

Hessequa



INTEGRATED DEVELOPMENT PLAN

2012-2017

2nd Review

DRAFT



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Foreword by the Mayor, Cllr. E. Nel

Die opstel van 'n Geïntregeerde Ontwikkelingsplan (GOP) vir Hessequa Munisipaliteit is nie net 'n uitdaging nie, maar ook 'n baie bevredigende proses. Die kennis en begrip van die behoeftes en ervarings van die verskillende gemeenskappe in ons streek en wat daarmee gepaard gaan, is 'n openbaring en laat ons as raad nederig en met die besef van die groot taak wat aan ons toevertrou is.



Die uitdaging van finansiële volhoubaarheid is 'n prioriteit en beperk ook dit wat in die kort termyn gedoen kan word en om die projekte wat in die GOP geïdentifiseer is te laat realiseer. Dit vra vir sorgvuldige beplanning en gesprekke met die inwoners om saam te werk om sodoende te bou aan die suksesvolle toekoms van Hessequa Munisipaliteit, elkeen met sy eiesoortige verantwoordelikheid en verantwoordbaarheid.

Die jongste sensusopname bewys die uitdagings van 'n gedeeltelike verouderde groep inwoners asook die groot behoefte van die jonger werkersgroep wie smag na werksgeleenthede. Die beperkinge as gevolg van die ekonomiese afplattings bly 'n remskoen en verg insig ten opsigte van toekomstige beplanning.

Die GOP rig die begroting en word sterk gepoog om die goue lyn trek tussen GOP, die raad se doelwitte, begroting en begrotingsimplimenteringsplan deur bestuur asook die prestasie ten opsigte van die uitvoering daaraan. Groot waarde word geheg deur alle Provinsiale- en Nasionale Departemente asook die Ouditeur Generaal op die integriteit van die GOP en die prosesse wat hieruit vloei.

Ek wil groot waardering uitspreek teenoor die amptenaar wie verantwoordelik is vir hierdie dokument en vertrou vestig in 'n suksesvolle veranderlike proses gelei deur die portefeulje voorsitter.

Emor Nel

Foreword by the Municipal Manager, Mr. J. Jacobs

Hessequa has the history of a municipality that aims to be an excellent local government. As communities suffer the negative effects of very real economic strain, the municipality finds itself in a place where the sustainability of our budgets is becoming a very real challenge. Within this context, the 3rd Generation Integrated Development Plan played an immensely important role to keep decision making objective. Simply stated, it is of no use setting goals, if we know it is impossible to reach.



The IDP facilitated the development of a set of strategic objectives and a roadmap at the hand of pre-determined objectives to ensure that focused impacts can be made in the coming 5 years. At the hand of area based planning methodologies the IDP has restructured planning in such a way that the reader will be able to see exactly what will be happening in his/her community within the coming years. This was strengthened by the commitment of council to approve a three year budget. This allows for the improvement of all processes that influence service delivery to the public and can the way forward be communicated better to all communities.

The ward committee structure ensures the relationship with all communities as we are committed to the inclusion of residents in municipal processes. Several representative platforms are in the process of being constituted and this serves as proof of our commitment of including as many role-players in all processes as possible.

However, it is important to note that Hessequa is experiencing serious pressure on its sources of income together with rising cost factors. Objective planning needs to be continued throughout the cycle of the 3rd Generation IDP, together with proper monitoring of progress on goals as provided in the National Development Plan and the Hessequa Long Term Financial Plan(INCA Report). The management of organisational performance in delivery on the goals set out in the IDP is of utmost importance to ensure the continued delivery of services to our communities in a manner that enhances their quality of life.

The IDP started to facilitate a renewed process of joint planning with all spheres of government to ensure that people are placed first when it comes to client services. Pro-active action plans are formalised to limit the impact of disasters on our residents and all of these strategic issues find their origin in the IDP.

One fact continues to surface in the content of the IDP and it tells us that our future is in the hands of all. Communities need to pick up their responsibility to join government forces and make the Hessequa dream a reality. The diverse nature of the Hessequa region is an asset and it needs to be considered something to be proud of. As Hessequa Municipality reaches for new heights, we look forward to a strengthened commitment of accountability to communities. I trust that the 3rd Generation IDP will be the foundation of a responsible, accountable and efficient local government, called Hessequa!

Johan Jacobs



2012-2017


& Beyond



Legislative Framework

Introduction

The first piece of legislation that provided guidance for the transformation is the highest level of legislation namely the Constitution of the Republic of South Africa (1996). The Constitution mandates local government to do the following:

	<p>DEFINITION OF MUNICIPAL OBJECTIVES</p> <p>In the Constitution (Act 108 of 1996) the objectives of a municipality or local government structure are described as follows:</p> <p>152. (1) The objects of local government are -</p> <ul style="list-style-type: none">(a) To provide democratic and accountable government for local communities;(b) To ensure the provision of services to communities in a sustainable manner;(c) To promote social and economic development;(d) To promote a safe and healthy environment; and(e) To encourage the involvement of communities and community organisations in the matters of local government. <p>(2) A municipality must strive, within its financial and administrative capacity, to achieve the objects set out in subsection (1).</p>
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Municipalities are no longer merely responsible for infrastructure, administration and regulations. They now have a **developmental role** and are described as an organ of state whose task it is to improve the quality of communities living within their boundaries. In other words, municipalities are much more responsible for **people**. As with all spheres of government, local government must also promote the Bill of Rights, which reflects the nation's values about human dignity, equality and freedom and uphold the principles enshrined in the Constitution.

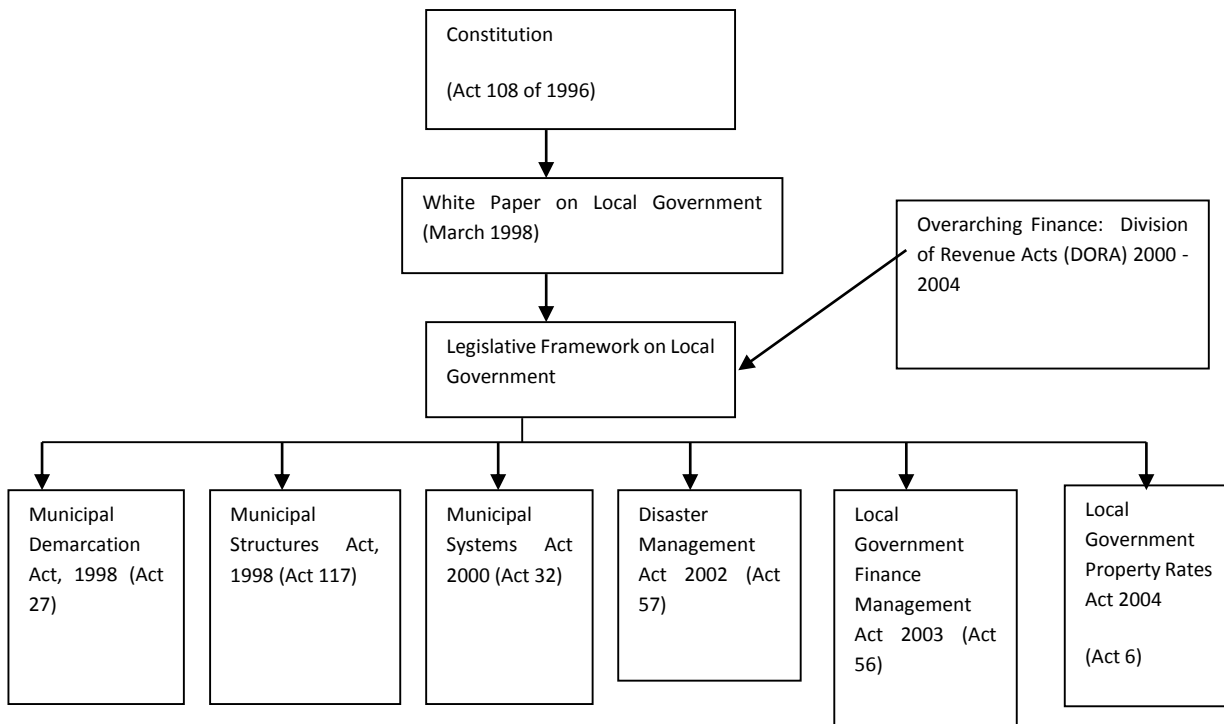
It is important to note that this responsibility was given to local government with the understanding that all three spheres of government will jointly strive to improve the wellbeing of communities. (Remember that the three spheres of government are local, provincial and national.)

The idea that the three levels of government should work together is also referred to as **cooperative governance**. What do you think of this cooperative idea? Do you think it's empowering? Does it encourage representation and democracy? How does the word 'cooperation' make you feel: good, worried, anxious or excited?

Central to this framework is the **White Paper on Local government (WPLG – March 1998)**. The White paper gave a clearer description of the new constitutional mandate of local government that replaces the traditional roles of municipalities with the requirements of developmental local government. This

places municipalities at the cold face of national efforts to rectify political, social and economic injustices of the past and wage the war against poverty.

In the following figure you will find an overview of all the pieces of legislation that form part of the legislation framework that determines the nature, functioning and practices of municipalities.



The above diagram is supported by Table 1 below and it provides an overview of the legislative outputs (pieces of legislation that was developed).

The intention of all the legislative outputs is to shape and influence the nature of local government.

TABLE 1: LEGISLATIVE OUTPUTS	
Legislation	Key issues relevant to the IDP process
Municipal Systems Act (MSA 32 of 2000)	<p>Sets out the principles, mechanisms and processes required for municipalities to shift into a new position within the landscape of development. Included in these mechanisms is the Integrated Development Planning process and Performance management systems.</p> <p>It also describes the legal nature of municipalities and the implications for the way that municipalities interact with communities, stakeholders and other spheres of government. Chapter 4 & 5 of the Act is discussed in much greater detail in Learning unit 3: Integrated Development Planning.</p>

Municipal Demarcation Act 27 of 1998	<p>The Municipal Demarcation Act of 1998 gives effect to Section 155 (3) (b) of the Constitution that determines three categories of municipalities (see the section explaining the issues guided by the Municipal Structures Act below).</p> <p>The demarcation process dramatically reduced the number of municipalities in the country from 843 to 283 (made up of 6 metro municipalities, 46 district municipalities and 231 local municipalities – all of which we’ll discuss in more detail further on.)</p>
<p>The Municipal Structures Act (117 of 1998), together with</p> <p>The Municipal Structures Amendment Act (33 of 2000)</p>	<p>These two Acts guides the establishment of municipalities as provided for in the Constitution.</p> <ul style="list-style-type: none"> • <u>Category A municipality</u>: A municipality that has exclusive municipal executive and legislative authority in its area. (This is called a metro municipality.) • <u>Category C municipality</u>: A municipality that has municipal executive and legislative authority in an area that includes more than one municipality. (This is called a district municipality.) • <u>Category B municipality</u>: A municipality that shares municipal executive and legislative authority in its area with a Category (C) municipality within whose area it falls. (This is called a local municipality.) <p>These Acts offers criteria and procedures for the various categories and outlines the powers and functions of municipalities as provided for in the Constitution. The allocated powers and functions influence the content of the IDP and identify key issues that would require alignment of strategies and actions.</p>
Municipal Finance Management Act, No 56 of 2003	<p>The Act clarifies the requirements of transparent and accountable practices in government and specifically in local government. The Act reiterates the requirements for public participation and the commitment to effective utilisation of resources. The Act determines the manner in which municipalities can dispose of capital assets. It is particularly the financial cycle (schedule requirements) that influences the development and review cycle of the IDP to ensure a process of mutual influence. .</p>
Disaster Management Act 57 of 2002	<p>The Act provides for an integrated, co-ordinated disaster management policy in line with the MSA (2000) requirement for IDPs to include a disaster management plan to identify and deal with risks.</p>

Intergovernmental Relations Framework Act 13 of 2005(IGR)	<p>The Act is a response to the limited successes in the alignment efforts among the three spheres of government. The act creates a framework to support intergovernmental cooperation and coordination as required by the “cooperative governance” defined by the Constitution.</p> <p>The implementation framework of the IDP depends on the ability to influence the investment and spending of other spheres of government, the Act also referred to IGR (2005) represents an important support mechanism to the IDP process. It provides for the obligation of all spheres to participate in the planning processes of the municipality and in turn allow their own planning processes to be influenced by municipal IDPs. Topic 3: Cooperative Governance offers a detailed description of the Act.</p>
Local Government Property Rates Act 6 of 2004	<p>The purpose of this Act is to regulate the power of a municipality to impose rates on property; to exclude certain properties from rating in the national interest; to make provision for municipalities to implement a transparent and fair systems of exemptions, reductions and rebates through their rating policies; to make provision for fair and equitable valuations methods of properties; to make provision for an objections and appeals process; to amend the Local Government Municipal Systems Act, 2000, so as to make further provision for serving of documents by municipalities; to amend or repeal certain legislation; and to provide for matters connected therewith.</p>

We have given you a brief overview of the Legislative Framework of the IDP and in the remaining Topics 2 to 5 we will unpack those elements most relevant to the Integrated Development Planning process.

Process of authorisation

The process of authorization (the power of the **Minister of Provincial and Local Government** to allocate powers and functions to a local municipality) creates the possibility that local municipalities can become responsible for powers and functions belonging to district municipalities.

Authorization refers only to national functions namely:

- Potable water supply
- Domestic waste water disposal systems
- Municipal health services
- Bulk supply of electricity

The process of authorization is influenced by the capacity assessment reports compiled by the Demarcation Board.

The provincial MEC can also allocate other functions to local municipalities but this refers to powers and functions listed in part B of schedule 4 and 5 and it does not refer to the national functions referred

to above. This process is referred to as *adjustment* and not *authorization*. Municipalities could also receive responsibilities via the process of *delegation or assignment*:

- *Delegation* implies that the municipality will exercise the power and function on behalf of national and province subject to the conditions placed on the delegation.
- When power is *assigned*, a municipality exercises the power and functions as if it is an original power or function.

The following table 2 provides an overview of the functions allocated to local government by different legislative documents. It also indicates the concurrency of the power with national and provincial spheres.

TABLE 2: FUNCTIONS AND POWERS OF LOCAL GOVERNMENT		
Powers and functions allocated to District municipalities	National and Provincial government have legislative competence	Provincial government has exclusive legislative competence
STRUCTURES ACT	CONSTITUTION: SCHEDULE 4	CONSTITUTION: SCHEDULE 5
Solid waste disposal sites in so far it relates to: Waste disposal strategy Regulation of waste disposal Establishment, operation and control of waste disposal Municipal roads which forms an integral part of a road transport system Regulation of passenger transport services Municipal airports that serves the whole district	Air pollution Building regulations Child care facilities Electricity and gas reticulation Fire fighting services Local tourism Municipal airports Municipal planning Municipal health services Municipal public transport Municipal public works Pontoons, ferries, jetties, piers & harbours Storm water management systems (build up areas)	Beaches and amusement facilities Billboards and the display of advertisements in public places Cemeteries, funeral parlours & crematoria Cleansing Control of public nuisances Control of undertakings that sell liquor to public Facilities for the accommodation, care and burial of animals Fencing and fences Licensing of dogs Licensing and control of undertakings that sell food to the public

<p>Fire fighting services</p> <p>Establish, conduct and control fresh produce markets and abattoirs serving large parts of the district</p> <p>Establish, conduct and control of cemeteries and crematoria serving large part of the district</p> <p>Promotion of local tourism</p> <p>Municipal public works relating to district responsibility</p>	<p>Trading regulations</p> <p>Water and sanitation services (potable drinkable)</p> <p>Water supply systems</p> <p>Domestic waste water</p> <p>Sewage disposal</p>	<p>Local amenities</p> <p>Local sport facilities</p> <p>Markets</p> <p>Municipal abattoirs</p> <p>Municipal parks and recreation</p> <p>Municipal roads</p> <p>Noise pollutions</p> <p>Pounds</p> <p>Public places</p> <p>Refuse removal</p> <p>Refuse dumps</p> <p>Solid waste disposal</p> <p>Street trading</p> <p>Street lighting</p> <p>Traffic and Parking</p>
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The description of roles between district and local municipalities are not clearly defined in the legislation. The district municipality is intended to act as *co-ordinator* and a mechanism through which provincial and national government link to local government.

The district municipality is also responsible for assisting local municipalities with limited capacity, thus the role varies according to the capacity of the local municipality. The relationship with regard to issues of mutual interest is left to the intergovernmental relations framework and the alignment processes in the IDP.

Relevance of powers and functions for the IDP

We have now discussed the powers and functions of municipalities. Next we need to ask the question: What is the relevance of these powers and functions of the IDP process of the municipality?

- i. In order to **respond to community needs**, the planning outcomes of the **IDP need to be aligned with the legal responsibilities of the municipalities** as defined by the powers and functions. In the IDP Guide Pack II, p 6 we read:

The IDP is the "Adoption of a framework for integrated development planning by each district municipality which binds both the district municipality and the local municipalities in the area and which is supposed to ensure proper consultation, co-ordination and alignment of the

planning process of the district municipality and the various local municipalities.”

The allocation of resources should be based on the strategic plan namely the IDP. If the content of the IDP is not in line with the powers and functions, such resource allocations would be unacceptable in terms of the Municipal Finance Management Act, No 56 of 2003. Therefore prioritization, identification of projects and the linkage of the IDPs financial requirements with the municipal budget process require synergy between the IDP process and the powers and functions.

Questions during the prioritization process should include the extent to which the community needs relate to the given powers and functions.

- i. The above result in the **need for a “referral system”** that enables municipalities to channel development needs to the appropriate authorities. For example: issues such as tarring of roads.
- ii. The concurrent nature of the powers and functions, with reference to the legislative functions of national and provincial government, requires municipalities to **plan within the given frameworks**. This practically means that during the discussion of each issue in the planning process the question should emerge: “What does the national and/or provincial legislative or planning requirements say about this issue?” Also see number **v(c)** below in this regard. Secondly, the issue of the **funding stream** emerge. Depending on the nature of the development issue the municipality might have powers and functions but the financial resources reside with a different sphere or department. This strengthens the need for cooperative governance both in determining the strategic direction and in the compilation of budgets and funding strategies.
- iii. Municipalities who functions within this framework **improve the quality of their public participation processes**.
- iv. This **division of powers and functions influences the alignment efforts** between Local and District municipalities. Considering the lack of clarity in terms of roles one can expect that the alignment process do not add the intended value. The IDP process institutionalizes a mechanism where clarity should be created through a dialogue namely the **District Framework**. The intention of the framework is to create a dialogue among municipalities which includes:
 - (a) The framework should **unpack the areas of interdependencies** between the district and local municipalities as created by the powers and functions. Ultimately the alignment needs to clarify what we need from each other in order to deliver the intended services.
 - (b) The framework considers the benefit of **“collective” bargaining**. The District Municipality might have better negotiating power with a particular provincial department or corporate service provider - the pressure from a single local municipality versus the pressure of 5–6 combined municipalities.
 - (c) The framework considers the principle of **“economy of scale”** with regard to incorporating the binding legislative and planning requirements of provincial and national spheres in the integrated development planning process. The total of the individual effort of each local municipality in summarizing the relevant legal and sector requirements that should influence the planning process will far outweigh the single effort by the District. As the same documentation will be relevant to all it seems logical to allocate this work to one party.

A New Policy Framework

Introduction

In South Africa we boast in a democratic existence that celebrates the “voice” of the voting booth as compared to previous regimes where the voice of the minority ruled. As the democratic process makes its mark every 5 years in a local government context, the outcomes might bring change in a policy framework or strengthen the existing. During the 2011 elections, Hessequa Municipality experienced a trying time of stability as the “voice” of the voting booth was indecisive. This then resulted in coalitions being formed and in the end, a new council.

A policy framework for a governing body is of utmost importance, as it communicates the approach that the governing body will employ during the development phase of objectives. It creates the scope or the spectrum which guides an institution to identify areas of importance to the governing body. The following diagram shows it graphically.

The governing coalition in office since August 2011, expressed the need to review and maybe, the redesign of the policy framework as it was set in place by previous governing parties. There are key sets of circumstances that created the need for governing policy review.

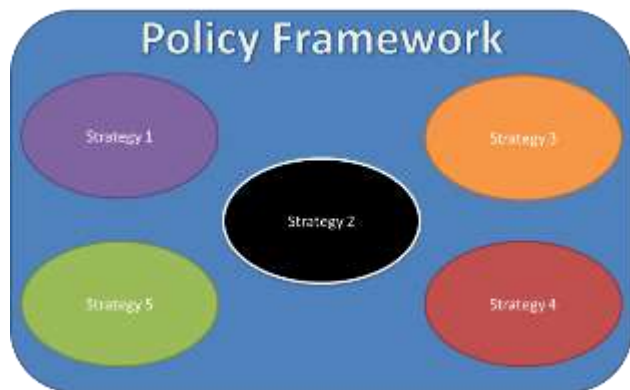


Figure 1 - The Essence of a Policy Framework

- The condition of the world economy created an environment where operating costs have escalated to an extent where decisions need to be made in terms of funding allocations
- Furthermore the need was identified to talk about the need for reconsideration of what the roles of a municipality needs to be when costs of services are considered
- The new governing body were in the opposition seats for a long time and need to make changes according to what they find to be better in service of the communities they serve.
- Another motivation for policy change is due to the fact that the municipality did relatively well for the last few years in terms of service delivery when compared to municipalities across the country. However, in terms of management of the municipality, it is of great concern to the new governing coalition; there is still room for improvement. This improvement aims at the changing of Hessequa into an example of a well-managed local government.

An interesting, but challenging, process initiated to look at the management of the organisation of Hessequa and strategically develop policies that would safeguard the sustainability of Hessequa and its people in difficult times. Several governing policies were identified as tools for bringing change to the “status quo” of service delivery and in mitigation of current threats to the existence of Hessequa Municipality. The following sets of guiding policies are summaries of in depth discussions between not merely the governing coalition, but the senior management at the time was included in these discussions to ascertain the feasibility of it.

Sustainability Policy

- A balanced approach to development of the economy, the social fabric of our communities and the responsible utilisation of natural resources.
- Decision making considers the interests of ALL people as Hessequa is a region with different communities and inevitably, different needs.
- Responsible financial planning to enhance affordability to the residents
- Delivery of services in a realistic manner to informed communities
- A more holistic view of the housing need in Hessequa
- Spatial development that considers the socio-economic realities of communities
- Sensitive reconsideration of current use of municipal assets.

Vulnerable Groups

The following people groups are identified and recognised as vulnerable people groups (*alphabetically ordered*):

- Farm Workers
- People affected by HIV/Aids
- People with disabilities
- Senior Citizens
- Women
- Youth

Communication

- Realistic and open communication with the public concerning issues that impact them as residents in an understandable way.
- Response to issues raised by the public, to give a sense that someone is listening to their concerns.
- Development and inclusion of representative platforms for focused discussions concerning governing issues.

Financial Policy

- No new appointments to be made, unless it is of utmost necessity due to affordability
- All financial contributions from property sales to be deposited into the Capital Replacement Fund.
- Strengthened approach to maintenance of existing infrastructure through a larger contribution to maintenance in operational budgets
- Broadening the Indigent Help safety net as far as possible

Hessequa Vision & Developmental Focus Areas

Introduction

The Hessequa Municipality embarked on the 3rd Generation IDP Process with a clear set of principles in mind as the Strategic Framework was being developed. One very important principle that was identified as a lesson learnt from the previous two generations of IDP's, was the need to move away from "wish lists". In the past all inputs was received and ended up in a document that was non-fundable with the given financial capacity of Hessequa. Even though the IDP's did include the plans for the different services, it was still amounting to an immense "need" in terms of funding to resolve of the issues raised by planning within the different services of the municipality. The clear need for "feasible" and "sustainable" plans to be located in the IDP document became very clear. The principle of "Outcomes Based Planning" was chosen to enhance the quality of the IDP to a standard where a person can look at the document and clearly see what is going to be done in his/her community and in which financial year.

Two other principles were also identified and are evident from the last sentence of the previous paragraph. The second being the principle of the planning being able to reflect a specific area/community's reality in terms of needs. The third principle is the multi-year commitment about what is going to be done in a given area/community. This would give the reader a clearer view of what the municipality is planning for implementation in his/her community. Immediately the credibility of the IDP in the eyes of the community is restored and the community can begin to feel a sense of accountability being given from the municipality through clear commitments in service delivery.

Even though these principles find their value in the IDP, the change it demands is not found in the IDP process alone, but in all three of the main municipal processes. As a result of these principles, the management of the complete institution is challenged and shaken into a place where the Planning, Budgeting, Monitoring and Evaluative processes are integrated into a synchronised flow of information which is generated from planning, guiding implementation and generated by implementation for evaluative purposes.

Outcomes Based Planning

As it was stated in the previous section, the need to be clearer on specific outcomes about what the resident can expect to be done during the elected Council's term of office, an approach of Outcomes Based Planning is needed. This approach takes the Policy Framework and guides the Council in the development of creating Strategic Objectives. Each Strategic Objective is then considered to identify specific Impacts that Council would like to achieve during their term of office, in other words, over a term of 5 years. To achieve one of these Impacts, certain Outcomes



must be achieved over the 5 year term. Every Outcome is then broken down into specific annual outputs that need to be delivered individually over the five financial years. It continues to identify the Activities and Inputs that are needed to achieve every Output. The methodology is very simple in approach and can be explained at the hand of the above triangular figure which explains the steps at the hand of guiding questions.

Process Integration

It is within this background, as briefly highlighted in the previous section that the 3rd Generation IDP process found its point of departure.

The following diagram indicates the current process of planning in many local municipalities.

This layout of the budgetary cycle does look logical and systematic and it even includes the public's inputs as is required by legislation. However, there are several indirect issues that do not get addressed in this model. Indirect symptoms of this methodology that causes a municipality to step into an array of problematic scenarios.



Shortages in this model can be summarized as follows:

- This process clearly identifies the latent assumption that when something is in the IDP, it can be budgeted for. This creates the problematic scenario where every item needs to be “taken up into the IDP” for purpose of allowing it to be budgeted for. The issue is not to get items into the IDP, but more of getting issues forthcoming from planning into the budget.
- Due to the annual nature of the cycle it leaves the items from the previous year that didn't make the priorities of the previous year, to compete again against new priorities. This in effect causes some items to be shifted to outer years every year. It is a risk of getting used to moving certain items out of the annual investment and cause some items to become more and more expensive as they do need to get done one or another time, but the longer the wait, the larger the cost.
- Another risk that the municipality expose themselves to in this manner of going about their business concerning the budget process, is the competition of ad-hoc items that can cause items, which might come from proper sectoral or master planning documentation, to be left out as it might not seem as an immediate issue that needs attention. The fact is actually that municipalities invest a large amount of funds on master planning documentation and when

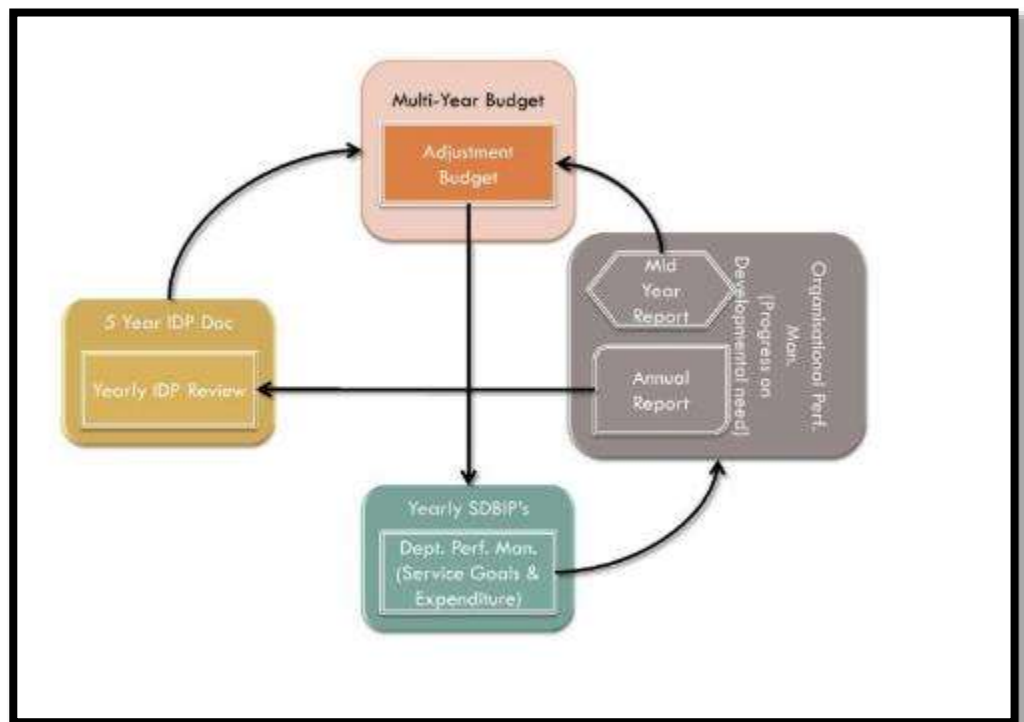
the identified issues is raised, it can get lost in the emotion of issues that might not be as important in terms of sustainable service delivery.

- Due to the annual nature of the cycle it brings the municipality in a short term planning culture. Pro-active investment is sacrificed for quick solutions.
- Even in the midst of municipalities strengthening their capacity in terms implementation, very little of operational information is used to plan ahead. Thus a proper evaluative process is difficult as impact on developmental cannot be measured with no multi-year planning that is in place.
- The final issue that needs to be considered is that in this methodology, no resident or investor can get a clear perspective about what are the municipality going to do in the medium term. Except for the interest groups, in general the public would not experience a council that is accountable to what they say they are going to do. In terms of Good Governance as a strategic objective, this process fails the public as inputs given only creates expectations in the hearts of the residents and when the following year little was implemented, the question is asked by the public why they are giving inputs at all as it is not being implemented. Obviously every input can't be satisfied, but at least in a different model people can see what the council commits themselves to over a period of time.

The following diagram displays a medium term planning cycle, integrating the different processes as legislation intended it to be.

First of all the process begins with a 3-5 year plan about what every line function is going to do strategically

concerning the identified issues pertaining to their field of responsibility. This allows a multi-year budget to be conceptualized. When this is done the annual targets are set and transferred into the SDBIP process that serves the platform for Departmental Performance Management that compares predetermined



objectives to implementation reports. This serves as a source of performance information that guides the municipal performance evaluation, which in turn compares the outcomes of implementation to the developmental need that is experienced by the average resident walking the streets of the municipal area.

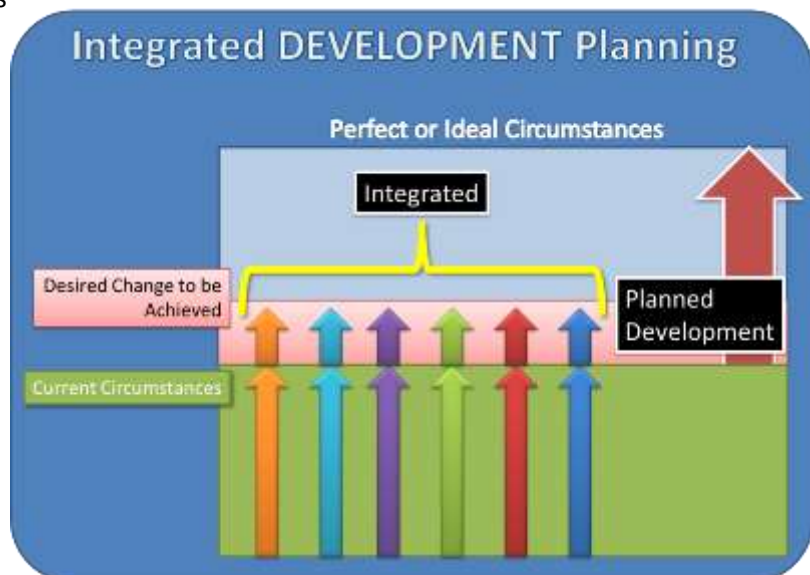
The performance reports generated by the performance management system bi-annually informs the adjustment budget after the second quarter of the financial year and at the end of the financial year it serves as departure point for the annual review of the IDP. This would then allow the review to actually fulfil its role of highlighting the differences between predetermined objectives and implementation.

However this methodology sounds ideal, it has very sensitive demands.

- First of all this model can only work where all the municipal line functions have a clear understanding about their challenges and have developed reachable targets for impacting their challenges within the municipal financial capabilities.
- A high risk for this model is that the municipal “culture” of how business is done, disrupts the flow of information from one process to the other
- It also takes for granted that each process is perfectly aligned to the other and know exactly what it can ask of the previous and what is expected by the next in terms of information.

Integrated DEVELOPMENT Planning

When the integration of process have been dealt with, it is important not to fall into a chaotic maze of managing each and every little activity that the municipality is already doing on a daily basis. This indirectly relates to the similar notion of trying to manage the performance of each and every person in service of the municipality through the formal Performance Management System. It becomes an immense task to manage all the



information and very confusing as different departments have different organisational layouts where one person might receive instructions from two people and of a varying nature. Even though it is possible, it creates a problem in terms of the original goal when we started to “plan”. It is supposed to be planning of a “developmental” nature. The goal is to create a plan for “calculated changes” to the current “Status Quo”.

The figure above explains this logic behind the concept of planning that considers the current realities and creates a base line from where the implementation of change departs from, to reach a calculated destination of service delivery.

PRE-DETERMINED OBJECTIVES – BACKGROUND

Introduction

Municipalities in South Africa have undergone radical changes in terms of legislative requirements and especially lower capacity local councils have struggled to implement the changes. Economic realities have also caused pressure on councils to be more responsible in terms of expenditure. Furthermore communities have grown tired of promises being made indirectly in terms of planning that have been communicated with them from the side of municipalities. This have been seen where communities publicly expressed their dissatisfaction with the delivery on promises made by councils by protests. Furthermore we see how other communities are not interested in any planning processes anymore as they experience it as “useless” exercises due to “nothing happening” after the inputs to the plans was given.

The concept of Strategic Objectives, or Pre-Determined Objectives (PDO’s) strives to rectify this very issue. It is being requested by the Auditor General of South Africa that municipalities must set their targets in their planning and be able to annually prove to the external auditing process how delivery was done and progress made on these objectives that were made. This requirement forces a municipality to start and be accountable to its communities. It forces objective communication between the municipality and it communities as targets that are being set cannot be “unreal”. It should be achievable and implementable. No more “pies in the skies” to make use of the informal figure of speech. It also forces municipalities to take stock of their capacity to implement the changes promised. Ultimately it becomes a tool to make realistic promises to the communities on issues relating to them.

Even though it is seems to promise much, there is still a mountain of problems on the doorstep of municipalities in South Africa. However, gradual overcoming of obstacles can be planned for and realistic targets can be identified and communicated with the residents.

Process Explanation

1. After a set of Focus Areas have been identified, the vision is developed from it. In essence it becomes a summary of that what the council deems important for Strategic Change, instead of a completely irrational and unrealistic vision which isn’t meaningful at all.
2. After the Focus Areas have been identified, each is then broken down into Strategic Objectives (PDO’s) that need to be delivered during Council’s term of office that is needed to make the desired Impact. This is the first set of Objectives that a municipality have direct control over. This means that the municipality commits to a specific set of deliverables to attain the change desired by the residents.
3. After the PDO’s have been developed in terms of what Council want to see, the officials continue to break down all Strategic Objectives into annual Outputs that resembles the change that needs to be brought about annually to attain the objective of the 5 year term of the Council.
4. Then the annual Outputs are broken down into specific Activities/Actions that need to be done to realize the annual Output.
5. Finally of course, everything costs something and the needed resources are allocated to implement the actions. The resources are Human Resource, Financial Resource and Time.

6. At this point the credibility of the goals is able to be tested for the first time. If any of the resources are not going to be available for a specific action, the plan will inevitably fail. This is where the balancing act between Plans and Ability to implement can be calculated in the measurement of Confidence.

Pre-Determined Objectives – The Building Blocks for Performance Management

To be able to complete the cycle of Planning, Monitoring and Evaluation, a clear set of objectives need to be set. It also needs to cover all services of the municipality as evaluation cannot be done on just some of the service delivery functions of a municipality. This IDP review facilitated the development of these objectives and is looking closely to ensure that in-year monitoring are aligned with these goals, together with the performance information that is submitted during the quarterly reports of the Performance Management Process.

The following set of Pre-Determined Objectives, page 29, have been identified and set as objectives as a “promise” to communities in Hessequa to be held accountable accordingly. They are sorted according to Department and secondly, the Line Function within the Department.

Budget Revenue and Expenditure Summary

Revenue Generated			
Municipal Focus Area	2014/15 Medium Term Revenue & Expenditure Framework		
	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Heritage Of Preservation	520	199	214
Infrastructure	177,661	192,224	206,250
Social Well-Being	5,744	6,136	6,503
Economic Growth	–	–	–
Safe Communities	13,566	19,123	21,075
Effective Communication	–	–	–
Accountability & Transparency	98,306	105,840	114,649
Total Revenue (excluding capital transfers and contributions)	295,798	323,521	348,692

The table above summarizes the revenue generated in relation to the Municipal Focus Areas of Hessequa Municipality.

Operating Expenditure			
Municipal Focus Area	2014/15 Medium Term Revenue & Expenditure Framework		
	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Heritage Of Preservation	1,096	770	779
Infrastructure	195,321	210,932	227,089
Social Well-Being	10,669	11,288	11,915
Economic Growth	3,080	3,169	3,272
Safe Communities	21,122	27,836	30,773
Effective Communication	1,059	1,132	1,192
Accountability & Transparency	71,634	76,981	81,578
Total Expenditure	303,982	332,108	356,598

The table above summarizes the operating expenditure in relation to the Municipal Focus Areas of Hessequa Municipality.

Capital Expenditure			
Municipal Focus Area	2014/15 Medium Term Revenue & Expenditure Framework		
	Budget Year 2014/15	Budget Year +1 2015/16	Budget Year +2 2016/17
Heritage Of Preservation	–	–	–
Infrastructure	75,641	56,294	46,336
Social Well-Being	268	15	313
Economic Growth	–	–	–
Safe Communities	1,919	423	923
Effective Communication	–	–	–
Accountability & Transparency	729	288	550
Total Capital Expenditure	78,558	57,019	48,123

HESSEQUA VISION STATEMENT AND STRATEGIC FOCUS AREAS

The first step that the new council took after it was inaugurated in September 2011 was to establish a medium to long term vision. The IDP coordinator facilitated a workshop with the governing coalition on the 28th of September 2011, with the aim of developing the vision on the foundation of clearly identified Strategic Objectives. In essence the vision statement then becomes an executive summary of that which the governing group would be aiming to achieve during their term of office and to create a sustainable governing environment for development in the future.

The Hessequa Municipality is at a place and time where serious decisions need to be made concerning service delivery within the scope of its tax base and rates payers. Municipal budgets are capped at a 6% growth rate on the one hand, but on the other hand costs are escalating in much larger percentages. Even though land sales boost infrastructure investment, since 2009 no major land sales realised in Hessequa as the global economic uncertainty caused the property market to come to a grinding halt in Hessequa. These are just to name a few realities that needed to be considered before a vision for the future could be conceptualised.

Even though the vision statement does not aim at a specific year in the long term future, it recognises the reality that a long term vision would not be attainable if the medium term responsibility in terms of mitigation for serious short term threats is not addressed. The sustainability of the municipality within the coming three years will be tested as the detail spelt out in the Institutional Overview would highlight. There are some serious issues that need attention over the medium term to secure a shure foothold in the longer term.

The vision then aims at a sustainable condition for Hessequa by stabilising the three pillars on which its existence depends. Our People, our Economy and our Environment. It promises benefit to everyone, responsibility in governance and leadership.

The vision for Hessequa Municipality as set out for 2012-2017 and beyond is:

***A CARING MUNICIPALITY WHERE EVERYONE REAPS THE
FRUIT OF COST EFFECTIVE AND INNOVATIVE SERVICE
DELIVERY, STIMULATED ECONOMIC GROWTH AND
SUSTAINABLE USE OF NATURAL RESOURCES***

Hessequa Developmental Focus Areas

As mentioned in the previous section, the vision was developed after serious considerations were given to the current circumstances presented to Hessequa Municipality. Analysis was done in terms of the institutional well-being to come to grips with what the municipality is facing. The financial state of the municipality was scrutinised. The economic realities in different sectors of the economy. The well-being of our people was placed under the “microscope”. A valuable resource in the sustainable development in Hessequa is our rich, bio diverse environment. An asset, but a very fragile one, as changes in climate and extreme weather conditions continues to challenge management of our environment. The Hessequa Council has set the following 7 Focus Areas ahead of themselves with specific impacts to be made:

- ***EFFECTIVE COMMUNICATION AND PARTICIPATION.***
- ***TO LIMIT THE IMPACT OF OUR PRESENCE IN THE NATURAL ENVIRONMENT AND RE-ESTABLISH A HERITAGE OF PRESERVATION.***
- ***MAINTENANCE AND DEVELOPMENT OF ALL INFRASTRUCTURE AND SERVICES.***
- ***DEVELOPMENT OF SAFE AND INTEGRATED HUMAN SETTLEMENTS.***
- ***HUMAN DEVELOPMENT INITIATIVES TO ENHANCE THE SOCIAL WELL-BEING OF ALL OUR RESIDENTS.***
- ***TO STIMULATE ECONOMIC GROWTH FOR THE BENEFIT OF ALL COMMUNITIES.***
- ***AN ACCOUNTABLE LOCAL AUTHORITY WITH A FIT FOR PURPOSE WORKFORCE AND TRANSPARENT FINANCIAL PRACTICES.***

As the heading for this section on focus areas read, these areas need to guide all planning and investments from the municipal budgets. The feasibility of any vision is located in the change that has been brought about by the set objectives after focused investment, based on a plan of change. This plan should inevitably be the Integrated Development Plan. It is an important reminder that a plan’s credibility is located in the implementability of its objectives. “Can we achieve what we want to achieve?” should be asked. If the answer is no to this question, a municipality is most definitely in a process of compliancy only and cannot claim, with any reasonable conviction, that the vision stated will become a reality. The 3rd Generation IDP of Hessequa Municipality departed on the principles that a vision that cannot be made a reality is not feasible, credible or responsible towards our communities who are expects an accountable government. Plainly stated, a government which does what it says it is going to do. The following section would look at the alignment of the objectives conceptualised on a local level with that of National and Provincial Government.

Alignment of Priorities - National, Provincial and Local

The Hessequa IDP process acknowledges the strategic mandate placed on government as a whole and seeks to align its principles, strategies and targets accordingly. The strategic framework which was primarily considered in the development of the 3rd Generation IDP was the methodology found in the national and provincial outcomes based approach to service delivery.

After the national elections took place in 2009, the cabinet initiated a strategic process of review and specific strategic initiatives were identified in the form of the so called “12 Outcomes”. Each of these outcomes broken down into specific targets and goals to be achieved.

12 National Outcomes:

1. Improved quality of basic education.
2. A long and healthy life for all South Africans.
3. All people in South Africa are and feel safe.
4. Decent employment through inclusive economic growth.
5. A skilled and capable workforce to support an inclusive growth path.
6. An efficient, competitive and responsive economic infrastructure network.
7. Vibrant, equitable and sustainable rural communities with food security for all.
8. Sustainable human settlements and improved quality of household life.
9. ***A responsive, accountable, effective and efficient local government system.***
10. Environmental assets and natural resources that is well protected and continually enhanced.
11. Create a better South Africa and contribute to a better and safer Africa and World.
12. An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship.

The 9th Outcome identified, focused specifically on how the national government sees and desires local municipalities to perform in terms of being the service delivery institution closest to the public.

This Outcome is broken down in Outputs that identifies specific areas of delivery. Once more the outputs are focusing on a national level, but it addresses issues on a local level as well. Here are the 7 Outputs listed and a brief description of how the Hessequa IDP responded to these priorities in a tangible manner. It is important to note that these priorities cannot merely be placed in a table and compared with the identified objectives set on a provincial and local level, but proof of how it is being incorporated in specific targets of a local municipality alone can provide evidence to measure alignment.

1. Output 1: Implement a differentiated approach to municipal financing, planning and support

2. Output 2: **Improve access to basic services.**
3. Output 3: Implementation of the **Community Work Programme**
4. Output 4: Actions supportive of the **human settlement** outcomes
5. Output 5: **Deepen democracy** through a **refined ward committee** model
6. Output 6: Administrative and financial capability
- 7. Output 7: Single window of coordination**

Ultimately the Constitution of South Africa forms the basis of all alignment for a local government as the roles and responsibilities are clearly stated. The following table shows how Hessequa Municipality responds through its set of Strategic Objectives to the mandated strategic responsibilities identified on a national and provincial level.

Constitution Sect 152	Outputs for Local Government within "Outcome 9" - From Cabinet Lekgotla	Provincial 11+1 Objectives	Hessequa KPA's 2012-2017
To provide democratic and accountable government for local communities;	Output 6: Administrative and financial capability	A responsive, accountable, effective and efficient local government system.	An accountable local authority with a fit for purpose workforce and transparent financial practices
	Municipalities with unqualified audits to increase from 53% to 100%.		
	The average monthly collection rate on billings to rise to 90%.	An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship.	
	The percentage of municipalities with debtors more than 50% of own revenue to be reduced from 24% to 12%.		
	The percentage of municipalities that are overspending on opex to improve from 8% to 4%.		
	The percentage of municipalities under-spending on capex to be reduced from 63% to 30%.		
	The percentage of municipalities spending less than 5% of opex on repairs and maintenance to be reduced from 92% to 45%.		
To ensure the provision of services to communities in a sustainable manner;	Output 2: Improving Access to Basic Services	An efficient, competitive and responsive economic infrastructure network.	Maintenance and development of all infrastructure and services
	In respect of this output the following targets for improving universal access are set for the period ending 2014:	Vibrant, equitable and sustainable rural communities with food security for all.	
	Water: from 92% to 100%		
	Sanitation: from 69% to 100%	Sustainable human settlements and improved quality of household life.	

	Refuse removal: from 64% to 75%		Maintenance and development of all infrastructure and services
	Electricity: from 81% to 92%	Environmental assets and natural resources that are well protected and continually enhanced.	
To promote social and economic development;	Output 3: Implementation of the Community Work Programme - Develop 'useful work' ranging from 1- 2 days a week or one week a month, targeting the poorest wards. The target is to implement the CWP in at least 2 wards. per local municipality. By 2014 at least 30% of all job opportunities must be associated with functional cooperatives at the local level.	Decent employment through inclusive economic growth.	Human development initiatives to enhance the social wellbeing of our residents
		A skilled and capable workforce to support an inclusive growth path.	To stimulate economic growth for the benefit of all communities
To promote a safe and healthy environment; and	Output 4: Actions supportive of the human settlement outcomes	Improved quality of basic education.	Development of safe and integrated human settlements
	Overcome the apartheid legacy, actions supportive of the human settlement outcomes need to initiated such as increasing densities in metros and large towns, release of public land for low income and affordable housing on "well located land" with a 30 to 45 minute journey to work and services and using less than 8% of disposable income for transport by 2014.	A long and healthy life for all South Africans.	
	Grading and rezoning of informal settlements by municipalities is crucial.	All people in South Africa are and feel safe.	To limit the impact of our presence in the natural environment and re-

		Create a better South Africa and contribute to a better and safer Africa and World.	establish a heritage of preservation
To encourage the involvement of communities and community organisations in the matters of local government.	Output 5: Deepen democracy through a refined Ward Committee model	A responsive, accountable, effective and efficient local government system.	Effective communication and participation
	Strengthening our people-centred approach to governance and development is a core part of the building the developmental state in this country. Three important, but related, tasks must be undertaken:		
	Firstly, the legislative framework for Ward Committees and community participation must be reviewed and strengthened to broaden participation of various sectors and to propose revised / new responsibilities and institutional arrangements for Ward Committees.		
	Secondly, a new approach must be found to better resource and fund the work and activities of Ward Committees. The funding of local democracy and community participation cannot be a discretionary matter.		
	Lastly, various support measures must be put in place to ensure that at least 90% of all Ward Committees are fully functional by 2014.		

Figure 2 - Alignment of Strategic Objectives

INTER-GOVERNMENTAL RELATIONS OVERVIEW

Introduction

Hessequa Municipality forms part of the Western Cape and hosts several service delivery access points managed by other spheres of government which ranges from provincial departments, national departments and government funded service organisations.

No local municipality can function in isolation from the other two spheres of government being involved in its annual processes. Various platforms are maintained by the provincial sphere of government for coordination of oversight within local municipalities. Hessequa Municipality is committed to the development of strengthened service delivery through inter-governmental partnerships and continued collaboration for the good of our communities. Hessequa Municipality also serves as an agent for some functions allocated to provincial government. This have major implications on budgets and management processes that needs to be controlled well for reporting purposes to the relevant provincial department.

Continuous engagements based on technical sectors takes place throughout the year between national, provincial and local spheres of government. From an IDP perspective there are a few important engagements to highlight.

District IDP Coordination

The Eden District Municipality coordinates the strategic regional process and continues to facilitate important strategic issues on a district level through the gathering of role-players. There are also several technical committees in the district that creates joint planning platforms. Hessequa Municipality supports the processes initiated by the district municipality.

Provincial IDP Forum

The provincial department of Local Government (DPLG) facilitates quarterly meetings where regulatory information is shared and consulted with IDP representatives from all local municipalities in the province. It serves as an important platform for information sharing and more specifically providing the provincial department with a mandate to address certain IGR issues experienced by local municipalities. These sessions have always proven to be helpful and supportive of local municipality's processes

Provincial IDP Indaba Programme

As part of the oversight role Provincial Treasury needs to fulfil towards local municipalities two joint planning sessions is organised by DPLG. Both of these sessions aim at aligning the planning provincial government does in all its departments with the realities faced on a local level. Municipalities are given the opportunity to communicate the issues coming from their IDP processes and all departments on a provincial level commits to possible solutions. It has given local municipalities an opportunity to raise and discuss issues coming from our public participation processes in detail. Issues such as provincial roads maintenance, pedestrian safety, funding for backlogs in service delivery and many more have been raised.

The LGMTEC Process

The LGMTEC process is an IGR platform where Provincial Treasury portrays their direct oversight role towards the municipal budget. After the adoption of Draft IDP's and Budgets at the end of March every year, municipalities supply these documents to Provincial Treasury who in turn evaluate the credibility of the strategic plan and the financial plan for the local municipality. Many issues concerning compliancy and financial sustainability are considered and debated with a set of recommendations from Provincial Treasury to the local municipality as an outcome. Hessequa Municipality commits to this process and supports the oversight role of provincial government for transparency and accountability reasons.

IDP Indaba Engagements

Hessequa Municipality participated in IDP hosted by the Provincial Department of Local Government and the objectives of this engagement were:

- To share municipal priorities with sector departments to inform and guide future sector departmental priority setting
- To obtain and share information on Sector Departmental projects in municipalities
- To share municipal financial allocations information

The table below list the projects and programs planned for the next 3 Financial years in the Hessequa Municipal area.

Department	Support	Intervention Required	On the Budget for			Comment
			2014/2015	2015/2016	2016/2017	
Cultural Affairs and Sport	Funding for Sport facilities upgrades, Heidelberg cricket grounds, Cloak rooms at Riverville, Slangrivier sports Facilities, Municipal Office Space, Upgrading Riversdale Tennis Courts	Funding required. No Cost has been completed for office space in Riversdale	X	X	X	Awaiting application to MIG
	Kwanokuthula	Upgrading Kwanokuthula Sport Facilities	X			Awaiting application to MIG
	Riversdale	Arts and Culture: Drama	R14 575.00			
	Heidelberg	Funding	R50 000.00			
Education	Ongoing Support	No	X	X	X	
Health	Heidelberg Ambulance Station	No	7.2 m	R300 000.00		

	Albertinia Ambulance Station	No			X	New Facility Needed for improved access
Community Safety	Ongoing Support					
Provincial Treasure	Ongoing Support					
Local Government	Ongoing Support					
SAPS	Ongoing Support					
Social Development	Ongoing Support					
Agriculture	Ongoing Support					
Economic Development and Tourism	Ongoing Support					
Environmental Affairs and Development	3 WDF's Licenced : Albertinia, Gouritsmond and Melkhoutfontein	Municipality already involve in process	X			
Eskom	Slangrivier Streetlights	Requirements listed in letter to Municipality				
Human Settlements	Riversdale GAP 40 units (services and units) Riversdale Kwankuthula		X X			

	<p>Extension (42 units)</p> <p>Heidelberg Diepkloof Phase 2 (122 services and 122 units)</p> <p>Heidelberg site 1 Erf 1213 (73 services and 73 units)</p> <p>Slangrivier (65)</p> <p>Melkhoutfontein (90 services and 90 units)</p>					
Transport and Public Works	Slangrivier: Surfacing of Port Beaufort Road	Noted for future upgrades when funding is possible				
Water Affairs	Ongoing Support					

Chapter 1 – Environmental Preservation

PDO 11: ENVIRONMENTAL MANAGEMENT

PDO:	#11	Environmental Management through the Environmental Management Framework		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Report	State of the Environment Report	Review Due	2015
2.	Plan	Coastal Management Plan	Draft	DEADP
3.	Plan	Air Quality Management Plan	Approved	2014
4.	Plan	Basic Assessment for Witsand Duine	Approved	DEADP
5.	Plan	Management Plan Lappiesbaai and Adjacent Area	Draft	DEADP

Analysis of Hessequa –Our Environment

The word biodiversity is used to mean the variety of life on our planet, measurable as the variety within species, between species, and the variety of ecosystems. South Africa has a very substantial share of global biodiversity within its borders, ranking third of any country in the world. Owing to its variety of landscapes between the scenic coastlines across the Langeberg to the Little Karoo, Hessequa makes a meaningful contribution to this biodiversity.

Our biological heritage is important to us in many ways – providing us with ecosystem services like clean water, contributing directly to the economy through industries like fishing and tourism, supporting livelihoods by providing food, medicines and building materials and generally improving our health and well-being. The value of biological diversity has three components:

- 1) Many species have a direct value through the products that can be harvested, for instance, many medicines used throughout the world have active ingredients extracted from plants and animals.
- 2) The pollination of agricultural crops by insects is an example of the indirect value where aspects of biodiversity bring economic benefit without the need to consume the resource.
- 3) There is also an ethical value to the diversity of life. Although it does not always lend itself to economic valuation in monetary terms, we still appreciate the beauty of the rose flower.

Through the most powerful human influence, habitat destruction and ill-conceived developments, biodiversity is under threat world-wide. The focus is frequently on the accelerated rate of disappearance of a species in the face of human influence. Species are lost at a rate never seen before in the fossil record of Earth. To counteract this mass extinction, conservation action is needed that is effective in maintaining the ecosystem services (e.g. fishing, grazing, clean water and air) provided by high levels of biodiversity.

Biodiversity encompasses more than just species richness. We should ensure that we protect representatives of as many types of community and ecosystem as possible. By conserving suitable habitat we are also improving the survival chances of the species and populations contained therein.

Living landscapes preserve the option value of biodiversity – the potential to provide benefits in the future. To protect biodiversity effectively, we need to conserve (Driver *et al.*, 2003):

- A representative sample of all biodiversity; and
- The ecological and evolutionary processes that allow this biodiversity to persist over time.

The systematic approach to conservation planning involves setting quantitative conservation targets, for instance the number of hectares of river corridor that need to be set aside to remain undeveloped. Quantitative conservation targets show how much we need to conserve in order to achieve the goal of living landscapes. This chapter explores how close we have come to this goal in Hessequa.

Drivers and pressures

Important driving forces putting pressure on the biodiversity resources of Hessequa are:

- Population growth;
- The demand for economic growth to provide wealth and job creation;
- Demand for housing and associated services for historically disadvantaged people;
- Unsustainable extraction of natural resources as a result of poverty or greed;
- Poor land use practices promoting soil erosion and infestation by invasive alien plants;
- Altered veld fire regimes;
- Poor waste and pollution management;
- Climate change; and
- Lack of understanding (ignorance of the importance of conserving biodiversity).

With an estimated annual population growth rate of 1% for the period 2001 – 2005 (Lehola, 2006) more and more South Africans are born every day whose basic human needs for food, freshwater and fuel are making unprecedented demands on our global and local ecosystems. Beyond the necessities of survival, there is increasing demand of society for more material goods and services.

South Africans already consume more resources per capita than people in any other African nation. As previously disadvantaged people strive to increase material wealth and the comforts and conveniences they have been denied before the new political dispensation, the strain on natural resources and biodiversity will only increase.

Ignorance of the importance of conserving biodiversity through lack of understanding should not be underestimated as a contributing factor. Subjects dealing with the conservation of our biological heritage are only recent arrivals in the school curriculum and the demand for environmental education by appropriately qualified teachers exceeds the supply by far, especially in out-of-town places.

Ecosystem status

The National Spatial Biodiversity Assessment (NSBA, Driver *et al.*, 2005) used maps of land classes, such as vegetation types or habitat types (e.g. Gourits Valley Thicket), to represent biodiversity features (pattern and process), habitat transformation and future land use pressure, across the nation. By using land classes incorporating expert knowledge about biological characteristics as surrogates of biodiversity (Lombard *et al.*, 2003), the problems associated with incomplete species-based

inventories, collection bias and extrapolating from one species group to another are overcome. In the absence of comprehensive data sets of the occurrence and status of species of conservation concern in Hessequa, the NSBA approach of using land classes as stand-ins for biodiversity was adopted for this report.

A total of 27 land classes covering in excess of 573,000 hectares have been identified in Hessequa by Mucina and Rutherford (2006). The classification of how intact and well-functioning they are is based on four categories:

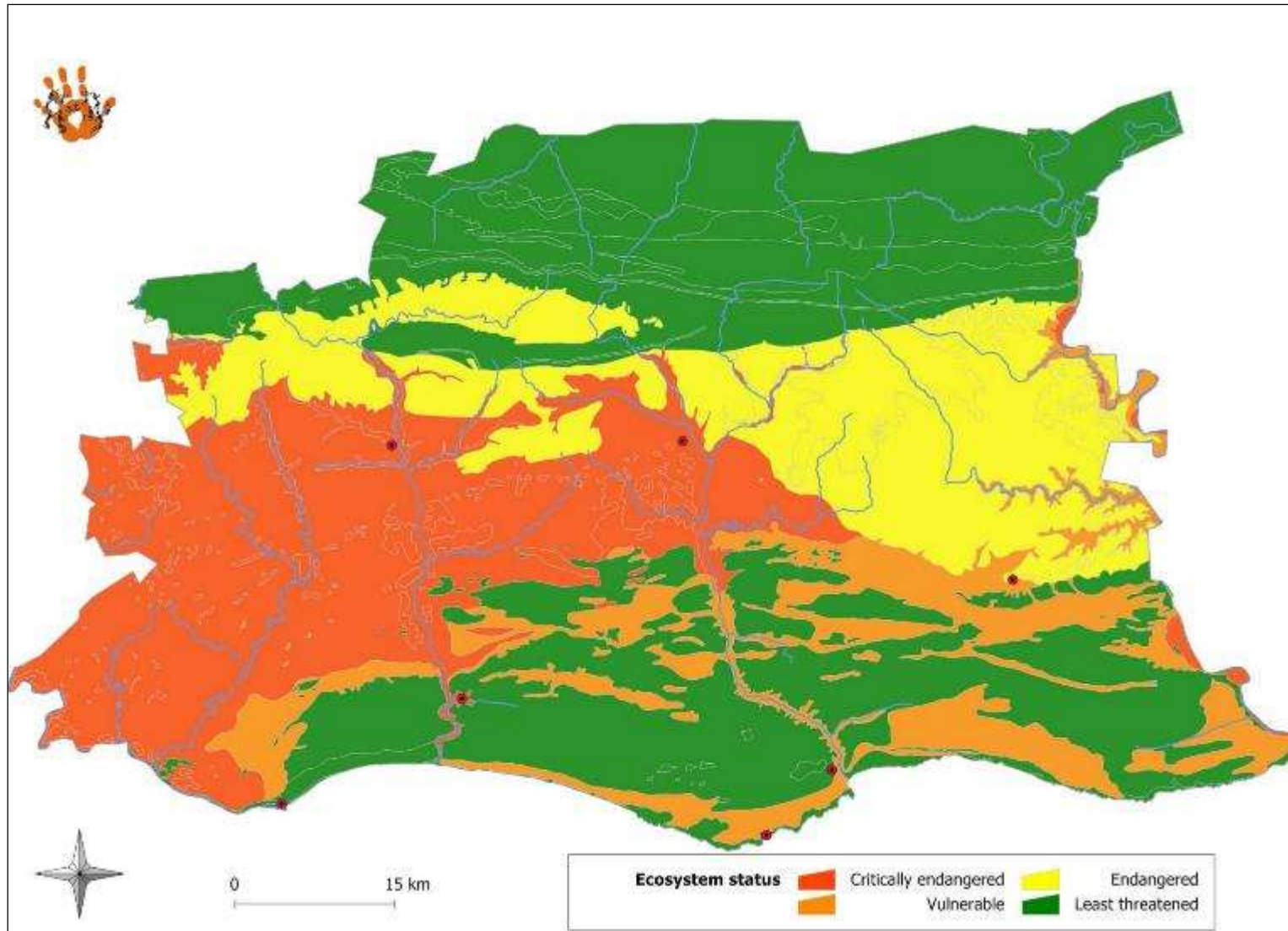
Table 4. Definition of ecosystem status categories of land classes.

Remaining natural habitat %	Category	Definition
80 - 100	Least Threatened	Still largely intact
60 - 80	Vulnerable	Reasonably intact, but nearing the threshold beyond which they will start to lose ecosystem functioning
20 - 60	Endangered	Have lost significant amounts of their original natural habitat, impairing their functioning
0 - 20	Critically Endangered	Have so little of the original habitat left that not only their functioning has been severely impaired, but species are being lost

The ecosystem status measures the amount of habitat lost in ecosystems (measured as land classes) relative to the conservation targets for those ecosystems. In Hessequa 22.2% of land classes are Endangered or Critically Endangered, with a further 11% Vulnerable to lose ecosystem functioning. In terms of the area occupied by the land classes, the Endangered or Critically Endangered account for 19% and 27%, respectively, of Hessequa (Figure 3).

The western and central coastal lands, the Langeberg Mountains and the areas north of it are still largely intact, whereas the western midland areas are under greater threat to lose their ecological integrity (Figure 3). The Critically Endangered parts of Hessequa are all lying in the west representing Renosterveld and Cape Lowland Alluvial Vegetation in river valleys. They are Critically Endangered because conversion to agriculture (owing to high soil fertility) has compromised target achievement. Only 19% and 22% of the original extent of Eastern Ruins Shale Renosterveld and of Ruins Silcrete Renosterveld, respectively, are remaining today, missing their biodiversity target of 27% which would be required to look after 75% of the species occurring in each vegetation type. Cape Lowland Alluvial Vegetation has been reduced to its biodiversity target of 31% remaining and cannot sustain further

loss of habitat (Rouget *et al.* 2004). In practical terms this means that all land lying fallow for more than 10 years should only receive environmental authorisation for ploughing (a requirement of the NEMA Amendment Bill, 2008) in exceptional circumstances.



Extent of formally conserved areas

Formally conserved areas falling into Hessequa are very important for biodiversity conservation, but not all types of conservation areas are equally valuable. For instance private game farms that are not part of a conservancy (type 3). Some game farms may well help to achieve conservation goals across the land, but due to the low level of protection that they are afforded and frequent changes in their status they are not listed in Table 5, which gives the extent of formally conserved areas of type 1 and 2 in Hessequa.

Table 5. Extent of formally conserved areas of type 1 and 2 in Hessequa.

Formally protected area	Area [ha]
Conservancies	32319
Local Authority Nature Reserves	1002
Private Nature Reserves (formally declared)	6159
Mountain Catchment Areas	29801
Provincial Nature Reserves and Wilderness Areas	17680
Sum of all formally conserved areas	86962
Hessequa area	573000

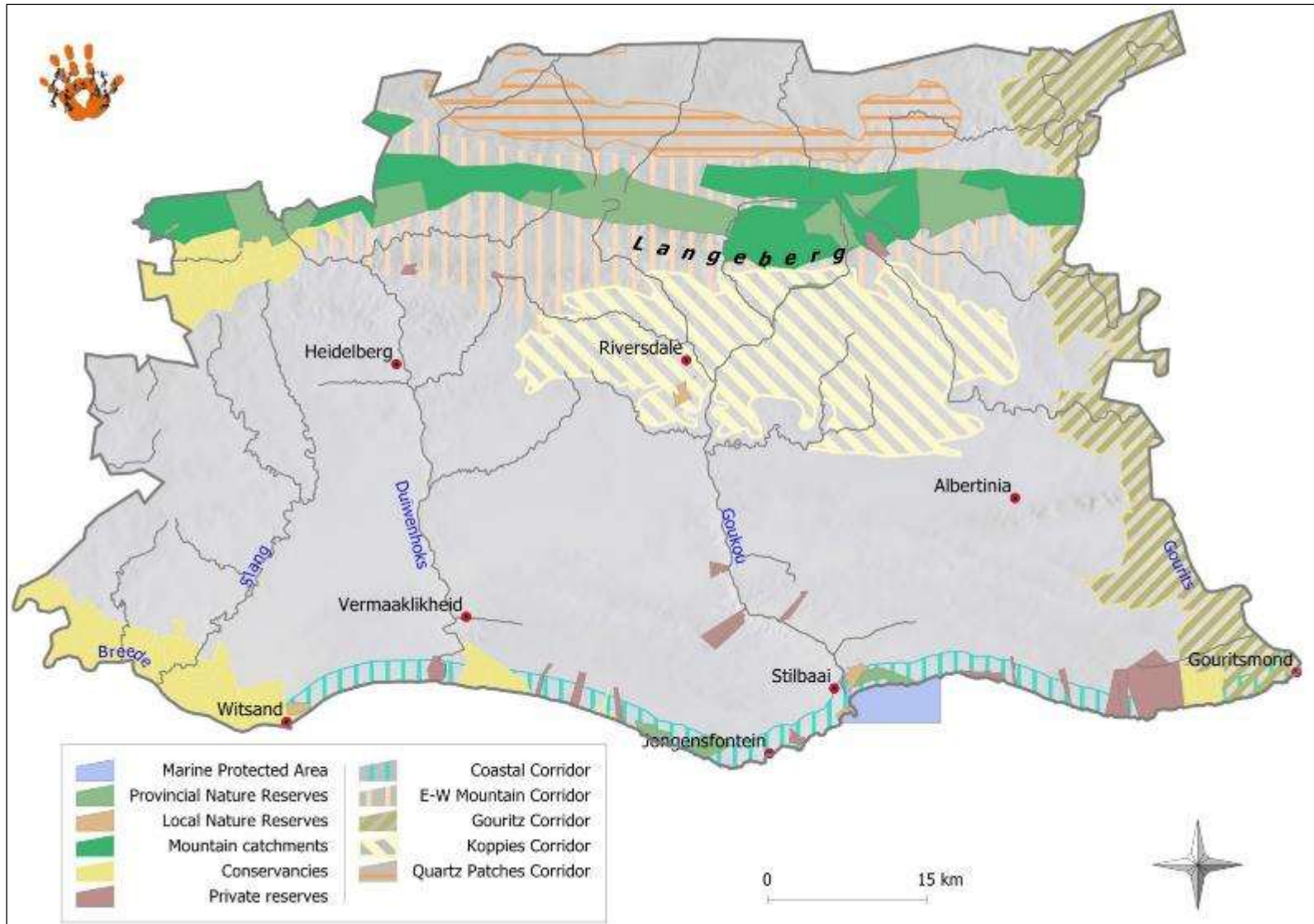
Currently, nearly 6% of land in South Africa is under protection in Type 1 and Type 2 protected areas (Rouget *et al.*, 2004). With a total area of 15% under formal type 1 and 2 protection Hessequa exceeds the national average considerably. It should be noted, however, that the protected areas shown in Figure 4 differ considerably in their management. Whereas all Local Authority Nature Reserves have scientifically formulated management plans, the same cannot be said for some of the other types (e.g. most conservancies). Much remains to be done in Hessequa until all types of reserves will reach their full potential in supporting bioregional conservation goals.

Biodiversity corridors

Figure 4 also shows the biodiversity corridors, of which there are five, identified by regional conservation planners. As described by (Pierce, 2003), corridors are a system of natural pathways for plants and animals meant to safeguarded their future survival. The basic concept is to facilitate the exchange of genetic information between species members and to promote natural evolutionary processes. With much of the countryside in Hessequa already transformed by agricultural development, corridors are seen as instrumental in preventing further loss of biodiversity. For a network to function as intended, the biological mechanisms responsible for the dispersal of plant propagules (pollen, seeds, pods, fruits) should not be interrupted, and neither should be the recombination of genes between sexually mature animals. For this to happen, animals must not be stopped by insurmountable fences, squashed on busy roads, mauled by domestic animals, or caught in indiscriminate gin traps. Similarly, plant propagules rely on the presence of their agents of dispersal, e.g. on free-flowing water along drainage lines, on insect pollination, attachment to the fur of an animal or being swallowed by birds to be transported in the digestive tract. Clearly, corridor

functioning is a matter of the density of people and the nature and the spatial arrangements of infrastructure whether an animal can safely reach the other side.

As can be seen in Figure 4 the coastal and the east-west mountain corridors are supported by declared conservation areas. However, the Gourits, the inland koppies and the Succulent Karoo corridors remain woefully unsupported.



Coastal Management Plan

1.1 INTRODUCTION

The Eden District Coastal Management Programme (CMP) is being developed in accordance with the requirements of Chapter 6 (Section 48, 49 and 50) of the National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008; ICM Act), which was promulgated to establish the statutory requirements for integrated coastal and estuarine management in South Africa. The purpose of the ICM Act is the need to ensure that the development and use of natural resources in the coastal zone is socially and economically justifiable, as well as being ecologically sustainable. The ICM Act is meant to guide and control our behaviour and actions in the coastal zone and to ensure that its benefits can be sustainably and equitably distributed. It is also intended to raise public awareness of the complexities of the coastal area, thereby promoting active participation in the management of the coast (DEA 2012). The ICM Act places great emphasis on the benefit of cooperation and shared management responsibilities.

Coastal Management Programmes are one of the tools the ICM Act uses to achieve its aims and are viewed as policy directives that will enable a coordinated strategic approach to coastal management within a 5-year timeframe. According to the DEA guideline document (DEA 2012), the main objective of a CMP is to collect and combine environmental, economic and political factors that influence the sustainable utilization of coastal resources into plans of action that provide for a coordinated approach for coastal managers and practitioners.

1.2 MUNICIPAL CMPs

The legislative requirements for Municipal CMPs are contained in Chapter 6, Part 3 (Sections 48 to 50) of the ICM Act, and are as follows:

Section 48: Preparation and adoption of municipal coastal management programmes.

- (1) A coastal municipality—
 - (a) must, within four years of the commencement of this Act, prepare and adopt a municipal coastal management programme for managing the coastal zone or specific parts of the coastal zone in the municipality;
 - (b) must review any programme adopted by it at least once every five years; and
 - (c) may, when necessary, amend the programme.
- (2) Before adopting a programme contemplated in subsection (1)(a), a municipality must by notice in the *Gazette* invite members of the public to submit written representations on or objections to the programme in accordance with the procedure contemplated in Chapter 4 of the Municipal Systems Act.
- (3) A municipality must, within 60 days of the adoption of the municipal coastal management programme or of any substantial amendment to it —
 - (a) give notice to the public —

- (i) of the adoption of the programme; and
 - (ii) that copies of, or extracts from the programme are available for public inspection at specified places; and
 - (b) publicise a summary of the programme.
- (4) A municipality may prepare and adopt a coastal management programme as part of an integrated development plan and spatial development framework adopted in accordance with the Municipal Systems Act and if it does so, compliance with the public participation requirements prescribed in terms of the Municipal Systems Act for the preparation and adoption of integrated development plans will be regarded as compliance with public participation requirements in terms of this Act.

Section 49: Contents of municipal coastal management programmes

- (1) A municipal coastal management programme must —
- (a) be a coherent municipal policy directive for the management of the coastal zone within the jurisdiction of the municipality; and
 - (b) be consistent with —
 - (i) the national and provincial coastal management programmes¹; and
 - (ii) the national estuarine management protocol².
- (2) A municipal coastal management programme must include —
- (a) a vision for the management of the coastal zone within the jurisdiction of the municipality, including the sustainable use of coastal resources;
 - (b) the coastal management objectives for the coastal zone within the jurisdiction of the municipality;
 - (c) priorities and strategies —
 - (i) to achieve the coastal management objectives of the municipality; and
 - (ii) to assist in the achievement of the national and provincial coastal management objectives as may be applicable in the municipality;
 - (iii) to address the high percentage of vacant plots and the low occupancy levels of residential dwellings;
 - (iv) to equitably designate zones as contemplated in section 56(I)(a)(i) for the purposes of mixed cost housing and taking into account the needs of previously disadvantaged individuals;
 - (v) to address coastal erosion and accretion; and
 - (vi) to deal with access issues.
 - (d) performance indicators to measure progress with the achievement of those objectives.
- (3) A municipal coastal management programme may include —
- (a) a programme of projected expenditure and investment by the municipality in coastal management infrastructure or in order to implement any coastal management programme;
 - (b) a description of specific areas within the coastal zone that require special coastal management, and management strategies for those areas;

¹ Note that at the time of drafting this CMP, neither a National nor a Provincial (Western Cape) CMP had been developed.

² Note that at the time of drafting this CMP, the National Estuarine Management Protocol had not been finalized (only a Draft for comment was available).

- (c) estuarine management plans; and
- (d) any other matter that may be prescribed.

Section 50: By-laws

A municipality may administer its coastal management programme and may make by-laws to provide for the implementation, administration and enforcement of the coastal management programme.

1.2.1 MUNICIPAL CMPs IN CONTEXT

The ICM Act prescribes three levels of CMPs, namely National (NCMP), Provincial (PCMP) and Municipal (MCMP), which differ fundamentally in terms of mandated functions and spatial coverage (DEA 2012). At each level, the primary objective is to provide action plans or strategies that facilitate a coordinated and integrated approach to coastal management. All tiers of CMPs will comprise strategic (broad themed and long-term) and operational (specific to an areas biophysical and socio-economic features) programmes. With MCMPs being at the bottom of the tier, they are more concerned with site-specific goals that have immediate to short-term affects on the environment and people's livelihoods. According to DEA (2012), MCMPs generally comprise 75% operational and 25% strategic focus.

By virtue of their definition, Municipal CMPs are not designed to address issues that are the mandate of Provincial or National Government (or para-statal for that matter). However, because Provincial and National legislation and the activities of the mandated organs of state often occur within the site-specific municipal context (with mandates sometimes being devolved to Municipal level), there is a direct impact on municipal activities and local livelihoods.

Many of the issues raised by stakeholders should be dealt with at the Provincial, and sometimes National level. In such instances the mandate will be made clear and the recommended way forward will be for these issues to be addressed in either the PCMP or NCMP when they are developed. However, when a Provincial or National mandate has the potential to impact immediately and directly at the Municipal level, it will be addressed in more detail in this CMP.

1.3 CMP AREA

The coastline of the Eden District stretches from the Bloukrans River in the east to the Breede Estuary (Witsand) in the west and comprises five Local (B) Municipalities, namely (from east to west) Bitou, Knysna, George, Mossel Bay and Hessequa (Figure 1.1). The area under immediate consideration will extend inland of the high water mark (HWM) to the extent of the coastal protection zone and seawards to the extent of Municipal jurisdiction or responsibility (i.e. a few hundred meters in most instances). Coastal management issues that are relevant to areas further offshore will fall under the jurisdiction of Provincial or National CMPs, and either SANParks or CapeNature in the

case of MPAs, and will be denoted as such. However, instances where Municipal cooperation and capacity can assist in the implementation of management actions beyond their jurisdiction will be included in this CMP.

A detailed bio-physical and socio-economic description of the Eden District area covered by this CMP is provided in Appendix 1.

1.4 COASTAL AREA DEFINITIONS

The ICM Act refers to many different zones or demarcations within the coastal zone (Figure 1.2), which need to be explained in order to understand the context and responsibility (mandate) of specific coastal management issues and organs of state.

Coastal zone

The area comprising coastal public property, the coastal protection zone, coastal access land and coastal protected areas, the seashore, coastal waters and the exclusive economic zone (200 nm offshore) and includes any aspect of the environment on, in, under and above such area.

Coastal waters

Marine waters that form part of the internal waters or territorial waters (12 nm offshore) of the Republic and any estuary.

Admiralty reserve

Admiralty Reserve means any strip of state-owned land adjoining the inland side of the High-Water Mark and includes land designated, on official plans, deed of grant or title deed, or other document that demonstrates title or land use rights as "government reserve", "beach reserve", "coastal forest reserve" or other similar reserve owned by the State.

Coastal public property

Includes a number of components such as coastal waters, the land below that water, islands, the sea shore (including the sea shore of privately owned islands), and other state land such as Admiralty Reserve. Coastal public property also includes natural resources found in any of the areas mentioned above.

The intention of coastal public property is to prevent exclusive use of the coast by facilitating access to, and sustainable use of the productive coastal resources for the benefit of all South Africans.

Coastal access land

Strips of land designed to secure public access to the coastal public property, and which are subject to public access servitudes in favour of the local municipality within whose area of jurisdiction it is situated and in terms of which members of the public may use that land to gain access to coastal public property. No land within a harbour, defence or other strategic facility may be designated as coastal access land without the consent of the

Minister responsible for that facility. A municipality may, on its own initiative or in response to a request from an organ of state or any other interested and affected party, withdraw the designation of any land as coastal access land.

Coastal protection zone (Appendix 5; Figures 1.1 to 1.6)

A continuous strip of land, starting from the HWM and extending 100 meters inland in developed urban areas zoned as residential, commercial, or public open space, or 1000 meters inland in areas that remain undeveloped or that are commonly referred to as rural areas (includes coastal wetlands, lakes, lagoons or dams situated wholly or partially in these land units). It further includes sensitive coastal areas declared in terms of the Environment Conservation Act (Act 73 of 1989) such as the Outeniqua Sensitive Coastal Areas Extension, coastal protected areas, the littoral active zone, parts of the seashore and Admiralty Reserves that are not coastal public property and any land inundated by a 1:50-year storm or flood. There are however some provisions in order to justify certain adjustments to this zone. The Figures depicting the CPZ presented in Appendix 5 also include all wetlands located within 2 km of the HWM, i.e. 1 km inland of the defined CPZ (it will be the responsibility of DEADP: Coastal Management, when they review this Draft, to decide whether to include some or all of these in the CPZ).

The coastal protection zone is established to manage, regulate and restrict the use of land that is adjacent to coastal public property, or that plays a significant role in the coastal ecosystem. It is also designed to protect people, property and economic activities from risks arising from dynamic coastal processes, including the risk of sea-level rise.

Coastal protected area

A protected area (as defined in Section 9 of the NEM:PAA) that is situated wholly or partially within the coastal zone and that is managed by, or on behalf of an organ of state, but excludes any part of such a protected area that has been excised from the coastal zone (see Appendix 5; Figures 3.1 to 3.6 for all protected areas, reserves etc. in the Eden management area).

Seashore

The area between the low-water mark and the high-water mark: any portion of the seashore below the high-water mark which was lawfully alienated before the Sea-Shore Act (Act 21 of 1935) took effect or which was lawfully alienated in terms of that Act and which has not subsequently been re-incorporated into the seashore.

High-water mark

The highest line reached by coastal waters, but excluding any line reached as a result of exceptional or abnormal floods or storms that occur no more than once in ten years or an estuary being closed to the sea.

Low-water mark

The lowest line to which coastal waters recede during spring tides.

Littoral active zone

Any land forming part of, or adjacent to, the seashore that is unstable and dynamic as a result of natural processes, and characterised by dunes, beaches, sand bars and other landforms composed of unconsolidated sand, pebbles or other such material which is either unvegetated or only partially vegetated.

Estuary

A body of surface water that is part of a water course that is permanently or periodically open to the sea in which a rise and fall of the water level as a result of the tides is measurable at spring tides when the water course is open to the sea or in respect of which the salinity is measurably higher as a result of the influence of the sea. The upper limit is measured as a line 100 m above the upper extent of the River-Estuary Interface (REI).

Special management area

May be wholly or partially within the coastal zone, and may be declared only if environmental, cultural or socio-economic conditions in that area require the introduction of measures which are necessary in order to more effectively attain the objectives of the CMP, facilitate the management of coastal resources by a local community, promote sustainable livelihoods for a local community or conserve, protect or enhance coastal ecosystems and biodiversity in the area.

1.5 CMP STRUCTURE

The main report for the Eden District CMP has been kept as concise as possible; initially this will facilitate the review process by stakeholders and ultimately provide managers with a more user-friendly document. Chapter one provides a brief introduction to CMPs in general and places the Municipal CMP in context; it also provides a description of the many zones or management areas that are relevant to CMPs as defined in the ICM Act. Chapter 2 outlines the Vision for the Eden CMP and describes the Coastal Management Objectives which need to be achieved in order to realize the Vision. The core of the CMP is Chapter three, where priority issues are identified and strategies are described that will guide and facilitate their implementation. Recommendations for implementation of the CMP (next phase of the overall project) are provided in Chapter four and propose the establishment and structure of a Municipal Coastal Committee and the audit/evaluation procedure.

The more detailed aspects that have been used to describe the CMP area and to inform some of the strategies described in Chapter 3, are provided in Appendices that can be viewed as a separate document. All GIS generated maps (Appendix 5) and the contact details for organs of state and key role players and organizations (Appendix 6) are also provided in Appendices, as is the list of references (Appendix 7) described throughout the text.

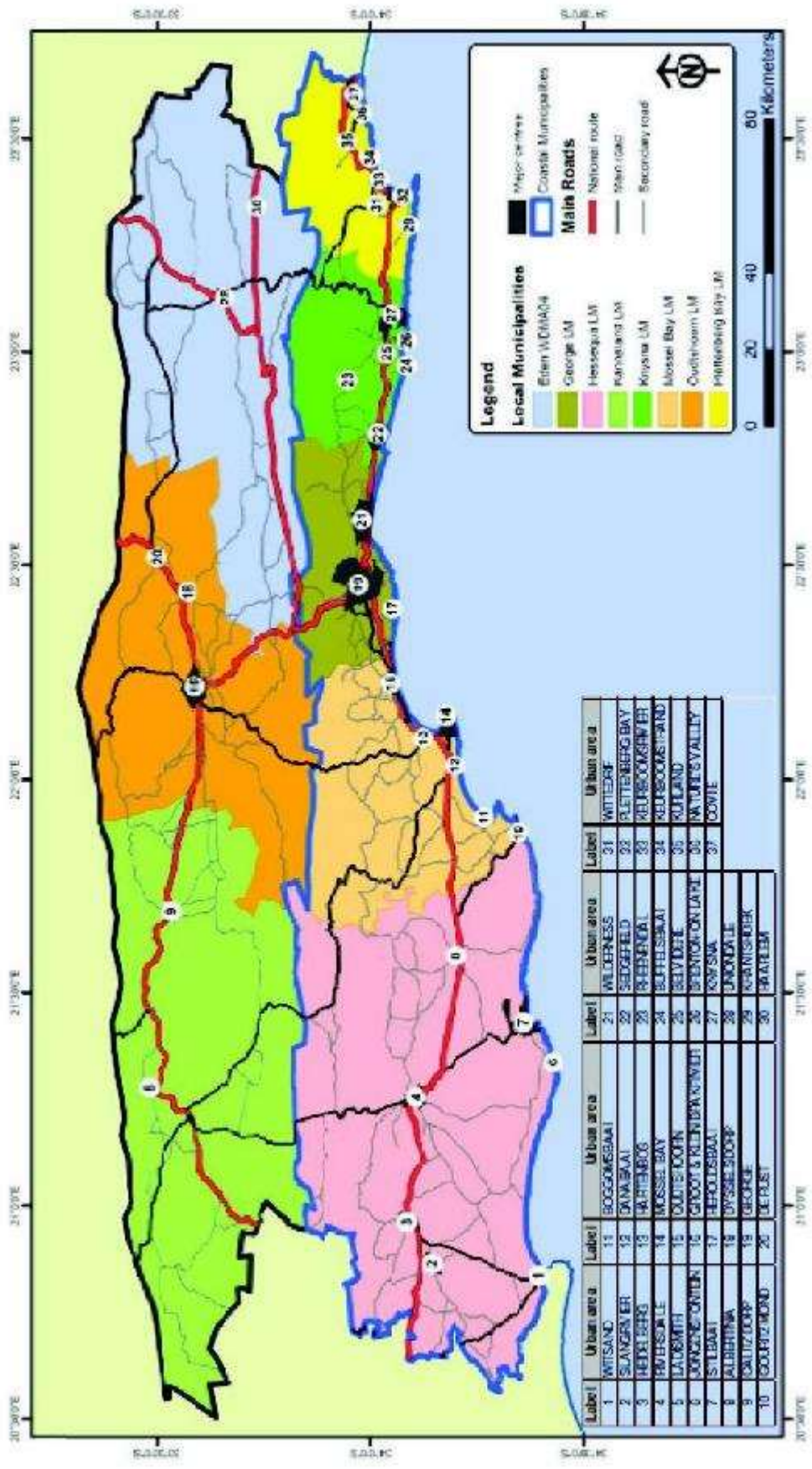


Figure 1.1 The Eden District Municipality, with all key towns and settlements.

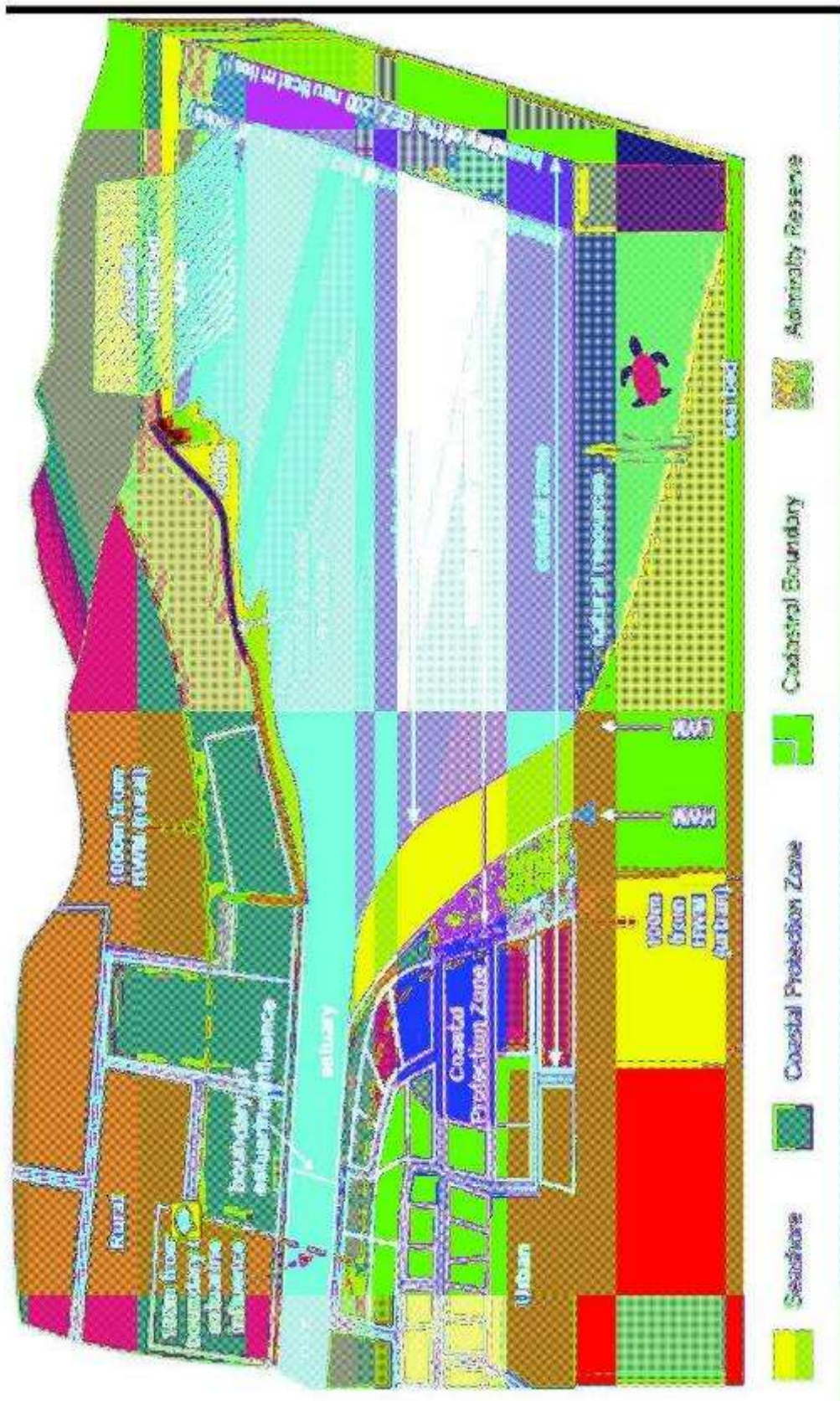


Figure 1.2 The coastal zone (from Celliers *et al.* 2009).

**For more information on the Coastal Management Plan, the complete document is available at the offices of Hessequa Municipality on request.*

Lappiesbaai Beach (Stilbaai) Management Plan

The following information is an extract from the management plan. For more information, please refer to the complete Lappiesbaai Beach and Adjacent Area Management Plan which is available for perusal at the municipal offices on request.

6 MANAGEMENT PLAN

6.1 The 1993 Management Plan

From the above it is concluded that the 1993 management plan (CSIR, 1993) is still valid and can be used as baseline for the development of the updated plan which brings into consideration the influence of climate change and specifically the potential effect of sea level rise. Specific layout and management refinements are, however, recommended based on the results of regular in-situ observations over the 20 years.

6.2 Conceptual plan for the updated management plan for the Lappiesbaai Beach area

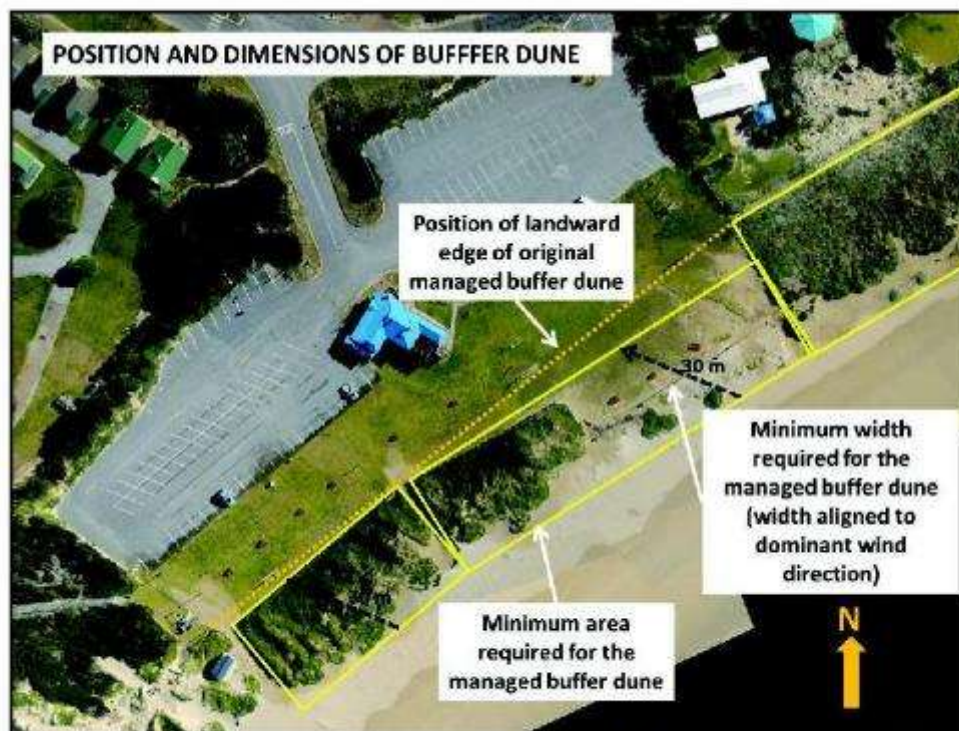


Figure 10: Position and dimensions of the required buffer dune at Lappiesbaai Beach

As depicted in Figure 10, the management plan for the Lappiesbaai Beach areas has the following key components:

- A vegetated buffer dune of at least 30m width is needed to manage the high potential for wind-blown sand influx.
- The design should allow for an actively managed frontal section of at least 10 m vegetated with pioneer dune grass that can outgrow the influx of wind-blown sand (Figure 11). It is foreseen that wave run-up during storm events, especially when these occur at high tides, will extend into this area. During such times it is natural that the width of the useable upper beach area will be reduced.
- The backdune section should be at least 20 m wide and will in time be covered by an indigenous dune vegetation community as the pioneer vegetation is naturally replaced (Figure 11).
- The high potential for wind-blown sand creates a challenge of providing effective pedestrian access pathways. Figure 12 indicates the alignment and positions of proposed raised boardwalks. Examples of a raised viewing deck and raised boardwalks are shown in Appendix 4.



Figure 11: Details of the vegetated areas within the buffer dune

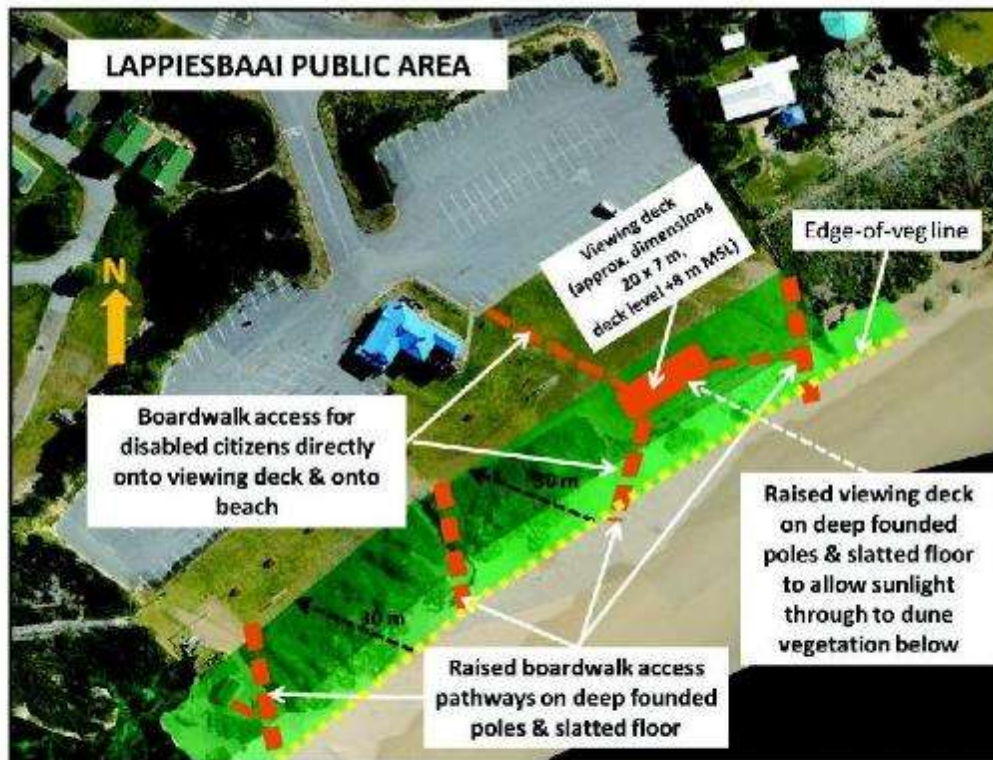


Figure 12: Conceptual details of the proposed raised boardwalks and viewing deck

6.3 Conceptual plan for the updated management plan for the area at the houses east of the Lappiesbaai public area

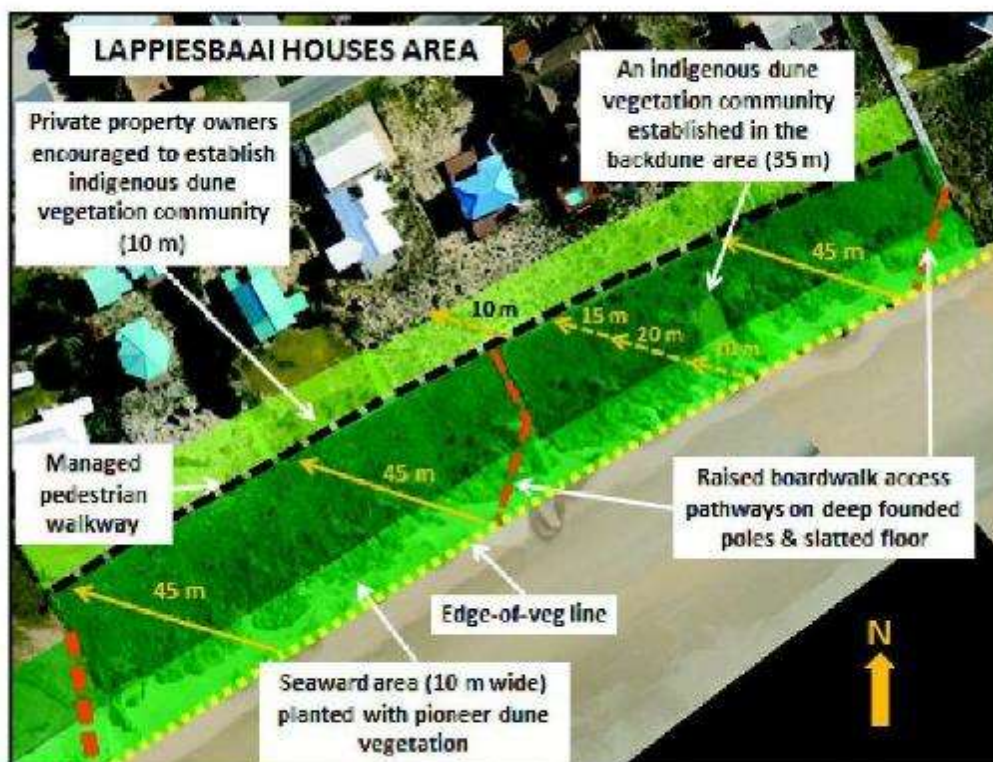


Figure 13: Position and dimensions of the required buffer dune at Lappiesbaai Houses

As depicted in Figure 13, the management plan for the Lappiesbaai Houses area has the following key components:

- A vegetated buffer dune of at least 45 m width is needed to manage the high potential for wind-blown sand influx due to the high risk to the houses.
- The design should allow for an actively managed frontal section of at least 10 m vegetated with pioneer dune grass that can outgrow the influx of wind-blown sand.
- The backdune section should be at least 35 m wide and will in time be covered by an indigenous dune vegetation community as the pioneer vegetation is naturally replaced.
- The high potential for wind-blown sand creates a challenge of providing effective pedestrian access pathways. Figure 13 also indicates the alignment and positions of proposed raised boardwalks. Examples of a raised viewing deck and raised boardwalks are shown in Appendix 4.

6.4 Alongshore crest profile and height

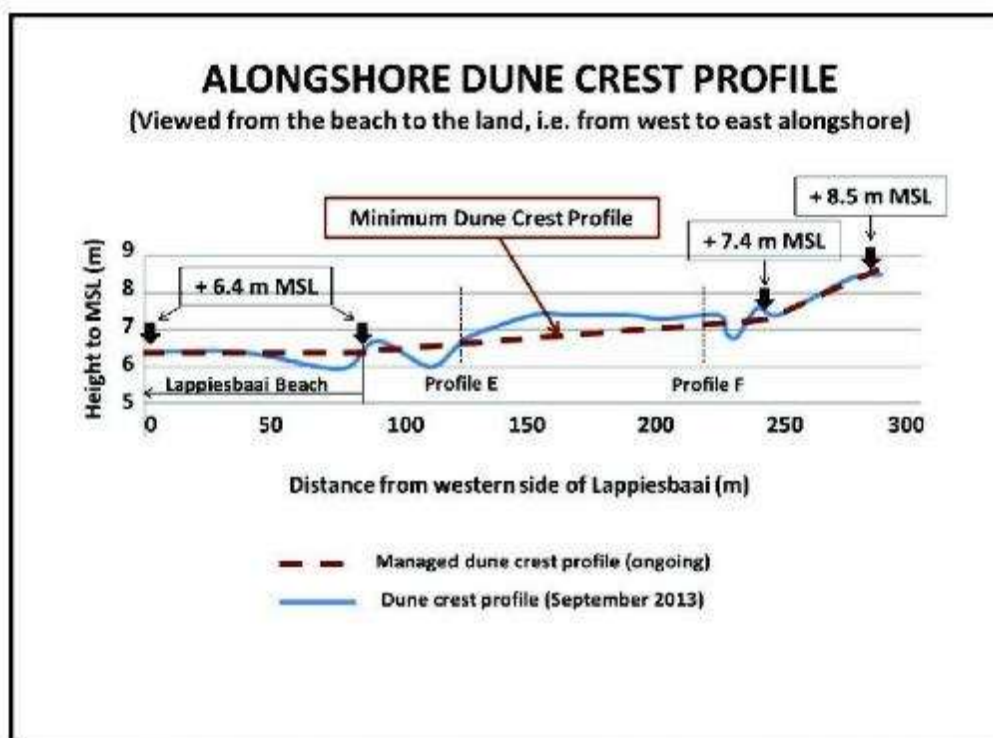


Figure 14: Summary of the key components of the buffer dune crest profile

A key aspect of the needs expressed by stakeholders during the consultation process which resulted in the 1993 management plan was for the public (especially the elderly parked in their cars) to be able to view the sea from the public parking area. Likewise the owners of the houses expressed the desire to be able to see the sea from their houses.

As depicted in the Good Practice Guideline (Appendix 5) it is important to consider the societal aspects when designing a buffer dune. However it is even more important to ensure the dune integrity of the system so-as to ensure its fit-for-purpose, in other words it should be able to provide the desired ecosystem service it was established for in the first place. The ideal is of course to allow the maximum benefit flow from the system without compromising its function.

Figure 14 shows the actual alongshore crest profile as surveyed in September 2013. From Section 6 (Figure 9) it was concluded that the effective dune height for the Lappiesbaai parking area should not be less than +6.4 m MSL. (see Figures 15 & 16). This elevation includes a modest additional allowance of 200 mm to account for inherent uncertainties in determining the individual process components as discussed in Section 4.4.

Likewise the minimum buffer dune crest height for the Lappiesbaai Houses area should be as depicted in Figure 14. In other words the crest height tapers from the +6.4 m MSL level on the western side to tie in with the current foredune height of +8.4 m MSL in the eastern side of the site via a minimum height of +7.4 m MSL in front of the last house along this section. If approved, it is recommended that a series of markers be surveyed in to indicate this minimum crest height (see Figures 17 & 18).

6.5 Alongshore crest profile and height of the Lappiesbaai Beach public area

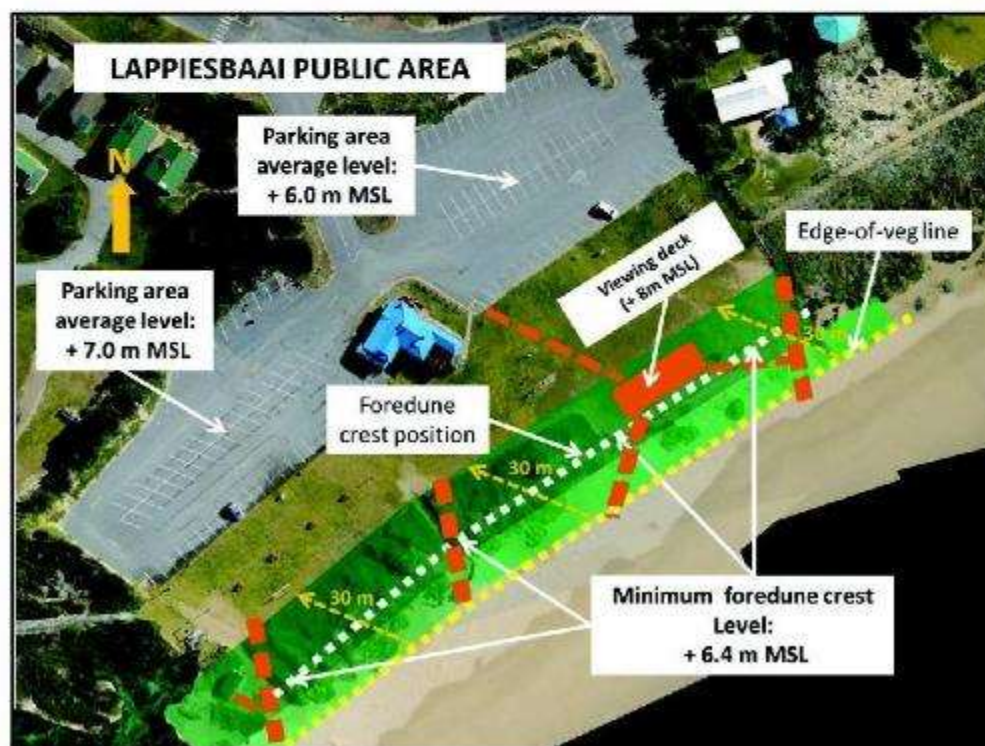


Figure 15: Position of the recommended minimum crest height

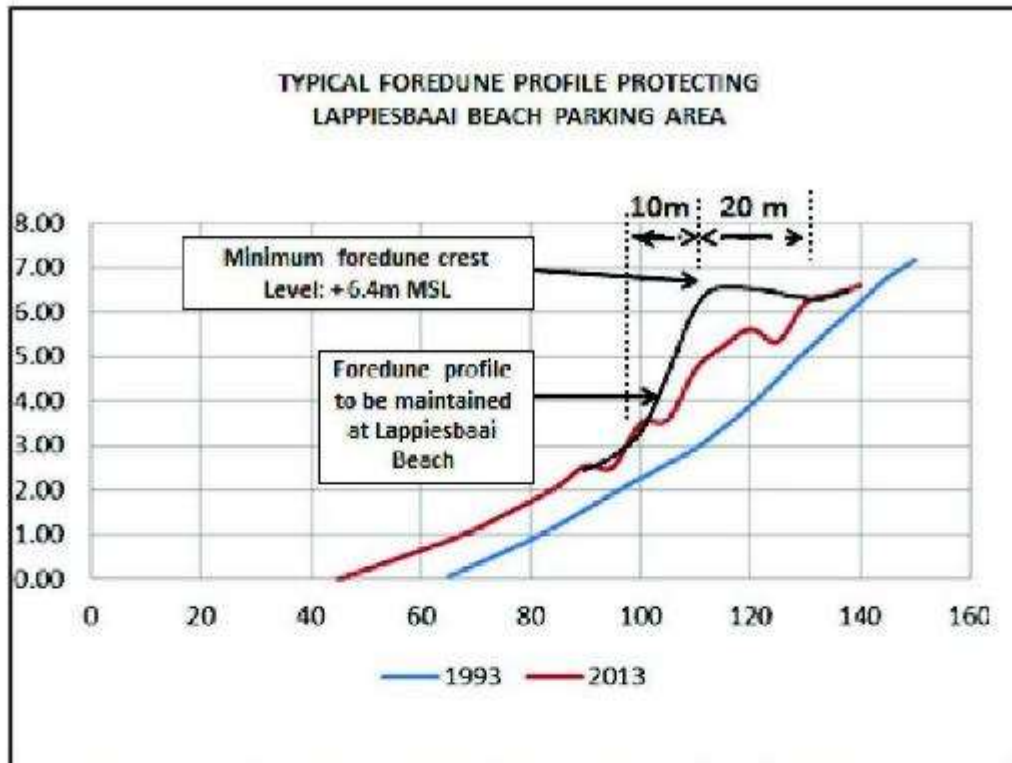


Figure 16: Typical dune profile and dimensions for the Lappiesbaai public area

6.6 Alongshore crest profile and height of the Lappiesbaai Houses area



Figure 17: Position of the recommended minimum crest height

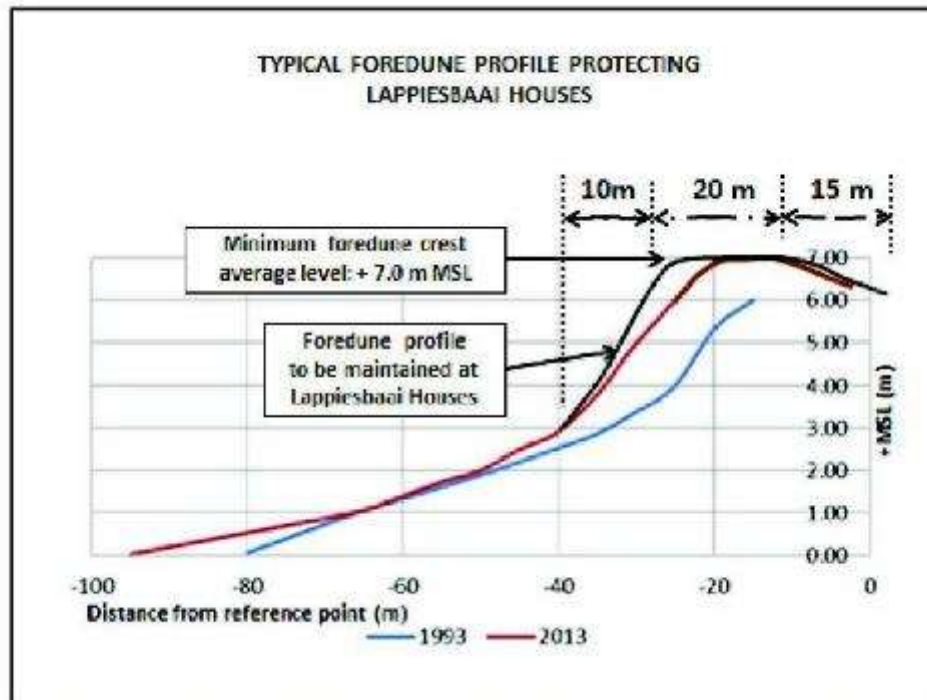


Figure 18: Typical dune profile and dimensions for the Lappiesbaai Houses area

7 MANAGEMENT ACTIONS

The following list of management actions reflect the recommended steps in the implementation of the management plan as depicted in this report:

1. Secure a budget
2. Appoint a dedicated 'dune gardening/management team'.
3. Construct raised boardwalk access ways (normal to dominant wind direction & front portion segmented to limit damage should a large storm occur).
4. Maintain buffer dune integrity (use the Generic Guideline – Appendix 5) and apply the relevant management actions as described. Keep records of all activities associated with the maintenance of the buffer dunes as recommended. Keeping an associated photographic record (date and time important!) will assist in making any required adjustments to the management plan when required.
5. Install a series of dune height reference poles indicating the minimum dune crest heights and use this as an educational topic.
6. Top the buffer dune to the predetermined minimum level (+6.4 m MSL at Lappiesbaai Beach tapering up to +7.4 m MSL on the eastern side of the Houses area) as shown in Figure 14. This can be done when required but such activities should be planned for July

and can be done by mechanical means or via manual labour. Note, a special permit needs to be obtained from DEA if it is required for vehicles to drive on the beach.

7. It is anticipated that a height control intervention will be required on average every 24 months. However if the dune integrity is managed diligently (Step 4) and all 'blown-out' dune sand placed back into the blow-outs and the excess placed back onto the beach (as this is an important natural source of sand that maintains the beach dynamics) it is foreseen that the dune crest height should naturally be maintained at or close to the minimum level.
8. Plan the topping exercise properly which includes the re-establishment of the dune vegetation during late winter and spring only.
9. Prepare a stockpile of seedless branches to be used for blow-out prevention / management, especially during summer and autumn.
10. Communicate effectively (seasonal news article on dune integrity status, especially during vacation periods) to secure cooperative management of the dune integrity.

Note that whereas the dimensions of the buffer dune differ in the area between Lappiebaai and Preekstoel, the essence of the ongoing management actions are similar and could be implemented with success in the area towards Preekstoel.

Witsand Dunes Assessment Report

The dunes area close to the Breede River mouth, is in need of a clear management plan to ensure that human presence do not impact negatively on the natural dunes. The process was started with the Environmental Impact Assessment and the assessment report is highlighted here. Please note that this is a short extract from the assessment report and that the management plan is to be developed. However the complete assessment report is available for perusal at the municipal offices on request.

1. PROJECT DESCRIPTION

(a) Is the project a new development?	YES	NO
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(b) Provide a detailed description of the development project and associated infrastructure.

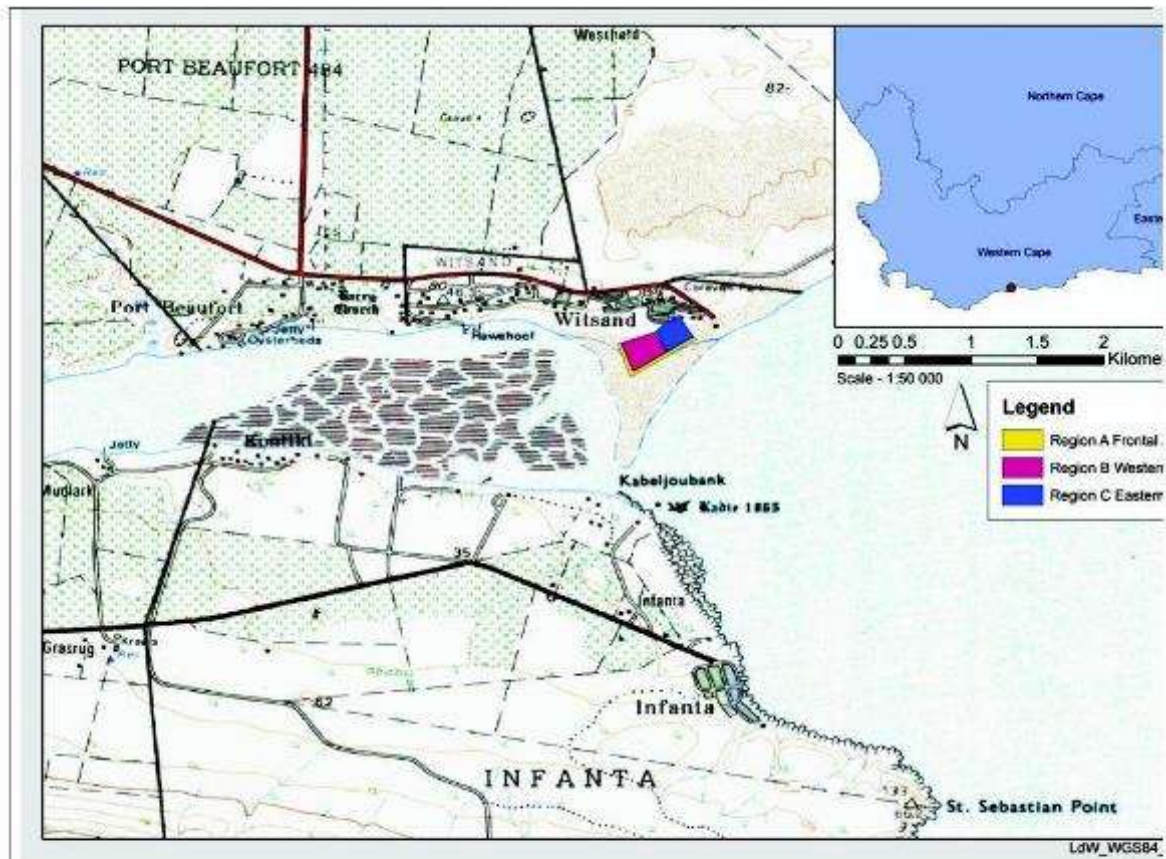
The proposed project will involve the stabilization of the sand dunes at Witsand. This will include the removal of the some sand and the establishment of vegetation on the dunes to prevent the sand from blowing onto the roads and properties. Once sufficient sand has been removed and the supply of sand has been cut off by stabilising the foredunes, indigenous vegetation will be planted on the most of the dune field. In the past the dunes were stabilised by the Department of Forestry often using alien species. The project will also include the removal of alien species encroaching on the dunes as indigenous species are introduced to replace them.

The Dune Field is a dynamic system and is exposed to extreme environmental conditions, e.g. gale force winds, mobile substrate which causes extensive erosion and/or deposition of sand in this area, salt spray, etc. Previous studies have shown that the sand deposited on the spit is carried inland by south and south-westerly winds and is ultimately stored in the relic dune field.

The construction of houses and roads across this dune field has impeded the natural process of sand movement. This in turn has resulted in a build up of sand at the houses and along the roads closest to the advancing dunes.

Due to the fact that the management of sand accumulation within the affected areas will be a long term obligation and that this may essentially become very costly, it has been proposed to stabilize the area. The problem of sand accumulation south of the residential area is unsolvable as it is not possible to cut off the sand supply and therefore the dune sands around the residential area must be managed.

The site has been divided into three sectors for the purpose of the stabilization programme. (See figure below)



The first region requiring stabilisation is the foredunes (the area closest to the coast where sand is deposited). Once this region is stabilised sand deposition will be limited to this area and the foredunes will be built up.

The remaining two sections will be planted with dune plants as the foredunes are stabilised, according to a detailed management plan.

The site is under the jurisdiction of the Department of Agriculture and Forestry (now the Department of Agriculture, Forestry and Fisheries (DAFF)).

In the 1960s and 1970s the then Department of Forestry, carried out an extensive stabilisation programme of dune fields along the southern and eastern Cape coasts using a brushwood packing and planting technique. It proved very successful and this dune field was stabilised to prevent migration of sand onto roads and houses as shown in the photographs below. However, due to a lack of on-going management the area was subsequently destabilised. Stabilised dune systems require the continuous removal of invasive alien species and the re-establishment of pioneer plants in bare areas before blowouts appear. Most importantly they must be fenced off to prevent trampling and disturbance of the sensitive vegetation.

The stabilisation programme will include the training of local municipality workers and officials so that the maintenance of the stabilised dune field will be assured.



INCLUDE THE ENTIRE PROJECT DESCRIPTION I.E. CONSTRUCTION OF STABILIZING WALLS, BOARD WALKS, ETC.

The essential requirement in establishing vegetation on mobile dunes is to prevent sand movement while seedlings or young plants become established, and also create a habitat favourable for seed germination. On mobile foredunes this requires the construction of fences or paddocks to restrict sand movement and/or the use of brushwood to cover the sand.

Fences or paddocks are barriers that protect the stabilised site from being covered by sand and also build a temporary dune which protects the area from erosion or sand deposition. A fence can be constructed using 1m wide nylon shade cloth (40% shade). More economical fences may be constructed of brushwood interlaced between vertically planted poles.

The area may be temporarily stabilised by covering with brushwood. Brushwood moderates the fluctuating high and low temperatures of the sand, halts sand drift and increases the humidity and water content of the soil, thus providing an ideal environment for seed germination and growth (Avis & Lubke 1986b). Brushwood using alien plants is not desirable as seed is brought into the area from these plants. Branches should be spread sparsely, with 650 cubic metres per hectare being a good rule of thumb. Branches should be placed facing the direction of the prevailing wind and not lie high above the sand so as to provide less resistance to the wind. Dune crest areas will have to be covered more densely than hollows.

A further alternative to temporarily stabilise the sand surface in exposed areas is to use geotextiles. Terrasafe is a bio-degradable natural fibre which assists vegetation by stabilising the soil, and degrading naturally over time, thus increasing the organic matter and leaving no artificial material behind.

In addition to the above stabilizing process, boardwalks will be constructed for easy access to the beach and to restrict trampling of newly vegetated areas. Stabilised footpaths should be constructed over the dunes or over vegetation that is susceptible to trampling. These paths should be orientated so as not to align with the predominant wind direction.

Raised wooden boardwalks are recommended, as the area is sensitive. Hand rails should be built where necessary, e.g. on steep slopes.

Air Quality Management Plan

The Hessequa Air Quality Management Plan has been completed and approved by Council and the following information are extracts from the plan. For any other information relating to this plan, please request a copy from the local municipal office.

Industrial Emission Sources

HESSEQUA MUNICIPALITY

The sources of air pollution identified in the Hessequa region and their estimated emissions are given in Table 1 below.

Sources	Emissions	PM	SO₂	NO_x	CO	CO₂
Organic Aloe steam boiler		0.3	0.3	0.1	0.0	28.4
Sentraal Suid Ko-operasie		0.05	0.17	0.48	0.12	510.8
Outeniqua Pale Boiler		0.7	0.0	0.9	1.1	353.1
Riversdale Sawmill		22.6	239.9	15.1	608.3	
Spitskop Stene		80.3	9.4	4.0	6.2	2340.0
Combo Timbers, Albertinia		15.8	168.1	10.6	426.3	
TOTAL, tons per annum		119.8	417.9	31.2	1042.0	3232.3

Continued on the next page.

Given the distances over which coal must be transported to the EDM region it is unlikely that a low-grade coal will be available in Hessequa. It is more likely that A-grade coal will be available to both industrial users and those households that use coal on a regular basis.

A-grade coal is a high-grade fuel with less volatile matter, but higher fixed carbon content with a calorific value of approximately 27 MJ/kg. The calorific values of the other domestic fuels used in EDM are:

LPG	46.1 MJ/kg
Paraffin	28.7 MJ/kg
Wood	15.9 MJ/kg

This implies that each kilogram of coal has the same energy content as approximately 0.6 kg LPG, 0.9 kg paraffin and 1.7 kg wood.

While it is a fairly simple task to obtain the facts given above, determining the annual mass emission rate from household burning is an extremely complex task. It is influenced by many factors, including:

- Seasonal variation, i.e. temperature fluctuations
- Degree of electrification
- Population density
- Availability of suitable fuels

The impacts of these factors are extremely difficult to quantify and emissions are, therefore, difficult to estimate. In addition, very little research has been done on the actual emissions from residential burning activities as most research projects

concentrated on the impact on ambient air quality, health risk, etc. Nevertheless, at least one research project provided useful data.

This project was funded by the Department of Minerals and Energy (DME) and was carried out in 1997 at Qalabotjha in the Free State. This is a village of approximately 15 000 people living in approximately 2 500 residences. The area was provided with limited electrification which was sufficient for essential services.

During the trial project coal was replaced with low-smoke fuels and the reduction in ambient particulates was investigated. While it did not describe actual emission rates, the project determined that the people of Qalabotjha consumed approximately 20 tons of D-grade coal per day during mid-winter. Given an average D-grade coal calorific value of 22.3 MJ/kg, this is equivalent to approximately 16.5 tons per day of A-grade coal.

This information can only be interpreted for a similarly sized population in Eden with the following assumptions:

- Approximately 25% less coal will be used in the EDM due to warmer winter temperatures and higher calorific value of the fuel.
- Maximum coal usage will occur for four winter months of the year, i.e. approximately 12.4 tons will be used per day.
- A further reduction of 25% will occur for four months during spring and autumn, resulting, i.e. approximately 9.3 tons will be used per day.
- A further 25% reduction will occur during the remaining summer months, i.e. approximately 7 tons will be used per day.

Using these assumptions and the differences in fuel calorific values given above, it implies that approximately 3 494 tons coal, 2 046 tons LPG, 3 287 tons paraffin or 5 933 tons of wood will be burned by a population of 15 000 people in EDM in one year.

According to AP-42 typical emission factors for various fuel types used for space heating are as follows (kg/ton fuel):

FUEL	Anthracite	LPG	Paraffin	Wood
Pollutant				
Particulates	4.5	0.04	0.29	1.83
Sulphur dioxide	17.7	0.006	1.04	0.11
Nitrogen oxides	1.3	1.36	2.93	2.24
Carbon monoxide	0.3	0.23	0.73	2.74
Carbon dioxide	2 580	927	3150	891 (**)

** Carbon dioxide emissions from burning of wood are not regarded as greenhouse gas emissions as it is considered part of the short-term CO₂ cycle of the biosphere.

Table 3: Domestic Fuel Emission Factors

If it is assumed that there is an average of 6 people per household, the domestic fuel consumption can be estimated from the information given in Tables 2 and 3, based on the assumed energy required calculated from the Qalabotja project.

Applying these emission factors to the estimated fuel consumption it implies that the following annual emissions (tons per annum) will occur:

Emissions	TPM	SO₂	NO_x	CO	CO₂
Hessequa	11.0	1.3	16.1	16.6	7497

Table 4: Estimated Emissions From Household Burning

It must be stressed that these figures are based on some rough assumptions and can only be verified through an intensive investigation into population densities, fuel burning habits (frequency, types and quantities of fuels), etc. It is, therefore, recommended that such a survey is undertaken on a statistical basis as an objective of the AQMP.

RECREATIONAL BURNING

The incidence of recreational burning of coal, wood, charcoal, etc., in fireplaces and barbecues is regarded as extremely low when compared to space heating and cooking activities in low socio-economic areas. The resultant annual emission rates will, therefore, be so low that it is not regarded as a notable source of air pollutants.

Nevertheless, it must be borne in mind that all of the pollutants mentioned above are emitted during such activities.

GARDEN REFUSE BURNING

Regardless of whether it is legal or not, some garden refuse burning activities occur within the EDM and must be regarded as a notable source of air pollutants as a result of the wide variety of pollutants that are released and the nuisance created by the smoke produced.

According to AP-42 all of the pollutants listed in Section 4.2 are emitted, in addition to methane and non-methane hydrocarbons.

The major issue associated with garden refuse burning is probably the nuisance value of the smoke and odours accompanying the burning of garden refuse.

MOBILE EMISSIONS

Mobile emissions are those caused by sources that are not stationary and can be grouped as follows:

- Road traffic
- Railways
- Aircraft
- Ships

Of these the greatest risk is associated with motor vehicles as emissions occur more frequently in close proximity to people and are the only road traffic sources applicable to Hessequa.

ROAD TRAFFIC

Vehicle emission factors have been developed by the European Union for use in member countries. However, these factors cannot be applied directly to local conditions due to variations in the following factors:

- Differences in vehicle fleet composition, e.g. cars, trucks, diesel powered cars and trucks, motor cycles, etc.
- Differences in vehicle fleet age
- Differences in fuel composition
- Differences in speed
- Differences in topography, i.e. mountains, flat regions, altitude, etc.

Nevertheless, by far the majority of motor vehicles sold in South Africa are based on equivalent European products with the result that it can be assumed that engine technology is comparable with European conditions.

South African fuels follow EU specifications, albeit with a time lag of several years due to upgrades required at local fuel refineries to allow production of EU-level fuels.

The EU developed a set of 6th order polynomials in order to estimate emissions of various pollutants from petrol and diesel powered vehicles. The general format of the polynomials is:

$$y = a + bx + cx^2 + dx^3 + ex^4 + fx^5 + gx^6 \text{ where}$$

y = pollutant emission rate, g/km

x = speed, km/h

a to g = coefficients unique to each pollutant

In addition, coefficients are defined for a classification of 40 different types of vehicles, covering all types of private and commercial road transport used in Europe today.

While the classification used in EU countries is extensive, it cannot be applied to the same level of efficiency in South Africa due to two major shortcomings:

- Inadequate traffic counts on local roads
- Unavailable vehicle fleet composition information

Nevertheless, the use of some assumptions allows the application of the EU polynomials to local conditions. These are:

- The ratio of petrol to diesel powered light motor vehicles (LMVs) is 1:1, i.e. there are as many petrol powered LMVs as there are diesel powered LMVs.
- There are equal numbers of HMVs in each category defined by the EU, i.e. no category has more vehicles than any other category.

- All heavy motor vehicles (HMs) are diesel powered.
- Heavy motor vehicles do not travel at speeds in excess of 100 km/h.

Based on these assumptions the following average emission factors in grams per kilometre at the indicated average speeds were calculated:

Pollutant	LIGHT MOTOR VEHICLES							
	50	60	70	80	90	100	110	120
CO		1.522	1.440	1.420	1.445	1.511	1.618	1.770
THC		0.114	0.106	0.100	0.097	0.096	0.095	0.096
NOx		0.455	0.475	0.517	0.584	0.681	0.814	0.995
TPM		0.022	0.022	0.023	0.025	0.029	0.035	0.043
CO ₂		195.3	198.0	205.3	216.6	231.7	250.6	273.3
Pollutant	HEAVY MOTOR VEHICLES							
	50	60	70	80	90	100		
CO	1.031	0.962	0.958	0.988	1.022	1.024		
THC	0.285	0.258	0.252	0.260	0.271	0.182		
NOx	5.729	5.485	5.503	5.666	5.842	5.904		
TPM	0.16	0.148	0.148	0.154	0.163	0.167		
CO ₂	713.4	678.9	681.7	703.1	728.3	756.1		

Table 5: Average Motor Vehicle Emission Factors, g/km

The South African National Roads Agency Ltd (SANRAL) carries out vehicle counts on major routes from time to time. During 2011 vehicle counts were done on the major routes in the Eden district and totals for LMVs and HMs as well as average speeds for both groups and the totals applicable to Hessequa are shown in Table 12 below.

Based on the average vehicle emission factors given in Table 11 above, the emissions of the pollutants given in Table 11 were calculated and the results are given in Table 13 below in tons per annum.

Site Name	Road	Distance km	Speed Limit km/h	HMV's	LMV's	Avg. Speed HVM's km/h	Avg. Speed LMV's km/h
Riversdale West	N002	74	120	16016	78446	64.6	81.0
Albertinia East	N002	76.1	100	17438	103133	88.9	115.6

Table 6: SANRAL Vehicle Count Data

POLLUTANT	LIGHT MOTOR VEHICLES						HEAVY MOTOR VEHICLES					
	CO	HC	NOx	PM	CO ₂		CO	HC	NOx	PM	CO ₂	
Riversdale West	8.2	0.6	3.0	0.1	1192		1.1	0.3	6.5	0.2	805	
Albertinia East	11.1	0.8	4.1	0.2	1611		1.3	0.3	7.3	0.2	901	
Totals per vehicle class	2.4	0.6	13.8	0.4	1706		19.4	1.4	7.1	0.3	2803	
Totals per pollutant	21.8	2.0	20.8	0.7	4508.6							

Table 7: Estimated Motor Vehicle Emissions, tons per annum

The emission factors shown in Table 6 above indicate that the emissions of slow moving vehicles are generally higher than when at speed. This is due to internal engine combustion efficiencies which result in more efficient fuel combustion,

It can, therefore, be argued that the emissions of all vehicles in urban driving cycles, especially in town centres, will be higher than for rural driving cycles. With no vehicle count data in town centres in the Eden district it is, therefore, not possible to estimate the level of emissions in each town.

It is recommended, therefore, that vehicle counts in major traffic flow areas are obtained with some degree of urgency.

OTHER SOURCES

Emission sources that cannot be grouped into any of the types listed above mainly relate to the burning of a variety of waste material in open fires and uncontrolled activities. Included in these sources are:

- Burning activities
- Municipal solid waste disposal
- Animals

These sources are dealt with individually below.

BURNING OF VEGETATION

- Burning of vegetation removed from a large area destined for development
- Burning of waste products

Burning of Vegetation

It is apparently common practice for developers to clear vegetation from an area for development and then subsequently burning the vegetation on site. Currently approval for these operations is only sought from the local fire departments.

According to AP-42 the emissions emanating from the burning of vegetation is a function of the type of species being burned and the mass of material that is destroyed in this manner. Typical emission factors (kg/ton vegetation) are as follows:

-- Burning of unspecified wood types:

Particulates:	19 kg/ton
Carbon monoxide:	56 kg/ton
Methane:	6 kg/ton
Non-methane hydrocarbons:	14 kg/ton

-- Burning of unspecified weeds:

Particulates:	8 kg/ton
Carbon monoxide:	42 kg/ton
Methane:	1.5 kg/ton
Non-methane hydrocarbons:	4.5 kg/ton

According to AP-42 CO₂ emitted from these sources are generally not counted as greenhouse gas emissions because it is considered part of the short-term CO₂ cycle of the biosphere. However, CO₂ emissions can be expected to be approximately 1 550 kg/ton of vegetation burned.

In addition to these “traditional” pollutants, many other organic compounds may be released to atmosphere, depending on the combustion efficiency achieved in the burning process. The table below gives some emission factors in kg/ton of vegetation burned.

Compounds	Emission factor
Ethane	0.7
Ethylene	2
Acetylene	1.124
Propane	0.358
Propene	1.244
i-Butane	0.028
n-Butane	0.056
Butene	1.192
Pentene	0.616
Benzene	1.938
Toluene	0.730
Furan	0.342
Methyl ethyl ketone	0.290
2-Methyl furan	0.656
2,5-Dimethyl furan	0.162
Furfural	0.486
o-Xylene	0.202

Table 8: Product of Combustion of Vegetation

Burning of Waste Products

The types and quantities of pollutants emitted during the uncontrolled burning of waste products are a direct function of the types and masses of wastes burned.

Emissions can consist of heavy metals (aluminium, antimony, arsenic, barium, calcium, chromium, copper, iron, lead, magnesium, nickel, selenium, silicon, sodium, titanium, vanadium and zinc), and a wide variety of organic compounds, some of which are regarded as carcinogenic, e.g. benzene, toluene, xylene, etc.

Without knowledge of the actual waste being burned, it is not possible to estimate emissions from the operation.

MUNICIPAL SOLID WASTE DISPOSAL

It is well known that municipal solid waste (MSW) disposal sites, or "tip sites" as it is generally referred to, are sources of significant emissions, the most prominent being methane (CH₄) and carbon dioxide, both of which are known greenhouse gases.

A number of MSW disposal sites are, or have been until recently, in operation in the Hessequa district. Details of the sites and their status were obtained from the Integrated Waste Management Plan (IWMP) for the Eden District Municipality that was compiled in 2006.

According to the IWMP a total of eight MSW sites are in operation, or have been until recently, i.e. Albertinia, Heidelberg, Riversdale, Slangrivier, Jongensfontein, Gouritsrivier, Witsand and Melkhoutfontein.

In addition, the IWMP provided details of the daily tonnage of MSW disposed of in each site.

The USEPA suggests an extensive method for estimating the emissions from MSW sites based on the age of the site, its expected life span and the annual mass of solid waste disposed of at the site.

The information provided in the IWMP served as input data for the calculations. Where insufficient information was provided, e.g. the age of a site, its expected life span, etc. some assumptions were made in order to obtain emissions information.

Cognisance is taken of the development of a large MSW disposal site near PetroSA in Mossel Bay and that the aim is to dispose all of the MSW collected in Bitou, Knysna, George, Mossel Bay and the Gouritsriver MSW site in Hessequa in this new site.

However, cessation of the use of a site does not mean that emissions cease accordingly as decomposition of disposed waste products continue unabated, albeit at a reduced rate.

Based on the information obtained from the IWMP and the USEPA's methodology, the following emissions in tons per annum were estimated from MSW disposal sites in the Hessequa region:

Pollutant	CH₄	THC	CO₂
Albertinia	86.4	90.1	237.0
Heidelberg	221.6	231.1	608.1
Riversdale	443.3	634.3	1216.0
Slangrivier	44.5	46.4	122.2
Jongensfontein	24.3	25.3	66.7
Gouritsrivier	27.3	28.5	75.0
Witsand	49.3	51.4	135.1
Melkhoutsfontein	369.4	385.3	1014.0
TOTAL, tpa	1266.1	1492.4	3474.1

Table 9: Emissions From Hessequa MSW Disposal Sites, tons per annum

It must be pointed out that the practice of burning of MSW at disposal sites may occur from time to time, sometimes officially and sometimes due to vandalism.

It is virtually impossible to estimate the emissions from the uncontrolled burning of a municipal refuse dump as the composition of the refuse, the duration of burning and the temperature at which it occurs all play a role in the emissions. The emission rates of the various pollutants are, therefore, highly variable.

Bearing in mind the large variety of components that make up municipal waste in general, the following pollutants can be expected:

- Criteria pollutants: SO₂, CO, NO₂, particulates, etc.
- Acidic gases: HCl, HF, HBr, SO₃, etc.
- Heavy metals: Arsenic, cadmium, chromium, lead, mercury, etc.
- Organic compounds: A wide variety of compounds, including dioxins, furans, PCBs, chlorophenols and poly-aromatic hydrocarbons

According to AP-42 the following emission factors for major pollutants can be allocated to municipal refuse burning activities (kg/ton refuse):

- Particulates: 8.0 kg/ton
- Sulphur oxides (SO₂ & SO₃): 0.5 kg/ton
- Nitrogen oxides: 3.0 kg/ton
- Carbon monoxide: 42.0 kg/ton
- Methane: 6.5 kg/ton
- Non-methane hydrocarbons: 15.0 kg/ton

No emission factors are available for acidic gases, heavy metals and other organic compounds.

As it is conceivable that rubber products, e.g. motor car tyres, are disposed of in landfill sites, the burning of refuse in these sites can lead to the emission of many heavy metals and a long list of organic compounds, many of whom are potentially dangerous substances.

As a result of the potentially harmful nature of these emissions it is strongly recommended that the burning of MSW, whether official or otherwise, is ceased and an alternative solution sought through the regional municipal waste handling policy

FARM ANIMALS

During world-wide investigations into greenhouse gas (GHG) emissions and climate change it became clear that all animals contribute to GHG emissions, notably methane gas (CH₄).

The United Kingdom's Department of Environment, Food and Rural Affairs (DEFRA) compiled the following set of methane emission factors associated with a range of farm animals:

Animal type	Total CH₄ kg/head/year
Dairy Breeding Herd	128.0
Beef Herd	50.74
Cattle: Others	54
Pigs	4.5
Breeding Sheep	8.19
Other Sheep	8.19
Lambs < 1year	3.276
Goats	5.12
Horses	19.4
Deer (stags & hinds)	10.66
Deer (calves)	5.33
Poultry	0.078

Table 10: DEFRA Farm Animal Emission Factors

During a survey of the number of farm animals in the Western Cape by the provincial authorities, the following totals emerged for the Eden district:

Animal counts	Hessequa
Breeding animals	2872

Beef	11964
Dairy	29505
Donkeys	34
Horses	494
Goats	6046
Sheep	12451
Poultry	7000

Table 11: Farm Animal Counts

The methane emissions calculated from DEFRA's emission factors and animal count data resulted in a total of 4 895 tons per annum.

SUMMARY OF EMISSIONS

The total emissions estimated across the EDM region are as follows:

Total particulate matter:	132.9 tpa
Sulphur dioxide:	419.2 tpa
Nitrogen oxides:	69.9 tpa
Carbon monoxide:	1 082.4 tpa
Carbon dioxide:	19 357.5 tpa
Total hydrocarbons:	1 500.9 tpa
Methane:	6 161.9 tpa

CONCLUSION

As can be deduced from the various sections above, a relatively small number of emissions sources exist in the Hessequa municipal district. While attempts have been made to compile as complete a list of sources and emissions as possible, it must be

borne in mind that an accurate and representative list of emissions cannot be compiled at this stage as there simply is not enough data available.

It is highly recommended, therefore, that a dedicated effort is made to obtain reliable emissions data for the region.

The emissions inventory discussed above was compiled as part of EDM's AQMP review program. However, future maintenance and expansion of the inventory must become a key activity of Hessequa's AQMP and Air Quality Officer.

Chapter 2 – Infrastructure

MUNICIPAL INFRASTRUCTURE GRANT (MIG)

Introduction

The MIG Programme is part of government's overall strategic programmes to eliminate poverty and create conditions for local economic development. It will, therefore, maximise opportunities for employment creation. The programme is demand driven and service delivery is decentralised to municipalities. Municipalities play a central role in coordinating development activity and delivery of municipal infrastructure in their Jurisdictions.

The Aim of the Municipal Infrastructure Grant (MIG) Program is to assist the poor to gain basic access to infrastructure thereby also improving the opportunity to maximise economic benefits.

This purpose of this report is to evaluate Hessequa Municipality's performance in respect of the Municipal Infrastructure Grant (MIG) to the National Treasury in terms of Chapter 3 section 11(6) of the 2010 Division of Revenue Act. This report also indicates the planned projects to be funded through the Municipal Infrastructure Grant.

The objectives of the evaluation are:

- To record the actual performance of the municipality throughout the financial year under consideration;
- To identify factors that caused delays in the execution of projects with a view of eliminating these in future;
- To critically evaluate performance with a view to improve performance in future.

Background

Hessequa Municipality covers an area of approximately 5 600 km² and is situated in the Eden District Municipal Area in the Western Cape Province. It is bounded on the north by the Langeberg mountain range and stretches along the Southern Cape coast from the Gourits River in the east to the Breede River in the west.

Hessequa is a predominantly rural agricultural region while the rise of tourism in the last half century has resulted in the establishment of four coastal towns namely Witsand, Jongensfontein, Stilbaai and Gouritsmond. Riversdale can be classified as the primary regional service centre and seat of the Hessequa Municipality while Heidelberg and Albertinia can be classified as secondary service centres. Slangrivier can be classified as a rural town, mainly residential, although some trades and services are found, while Vermaaklikheid and Groot-Kragga are rural settlements.

Hessequa can be taken to have a population of some 50,952 (counted in 2009/10 by fieldworkers of Hessequa Municipality who were provided with data collecting devices of which 20 were procured to address the statistic dilemma of municipalities where the most recent available statistics were from the 2001 census). Significant portions of Hessequans live below the poverty line and pockets of extreme poverty exist, for example in Kwanokuthula in Riversdale and in Slangrivier. Employment fluctuates around 50%. The WSDP indicates that 70% of the population falls under the predisadvantages group.

The Hessequa PMU was established at the beginning of the 2011/12 financial year. The PMU is fully integrated into the technical services section of the municipality and receives excellent support from all the other municipal departments as and when needed.

Progress to Date and Planned Projects (Funded and non-funded)

MIG PLANNING											
Project	Location	Proj Cost	Counter Funding	Grant Funding							Status
					201314	201415	201516	201617	201718	201819	
PMU (5% Admin Fees)	Hessequa	639,950	0	639,950	631,100	649,850	670,900	691,200	691,200		
1ML Reservoir	Heidelberg	3,903,816	1,171,145	2,732,671							complete
1ML Reservoir Budget Main	Heidelberg	1,528,043	458,413	1,069,630	627,148						complete
Roads & Stormwater Upgrade	Slangrivier	18,593,970	0	18,593,970	821,192	2,940,978	3096592			7,331,250	Construction
Theronville Sport Upgrade Ph 1	Albertinia	5,604,810	1,345,154	4,259,656	4,259,656						Clarification Meeting
Theronville Sport Upgrade Ph2	Albertinia	1,733,604	415,810	1,317,794					1,317,794		Awaiting Appraisal
Refurbishment Sewerage Works	Riversdale	4,608,985	276,985	4,332,000	1,637,136	2,050,254					Design /Tender
Aloeridge Stormwater canal	Riversdale	2,280,000	280,000	2,000,000	1,999,900						Appeal Period applies
New Bulk Water Supply	Melkhoutfntein	4,081,741	408,174	3,673,567			1,832,697	1,840,871			Concept
New Bulk Sewer Supply	Melkhoutfntein	3,151,787	315,178	2,836,609			1,575,894	1,260,716			Concept
Bulk Sewer Upgrade	Riversdale	13,156,854	3,815,488	9,341,366	2,485,448	6,855,918					Approved
Rehabilitation of sw pipe	Riversdale	500,000	0	500,000		500,000					Approved
Oxidation Ponds Phase 2	Slangrivier	815,634	100,166	715,468					715,468		Report outstanding
Riversdale WWTW Phase 2	Riversdale	38,801,332	11,588,839	27,212,493			6,241,918	10,031,214	10,939,361		Approved
New Bulk Water Investigation	Melkhoutfntein	100,000	0	100,000	100,000						Approved
New Bulk Sewer Investigation	Melkhoutfntein	60,420	0	60,420	60,420						Approved
Totals		99,560,946	20,175,352	79,385,594	12,622,000	12,997,000	13,418,000	13,824,000	13,663,823	7,331,250	

New MIG Projects for Application		
Albertinia	Albertinia	1,000,000
Helmstraat Sigwater	Heidelberg	500,000
Hessestraat stormwater kanaal	Riversdal	1,000,000
Kloof stormwater kanaal	Riversdal	1,500,000
Melkhoutfontein	Stilbaai	1,500,000
Water toevoer na Kleinboere	Albertinia	1,000,000
Water toevoer na Kleinboere	Stilbaai	1,000,000
Behuising Watervoorsiening	Stilbaai	4,632,000
Nuwe Reservoir Riversdal	Riversdal	6,500,000
Nuwe Reservoir	Gouritsmond	2,000,000
Upgrading of Sewerage Works	Albertinia	2,000,000
Upgrading of Sewerage Works	Witsand	1,000,000
Upgrading of Sewerage Works	Gouritsmond	1,700,000
Opgradering van Stortingsterreine	Hessequa	2,817,115
Vervang Vibracrete (Sportgronde)	Heidelberg	35,000
Ablusiegriewe sportgronde	Heidelberg	140,000
	Total	28,324,115

PDO 12: ELECTRICAL SERVICE

PDO:	#12	Delivery and Maintenance of Electrical Service to Users		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Electrical Network Master Plans	Approved	2012

Albertinia

Existing Network and Proposed Changes

4.1 Eskom Supply:

The Eskom supply is provided from a 66/11kV Eskom substation adjacent to the main intake substation, i.e. "SS Albertinia" via an 11kV overhead radial line (no firm supply).

The current notified maximum demand with Eskom is 2 500 kVA and the maximum actual kVA demand was measured in December 2007 at 2 165 kVA.

The estimated maximum demand in the next 10 years is about 3,3 MVA, which means that the existing supply cable will be just sufficient to cater for the estimated load. The town's load towards the end of the ten year period must, however, be closely monitored to ensure that the supply cable be upgraded when required.

Eskom indicated that they will be able to provide the estimated power at the end of the master plan period from said substation and overhead line.

Municipal Network:

The existing main MV (11kV) reticulation network consists of underground cable and bare & ABC overhead line feeders, feeding from the main switching (intake) substation i.e. "SS Albertinia". The feeders are connected to a various number of metal clad ring main units and miniature substations forming part of a number of rings. The underground cables are predominantly 35mm² copper with a few shorter lengths of 50mm² Cu. Said overhead lines consist of 35mm² AAAC and 50mm² ABC Conductor. The loads on the system conductors are generally well within the current capacities of the conductors, but upgrading measures on some ring main units, cable feeders, and additional load centers, are required to accommodate the expected load growth in Albertinia as further discussed below.

The existing minor feeders are mainly in the Rainbow and Theronville townships and rural area, are generally overhead lines consisting of aluminum conductors and are taken from the afore-mentioned ring main units, by means of fuse switches. Some of these feeders needed to be extended to strengthen the current main reticulation network in future with ring feeds.

CBD and Town Areas:

Feeder cables / overhead lines:

The CBD and Town Areas are presently fed by means of short lengths of 35mm² AAAC and 50mm² ABC overhead lines and a mixture of 35mm² and 50mm² Cu cables.

An additional supply is required to assist the two main incomers to town, i.e. Feeders "MS Saayman" & "RMU 6 – MS Hoof" (combination of 35 and 50mm² underground Cu cables), and secondly Feeder "MS Malan" (combination of 35mm² Cu cables and 35mm² AAAC overhead line). The firm supply from the main intake substation to town is currently 2,29MVA (current capacity of a 35mm² Cu cable) and it is expected that the town's peak demand will reach this load in 2014. (See Annexure A). We propose that ring main unit "RMU 6" be upgraded as detailed on the schematic diagram, which will ensure a firm supply of 4,58MVA to town.

We propose that all substations be connected to a ring feed supply which will require the supply and installation a 25mm² Cu cable in Tuin Street, 35mm² Cu cables in Badenhorst Street and a 35mm² Cu cable between Ground Mounted Transformer "GMT R&A Koöp" and "RMU 4".

The connection of pole mounted transformer substation "PMT Parkstraat" is not recommended at this stage, since it has been assumed that the future developers of the erven situated on the northern side of this substation will upgrade same to be part of their development.

It is recommended that the main supply to the main intake substation, consisting of an aged overhead line, metering equipment, pole mounted switches, pole mounted transformer substation confined in a very restricted area, be upgraded to ensure a safer working installation and to increase the quality of supply to town.

It is recommended that the aged ABC overhead conductor between "MS Malan" and "MS Kragstasie" be replaced with a 35mm² Cu underground cable to ensure a firm supply to main network.

The current capacity of the 70mm² Cu underground cable is expected to be reached towards the end of 2022 and it is proposed that said cable be replaced with a 185mm² Cu cable.

Switching Stations and Ring Main Units:

"SS Albertinia" is a brick built substation housing four (4) ring main circuit breakers. The substation does not need to be extended at this stage, or during the master plan period. Extension of the substation will, however, be required when an additional feeder circuit breaker will be required in future when a dedicated supply is required for a load centre on the southern side of town. "RMU 4" has been indicated to be the future load centre and all new extensible switches to be connected to this ring main unit must be circuit breakers.

It is recommended that "RMU Malan" be supplied and installed, which will ensure a ring feed supply to miniature "MS Tuin". "RMU 2", which is almost 40 years old, must be replaced with a new ring main unit to ensure the safe switching in future.

Miniature Substations:

A new ring main unit is to be supplied and installed inside the MV compartment of "MS Tuin" and "MS Dorp" to ensure a ring feed supply to said substations.

New miniature substations, i.e. "MS William", "MS Aalwyn" and "MS Matoppo" are proposed to ensure a good quality of LV supply to the erven in their respective areas.

New miniature substations "MS Future A", "MS Future B", "MS Future C", "MS Future F" and "MS Future G", including their supply cables, indicated in green on the aforementioned drawing, will be supplied and installed by future Developers in the approximate locations depicted on the drawings.

From our inspection it was noted that some of the ring main units were wrongly labeled. We propose that all switchgear and equipment be labeled according to the drawings.

The Industrial Area:

Feeder cables / overhead lines:

The Industrial Area is presently fed by means of two 35mm² Cu cables resulting a ring feed supply to this area. No upgrading measures are currently required for this area.

A new underground network is, however, indicated in green on the southern side of the N2 National Road and will be supplied and installed when this area is developed by future Developers.

Ring Main Units:

It is recommended that ring main unit "RMU GMT R&A Koöp" be supplied and installed to ensure a ring feed supply to miniature "GMT R&A Koöp".

Ring main units "RMU 5" and "RMU Aloe Park" each need to be upgraded with an additional isolator switch when future development takes place on the southern side of the N2 National Road. Said upgrade will be done by the future Developers.

Miniature Substations:

New miniature substations "MS Future D", "MS Future E", "MS Future J" and "MS Future K", including their supply cables, indicated in green on the aforementioned drawing, will be supplied and installed by future Developers in the approximate locations depicted on the drawings.

A new ring main unit is to be supplied and installed inside the MV compartment of "MS Waterworks" to ensure a ring feed supply to the above substations.

Townships and Rural Areas

Overhead lines:

The township and rural areas are mainly fed by overhead lines and it is recommended that the network be inspected regularly to ensure unnecessary outages due to bad maintenance.

The overhead line to Driefontein has recently been upgraded and we do not foresee any immediate upgrading works on this line, except for regular inspections.

A section of overhead line to be supplied and installed between pole mounted transformer substations "PMT L" and "PMT N" is depicted on the master plan layout, which will ensure a ring feed supply to "PMT I", "PMT J", "PMT K", and "PMT L".

Pole mounted fuse switches in the townships must be replaced with isolator switches, as depicted on the drawings, to ensure the easy switching of electrical supplies from various sources.

Ring Main Units:

The following upgrading measures are required on the ring main units:

To increase the switching possibilities on the main network and better the quality of the supply to the end user by sectionalizing possible sensitive earth faults, it is recommended that ring main unit "RMU Bloekompark" be installed.

Miniature Substation:

A new miniature substation, i.e. "MS Oker Way", including 35mm² Cu cable, is proposed to ensure a good quality of LV supply to the erven in this area.

Condition:

The condition of electricity assets were recently (2009) determined during a field survey by Messrs Aurecon and it was noted that RMU 2 must be upgraded as discussed under item 4.2.1.2.

Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The immediate urgent elements which must be attended to:

- (a) Upgrade the MV supply to "SS Albertinia" to ensure a safer working installation and to increase the quality of supply to town. Note that this upgrade does not include the upgrade of the existing 70mm² Cu cable to a 185mm².
- (b) Provide a firm supply to the town, i.e. between main intake substation and town by upgrading "RMU 6".
- (c) Strengthen the LV supply in Stasie, Matoppo and Aalwyn Streets by installing new miniature substations.
- (d) Provide a ring feed to miniature substations which are connected on a radial feed.
- (e) Commence / proceed with a maintenance programme.

The vision for the town in future is a ring main underground cable system as far as possible, which connects "SS Albertinia" with all the miniature substations and to provide a new 11kV load centre on the southern side of town, i.e. "RMU 4", by installing a dedicated underground cable between "SS Albertinia" and said load centre to accommodate the proposed new developments and to strengthen the existing network.

Until such time that load growth demands said new load centre, provision should be made to strengthen the existing MV underground ring feeds and to upgrade the LV supply in the above areas.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2012) to 2014, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2015 to 2018 and 2019 to 2022. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2015 and 2022, depending on the rate of development.

5.1 Phase 1 - (2012 to 2014):

- 5.1.1 "SS Albertinia": Upgrade the MV supply to "SS Albertinia".
- 5.1.2 Ring Main Unit "RMU 6": Upgrade "RMU 6" by installing a new bus section switch.
- 5.1.3 Miniature Substation "MS William": Supply and install "MS William", including 35mm² Cu underground cables to the main reticulation network.

5.2 Phase 2 - (2015 to 2018):

- 5.2.1 Miniature Substation "MS Matoppo": Supply and install "MS Matoppo", including 35mm² Cu underground cables to the main reticulation network.
- 5.2.2 Miniature Substation "MS Aalwyn": Supply and install "MS Aalwyn", including 35mm² Cu underground cables to the main reticulation network.
- 5.2.3 Ring Main Unit "RMU Bloekompark": Supply and install "RMU Bloekompark", including 35mm² Cu underground cables to the main reticulation network.
- 5.2.4 Miniature Substation "MS Dorp": Recover ring main unit "RMU 1", supply and install a ring main unit inside "MS Dorp" and connect said substation to the main MV network via two 35mm² Cu underground cables.
- 5.2.5 Ring Main Unit "RMU Malan": Supply and install "RMU Malan", including 35mm² Cu underground cables to the main reticulation network.
- 5.2.6 Ring Main Unit "RMU Malan": Supply and install 25mm² Cu cable between "RMU Malan" and new ring main unit inside "MS Tuin". The ring main unit inside "MS Tuin" must also be installed as part of this item.

5.3 Phase 3 - (2019 to 2022):

- 5.3.1 Ring Main Unit "RMU GMT R&A Koöp": Supply and install "RMU GMT R&A Koöp", including 35mm² Cu underground cable between said ring main unit and "RMU 4".
- 5.3.2 MV Overhead Connection at "PMT L": Supply and install 35mm² AAC connection between "PMT L" and "PMT N".
- 5.3.3 Ring Main Unit "RMU 2": Upgrade "RMU 2" by replacing same with new.
- 5.3.4 50mm² ABC Conductor: Replace the 50mm² ABC overhead conductor between "MS Malan" and "MS Kragstasie" with a 35mm² Cu underground cable.
- 5.3.5 Miniature Substation "MS Oker Way": Supply and install "MS Oker Way" including 35mm² Cu cables.
- 5.3.6 70mm² Cu Supply cable to "SS Albertinia": Upgrade the 70mm² Cu supply cable to "SS Albertinia" with a 185mm² Cu cable.

Note that the new infrastructure required for new developments, i.e. the infrastructure indicated in green, have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers. The proposed new infrastructure has been based on the Spatial Development for Albertinia received from the Municipality's Town Planning Department.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1	Phase 1 - (2012 to 2014):		
6.1.1	Upgrade the MV supply to "SS Albertinia".	R 30 000-00	
6.1.2	Upgrade "RMU 6" by installing a new bus section switch.	R 200 000-00	
6.1.3	Supply and install "MS William", including 35mm ² Cu underground cables to the main reticulation network.	<u>R 525 000-00</u>	R 755 000-00
6.2	Phase 2 - (2015 to 2017):		
6.2.1	Supply and install "MS Matoppo", including 35mm ² Cu underground cables to the main reticulation network.	R 425 000-00	
6.2.2	Supply and install "MS Aalwyn", including 35mm ² Cu underground cables to the main reticulation network.	R 615 000-00	
6.2.3	Supply and install "RMU Bloekompark", including 35mm ² Cu underground cables to the main reticulation network.	R 325 000-00	
6.2.4	Recover ring main unit "RMU 1", supply and install a ring main unit inside "MS Dorp" and connect said substation to the main MV network via two 35mm ² Cu underground cables.	R 400 000-00	
6.2.5	Supply and install "RMU Malan", including 35mm ² Cu underground cables to the main reticulation network.	R 350 000-00	
6.2.6	Supply and install 25mm ² Cu cable cable between "RMU Malan" and new ring main unit inside "MS Tuin". The ring main unit inside "MS Tuin" must also be installed as part of this item.	<u>R 400 000-00</u>	R 2 515 000-00

6.3	Phase 3 - (2018 to 2021):		
6.3.1	Supply and install "RMU GMT R&A Koöp", including 35mm ² Cu underground cable between said ring main unit and "RMU 4".	R 550 000-00	
6.3.2	Supply and install 35mm ² AAAC connection between "PMT L" and "PMT N".	R 35 000-00	
6.3.3	Upgrade "RMU 2" by replacing same with new.	R 200 000-00	
6.3.4	Replace the 50mm ² ABC overhead conductor between "MS Malan" and "MS Kragstasie" with a 35mm ² Cu underground cable.	R 450 000-00	
6.3.5	Supply and install "MS Oker Way" including 35mm ² Cu cables.	R1 450 000-00	
6.3.6	Upgrade the 70mm ² Cu supply cable to "SS Albertinia" with a 185mm ² Cu cable.	<u>R 85 000-00</u>	<u>R 2 770 000-00</u>
	Total, excl. VAT		R 6 040 000-00

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.
- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

Gouritsmond

Existing Network and Proposed Changes

The layout and schematic diagram of the existing MV network are shown on Drawing No. 4887/E/01-1.

4.1 Eskom Supply:

The Eskom supply is provided from a 66/11kV Eskom situated near Albertinia Town, via an 11kV overhead radial line (no firm supply) with capacity of approximately 2,7 MVA.

The current notified maximum demand with Eskom is 800 kVA and the maximum actual kVA demand was measured in January 2009 at 1 134 kVA.

From Annexures A & B, it can be seen that the capacity of the aforementioned overhead line is sufficient to provide power to the town for the next ten (10) years. Eskom indicated that they will be able to provide the estimated power at the end of master plan period from their substation.

4.2 Municipal Network:

4.2.1 Auto Recloser at Supply Point:

The settings of the auto recloser have recently been checked and there is no immediate work to be done in this regard or on the recloser itself. Provision has, however, been made under item 5.1.3 to provide communication to the recloser, which will enable the switching of the recloser from Albertinia.

CBD and Town Areas:

Feeder cables / overhead lines:

The existing MV reticulation network in town consists of underground cable feeders feeding from the main switching station, i.e. "Main Substation". The main supply feed to said substation is, however, an overhead line. The underground cables are connected to a number of miniature substations. The loads on the system conductors are well within the current capacities of the conductors, but upgrading measures on the overhead line and some cables need to be done as further discussed below.

The existing minor feeders are on the outskirts of town, are overhead radial lines consisting of copper and are taken from the afore-mentioned 35mm² Cu overhead line by means of fuse switches.

The 35mm² Cu overhead line feeding "Main Substation" must be inspected regularly to ensure unnecessary outages. We recommend that the two aged strain poles adjacent to "Main Substation" be replaced with new, including the stay wires.

The CBD and Town Areas are presently fed by means of two (2), 35mm² Cu, radial underground cable feeders. We recommended that these two feeders be extended to "Main Substation" to form two ring feeds. The underground cable between the aforementioned overhead line and substation must also be replaced as a result of aging.

Substations and Miniature Substations:

"Main Substation" is a brick-built substation housing three K-type extensible ring main switches. This substation needs to be extended when the new and upgraded circuit breaker panels are installed to cater for the new ring feed supplies. The existing fuse switches need to be replaced with circuit breaker panels to prevent it tripping in a case of a possible "cold start".

A number of plinth mounted miniature substations, i.e. "MS-1", "MS-2", "MS-3", "MS-4", "MS-6", "MS-7" and "MS Kusweg" forms part of the radial MV network. New ring main units are to be supplied and installed inside the MV compartments of "MS-7" and "MS Kusweg" to ensure a ring feed supply to said substations. A new miniature substation, i.e. "MS Voortrekker" is proposed to ensure a good quality of LV supply to the erven in Kusweg, Kruger, Rivier and Voortekker Sreets. New miniature substations, i.e. "MS-Future A", "MS Future E" and "MS Future F", including their supply cables, indicated in green on the aforementioned drawing, will be supplied and installed by future Developers in the approximate locations depicted on the drawings.

From our inspection it was noted that some of the ring main units, miniature substations and cables were not labeled. We propose that all switchgear, equipment and material be labeled according to the drawings.

The Industrial Area:

The Industrial Area is presently fed at LV. It is recommended that new miniature substations "MS Future B", "MS Future C" and "MS Future D", indicated in green on the aforementioned drawing, be supplied and installed in the approximate positions shown on the drawing at the time when an increased supply is required in this area. Note that the Developers of this area will be responsible for the cost to supply and install the electrical network.

4.2.4 Township :

The township is fed by an overhead line and it is recommended that the network be inspected regularly to ensure unnecessary outages due to bad maintenance. It is recommended that the existing overhead line, which is supplying "PMT Bitou", including said pole mounted transformer substation, be upgraded when this township be expanded as depicted on the master plan.

4.3 Condition:

The condition of electricity assets was determined during a field survey in 2009 by Messrs Aurecon and it was noted that they indicated that the K-type isolators inside "SS Main Substation" needs to be replaced. Said switches were recently serviced and we are of the opinion that they can remain in service until the fuse switches be replaced with circuit breakers.

Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The immediate urgent elements which must be attended to:

- (a) Upgrade the MV supply to "Main Substation" by replacing the two aged strain poles adjacent to "Main Substation" with new, including the stay wires. Replace the 35mm² Cu cable between the 35mm² Cu overhead line and the aforementioned substation with new.
- (b) Strengthen the LV supply in Kusweg, Kruger, Rivier, Voortekker Streets by installing new miniature substation "MS Voortrekker".
- (c) Provide a ring feed supply to all the miniature substations in the CBD and Town Areas.
- (d) Commence / proceed with a maintenance programme.

The vision for the town in future is a ring main underground cable system which connects "Main Substation" with all the miniature substations to accommodate the proposed new developments and to strengthen the existing network.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2012) to 2014, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2015 to 2018 and 2019 to 2022. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2015 and 2022, depending on the rate of development.

5.1 Phase 1 - (2012 to 2014):

- 5.1.1 Upgrade MV supply to Main Substation: Replace two strain poles near Main Substation with new, incl. stays and MV 50mm² Cu cable between overhead line and switchgear inside "Main Substation".
- 5.1.2 MS Voortrek Street: Supply and install "MS Voortrek Street", incl. MV underground cables along Relief Street. Connect existing LV feeder cables to this miniature substation.

5.1.3 Auto Recloser: Supply and install a SCADA system to ensure remote switching to the auto recloser near the supply point to Gourits.

5.2 Phase 2 - (2015 to 2018):

5.2.1 MV Cable between "MS-6" and "MS-7": Supply and install a 35mm² underground cable between miniature substations "MS-6" and "MS-7", including a ring main unit inside miniature substation "MS-7". Note that the cables feeding "MS Future E" and "MS Future F" are not part of this item.

5.2.2 Main Substation: Extend substation building and supply and install two additional circuit breaker ring main panels, i.e. "GR-Wes Bystand Voerder" and "GR-Oos Bystand Voerder"

5.2.3 MV Cable between "Main Substation" and "MS-Kusweg": Supply and install a 35mm² underground cable between substation "Main Substation" and "MS-Kusweg", including a ring main unit inside miniature substation "MS-Kusweg". Note that the cables feeding "MS Future A" is not part of this item.

5.3 Phase 3 - (2019 to 2022):

5.3.1 MV Cable between "Main Substation" and "MS-6": Supply and install a 35mm² underground cable between substation "Main Substation" and "MS-6" as depicted on the drawing. Note that the supply and installation of ring main unit "RMU Voortrekker" is not part of this item.

5.3.2 Main Substation: Replace the existing fuse and isolator switches with circuit breaker ring main panels.

Note that the new infrastructure required for new developments, i.e. the Industrial Ring which include miniature substations "MS Future B", "MS Future C", "MS Future D" and "MS Bitou", or any other developments in town, i.e. miniature substations "MS Future A", "MS Future E" and "MS Future F" with their respective supply cables have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers. The proposed new infrastructure has been based on the Spatial Development Plan for Gourits received from the Municipality's Town Planning Department.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1 Phase 1 - (2012 to 2014):

6.1.1 Replace two strain poles near "Main Substation" with new, incl. stays and MV 50mm² Cu cable between overhead line and switchgear inside "Main Substation". R 50 000-00

6.1.2	Supply and install "MS Voortrek Street", incl. MV underground cables along Retief Street. Connect existing LV feeder cables to this miniature substation.	R 800 000-00	
6.1.3	Supply and install a SCADA system to ensure remote switching to the auto recloser near the supply point to Gourits.	<u>R 100 000-00</u>	R 950 000-00
6.2	Phase 2 - (2015 to 2018):		
6.2.1	Supply and install a 35mm ² underground cable between miniature substations "MS-6" and "MS-7", including a ring main unit inside miniature substation "MS-7".	R 700 000-00	
6.2.2	Extend substation building and supply and install two additional extensible circuit breaker ring main panels.	R 850 000-00	
6.2.3	Supply and install a 35mm ² underground cable between substation "Main Substation" and "MS Kusweg", including a ring main unit inside miniature substation "MS Kusweg".	<u>R 750 000-00</u>	R 2 300 000-00
6.3	Phase 3 - (2019 to 2022):		
6.3.1	Supply and install a 35mm ² underground cable between substation "Main Substation" and "MS-6" as depicted on the drawing.	R 650 000-00	
6.3.2	Replace the existing fuse and isolator switches with extensible circuit breaker ring main panels.	<u>R 500 000-00</u>	<u>R 1 150 000-00</u>
	Total, excl. VAT		R 4 400 000-00

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.
- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

Heidelberg

Existing Network and Proposed Changes

Refer to the afore-mentioned drawings mentioned under item 2.0.

4.1 Eskom Supply:

The Eskom supply is provided from the 66/11kV Eskom substation, situated near the Witsand turn-off from the N2-National Road, via an 11kV overhead radial line (no firm supply).

The current notified maximum demand with Eskom for the three supply points to Heidelberg is 3 250 kVA and the maximum actual kVA demand was measured in December 2011 at 3 691 kVA.

The estimated maximum demands in the next 10 years is about 1,4 MVA and 4,7 MVA for the Oos Dorp Township and Heidelberg Town respectively.

Eskom advised that the above-mentioned 11kV overhead line to Heidelberg has recently been upgraded and that said line and substation will be able to provide Heidelberg with the expected load, estimated towards the end of the master plan period.

The existing main MV (11kV) reticulation network consists of underground cable and bare & ABC overhead line feeders, feeding from the main switching substation i.e. "Main Intake Substation" and the second supply point at the Oos Dorp Township, set of pole mounted fuses. The feeders are connected to a various number of metal clad ring main units and miniature substations forming part of a number of rings. The underground cable network consists of 16mm², 25mm² and 95mm² copper cables. The overhead line sizes are Mink, Gopher, 35mm² copper, 25mm² copper, and 16mm² copper.

The loads on the system conductors are generally within the current capacities of the conductors, but upgrading measures on some ring main units, cable feeders, and additional load centers, are required to ensure ring feed supplies, and to accommodate the expected load growth in Heidelberg as further discussed below.

The existing minor feeders are mainly in the Oos Dorp Township and rural area, located on the outskirts of town, are generally overhead lines. Some of these feeders needed to be extended to strengthen the current main reticulation network in future with ring feeds.

4.2.1 CBD and Town Areas:

4.2.1.1 Feeder cables / overhead lines:

The CBD and Town Areas are presently fed by means of Mink, Gopher and a mixture of 16mm² to 35mm² bare copper overhead lines. The underground cable sizes vary between 16mm² to 95mm² copper.

An additional supply is urgently required to assist the two main incomers to town, i.e Feeders "MS Buitekant" (combination of 25mm² underground copper cables and 16mm² copper & Mink overhead lines), and secondly Feeder "MS Van Niewenhuysen" (combination of 25mm² underground copper cable and 16mm² copper & Mink overhead lines). The firm supply, from the main intake substation to town, is currently 1,6MVA (current capacity of a 16mm² copper overhead line), which means that the Municipality will not be able to provide power to the whole town should there be a fault on one of the abovementioned main incomers near the main intake substation.

For the interim we propose that the aforementioned main incomers be upgraded by replacing the 25mm² copper underground cable between "MS Buitekant St" and "SS Fourie St", the 25mm² copper underground cable and 16mm² copper overhead line between "PMT Waterwese" and the new proposed "RMU Uys St" with a 95mm² copper underground cable, incl a new 95mm² copper cable between "SS Fourie" and the aforementioned "RMU Uys St".

The supply and installation of the 95mm² copper cable between the new proposed "RMU Haig St" and "GMT SSK" will not only provide a ring feed supply to the town on the southern side of Fourie Street, but will together with the new 95mm² copper cable between "Main Intake Substation" and the Mink overhead line in Fourie Street ensure a firm supply to the expected load of 4,7 MVA at the end of the master plan period.

The upgrade of the 16mm² copper overhead line in Uys Street towards the end of the master plan period is proposed to increase the load capacity on this ring feeder to accommodate the expected load in this area.

The replacement of the existing MV overhead lines with underground cables will be implemented after the above very important upgrading measures have been completed.

The replacement of the overhead line, which is supplying miniature substation "MS Marais Street", with an underground cable, will ensure that said substation is on a ring feed supply.

It has been assumed that substations, i.e. "MS Sonoplaan", "MS Buitekan St", "MS Muiet St", "SS Fourie St" and "SS Haig", which are being supplied from an overhead line and is located less than one hundred (100) meters from said line, will not be connected to a ring feed supply. Said substations will be connected to a ring when the overhead lines are being upgraded with underground cables in future. (Not part of the ten year master plan).

The installation of the future cables, indicated in green, will be developed by the future developers of these areas.

4.2.1.2 Switching Stations and Ring Main Units:

"Main Intake Substation" is a brick built substation housing three (3) circuit breaker panels. The substation has been built in 2011 and sufficient space has been allowed for the installation of the future planned circuit breaker panels. Circuit breaker panel "MS Marais St" will be supplied and installed when the 95mm² copper cable between "Main Intake Substation" and the Mink overhead line in Fourie Street is installed as indicated under item 4.2.1.2. The future panels, i.e. "MS Future E" and "MS Future G", indicated in green, will be supplied and installed by future Developers.

To ensure the safe switching between the proposed ring feeds it is recommended that ring main units "RMU Uys St", "RMU Van Niekerk St" and "RMU Haig St" be installed.

It is proposed that ring main units be supplied adjacent to the ground mounted transformer substations, that are located on the upgraded MV underground cable routes mentioned under item 4.2.1.1 above. The ring main units are "RMU Markplein" and "RMU SSK".

Ring main unit "RMU Skoolkop" will be installed by future Developers when this area is further developed.

4.2.1.3 Miniature Substations:

It is proposed that ring main units be supplied and installed inside all the miniature substations that are located on the upgraded MV underground cable routes mentioned under item 4.2.1.1 above. The miniature substations are "MS Kragstasie", "MS Esperanza", "SS Markplein", "MS Spar" and "MS Marais St".

New miniature substations, i.e. "MS Fourie St. No.1", "MS Eksteen St", "MS Van Niekerk St", "MS Market St", "MS Uys St", "MS Middleton St", "MS Kloof St" and "MS Haig St" are proposed to ensure a good quality of LV supply to the erven in their respective areas.

New miniature substations "MS Future A", "MS Future B", "MS Future C", "MS Future D", "MS Future E", "MS Future F", "MS Future G", "MS Future H", "MS Future J", "MS Future K", and "MS Future L", including their supply cables, indicated in green on the aforementioned drawing, will be supplied and installed by future Developers in the approximate locations depicted on the drawings.

From previous inspections it was noted that some of the ring main units were wrongly labeled. We propose that all switchgear and equipment be labeled according to the drawings.

4.2.2 Rural Areas

4.2.2.1 Overhead lines:

The rural areas are mainly fed by overhead lines and it is recommended that the network be inspected regularly to ensure unnecessary outages due to bad maintenance. No major rings are planned for these lines.

Pole mounted fuse switches on the radial feeds have not been replaced with isolators to ensure no nuisance tripping to the end user.

4.2.3 Oos Dorp Township:

4.2.3.1 Feeder cables / overhead lines:

The township are presently fed by means of Mink, Gopher, ABC and a mixture of 16mm² to 35mm² bare copper overhead lines. The underground cable sizes vary between 16mm² to 35mm² copper.

The loads on the system conductors are generally within the current capacities of the conductors.

Underground cables between miniature substation "MS Gemeenskapsaal" and the proposed new ring main unit at the second main intake point, and the overhead line in Eike Street and miniature substation "MS Tomlinson" are proposed to ensure that the majority of the substations in this residential area is on a ring feed. For the interim we, however, propose that the 35mm² copper cable between the MV ABC conductor and mink overhead line in Andries du Toit Street be installed to ensure a ring feed to this area. The overhead line connections to pole mounted transformer substations "PMT Van Niekerk", "PMT A", "PMT B", "PMT Kayelitsha" and "PMT King St" will ensure that said substations are on a ring feed supply.

The replacement of the aged overhead ABC conductor between the overhead line in Church Street and the new proposed ring main unit "RMU Andries du Toit St" will further increase the quality of supply in the centre of the township.

A ring feed supply to the two (2) miniature substations at the sewerage works are not considered at present, since provision has been made for a standby generator at miniature substation "MS-Heidelberg Sewerage Works No. 1". We are of the opinion that the costs to provide a ring feed supply to miniature substation "MS Heidelberg Sewerage No.2" is just too high and that the relative short length of line can be easily repaired when a fault occurs on this line.

The installation of the future cables, indicated in green, near the second Eskom supply point will be developed by the future developers of these areas.

4.2.2.2 Switching Stations and Ring Main Units:

The main supply to the township consists of a set of overhead line fuses and it is proposed that said fuses be replaced with a plinth mounted ring main unit which will ensure the ease and safe operation of the main supply to this area

To ensure the safe switching between the proposed ring feeds it is recommended that ring main units "RMU Geldenhuys Way" and "RMU A. du Toit St" be installed.

4.2.2.3 Miniature Substations:

It is proposed that ring main units be supplied and installed inside all the miniature substations that are located on the upgraded MV underground cable routes mentioned under item 4.2.1.1 above. The miniature substations are "MS Tomlinson St", "MS A. du Toit St" and "MS Gemeenskapsaal".

New miniature substation "MS Eike St." is proposed to ensure a good quality of LV supply to the erven in this area.

New miniature substations "MS Future M", "MS Future N", "MS Future P", and pole mounted transformer substation "PMT Future R, including their supply cables / overhead lines, indicated in green on the aforementioned drawing, will be supplied and installed by future Developers in the approximate locations depicted on the drawings.

4.3 Condition:

The condition of electricity assets were recently (2009) determined during a field survey by Messrs Aurecon and it was noted that the equipment is generally in good condition, but continues maintenance is required on all equipment to ensure the safe working of same at all times.

Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The urgent elements which must be attended to:

- (a) Provide a firm supply to town by upgrading the two main incomers to town by replacing the 25mm² copper cables and 16mm² copper overhead lines with 95mm² copper cables. Provide ring main units to all the miniature substations that are on these cable routes and install ring main unit "RMU Uys".
- (b) Provide a ring feed supply to the Oos Dorp Township by installing the 35mm² Cu cable between the ABC conductor and Mink overhead line in Andries du Toit Street.
- (c) Supply and install miniature substations "MS Fourie St No.1", "MS Uys St", "MS Eksteen St", "MS Market St", "MS Van Niekerk St", "MS Kloof St" and "MS Eike St" to better the LV supply in these areas.

- (d) Provide a ring feed to miniature substations / pole mounted transformer substations which are connected on a radial feed.
- (e) Commence / proceed with a maintenance programme.

The vision for the town in future is a ring main underground cable system as far as possible, which connects "SS Main Intake Substation" with all the miniature substations and ring main units to accommodate the proposed new developments and to strengthen the existing network.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2012) to 2014, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2015 to 2018 and 2019 to 2022. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2015 and 2022, depending on the rate of development.

5.1 Phase 1 - (2012 to 2014):

- 5.1.1 "MS Buitekant St: Replace the 25mm² copper cable between "MS Waterwese" and "SS Fourie St" with a 95mm² copper cable and install a new 95mm² copper cable between "SS Fourie" and the new proposed ring main unit "RMU Uys St". Said ring main unit must also be installed under this item.
- 5.1.2 Oos Dorp Ring: Supply and install a 35mm² Cu cable between the MV ABC overhead conductor and Mink overhead line in Andries du Toit Street to ensure a ring feed supply to the Oos Dorp.
- 5.1.3 "MS Kragstasie": Replace the 16mm² copper overhead line with a 95mm² copper cable between "MS Kragstasie" and the newly installed "RMU Uys St". Ring main units are to be installed inside miniature substations "MS Kragstasie", "MS Esperanza", "MS van Riebeeck. Supply and install outdoor ring main units "RMU Markplein and "RMU Niekerk St".

5.2 Phase 2 - (2015 to 2018):

- 5.2.1 "PMT Waterwese": Replace the 25mm² copper cable between "PMT Waterwese" and "MS Kragstasie" with a 95mm² copper cable.
- 5.2.2 "RMU Haig St." Supply and install 95mm² copper cable between "RMU Haig St" and "RMU SSK", including the supply and installation of said ring main units.
- 5.2.3 "MS Fourie St No.1 and "MS Kloof St": Supply and install miniature substations "MS Fourie St No.1" and "MS Kloof St", including connection cables to the main reticulation network.
- 5.2.4 "MS Uys St and "MS Niekerk St": Supply and install miniature substations "MS Uys St" and "MS Niekerk St", including connection cables to the main reticulation network.
- 5.2.5 "Main Intake Substation": Supply and install 95mm² copper cable between "Main Intake Substation" and Mink overhead line in Fourie Street, including new circuit breaker panel inside "Main Intake Substation".

5.3 Phase 3 – (2019 to 2022):

- 5.3.1 "MS Eksteen St" and "MS Market St": Supply and install miniature substations "MS Eksteen St" and "MS Market St", including connection cables to the main reticulation network.
- 5.3.2 "RMU 2nd Intake": Supply and install a 35mm² copper cable between "MS Gemeenskapsaal" and the proposed ring main unit "RMU 2nd Intake", including the supply and installation of the latter ring main unit.
- 5.3.3 "MS Tomlinson St." Supply and install 35mm² copper cable between miniature substation "MS Tomlinson St" and the 35mm² copper overhead line in Eike Road, including a ring main unit inside said substation.
- 5.3.4 "PMT Kayelitsha": Provide substations "PMT Kayelitsha", "PMT A", "PMT B", "PMT Van Niekerk", "PMT King St", "MS Hoog St" and "MS Marais St" with ring feed supplies as depicted on the drawings.
- 5.3.5 "RMU Uys St": Replace the 16mm² copper overhead line between "RMU Uys St" and "PMT Rugbyveld" with a 95mm² copper cable.
- 5.3.6 "MS A. Du Toit": Replace the ABC overhead conductor between "MS A. Du Toit St" and the proposed ring main unit "RMU A. Du Toit St" with a 95mm² copper cable, including the supply and installation of the latter ring main unit.
- 5.3.7 "MS Middleton St" and "MS Eike St": Supply and install miniature substation "MS Middleton St", including connection cables to the main reticulation network.

Note that the new infrastructure required for new developments, i.e. the infrastructure indicated in green, have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers. The proposed new infrastructure has been based on the Spatial Development Plan for Heidelberg received from the Municipality's Town Planning Department.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1 Phase 1 – (2012 to 2014):

- 6.1.1 Replace the 25mm² copper cable between "MS Buitekant St" and "SS Fourie St" with a 95mm² copper cable and install a new 95mm² copper cable between "SS Fourie" and the new proposed ring main unit "RMU Uys St". Said ring main unit must also be installed under this item. R 950 000-00

- 6.1.2 Supply and install a 25mm² Cu cable between the MV ABC overhead conductor and Mink overhead line in Andries du Toit Street to ensure a ring feed supply to the Oos Dorp. R 100 000-00
- 6.1.3 Replace the 16mm² copper overhead line with a 95mm² copper cable between "MS Kragstasie" and the newly installed "RMU Uys St". Ring main units are to be installed inside miniature substations "MS Kragstasie", "MS Esperanza", "MS van Riebeeck. Supply and install outdoor ring main units "RMU Markplein and "RMU Niekerk St". R 2 250 000-00 R 3 300 000-00

Phase 2 - (2015 to 2017):

- 6.2.1 "PMT Waterwese": Replace the 25mm² copper cable between "PMT Waterwese" and "MS Kragstasie" with a 95mm² copper cable. R 800 000-00
- 6.2.2 "RMU Haig St." Supply and install 95mm² copper cable between "RMU Haig St" and "RMU SSK", including the supply and installation of said ring main units. R 1 700 000-00
- 6.2.3 "MS Fourie St No.1 and "MS Kloof St": Supply and install miniature substations "MS Fourie St No.1" and "MS Kloof St", including connection cables to the main reticulation network. R 880 000-00
- 6.2.4 "MS Uys St and "MS Niekerk St": Supply and install miniature substations "MS Uys St" and "MS Niekerk St", including connection cables to the main reticulation network. R 880 000-00
- 6.2.5 "Main Intake Substation": Supply and install 95mm² copper cable between "Main Intake Substation" and Mink overhead line in Fourie Street, including new circuit breaker panel inside "Main Intake Substation". R 1 300 000-00 R 5 560 000-00

Phase 3 - (2018 to 2021):

- 6.3.1 "MS Eksteen St" and "MS Market St": Supply and install miniature substations "MS Eksteen St" and "MS Market St", including connection cables to the main reticulation network. R 880 000-00

6.3.2	<p><u>"RMU 2nd Intake"</u>: Supply and install a 35mm² copper cable between "MS Gemeenskapsaal" and the proposed ring main unit "RMU 2nd Intake", including the supply and installation of the latter ring main unit.</p>	R 860 000-00	
6.3.3	<p><u>"MS Tomlinson St."</u> Supply and install 35mm² copper cable between miniature substation "MS Tomlinson St" and the 35mm² copper overhead line in Eike Road, including a ring main unit inside said substation.</p>	R 420 000-00	
6.3.4	<p><u>"PMT Kayelitsha"</u>: Provide substations "PMT Kayelitsha", "PMT A", "PMT B", "PMT Van Niekerk", "PMT King St", "MS Hoog St" and "MS Marais St" with ring feed supplies as depicted on the drawings.</p>	R 550 000-00	
6.3.5	<p><u>"RMU Uys St"</u>: Replace the 16mm² copper overhead line between "RMU Uys St" and "PMT Rugbyveld" with a 95mm² copper cable.</p>	R 560 000-00	
6.3.6	<p><u>"MS A. Du Toit"</u>: Replace the ABC overhead conductor between "MS A. Du Toit St" and the proposed ring main unit "RMU A. Du Toit St" with a 95mm² copper cable, including the supply and installation of the latter ring main unit.</p>	R 600 000-00	
6.3.7	<p><u>"MS Middleton St and "MS Eike St"</u>: Supply and install miniature substation "MS Middleton St", including connection cables to the main reticulation network.</p>	R 880 000-00	R 4 750 000-00
	<p>Total, excl. VAT.</p>		R 13 610 000-00

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.

- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

Riversdale

Existing Network and Proposed Changes

The layout and schematic diagram of the existing MV network are shown on Drawing No.'s 4843/E/01-1 and 4843/E/01-2 respectively.

4.1 Eskom Supply:

The Eskom supply is provided from a 66/11kV Eskom substation some 4,8km from Riverdale's Main Intake Substation, via an 11kV overhead radial line (no firm supply) and underground cable with capacities of 19,8 and 9,3 MVA respectively to the main intake substation, i.e. "SS Kragstasie", situated in the centre of Riversdale. Eskom is currently in the process of upgrading the existing two, 5 MVA transformers at the aforementioned Eskom substation with two 10 MVA transformers and advised this office that they will at least provide the Municipality with a supply of 15MVA in future from said transformers. The estimated maximum demand in the next 10 years is about 11 MVA, which means that the existing supply cable needs to be upgraded by then.

The current notified maximum demand with Eskom is 7 050 kVA and the maximum actual kVA demand was measured in October 2010 at 6 825 kVA.

From Annexures A & B, it can be seen that the capacity of the underground cable will have been reached in about 8 years time from now, at which time the Municipality will have to upgrade the underground cable by installing an additional underground cable in parallel with the existing, or consider the possibility of installing a 66kV overhead line (operated at 11kV) between the afore-mentioned 11kV overhead line and "SS Kragstasie" to provide power for a future 66/11kV substation. We propose that said line be a double circuit to provide a line route for both the two incomer lines, i.e. mains and standby, in future.

We are of the opinion that the latter option must be considered, since Eskom could in future request the Municipality to take supply at 66kV, or that the regulation between the Eskom Substation and "SS Kragstasie" becomes too high. According to our calculations the current regulation between the Eskom Substation and "SS Kragstasie" is already at 1,8% and it is expected to be 2,66% by the end of 2021. We propose that the Municipality in the mean time start identifying areas (250m x 250m) near "SS Kragstasie" for the possible construction of a 66/11kV Substation.

To ensure a firm supply to meet the actual supply of the town, we propose that a 66kV, 2 x Panther, overhead line, operated at 11kV, and connected to "SS Kragstasie" via 11kV, 500mm² Cu, single core cables, be erected as depicted on the drawings. Said line will be supplied from the Eskom Substation via an additional feeder bay and metered by summation metering connected to the two main incomer overhead lines. Provision is made for a 66kV constructed overhead line for the possible future feed to a 66/11kV substation, if required, as mentioned previously. We advise that provision be made in the budget to finance this project as soon as possible. The costing for this line has been included under the first phase of the master plan, i.e. before 2013, as mentioned under Clause 5.0 hereafter.

To ensure an "interim supply" of 6,3 MVA to Riversdale, i.e. the capacity of the previous main supply feeder cables at "SS Main", it is recommended that the previous overhead line be connected immediately to the new take-off pole near the Eskom substation via a set of links, and an underground cable connection, where the previous overhead line was cut to make provision for the new overhead supply line. Note that said links will be normally-open and will only be closed when the new set of links, also depicted on the current main feeder, has been opened. Note that this will not be a 100% firm supply, since the short length of take-off span at the Eskom substation will be shared by the two feeders. We are, however, of the opinion that said span could be easily rectified, without skilled labourers, in a very short time period, should a failure occur on this short length of line. The cost for this second supply is low, i.e. R 250 000-00, excl. VAT, compared with the high costs of a second main incomer. It is recommended that these connections be utilised until funds are available for the construction of the second main intake line estimated at R 9 500 000-00, excl. VAT.

4.2 MV Feeders:

The existing main MV reticulation network consists mostly of underground cable feeders feeding from "SS Kragstasie". The cables are connected to a various number of brick-built switching stations and metal clad ring main units forming part of a major ring system and are predominantly 70mm² copper with a few shorter lengths of 16mm² and 35mm² Cu respectively. Sections of overhead line conductor are noted in the built-up areas, which also form part of the main network. The loads on the system conductors are generally well within the current capacities of the conductors, but upgrading measures on some cables, and additional load centers, are required to accommodate the expected load growth in Riversdale as further discussed below.

The voltage regulation philosophy adopted in our analysis is a maximum of 10% voltage drop, with 5% on the MV network and the remainder 5% on the LV network.

The worst voltage regulation at critical points of the present and future network, expressed as a percentage, are as follows: (Note: no upgrading measures during the ten year period)

	Present	2022
SS Lourens	2,81%	4,24%
SS Sentrum	2,9%	4,37%
SS Heese St	2,45%	3,68%
RMU Osler	3,9%	6,1%
RMU Slagkop	3,92%	5,92%
MS Waterwerke	3,93%	5,93%
RMU Versveld	2,27%	3,41%

The voltage regulation at a substation, or RMU, node should not be more than 4% to allow a further 1 percent regulation in the secondary network. It can be seen from the voltage regulation figures above that the target of 4 percent is not reached at the following substations, RMU's, i.e. "SS Lourens", "SS Sentrum", "RMU Osler", "RMU Slagkop" and "MS Waterwerke". It should, however, be taken into account that the above figures show the maximum regulation with the loss of any one feeder.

The existing minor feeders are mainly on the outskirts of town, are generally overhead radial lines consisting of copper or aluminum conductors and are taken from the aforementioned switching stations, by means of switches/fuse switches. Some of these feeders needed to be upgraded to strengthen the current main reticulation network in future with ring feeds.

CBD and Town Areas:

The CBD and Town Areas are presently fed by means of short lengths of 40mm² Aluminium overhead lines and a mixture of 70mm², 35mm² and 16mm² Cu cables. We recommended that all main ring feeds be upgraded to 70mm² Cu underground cables.

An additional supply cable is required to "SS Lourens" and "SS Sentrum" to cater for the additional load in the case when a feeder is lost to one of the aforementioned substations. Said cable will also better the voltage regulation at said substations.

From the table above it is clear that the supply cable to "RMU Osler" must be upgraded in the near future. An interim measure will be to move the "open point" to "RMU Heide St".

The 35mm² Cu cable between "MS Versveld St" and "SS Heese St" will almost be at full capacity by 2021, and it is recommended that the load requirement at "SS Heese St" be monitored closely to ensure that said cable be of a sufficient size when an alternative supply is required at said substation.

The Industrial Area:

The Industrial Area is presently fed by 70mm², 50mm², 35mm² and 16mm² Cu cables. It is recommended that said 16mm² Cu cables be upgraded to a 70mm² to accommodate the load of the Industrial Area and Kwanokuthula when an alternative supply is required. This will better the voltage regulation at "MS Waterwerke" and "RMU Slagkop".

Townships and Rural Lines

The townships and rural areas are mainly fed by overhead lines and it is recommended that the network be inspected regularly to ensure unnecessary outages due to bad maintenance. It is recommended that when existing lines are extended that this be done with 40mm² Cu conductors.

4.3 Substations:

"SS Kragstasie", "SS Main", "SS Hospitaal", "SS Heese St", "SS Sentrum", "SS Museum", "SS Lourens" and "SS Pauw St" are circuit breaker/isolator/fuse switch substations whereas the remainder are transformer substations, consisting of pole mounted transformers and fuses, miniature substations with ring main units, or brick-built buildings with transformers and ring main units.

A number of outdoor metal clad ring main units, i.e. "RMU Versveld St", "RMU Osler St", "RMU Ixia St", "RMU Heide St", "RMU Protea St", "RMU Simon St" and "RMU Slagkop" also form part of the ring feed MV network.

A number of ring main units needed to be upgraded and installed, as depicted on the drawings, to cater for the future load.

Currently there is not a power factor correction capacitor bank in the main intake substation, i.e. "SS Kragstasie", and we propose that this matter be further investigated to determine if there will be a financial benefit to the Municipality by installing same.

From our inspection it was noted that some of the ring main units were wrongly labeled. We propose that all switchgear and equipment be labeled according to the drawings.

4.4 Condition:

The condition of electricity assets were recently (2009) determined during a field survey by Messrs Aurecon and it was noted that approximately 25% of the MV assets, which include equipment and underground cables, require significant renewal / upgrade.

There is quite a number of switchgear at the aforementioned substations and pole mounted transformers which are very old, i.e. 40 years and older. From what has been observed, however, the system components generally appear to be in a good condition and are well maintained, but regular inspections and tests are needed to ensure that all components are working safely.

The following equipment was highlighted during the survey that needs attention: (Note that this equipment is not highlighted on the drawings)

- (a) Switches inside the following substations: "SS Heese St", "SS Museum", "SS Lourens", "SS Landbou Ko-op" and "SS Graansilos".
- (b) Ring main unit "RMU Protea St".
- (c) Pole Mounted Transformer Substations (PMT's) "Visagie", "Malherbe Pompstasie 2", "Van Wyk Arbeiders", "Jonker", "GMT FM Toring", "Vermaak", "Oosthuizen Melkstal", "Olivier", "Griesel" and "Waterwese Arbeiders".
- (d) The auxiliary transformer substation at "SS Kragstasie".

Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The immediate urgent elements which must be attended to:

- (a) Provide a firm supply to the town.
- (b) Strengthen the MV ring to the Industrial Area and provide a ring feed to miniature substations which are connected on the radial feed, fed from "SS Sentrum".
- (c) Commence / proceed with a maintenance programme.

The vision for the town in future is a ring main underground cable system which connects "SS Kragstasie" with all the switching stations, the Eskom Substation and to provide new 11kV load centres on the north western side of town to accommodate the proposed new developments and to strengthen the existing network. The load centers should, preferably, have dedicated feeders direct from "SS Kragstasie".

Until such time that load growth demands new load centres on the north western side of town, provision should be made to strengthen the existing MV underground ring feeds.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2011) to 2013, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2014 to 2017 and 2018 to 2021. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2014 and 2025, depending on the rate of development.

Phase 1 - (2011 to 2013):

- 5.1.1 Interim main intake feeder (temporary): Connect previous main intake overhead line (Hare) to current main intake overhead line (2 x Phantom) via a set of links near the Eskom Substation. Joint the (Hare) overhead line with a 185mm² Cu underground cable in the position where the line is broken to accommodate the existing (2 x Phantom) overhead line. This measure will provide a temporary firm supply to town of 6,3 MVA as further described under Sub-Clause 4.1.
- 5.1.2 SS Pauw Street: Replace the fuse switch feeding "MS Mulder Street" with an isolator. This will ensure a sufficient standby supply to the Industrial Area and Kwanokukthula Township, should the feeder between "SS Main" and "RMU Slagkop" fails.
- 5.1.3 MS Slagkop A: Replace 16mm² Cu cable between "MS Slagkop A" and "MS Kentucky" with a 70mm² Cu cable. This will ensure sufficient capacity to the Industrial Area and Kwanokuthula Township as mentioned under item 5.1.2 above.
- 5.1.4 MS Kentucky: Replace 16mm² Cu cable between "MS Kentucky" and "RMU Takkieskloof" with a 70mm² Cu cable. This will ensure sufficient capacity to the Industrial Area and Kwanokuthula Township as mentioned under item 5.1.2 above.
- 5.1.5 SS Heese St: Install a new isolator in "SS Heese St." Said switch is required for the 70mm² Cu underground cable link between "SS Heese St" and MS Kerk St Suid" to ensure a ring feed supply to miniature substations "MS Spar", "MS Outo-Sentrale", MS Cumming St", "MS SAPD" and MS Kerk St Suid".
- 5.1.6 SS Heese St: Install a 70mm² Cu cable between "SS Heese St" and "SS Sentrum". Said cable will assist in providing a ring feed supply to the miniature substations mentioned under item 5.1.5.
- 5.1.7 Second Main Incomer to act as a firm supply to Town: 66kV, 2 x "Phantom", overhead line operated at 11kV and connected to "SS Kragstasie" via 1 x 500mm² Cu core cable per phase. Provision has also been made for the Eskom costs to provide a second feeder bay at their substation. This item is further described under Sub-Clause 4.1.
- 5.1.8 General: Inspect and test equipment mentioned under Sub-Clause 4.4 of Clause 4.0 and replace with new or refurbish existing.

Phase 2 - (2014 to 2017):

- 5.2.1 SS Hospitaal: Replace the fuse switch inside the substation building with a non-extensible ring main unit. Said ring main unit is required for the 70mm² Cu underground cable link between "SS Kragstasie" and "MS Mulder St" to ensure a ring feed supply to "SS Hospitaal".

- 5.2.2 SS Hospitaal: Disconnect the cable-end at "MS Mulder Street Circuit Breaker" at "SS Hospitaal", replace overhead line between said circuit breaker and "MS Mulder St" with a 70mm² Cu cable and connect same to the non-extensible ring main unit mentioned under Sub-Clause 5.2.1. It is proposed that the afore-mentioned cable-end be changed over to the north-eastern side of the bus section switch to ensure a ring feed supply to the Industrial Area, Kwanokuthula Township and the north eastern side of town, should there be a failure on the south-western busbar of "SS Kragstasie". It is recommended that the overhead line be replaced with an underground cable to ensure a more reliable feed on this very important ring.
- 5.2.3 SS Hospitaal: Replace 35mm² Cu cable between "SS Hospitaal" and "SS Kragstasie" with a 70mm² Cu cable. This is proposed to strengthen the ring feed mentioned under Sub-Clause 5.2.2.
- 5.2.4 MS Mulder St: Replace the overhead line between "MS Mulder St" and "SS Pauw St" with a 70mm² Cu cable. This upgrade is proposed to strengthen the ring feed mentioned under Sub-Clause 5.2.2 and to conform with Sub-Clause 4.2 that all main feeds shall be at least 70mm² Cu cable.
- 5.2.5 RMU Bauhinia St: (2 isolators, 1 fuse switch and 1 circuit breaker) Install "RMU Bauhinia St", if not already installed by a private developer. The importance of this ring main unit is to ensure a connection point between the various cable sizes to ensure that all cables are utilised according to their full capacity.
- 5.2.6 RMU Takkieskloof: Install a fuse switch at "RMU Takkieskloof" and disconnect the 16mm² Cu cable and connect same to the new fuse switch. This is required to ensure that the new 70mm² Cu cable, to be installed between "RMU Takkieskloof" and "RMU Bauhinia St", be utilised to it's full potential.
- 5.2.7 RMU Takkieskloof: Install a 70mm² Cu cable between "RMU Takkieskloof" and "RMU Bauhinia St". Said cable must be connected to the spare isolator switch, which will become available when a new fuse switch is installed as mentioned under Sub-Clause 5.2.6 above. Note that Sub-Clause 5.2.6 must take place before this clause. This is proposed to strengthen the "SS Kragstasie", "SS Hospitaal", "SS Pauw St", "RMU Simon St", "RMU Bauhimia St", "RMU Osler St" and "SS Kragstasie" ring, which was previously connected with a 16mm² Cu cable between "RMU Simon St" and "RMU Bauhimia St"
- 5.2.8 General: Inspect and test equipment mentioned under item Sub-Clause 4.4 of Clause 4.0 and replace with new or refurbish existing.

Phase 3 - (2018 to 2021):

- 5.3.1 RMU Ixia St: (2 isolators, and 1 circuit breaker) Install "RMU Ixia St". The installation of this ring main unit is required to provide a sufficient standby supply to "SS Lourens", should there be a failure on the south-western busbar of "SS Kragstasie".
- 5.3.2 RMU Ixia St: Install a 70mm² Cu cable between "RMU Ixia St" and "RMU Bauhimia St." This cable is required to provide a sufficient standby supply to "SS Lourens", should there be a failure on the south-western busbar of "SS Kragstasie".

- 5.3.3 SS Pauw St: Replace 35mm² Cu cable between "SS Pauw St" and "RMU Takkieskloof" with a 70mm² Cu cable. This cable will strengthen the ring to the Industrial Area and Kwanokuthula. (Note that new developments are proposed for both areas.)
- 5.3.4 SS Kragstasie: Install a 500mm² Cu single core cable in parallel with the existing main supply cable between the Main Supply Overhead Line and "SS Kragstasie", or alternatively a 66kV overhead line between said points. The installation of a 66kV overhead line must be considered after consultation with Eskom at this time regarding their future vision concerning a 66kV supply to Riversdale.
- 5.3.5 SS Main: Replace 35mm² Cu cable between "SS Main" and "MS Waterwerke" with a 70mm² Cu cable. This cable will strengthen the "SS Kragstasie", "SS Main", "MS Waterwerke", "RMU Slagkop", "RMU Simon St" and "SS Pauw St" ring.
- 5.3.6 RMU Slagkop: Replace isolator switch with a circuit breaker. This upgrade will ensure that the ring mentioned under Sub-Clause 5.3.5. will be operated to it's full potential.
- 5.3.7 RMU Versveld St: Upgrade / replace 35mm² Cu cable and overhead line between "RMU Versveld St" and "SS Heese St" with a 70mm² Cu cable. This upgrade will strengthen the supply to "SS Heese St" and ensure a firm supply to said substation should there be a failure on the south-western busbar of "SS Kragstasie".
- 5.3.8 RMU Versveld St: Replace isolator at said ring main unit with a fuse switch. This will ensure that the upgraded supply mentioned under Sub-Clause 5.3.7 will be utilised to it's full potential.
- 5.3.9 SS Heese St: Install new 70mm² Cu cable between "SS Heese St" and overhead line feeding "PMT Beverly Hills".
- 5.3.10 SS Panorama St: Install 70mm² Cu cable between "MS Panorama St" & "MS Koshuis" and "MS Gerrit du Plessis" & "MS Aloeridge No.2". The installation of these cables will ensure a ring feed supply to the miniature substations in Morestond and Panorama.
- 5.3.11 RMU Osler St: Replace the overhead line link between "RMU Osler" and "SS Lourens" with a 70mm² Cu underground cable. This upgrade will ensure a more reliable connection between said substations.
- 5.3.12 RMU Osler St: Connect an additional isolator to said ring main unit. The installation of said isolator is required for the connection of the new 70mm² Cu cable between "SS Kragstasie" and "RMU Osler St" mentioned under Sub-Clause 5.3.13 below. (We are, however, of the opinion that this Sub-Clause can be delayed if the 185mm² Cu cable, between "SS Kragstasie" and "RMU Bauhinia St", has already been installed by this time by the Municipality or a private developer.)
- 5.3.12 SS Kragstasie: Install a 70mm² Cu cable between "SS Kragstasie" and "RMU Osler St" to strengthen the electricity supply to the eastern side of town and to strengthen the ring mentioned under Sub-Clause 5.3.3. (We are, however, of the opinion that this Sub-Clause can be delayed if the 185mm² Cu cable, between "SS Kragstasie" and "RMU Bauhinia St", has already been installed by the Municipality, or a private developer.)

- 5.3.13 RMU Takkieskloof: Install an additional isolator switch to said ring main unit. This isolator will improve the switching possibilities to the various rings at this ring main unit.
- 5.3.15 MS Le Roux: Install a ring main unit at this miniature substation. This will increase the switching possibilities in this area of town and the quality of supply to the end user.
- 5.3.16 General: Inspect and test equipment mentioned under item Sub-Clause 4.4 of Clause 4.0 and replace with new or refurbish existing.

Note that the new infrastructure required for new developments, i.e. the proposed development on the north western side of town, the extensions to the industrial area, or any other smaller developments in town, have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1 Phase 1 - (2011 to 2013):

6.1.1	Connect previous main intake overhead line (Hare) to current main intake overhead line (2 x Phantom) via a set of links near the Eskom Substation. Joint the (Hare) overhead line with a 185mm ² Cu underground in the position where the line is broken to accommodate the (2 x Phantom) line.	R 250 000
6.1.2	Replace the fuse switch inside "SS Pauw St", feeding "MS Mulder Street", with an isolator.	R 135 000
6.1.3	Replace 16mm ² Cu cable between "MS Slagkop A" and "MS Kentucky" with a 70mm ² Cu cable.	R 240 000
6.1.4	Replace 16mm ² Cu cable between "MS Kentucky" and "RMU Takkieskloof" with a 70mm ² Cu cable.	R 195 000
6.1.5	Install a new isolator in "SS Heese St."	R 135 000
6.1.6	Install a 70mm ² Cu cable between "SS Heese St" and "SS Sentrum".	R 260 000

6.1.7	66kV incomer line, 2 x Phantom, operated at 11kV and connected to the Kragstasie Substation via 1 x 500mm ² Cu core cable per phase, incl. Eskom Feeder Bay.	R 9 500 000	
6.1.8	Inspect and test equipment mentioned under Sub-Clause 4.4 and replace with new or refurbish existing.	<u>R 600 000</u>	R 11 315 000
6.2	Phase 2 - (2014 to 2017):		
6.2.1	Replace the fuse switch inside the "SS Hospitaal" building with non-extensible ring main unit.	R 140 000	
6.2.2	Replace 35mm ² Cu cable between "SS Hospitaal" and "SS Kragstasie" with a 70mm ² Cu cable.	R 260 000	
6.2.3	Disconnect the cable-end at "MS Mulder Street Circuit Breaker" at "SS Hospitaal", replace overhead line between said circuit breaker and "MS Mulder St" with a 70mm ² Cu cable and connect to the non-extensible ring main unit at "SS Hospitaal".	R 290 000	
6.2.4	Replace the overhead line between "MS Mulder St" and "SS Pauw St" with a 70mm ² Cu cable.	R 300 000	
6.2.5	Install "RMU Bauhinia St", if not already installed by a private developer.	R 465 000	
6.2.6	Install an additional fuse switch to "RMU Takkieskloof", disconnect 16mm ² Cu cable from isolator and connect same to fuse switch.	R 215 000	
6.2.7	Install a 70mm ² Cu cable between "RMU Takkieskloof" and "RMU Bauhinia St."	R 575 000	
6.2.8	Inspect and test equipment mentioned under Sub-Clause 4.4 and replace with new or refurbish existing.	<u>R 600 000</u>	R 2 845 000
6.3	Phase 3 - (2018 to 2021):		
6.3.1	Install "RMU Ixia St".	R 320 000	
6.3.2	Install a 70mm ² Cu cable between "RMU Ixia St" and "RMU Bauhinia St."	R 1 075 000	

6.3.3	Replace 35mm ² Cu cable between "SS Pauw St" and "RMU Takkieskloof" with a 70mm ² Cu cable.	R 250 000
6.3.4	Install a 500mm ² Cu single core cable in parallel with the existing main supply cable between the Main Supply Overhead Line and Kragstasie, or alternatively a 66kV overhead line between said points. (Note the more expensive estimate is shown) <u>If item 5.1.7 has been installed, this item can be omitted.</u>	(R 2 200 000)
6.3.5	Replace 35mm ² Cu cable between "SS Main" and "MS Waterwerke" with a 70mm ² Cu cable.	R 390 000
6.3.6	Replace isolator switch at "RMU Slagkop" with a circuit breaker.	R 250 000
6.3.7	Upgrade / replace 35mm ² Cu cable and overhead line between "RMU Versveld St" and "SS Heese St" with a 70mm ² Cu cable.	R 875 000
6.3.8	Replace isolator with fuse switch at "RMU Versveld St."	R 140 000
6.3.9	Install 70mm ² Cu cable between "SS Heese St" and overhead line feeding "PMT Beverly Hills".	R 50 000
6.3.10	Install 70mm ² Cu cable between "MS Panorama St" & "MS Koshuis" and "MS Gerrit du Plessis & "MS Aloeridge No.2"	R 1 100 000
6.3.11	Replace the overhead line link between "RMU Osler" and "SS Lourens" with a 70mm ² Cu cable.	R 200 000
6.3.12	Install an isolator at "RMU Osler St"	R 215 000
6.3.13	Install a 70mm ² Cu cable between "RMU Osler St" and "SS Kragstasie".	R 910 000
6.3.14	Install an isolator at "RMU Takkieskloof"	R 215 000
6.3.15	Install ring main unit at "MS Le Roux St"	R 215 000

6.3.16	Inspect and test equipment mentioned under Sub-Clause 4.4 and replace with new or refurbish existing.	<u>R 600 000</u>	R 6 805 000
	Total, excl. VAT		R 20 965 000

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.
- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

Stilbaai Area

Existing Network and Proposed Changes

4.1 Stilbaai:

4.1.1 Eskom Supply:

The existing Eskom supply is provided from a 66/11kV substation situated near Melkhoutfontein, via an 11kV overhead radial line (no firm supply). The existing available capacity from Eskom, i.e. 6500 kVA, is not sufficient to provide the required load during the holidays and therefore the Municipality is currently in the process of erecting a new 66/11kV substation on the north western side of town, as depicted in the location on Drawing No. Drawing No. 4891/E/02-1, including a 66kV overhead line from the Stilbaai Eskom Substation some 6 km from Stilbaai. A 66/11kV will be erected at the new main intake substation with a capacity of at least 10kVA.

The maximum actual kVA demand was measured in January 2009 at 6882 kVA. The Municipality is currently load shedding during the holidays to try not to exceed the above-mentioned available capacity from Eskom.

4.1.2 Municipal Network:

The existing main MV reticulation network consists mostly of underground cable feeders being fed from "SS Hoof". The cables are connected to a small number of brick-built switching stations and various metal clad ring main units, forming part of a major ring system. The cables sizes vary between 16mm² to 185mm² copper. Sections of overhead line conductor are noted in the built-up areas, which also form part of the main network. Radial overhead and underground feeders, however, also exist.

This connection will ensure the strengthening of the main MV reticulation network between "SS Main Intake" and "SS 3". It is further recommended that "RMU 2-2 Uitsig Straat" be re-covered and re-turned to the municipal stores. No ring main unit will replace same as depicted on the drawings.

The installation of the following ring main units, i.e. "RMU Hoofweg Wes 3", "RMU Paling St.", "RMU Oester Ave No.1", "RMU Oester Ave No.2", "RMU Gordon St." and "RMU H H Steyn" will further strengthen the switching possibilities of the network, but can be installed towards the end of the master plan period.

4.1.2.4 Feeder Cables / Overhead Lines:

The ongoing strengthening of the existing underground network between the abovementioned new main intake substation and switching stations "SS 3" and "SS Sub-Hoof", including the other sub-switching stations mentioned above are of great importance to ensure that a ring feed supply is available to all load centres and miniature substations. (Note that some of this work will be discussed, but not priced, in this document, since the project is already in process.)

The installation of the following main supply cables from the new "Main Intake Substation" are proposed:

- 25mm² Cu underground cable to miniature substation "MS 18 Azalea St", the 70mm² Cu underground cable to the 70mm² Cu cable in Kert Street and the 120mm² Cu underground cable to the 120mm² Cu cable in Uitsig Street. These cables will ensure a firm supply of 4,76 MVA (capacity of a 120mm² Cu cable) to the existing load centre on the western side of town, i.e. "RMU Indraf".
- 185mm² Cu underground to the 185mm² Cu overhead line in Main Road, at the position where "RMU Hoofweg Wes 3" is shown. This cable, is proposed to provide a dedicated main supply to "SS Sub-Hoof" and must be done within the next four (4) years to ensure a firm supply of 4,76 MVA (expected load) for the western side of town.
- 185mm² Cu underground cable to the proposed switching station "SS 3" is proposed in the next five years to increase the firm supply to "SS 3" from 4,76 MVA to 7,69 MVA (capacity of the sum of a 185mm² Cu and 16mm² Cu cable), since it is expected that the load on the western side of town will exceeds 4,76 MVA.
- Second 185mm² Cu cable to "SS Sub-Hoof" is proposed to ensure a firm supply to the residential areas on the north western and eastern sides of town.
- The replacement of the overhead line along Main Road with a 185mm² Cu cable to "SS Sub-Hoof". This item can be implemented towards the end of the ten year master plan period.

The installation of the following ring feed supply cables are proposed:

- 70mm² Cu underground cable between "MS Indraf (OK)" and "SS 3", the 120mm² Cu underground cable between "SS Palinggat" and "SS 3" and 25mm² Cu cable between "MS Strandloper Kruijn No. 4" and "SS 3". Said cables will ensure three major rings between the main intake substation and "SS 3".
- 25mm² Cu underground cable between "MS Bereford Place" and "SS 3". Said installation will ensure that the cable (minimum 16mm² Cu) between "SS Main Intake", "MS Fynbos No. 3" and "SS 3" will be sufficient to cater for the expected increased load on this ring in the next ten years, since the number of miniature substations has been lessen on this ring to suit the existing cable size with capacity of 1,6 MVA.

- 25mm² Cu underground cable between and "MS Strandloperkruin No. 3" and "SS 3". This installation will ensure that all the miniature substations at Strandloperkruin are on a ring feed supply.
- 70mm² Cu underground cable between "SS 3" and "SS Golf Park. 70mm² Cu underground cable between "SS 3" and overhead line in Oester Avenue. These cables will ensure that the southern side of town, excluding Bosbokduin, will be connected to a ring feed supply.
- 70mm² Cu underground cable between "SS Golf Park" and "MS Adelprach". Said installation will ensure that the cable (minimum 16mm² Cu) between "MS 11", "MS Golf Park No. 2" and "SS Golf Park" will be sufficient to cater for the expected increased load on this ring in the next ten years, since the number of miniature substations has been lessen on this ring to cater for the existing cable size with capacity of 1,6 MVA.
- 70mm² Cu cable between "SS Sub-Hoof" and "SS 1". This cable must be installed before any ring feed cable installations are done on the eastern side of town.
- 25mm² Cu underground cable between proposed "RMU Azalea St" and "MS 19 Bokmakierie"; 25mm² Cu underground cable between proposed "RMU Wege St" and "MS Hall"; 25mm² Cu cable between "MS Uys" and the overhead line in Wege Street; 70mm² Cu cables between the overhead line in Oester Avenue and the proposed "MS Nautilus Ave."; 50mm² Cu cable between proposed "RMU Hoofweg Wes 5" and "RMU Munic"; 50mm² Cu cable between "MS 9" and the overhead line along Bosbok Avenue; 25mm² Cu cable between "MS 7A Jagersfontein and the proposed "RMU Jagersfontein No.2"; 25mm² Cu cable between "MS Bosbokduin No.1" and "MS Bosbokduin No.2"; 25mm² Cu cable between proposed "SS Bosbokduin" and "MS Bokmakierieduin"; 35mm² Cu cable between "MS Undermilkwood No.1" and "MS Undermilkwood No.2"; 70mm² cu cables between proposed "RMU Steadfray" and the underground cable in Van Wyk Street; 35mm² Cu cable between "MS C Rust" and "MS SS X"; 35mm² Cu cable between "MS Y Gordon Slot" and "MS H H Steyn"; 35mm² Cu cable between "MS H H Steyn" and "MS Preekstoel No.3"; 35mm² Cu cable between proposed "RMU Plet Huisies" and "MS Glybaan" and 120mm² Cu cable between "RMU Hoofweg Wes 4" and "MS Bosbok Kloof". These cables will ensure a ring feed supply to all of the aforementioned miniature substations and ground mounted transformer substations.

The upgrade of the overhead lines between proposed "MS F Plet Huisies" and "MS Glybaan", and "MS Duine No.4" and "MS Preekstoel No.1" is required to ensure that the ring feed supply will be sufficient to cater for the expected load growth in this area. These lines must be upgraded before the total load from "SS 1" exceeds 1,6MVA.

Note that the proposed developments on the western and north western sides of town have not been indicated on the drawings. These areas will be supplied via ring feed underground cable networks directly from "SS Main Intake". It is proposed that the residential development that is planned at the existing Golf Course be fed from the 70mm² Cu cable planned between "SS Golf Park" and "MS Adelprach". Future developments directly adjacent "SS 3" will be supplied directly from this switching station via a ring feed supply.

4.1.2.5 Miniature Substations (MS):

The installation of the following miniature substations, i.e. "MS Nautilus Ave", "MS Prinsloo Dr", "MS Van Wyk St", "MS Erf 698" and "MS 873" are proposed to ensure a good quality of LV supply to the erven in the respective areas.

It is proposed that "PMT Hoofweg Wes" be replaced with a miniature substation "MS Hoofweg Wes" when the overhead line supplying same be replaced with an underground cable.

The installation of miniature substations indicated in green will be supplied and installed by future developers at the time when these areas are developed.

4.2 Melkhoutfontein:

4.2.1 Eskom Supply:

The Eskom supply is provided from the nearby 66/11kV substation via an 11kV overhead radial line. The existing available capacity from Eskom, i.e. 500 kVA, is not sufficient to provide the required load and therefore the Municipality is currently in the process of erecting a new interconnecting 11kV overhead line between the existing municipal main 11kV overhead line to Stilbaai and the 11kV network at Melkhoutfontein to enable the Municipality to shift load to Stilbaai. The load requirement of Stilbaai only exceeds their notified maximum demand of 6500 kVA in January of each year and therefore it was decided to shift some of the Melkhoutfontein load to Stilbaai. The disadvantage of this load shifting for Melkhoutfontein is that a portion of Melkhoutfontein will now also be subject to load shedding during the December holidays. This is, however, only an interim arrangement until Melkhoutfontein will be supplied from Stilbaai when the new 66/11kV substation is erected as mentioned under item 4.1.1. The existing 11kV overhead line between the Eskom Substation and Stilbaai's "SS Hoof" substation will then be utilised as the new supply line to Melkhoutfontein.

4.2.2 Municipal Network:

The existing main MV reticulation network consists mostly of overhead line feeders which are connected to a number of pole mounted transformer substations. Most of the feeders are radial lines and it is proposed that same be connected to ring feed supplies. The loads on the system conductors are generally well within the current capacities of the conductors.

4.2.2.1 Ring Main Unit:

The installation of ring main unit "RMU Sonop St" is proposed and is indicated in green on the aforementioned drawings. This ring main unit will be supplied and installed by future developers in the approximate location depicted on the drawing.

4.2.2.2 Feeder Cables / Overhead Lines:

The installation of the underground cable between the overhead line in Erica Crescent & "PMT 4" and the overhead line section between the overhead line in Rooipitjie Road & "PMT 7", including the short sections of overhead line between "PMT-1" & "PMT-3" and the "wolf" overhead conductor and "PMT-1" are required to ensure the ongoing strengthening of the existing network by providing ring feed supplies. The installation of the latter two short sections of overhead lines will be required when the supply to Melkhotfontein is swapped from Eskom to Stilbaai.

The installation of the overhead lines and cables depicted in green on the drawings will be done by future developers at the time when these areas are developed.

4.2.2.3 Miniature Substations / Pole Mounted Transformer Substations:

The installation of miniature substations "MS Future A", "MS Future B" & "MS Future C" and pole mounted transformer substations "PMT Future A", "PMT Future A" & "PMT Future B" will be supplied and installed by future developers at the time when these areas needed to be upgraded.

4.3 Jongensfontein:

4.3.1 Eskom Supply:

The Eskom supply is provided from the same 66/11 kV substation as mentioned above near Melkhoutfontein via an 11kV overhead radial line and underground cable with capacities of 2,1 MVA and 2,8 MVA respectively. The current notified maximum demand with Eskom is 1,25 MVA and the maximum actual kVA demand was measured in January 2088 at 1,22 MVA. The estimated maximum demand in the next 10 years is about 2 MVA, which means that the existing supply cable and line will be just sufficient to cater for the estimated load. The town's load towards the end of the ten year period must, however, be closely monitored to ensure that the supply cable and overhead line be upgraded when required.

4.3.2 Municipal Network:

The existing main MV reticulation network consists of two underground cable radial feeders which are connected to a number of miniature substations. It is proposed that two ring feed supplies be extended as depicted on the drawings. The loads on the system conductors are currently well within the current capacities of the conductors, but upgrading measures are, however, required as indicated below.

4.3.2.1 Switching Station:

The upgrading of the existing main intake substation building is required when the ring main unit panel inside same will be extended to cater for the two new ring main switches as depicted on the schematic diagram. The installation of the circuit breaker panel in green will be done by future developers.

4.3.2.2 Feeder Cables:

The upgrade of the 16mm² Cu cable between the main circuit breaker panel inside the main intake substation and the ring main unit panel in the same substation building will be required when the load at Jongensfontein reach 1,5 MVA, expected in 2016.

The installation of the 35mm² Cu underground cable between "Main Intake Substation" and "MS 7 J – Baai" is required to ensure a ring feed supply to the miniature substations on the eastern side of Jongensfontein. The new proposed 35mm² Cu cable between "MS 4 Rowweklip" and "MS Rowweklip No.2" is required to provide power to the new proposed "MS Rowweklip No.2".

The installation of the 35mm² Cu underground cable between "MS Rowweklip No.2" and the main intake substation, which is indicated in green on the drawings, will be installed by future developers when this area is developed.

4.3.2.3 Miniature Substations / Pole Mounted Transformer Substations:

The installation of the following miniature substations, i.e. "MS Rowweklip No. 2", "MS Rowweklip No. 1", "MS Hoofweg" and "MS Daytona Rd" are proposed to ensure a good quality of LV supply to the erven in the respective areas.

The installation of miniature substations "MS Future A", "MS Future B" & "MS Future C", indicated in green on the drawings, will be supplied and installed by future developers at the time when these areas needed to be upgraded.

4.4 Condition:

From what has been observed the system components generally appear to be in a good condition, but regular inspections and tests are needed to ensure that all components are working safely.

5.0 Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The immediate urgent elements which must be attended to:

- (a) The erection of the main intake substation at Stilbaai, i.e. "SS Main Intake", on the north western side of Stilbaai, together with the 66kV overhead line between the Eskom Substation and Stilbaai.
- (b) The installation of the MV cables from the new main intake substation to the existing network in Stilbaai.
- (c) The establishing of a new load centre, i.e. "SS 3" on the western side of Stilbaai.
- (d) Commence / proceed with a maintenance programme.

The vision for Stilbaai, Melkhoutfontein and Jongensfontein in future is a ring main underground cable / overhead line network system which connects all the miniature substations and pole mounted transformer substations with each other until such time that load growth demands new load centres on the north western side of town, provision should be made to strengthen the existing MV underground ring feeds.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2012) to 2014, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2015 to 2018 and 2019 to 2022. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2015 and 2026, depending on the rate of development.

5.1 Phase 1 - (2012 to 2014):

- 5.1.1 "SS Main Intake" at Stilbaai: The erection of the main intake substation, i.e. "SS Main Intake", on the north western side of Stilbaai, together with the 66kV overhead line between the Eskom Substation and Stilbaai. (Note that this project is currently in the process.)
- 5.1.2 MV Cables at Stilbaai: The installation of the following main supply cables from "SS Main Intake" to the following MV equipment / material, i.e. 25mm² Cu cable to "MS18 Azalea St", 70mm² Cu cable to 70mm² Cu cable in Kerk Street, 120mm² Cu cable to 120mm² Cu cable in Uitsig Street, 185mm² Cu cable to overhead line in Hoofweg, at the position where "RMU Hoofweg Wes 3" is shown, and 185mm² Cu cable to and including "RMU Kerk St". The replacement of the 185mm² Cu overhead over the river between "SS Sub-Hoof" and "RMU Uitbreiding 5-1 Hoofweg Wes" with a 185mm² Cu cable. (Note that this project is currently in the process.)
- 5.1.3 "SS-3" at Stilbaai: The establishing of new load centre "SS-3", including six (6) switchgear panels, on the western side of Stilbaai.
- 5.1.4 Overhead Line Sections at Melkhoutfontein: the installation of short lengths of 25mm² Cu overhead line between "PMT 1" & "PMT 3" and the "wolf" overhead conductor and "PMT 1". This will be done after the new 66/11kV substation has been erected and commissioned.

5.2 Phase 2 - (2015 to 2018):

- 5.2.1 "SS 2" and "RMU 2-3 Uitsig St" at Stilbaai: The upgrading of "SS 2" and "RMU 2-3 Uitsig St" are required to strengthen the MV network between the new "Main Intake Substation" and "SS 3". Note that this work only includes the disconnecting and re-connecting of the cables to the existing switchgear.
- 5.2.2 MV Cables at Stilbaai: The installation of the following ring feed supply cables, i.e. 70mm² Cu cable between "MS Indraf (OK)" & "SS 3", the 120mm² Cu cable between "SS Palinggat" & "SS 3", the 25mm² Cu cable between "MS Strandloper Kruin No. 4" & "SS 3", the 25mm² Cu cable between "MS Bereford Place" & "SS 3" and the 25mm² Cu cable between "MS Strandloperkruin No. 3" & "SS 3".
- 5.2.3 Main Intake Substation at Jongensfontein: The upgrade of the 16mm² Cu cable between the main circuit breaker panel and the ring main unit inside the afore-mentioned substation with a 50mm² Cu cable.

- 5.2.4 MV Cable between "SS Main Intake" and "SS 3" at Stilbaai: The installation of a 185mm² Cu cable between "SS Main Intake" and "SS 3", including a circuit breaker panel each at "SS Main Intake" and "SS 3".
 - 5.2.5 "MS Nautilus Ave at Stilbaai": The installation of "MS Nautilus Ave.", including the two 70mm² Cu supply cables from the overhead line network in Oester Avenue to said substation.
 - 5.2.6 "MS Daytona Rd at Jongensfontein": The installation of "MS Daytona Rd", including the 35mm² Cu cable between "MS7 J-Baai" and said miniature substation.
 - 5.2.7 "MS Van Wyk St. at Stilbaai": The installation of "MS Van Wyk St".
 - 5.2.8 "SS 3" at Stilbaai: The installation of a 70mm² Cu cable between "SS 3" and "SS Golf Park" and 70mm² Cu cable between "SS 3" and overhead line in Oester Avenue, incl. "SS Golf Park" and "RMU Oester Ave. No.1".
 - 5.2.9 "SS Bosbokduin" at Stilbaai: The installation of "SS Bosbokduin", including the installation of the 25mm² Cu cable between "MS Bokmakierieduin" and "SS Bosbokduin".
 - 5.2.10 MV Cable to "SS Sub-Hoof" at Stilbaai: The installation of a 185mm² Cu cable between "RMU Kerk St" and "SS Sub-Hoof", including a circuit breaker panel inside "SS Sub-Hoof".
- 5.3 Phase 3 – (2019 to 2022):
- 5.3.1 "SS Sub-Hoof" at Stilbaai: The installation of the 70mm² Cu cable between "SS Sub-Hoof" and "SS 1", including the installation of the bus section panels at "SS Sub-Hoof" and "SS 1".
 - 5.3.2 "MS Rowweklip No. 2" at Jongensfontein: The installation of "MS Rowweklip No. 2", including the installation of the 35mm² Cu cable between "MS 4 Rowweklip " and "MS Rowweklip No. 2".
 - 5.3.3 "MS C Rust" at Stilbaai: The installation of the 35mm² Cu cable between "MS C Rust" and "MS SS X".
 - 5.3.4 "MS Y Gordon Slot" at Stilbaai: The installation of the 35mm² Cu cable between "MS Y Gordon Slot" and "MS H H Steyn".
 - 5.3.5 "MS H H Steyn" at Stilbaai: The installation of the 35mm² Cu cable between "MS H H Steyn" and "MS Preekstoel No.3".
 - 5.3.6 "RMU Plet Huisies" at Stilbaai: The installation of "RMU Plet Huisies", including the 35mm² Cu cable between said ring main unit and "MS Glybaan".
 - 5.3.7 MV Overhead Line at Stilbaai: The upgrade of the two sections of 16mm² Cu overhead line feeding from "SS 1" on the eastern side of town.

- 5.3.8 "MS Prinsloo Dr", "MS Erf 698" and "MS 873" at Stilbaai: The installation of "MS Prinsloo Dr", "MS Erf 698" and "MS 873".
- 5.3.9 "MS Hoofweg" and "MS Rowweklip No. 1" at Jongensfontein: The installation of "MS Hoofweg" and "MS Rowweklip No. 1".
- 5.3.10 "SS Golf Park" at Stilbaai: The installation of the 70mm² Cu cable between "SS Golf Park" and "MS Adelprach", including "RMU Oester Ave. No. 2"
- 5.3.11 "RMU Wege St" at Stilbaai: The installation of the 25mm² Cu cable between "RMU Wege St" and "MS Hall", including "RMU Wege St."
- 5.3.12 "MS Uys St" at Stilbaai: The installation of the 25mm² Cu cable between "MS Uys St" and the overhead line in Wege Street.
- 5.3.13 "RMU Paling St" at Stilbaai: The installation of "RMU Paling St", including the two 50mm² Cu cables between the overhead line in Bosbok Avenue and "MS 9".
- 5.3.14 "MS Undermilkwood No.1" at Stilbaai: The installation of the 35mm² Cu cable between "MS Undermilkwood No.1" and "MS Undermilkwood No. 2".
- 5.3.15 "RMU Prinsloo Dr" and RMU Hoofweg Wes 4" at Stilbaai: The installations of "RMU Prinsloo Dr" and RMU Hoofweg Wes 4", including the 120mm² Cu cable between "RMU Hoofweg Wes 4" and "MS Bosbokkloof".
- 5.3.16 "MS SS7A Bosbokduin No.2" at Stilbaai: The installation of a 25mm² Cu cable between "MS SS7A Bosbokduin No.2" and "MS SS7A Bosbokduin No.1", including ring main units inside the aforementioned substations.
- 5.3.17 "RMU Jagersfontein No. 2" at Stilbaai: The installation of "RMU Jagersfontein No.2" and the 25mm² Cu cable between "RMU Jagersfontein No.2" and "MS 7A Jagersfontein".
- 5.3.18 "Main Intake Substation" at Jongensfontein: The extension of the "Main Intake Substation" building to cater for the future switchgear panels inside said substation, including the installation of the 35mm² Cu cable between "Main Intake Substation" & "MS-Daytona Rd" and switchgear panel inside the afore-mentioned substation.
- 5.3.19 "RMU Munic" at Stilbaai: The installation of the 50mm² Cu cable between the proposed "RMU Hoofweg Wes 5" and "RMU Munic", including the installation of the aforementioned ring main units.
- 5.3.20 "RMU Steadfray" at Stilbaai: The installation of "RMU Steadfray", including the two 70mm² Cu supply cables from the underground cable in Van Wyk Street.
- 5.3.21 "RMU Azalea St" at Stilbaai: The installation of "RMU Azalea St" including the 25mm² Cu cable between "RMU Azalea St" and "MS19 Bokmakierie".
- 5.3.22 "PMT 7" at Melkhoutfontein: The installation of the 25mm² Cu overhead line between "PMT 7" and the overhead line in Rooipitjie Road.

- 5.3.23 MV Cable to SS-Sub-Hoof at Stilbaai: The replacement of the MV overhead line between the proposed "RMU Uitbreiding 5-1 Hoofweg Wes" and proposed "RMU Hoofweg Wes 3" with a 185mm² Cu underground cable, including the installation of ring main units "RMU Hoofweg Wes 3", "MS Hoofweg Wes", "RMU Uitbreiding 5-2 Hoofweg Wes" and "RMU Uitbreiding 5-1 Hoofweg Wes"
- 5.3.24 "PMT 4" at Melkhoutfontein: The installation of a 35mm² Cu cable between "PMT 4" and the overhead line in Erica Crescent, including the 25mm² Cu overhead line between "PMT 7" and the overhead line in Rooipitjie Road.
- 5.3.25 "RMU Gordon St" and "RMU H H Steyn" at Stilbaai: The supply and installation of "RMU Gordon St" and "RMU H H Steyn" to further strengthen the municipal network on the eastern side of the town.

Note that the new infrastructure required for new developments, i.e. the infrastructure indicated in green, the proposed development on the western and north western sides of town, or any other smaller developments in town, have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1 Phase 1 - (2012 to 2014):

- 6.1.1 "SS Main Intake" at Stilbaai: The erection of the main intake substation, i.e. "SS Main Intake", on the north western side of Stilbaai, together with the 66kV overhead line between the Eskom Substation and Stilbaai. (Note that this project is currently in the process.) Included under current project
- 6.1.2 MV Cables at Stilbaai: The installation of the following main supply cables from "SS Main Intake" to the following MV equipment / material, i.e. 25mm² Cu cable to "MS 18 Azalea St", 70mm² Cu cable to 70mm² Cu cable in Kerk Street, 120mm² Cu cable to 120mm² Cu cable in Uitsig Street, 185mm² Cu cable to overhead line in Hoofweg, at the position where "RMU Hoofweg Wes 3" is shown, and 185mm² Cu cable to and including "RMU Kerk St". The replacement of the 185mm² Cu overhead over the river between "SS Sub-Hoof" and "RMU Uitbreiding 5-1 Hoofweg Wes" with a 185mm² Cu cable. (Note that this project is currently in the process.) Included under current project

6.1.3	<u>"SS 3" at Stilbaai:</u> The establishing of new load centre "SS 3", including six (6) switchgear panels, on the western side of Stilbaai.	R 3 000 000	
6.1.4	<u>Overhead Line Sections at Melkhoufontein:</u> the installation of short lengths of 25mm ² Cu overhead line between "PMT 1" & "PMT 3" and the "wolf" overhead conductor and "PMT 1".	R 50 000	R 3 050 000

Phase 2 - (2015 to 2018):

6.2.1	<u>"SS 2" and "RMU 2-3 Uitsig St" at Stilbaai:</u> The upgrading of "SS 2" and "RMU 2-3 Uitsig St" are required to strengthen the MV network between the new "Main Intake Substation" and "SS 3". Note that this work only includes the disconnecting and re-connecting of the cables to the existing switchgear.	R 50 000	
6.2.2	<u>MV Cables at Stilbaai:</u> The installation of the following ring feed supply cables, i.e. 70mm ² Cu cable between "MS Indraf (OK)" & "SS 3", the 120mm ² Cu cable between "SS Palinggat" & "SS 3", the 25mm ² Cu cable between "MS Strandloper Kruin No. 4" & "SS 3", the 25mm ² Cu cable between "MS Bereford Place" & "SS 3" and the 25mm ² Cu cable between "MS Strandloperkruin No. 3" & "SS 3".	R 1 900 000	
6.2.3	<u>Main Intake Substation at Jongensfontein:</u> The upgrade of the 16mm ² Cu cable between the main circuit breaker panel and the ring main unit inside the aforementioned substation with a 50mm ² Cu cable.	R 35 000	
6.2.4	<u>MV Cable between "SS Main Intake" and "SS 3" at Stilbaai:</u> The installation of a 185mm ² Cu cable between "SS Main Intake" and "SS 3", including a circuit breaker panel each at "SS Main Intake" and "SS 3".	R 4 450 000	

6.2.5	<u>"MS Nautilus Ave at Stilbaai"</u> : The installation of "MS Nautilus Ave.", including the two 70mm ² Cu supply cables from the overhead line network in Oester Avenue to said substation.	R 700 000	
6.2.6	<u>"MS Daytona Rd at Jongensfontein"</u> : The installation of "MS Daytona Rd", including the 35mm ² Cu cable between "MS7 J-Baai" and said miniature substation.	R 900 000	
6.2.7	<u>"MS Van Wyk St. at Stilbaai"</u> : The installation of "MS Van Wyk St".	R 420 000	
6.2.8	<u>"SS 3" at Stilbaai</u> : The installation of a 70mm ² Cu cable between "SS 3" and "SS Golf Park" and 70mm ² Cu cable between "SS 3" and overhead line in Oester Avenue, incl. "SS Golf Park" and "RMU Oester Ave. No.1".	R 3 115 000	
6.2.9	<u>"SS Bosbokduin" at Stilbaai</u> : The installation of "SS Bosbokduin", including the installation of the 25mm ² Cu cable between "MS Bokmakierieduin" and "SS Bosbokduin".	R 835 000	
6.2.10	<u>MV Cable to "SS Sub-Hoof" at Stilbaai</u> : The installation of a 185mm ² Cu cable between "RMU Kerk St" and "SS Sub-Hoof", including a circuit breaker panel inside "SS Sub-Hoof".	<u>R 4 000 000</u>	R 16 405 000

Phase 3 – (2019 to 2022):

6.3.1	<u>"SS Sub-Hoof" at Stilbaai</u> : The installation of the 70mm ² Cu cable between "SS Sub-Hoof" and "SS 1", including the installation of the bus section panels at "SS Sub-Hoof" and "SS 1".	R 2 685 000	
6.3.2	<u>"MS Rowweklip No. 2" at Jongensfontein</u> : The installation of "MS Rowweklip No. 2", including the installation of the 35mm ² Cu cable between "MS 4 Rowweklip " and "MS Rowweklip No. 2".	R 720 000	
6.3.3	<u>"MS C Rust" at Stilbaai</u> : The installation of the 35mm ² Cu cable between "MS C Rust" and "MS SS X".	R 600 000	
6.3.4	<u>"MS Y Gordon Slot" at Stilbaai</u> : The installation of the 35mm ² Cu cable between "MS Y Gordon Slot" and "MS H H Steyn".	R 670 000	

6.3.5	<u>"MS H H Steyn" at Stilbaai:</u> The installation of the 35mm ² Cu cable between "MS H H Steyn" and "MS Preekstoel No.3".	R 850 000
6.3.6	<u>"RMU Plet Huisies" at Stilbaai:</u> The installation of "RMU Plet Huisies", including the 35mm ² Cu cable between said ring main unit and "MS Glybaan".	R 490 000
6.3.7	<u>MV Overhead Line at Stilbaai:</u> The upgrade of the two sections of 16mm ² Cu overhead line feeding from "SS 1" on the eastern side of town.	R 400 000
6.3.8	<u>"MS Prinsloo Dr", "MS Erf 698" and "MS 873" at Stilbaai:</u> The installation of "MS Prinsloo Dr", "MS Erf 698" and "MS 873".	R 1 220 000
6.3.9	<u>"MS Hoofweg" and "MS Rowweklip No. 1" at Jongensfontein:</u> The installation of "MS Hoofweg" and "MS Rowweklip No. 1".	R 780 000
6.3.10	<u>"SS Golf Park" at Stilbaai:</u> The installation of the 70mm ² Cu cable between "SS Golf Park" and "MS Adelprach", including "RMU Oester Ave. No. 2"	R 1 658 000
6.3.11	<u>"RMU Wege St" at Stilbaai:</u> The installation of the 25mm ² Cu cable between "RMU Wege St" and "MS Hall", including "RMU Wege St."	R 430 000
6.3.12	<u>"MS Uys St" at Stilbaai:</u> The installation of the 25mm ² Cu cable between "MS Uys St" and the overhead line in Wege Street.	R 70 000
6.3.13	<u>"RMU Paling St" at Stilbaai:</u> The installation of "RMU Paling St", including the two 50mm ² Cu cables between the overhead line in Bosbok Avenue and "MS 9".	R 420 000
6.3.14	<u>"MS Undermilkwood No.1" at Stilbaai:</u> The installation of the 35mm ² Cu cable between "MS Undermilkwood No.1" and "MS Undermilkwood No. 2".	R 360 000

6.3.15	<u>"RMU Prinsloo Dr" and "RMU Hoofweg Wes 4" at Stilbaai:</u> The installations of "RMU Prinsloo Dr" and RMU Hoofweg Wes 4", including the 120mm ² Cu cable between "RMU Hoofweg Wes 4" and "MS Bosbokkloof".	R 585 000
6.3.16	<u>"MS SS7A Bosbokduin No.2" at Stilbaai:</u> The installation of a 25mm ² Cu cable between "MS SS7A Bosbokduin No.2" and "MS SS7A Bosbokduin No.1", including ring main units inside the aforementioned substations.	R 720 000
6.3.17	<u>"RMU Jagersfontein No. 2" at Stilbaai:</u> The installation of "RMU Jagersfontein No.2" and the 25mm ² Cu cable between "RMU Jagersfontein No.2" and "MS 7A Jagersfontein".	R 375 000
6.3.18	<u>"Main Intake Substation" at Jongensfontein:</u> The extension of the "Main Intake Substation" building to cater for the future switchgear panels inside said substation, including the installation of the 35mm ² Cu cable between "Main Intake Substation" & "MS-Daytona Rd" and switchgear panel inside the afore-mentioned substation.	R 1 635 000
6.3.19	<u>"RMU Munic" at Stilbaai:</u> The installation of the 50mm ² Cu cable between the proposed "RMU Hoofweg Wes 5" and "RMU Munic", including the installation of the aforementioned ring main units.	R 535 000
6.3.20	<u>"RMU Steadfray" at Stilbaai:</u> The installation of "RMU Steadfray", including the two 70mm ² Cu supply cables from the underground cable in Van Wyk Street.	R 765 000
6.3.21	<u>"RMU Azalea St" at Stilbaai:</u> The installation of "RMU Azalea St" including the 25mm ² Cu cable between "RMU Azalea St" and "MS19 Bokmakierie".	R 530 000
6.3.22	<u>"PMT 7" at Melkhoutfontein:</u> The installation of the 25mm ² Cu overhead line between "PMT 7" and the overhead line in Rooipitjie Road.	R 95 000

6.3.23	<u>MV Cable to SS-Sub-Hoof at Stilbaai:</u> The replacement of the MV overhead line between the proposed "RMU Uitbreiding 5-1 Hoofweg Wes" and proposed "RMU Hoofweg Wes 3" with a 185mm ² Cu underground cable, including the installation of ring main units "RMU Hoofweg Wes 3", "MS Hoofweg Wes", "RMU Uitbreiding 5-2 Hoofweg Wes" and "RMU Uitbreiding 5-1 Hoofweg Wes"	R 2 600 000	
6.3.24	<u>"PMT 4" at Melkhoutfontein:</u> The installation of a 35mm ² Cu cable between "PMT 4" and the overhead line in Erica Crescent, including the 25mm ² Cu overhead line between "PMT 7" and the overhead line in Rooipitjie Road.	R 175 000	
6.3.25	<u>"RMU Gordon St" and "RMU H H Steyn" at Stilbaai:</u> The supply and installation of "RMU Gordon St" and "RMU H H Steyn" to further strengthen the municipal network on the eastern side of the town.	<u>R 500 000</u>	<u>R 19 868 000</u>
	Total, excl. VAT		R 39 323 000

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.
- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

Witsand

Existing Network and Proposed Changes

4.1 Eskom Supply:

The Eskom supply is provided from a 66/22kV Eskom substation, near the Witsand turn-off from the N2 National Road, via a 22kV overhead radial line (no firm supply).

The current notified maximum demand with Eskom is 1 250 kVA and the maximum actual kVA demand was measured in January 2008 at 1 318 kVA.

Eskom indicated that they will be able to provide the estimated power at the end of the master plan period from their electrical network. Upgrading measures will, however, be required on their network.

4.2 Municipal Network:

4.2.1 Main Intake Substation, i.e. Sub 1:

The 22/11kV main intake substation consists of two off 3150 KVA, 22/11kV feeder bays. The substation has recently (2011/12) been upgraded and therefore we foresee no upgrading measures to same for the next ten years, except for regular routine and maintenance inspections. The supply and installation of 11kV circuit breaker feeder panels will be addressed in future master plans, since we are of the opinion that the switching of the two main feeders can currently successfully be done by the two newly installed 11kV auto reclosers inside Sub 1.

4.2.2 CBD and Town Areas:

4.2.2.1 Feeder cables / overhead lines:

The existing MV (11kV) reticulation network predominately consists of two (2) overhead lines with short underground radial cable feeds to plinth mounted miniature substations. Said cables are connected to the overhead line via pole mounted fuse switches. The residential area, i.e. Breedezicht, which is situated on the western boundary of the town is, however, fed via an underground cable network from one of the aforementioned lines.

Each of the two overhead lines are connected to the main intake substation via it's own auto recloser. The loads on the system conductors are well within the current capacities of the conductors, but upgrading measures on the feeders are required to ensure a ring feed supply to the miniature substations as further discussed below.

The existing minor feeders are mainly on the outskirts of town, are generally overhead radial lines consisting of copper conductors and are taken from the afore-mentioned two overhead lines by means of pole mounted fuse switches. None of these feeders needed to be upgraded to strengthen the current main reticulation network in future with ring feeds.

The Town is presently fed by means of 25mm² Copper overhead lines and a mixture of 50mm², 35mm², 25mm² and 16mm² Cu underground cables. We recommended that all new cables that will be installed to provide power to new miniature substations, or cables which will provide ring feeds to substations, be 50mm² Cu. The upgrading of the 35mm², 25mm² and 16mm² Cu cables will be handled in the next master plans and do not need to be increased in the next ten (10) years.

Underground ring feed supplies need, however, to be supplied and installed to all the existing and future miniature substations to increase the current quality of supply to the end user as depicted on the plan layout and schematic diagram.

Fuse switches supplying the underground cables, and which are installed at various points on the overhead lines, must be replaced with solid links to prevent nuisance tripping in the event when the "open points" are moved on the ring.

4.2.2.2 Miniature Substations:

All miniature substations must be equipped with ring main units except for the four (4) substations, i.e. "MS-Breedezicht", "MS- Breedezicht 1", "MS- Sub 7" and "MS-Sub 8", which are already equipped with same.

Miniature Substations "MS-Joubert Street", "MS- Barracouda Street" and "MS-Protea Road" need to be installed to better the quality of the supply to the end-user.

From our inspection it was noted that some of the cables were not labeled. We propose that all switchgear, cables and equipment be labeled according to the drawings.

4.3 Condition:

From what has been observed, however, the system components generally appear to be in a good condition and are well maintained, but regular inspections and tests are needed to ensure that all components are working safely.

Upgrading of the MV Network

In order to overcome the immediate and ten year load growth problems, the systematic strengthening of the internal reticulation system is recommended. An ongoing commitment to regular maintenance is also a pre-requisite to the provision of a quality supply to the town's consumers.

The immediate urgent elements which must be attended to:

- (a) Provide an underground ring feed supply to all the miniature substations.
- (b) Commence / proceed with a maintenance programme.

The vision for the town in future is a ring main underground cable system which connects all the miniature substations resulting in two major rings that will be connected to the main intake substation. "

Until such time that load growth demands new load centres on the west and eastern sides of town, provision should be made to strengthen the existing MV underground network.

The proposed improvements and extensions have been divided into three phases. Phase 1 covers the most urgent work which should be carried out within the period from present (2012) to 2014, followed by Phase 2 and Phase 3 each of four year work periods, i.e. 2015 to 2018 and 2019 to 2022. Phase 3 encompasses some items of work for which it is not practical to set a time period, as certain items may be required at any time between 2015 and 2022, depending on the rate of development.

5.1 Phase 1 - (2012 to 2014):

- 5.1.1 MV cable between "MS-Sub 2" and "MS-Sub 3": Supply and install a 50mm² Cu underground cable between miniature substations "MS-Sub 2" and "MS-Sub 3", including ring main units inside each of the afore-mentioned substations. Replace the fuse links with solid links which are feeding the underground cables from the overhead line.
- 5.1.2 MV cable between "MS-Sub 3", "MS-Sub 3A" and "RMU Hotel": Supply and install a 50mm² Cu underground cable between miniature substations "MS-Sub 3", "MS-Sub 3A" and "RMU Hotel", including a ring main unit inside "MS-Sub 3A". Disconnect "MS-Sub 3A" from the overhead line.

5.2 Phase 2 - (2015 to 2018):

- 5.2.1 MV cable between "MS-Sub 5" and "MS-Breedezicht": Supply and install a 50mm² Cu underground cable between miniature substations "MS-Breedezicht" and "MS-Sub 5", including a ring main unit inside "MS-Sub 5".
- 5.2.2 "MS Joubert Street": Supply and install "MS Joubert Street.", including 50mm² Cu underground cable from the overhead line near the main intake substation.
- 5.2.3 "MS Barracouda Street": Supply and install "MS Barracouda Street.", including 50mm² Cu underground cable from "MS-Sub 6" and ring main unit inside the latter miniature substation.
- 5.2.4 "MS Protea Road": Supply and install "MS Protea Road.", including 50mm² Cu underground cable from the overhead line.
- 5.2.5 MV cable between "MS Joubert Street" and "MS-Sub 6": Supply and install a 50mm² Cu underground cable between future "MS-Joubert Street" and "MS-Sub 6". Disconnect "MS-Sub 6" from the overhead line.

5.3 Phase 3 - (2019 to 2022):

- 5.3.1 MV cable between "MS Barracouda Street" and "MS-Sub 7": Supply and install a 50mm² Cu underground cable between "MS-Barracouda Street" and "MS-Sub 7". Disconnect "MS-Sub 7" from the overhead line.
- 5.3.2 MV cable between "MS Protea Road" and "MS-Sub 10": Supply and install a 50mm² Cu underground cable between "MS-Protea Road" and "MS-Sub 10, including a ring main unit inside MS-Sub 10".
- 5.3.3 MV cable between "MS-Sub 8", "MS-Sub 9" and "MS-Sub 10": Supply and install a 50mm² Cu underground cable between miniature substations "MS-Sub 8", "MS-Sub 9" and "MS-Sub 10", including ring main units inside "MS-Sub 9" and "MS-Sub 10".
- 5.3.4 MV cable between "MS Protea Road" and "MS-Sub 11": Supply and install a 50mm² Cu underground cable between "MS-Protea Road" and "MS-Sub 11, including a ring main unit inside MS-Sub 11". Disconnect "MS - Protea Road" from the overhead line.
- 5.3.5 MV cable between overhead line and "GMT-16": Supply and install a 50mm² Cu underground cable between future overhead line and "GMT-16, including ring main unit at "GMT 16".

Note that the new infrastructure required for new developments, i.e. the areas indicated in green, have not been priced, since it has been assumed that said infrastructure will be financed by the respective developers. The proposed new infrastructure has been based on the Spatial Development Plan for Witsand received from the Municipality's Town Planning Department.

Proposed Changes together with Cost Estimates

The proposed upgrading and extensions to the MV network, together with the cost estimates & proposed order of priority, is given hereafter.

It is to be noted that the cost estimates exclude VAT and escalation, but include planning fees. Escalation can be added at approximately 1,25% per month. The cost estimates are order of magnitude values and must be refined the year before implementation after a more detailed design has been carried-out.

6.1 Phase 1 - (2012 to 2014):

- 6.1.1 Supply and install a 50mm² Cu underground cable between miniature substations "MS-Sub 2" and "MS-Sub 3", including ring main units inside each of the afore-mentioned substations. Replace the fuse links with solid links which are feeding the underground cables from the overhead line. R 500 000-00
- 6.1.2 Supply and install a 50mm² Cu underground cable between miniature substations "MS-Sub 3", "MS-Sub 3A" and "RMU Hotel", including a ring main unit inside "MS-Sub 3A". Disconnect "MS-Sub 3A" from the overhead line. R 700 000-00 R 1 200 000-00

Phase 2 - (2015 to 2018):

6.2.1	Supply and install a 50mm ² Cu underground cable between miniature substations "MS-Breedezicht" and "MS-Sub 5", including a ring main unit inside "MS-Sub 5".	R 580 000-00	
6.2.2	Supply and install "MS Joubert Street", including 50mm ² Cu underground cable from the overhead line near the main intake substation.	R 650 000-00	
6.2.3	Supply and install "MS Barracouda Street", including 50mm ² Cu underground cable from "MS-Sub 6" and ring main unit inside the latter miniature substation.	R 750 000-00	
6.2.4	Supply and install "MS Protea Road", including 50mm ² Cu underground cable from the overhead line.	R 500 000-00	
6.2.5	Supply and install a 50mm ² Cu underground cable between "MS-Joubert Street" and "MS-Sub 6". Disconnect "MS-Sub 6" from the overhead line.	<u>R 570 000-00</u>	R 3 050 000-00

Phase 3 - (2019 to 2022):

6.3.1	Supply and install a 50mm ² Cu underground cable between "MS-Barracouda Street" and "MS-Sub 7". Disconnect "MS-Sub 7" from the overhead line.	R 550 000-00	
6.3.2	Supply and install a 50mm ² Cu underground cable between "MS-Protea Road" and "MS-Sub 10", including a ring main unit inside MS-Sub 10".	R 380 000-00	
6.3.3	Supply and install a 50mm ² Cu underground cable between miniature substations "MS-Sub 8", "MS-Sub 9" and "MS-Sub 10", including a ring main unit inside "MS-Sub 9". Disconnect "MS-Sub 8" "MS-Sub 9" and "MS-Sub 10" from the overhead line.	R 770 000-00	
6.3.4	Supply and install a 50mm ² Cu underground cable between "MS-Protea Road" and "MS-Sub 11", including a ring main unit inside "MS-Sub 11". Disconnect "MS-Protea Road" from the overhead line.	R 650 000-00	

6.3.5	Supply and install a 50mm ² Cu underground cable between future overhead line and "GMT-16", including ring main unit at "GMT 16".	<u>R 200 000-00</u>	<u>R 2 550 000-00</u>
	Total, excl. VAT		R 6 800 000-00

Funding

It is only viable to implement the capital expenditure proposed under Clause 6.0 if suitable income sources can be found to fund such expenditure. These income sources can be as follows:

- (i) A portion of the income from the sales of electricity to fund External Loans.
- (ii) Contribution by developers in the form of:
 - (a) Augmentation Levies that will become Internal Funds.
 - (b) Direct payments for the supply and installation of external or main MV network components necessary to supply specific new developments.
- (iii) Grants from example the Department of Energy (DoE) for the electrification of sub-economy housing, schools, etc, and MIG funding from Provincial Government for mainly streetlighting projects.

It is recognised that in the case of External Loans, although it could be financially justified and increased year by year in relation to the increased income from electricity sales, there are other considerations in terms of the Municipality's overall budget, the availability of loans, etc, that finally determines the value thereof. The income from this source should therefore be determined by the Municipality's treasury department in consultation with the electrical department.

PDO 14: ROAD AND STORMWATER INFRASTRUCTURE

PDO:	#14	Development and Maintenance of Road and Stormwater Infrastructure		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Integrated Transport Plan	Approved	2010
2.	System	Pavement Management System	Review Due	2015
	System	Storm Water Management System	Review Due	2007
	Plan	Roads and Transport Master Plan	Review Due	2015
	Plan	Building Maintenance Management Plan	Review Due	2015

Streets, Storm water, Parks & Resorts

This department is responsible for the management, maintenance and upgrading of streets, storm water, parks and resorts within the Hessequa municipal area. The towns where these services are rendered include Riversdale (administrative centre), Heidelberg, Albertinia, Stillbay, Jongensfontein, Melkhoutfontein, Gouritsmond, Slangrivier and Witsand. Please note that this section provides a summary of findings of the following sectoral Plans which forms an integral part of the IDP:

1. *Hessequa Integrated Transport Plan of 2010*
2. *Eden Integrated Transport Plan of 2010*
3. *Hessequa Pavement Management System of 2009*
4. *Hessequa Storm water Management System of 2007*
5. *Hessequa Roads and Transport Master Plan of 2009-10*
6. *Hessequa Building Maintenance Management Plan of 2010*

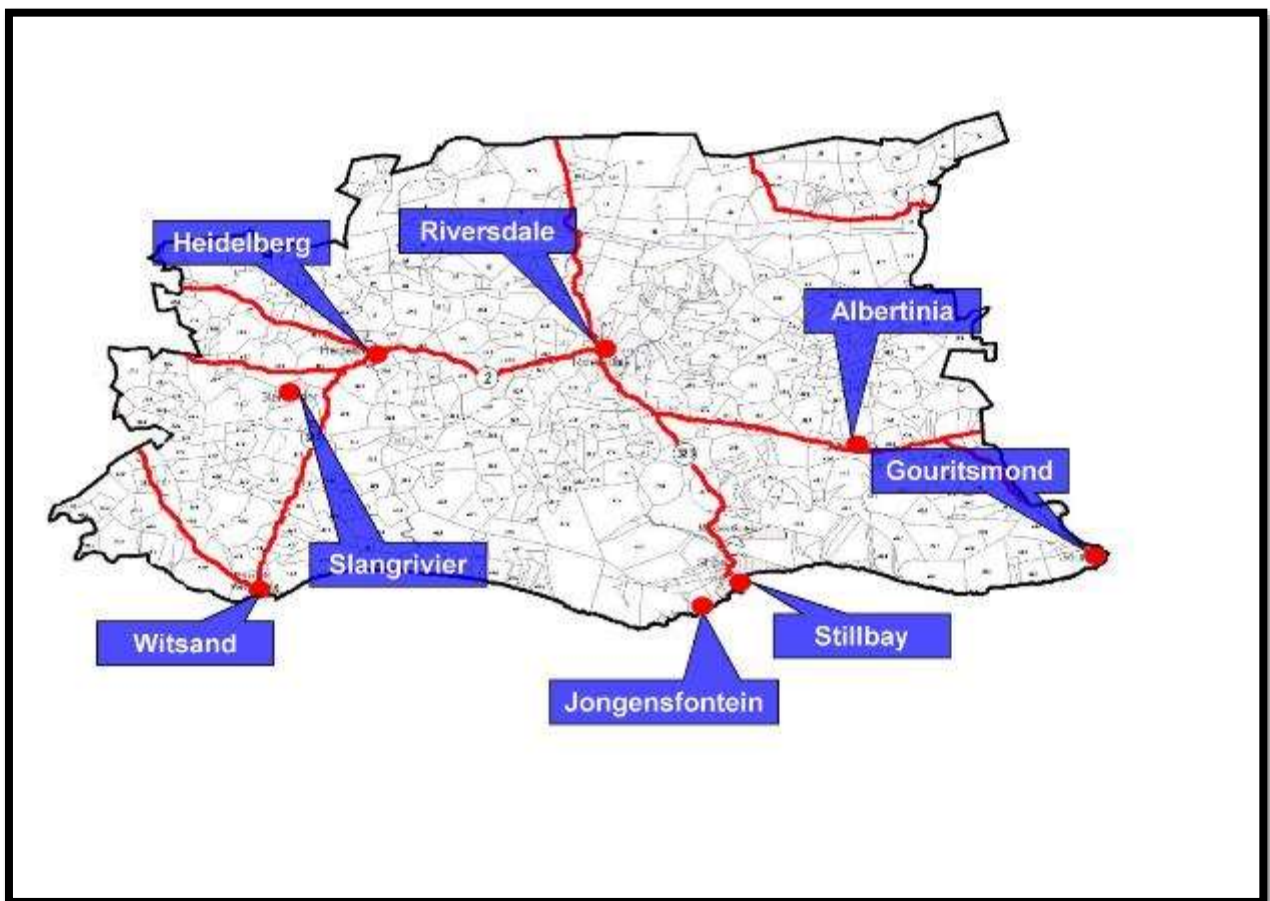
The parks include all municipal public opens spaces, beaches, sport grounds, cemeteries and recreational parks. There are furthermore six (6) municipal resorts which are managed by this department and these resorts are situated in Riversdale, Stillbay, Witsand, Gouritsmond and Jongensfontein.

Various sectors of our community uses the above facilities and ranges from the normal inhabitant of Hessequa to Churches, Sport clubs, Tourists, Public Transport Operators, Motorists and individuals.

The aim of this department is to deliver a safe, accessible, reliable and affordable service insofar streets, storm water, parks and resorts are concerned.

The levels of service currently provided are within reasonable standards and access to streets and amenities are within acceptable ranges. The latter therefore imply the all home owners within Hessequa have sufficient access to streets en storm water services. Although the overall streets and storm water network's conditional rating can be classified as being are rated below average, many factors influence such ratings like aging infrastructure and extreme weather patterns and lack of sufficient funds which influence the overall performance of infrastructure.

Hessequa Municipal area can be classified as geographically sparsely spread with distances in excess of 200km between towns located at the outer boundaries of the Hessequa Municipal area. The map below illustrates the latter and Riversdale is the administrative centre of the region.

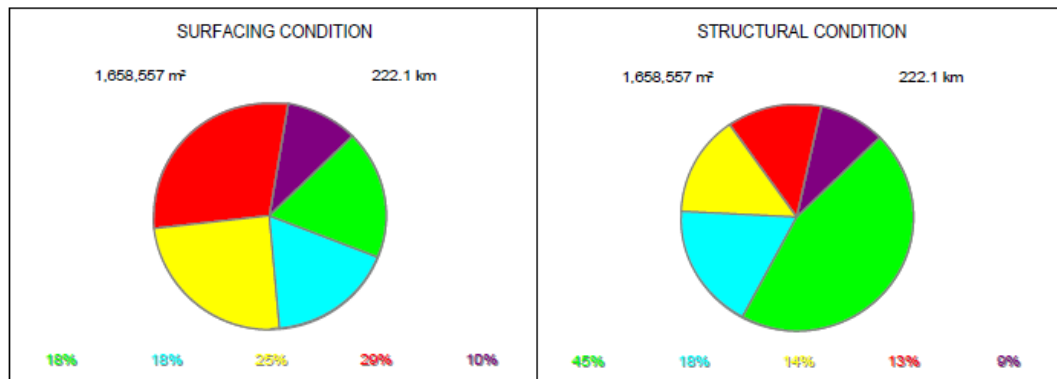


The N2 connects all in-land towns and provide access to all coastal towns via the Provincial Road network. Within each town, the extents of the street and storm water network are indicated in the table below:

TOWN	STREET NETWORK (km)		STROMWATER NETWORK (m)		
	SURFACED	GRAVEL	PIPE LENGTHS	OPEN CANALS	MANHOLES (no)
<i>Riversdale</i>	58.3	7.4	19655	9744	741
<i>Stilbaai (+MHF)</i>	70.5	3.2	15026	1417	334
<i>Albertinia</i>	27.3	4.3	6933	2149	180
<i>Heidelberg</i>	31.7	5.1	11086	6423	289
<i>Gouritsmond</i>	11.5	0.4	673	64	28
<i>Jongensfontein</i>	10.7	0.3	2903	428	71
<i>Witsand</i>	13.8	0.2	1022	437	32
<i>Slangrivier</i>	2.5	9.8	500	300	22
TOTALS	226.3	30.7	57798	20962	1697

Detailed information regarding the condition of the streets and storm water network can be found in the Pavement and Storm water Management Systems (PMS and SMS) and can be summarized as follows as extracted from the 2009 PMS and 2007 PMS respectively:

The total length of the paved network is 226.4km (222.1km tar, 3.7km block paving and 1.6km concrete pavements) with an estimated replacement value of R507.7 million. The average condition of the network can be rated as poor to very poor, with 39% of the surfacing and 22% of the structure in the poor to very poor category.



The estimated Funding Backlog on the bituminous pavements at this stage is R 105 million with the following immediate needs on the paved network:

(2009 HESSEQUA PMS)

The 2007 SMS conclusions suggest that future development of new infrastructure should be done according to best practice guidelines and all drainage infrastructure including streets, should be designed to accommodate run-off for 20-year storm events. In the past all drainage infrastructure was designed to accommodate 2-year storm events only due to economic factor as cost could increase exponentially for higher return periods.

As stated previously, all households do have adequate access to streets and a storm water system although future upgrades are required as towns and suburbs expands.

Basic Municipal Services

Streets:

Three guideline studies exist which informs the development and maintenance of the street network namely:

- 1. The Hessequa Pavement Management System** is used to manage the municipal street network of Hessequa. The Pavement Management System is a subset of the Road Infrastructure Management System. The use of a Pavement Management System is generally accepted as being essential for determining the maintenance needs of road networks in a scientific manner. Implemented in a sequence of phases, it first identifies maintenance projects from a visual assessment of the pavement condition within the road network. It then determines the most economical alternative maintenance treatment. A Pavement Management System enables road authorities to establish their budget requirements objectively, as well as maintaining control over the pavement performance.

2. *The Hessequa Roads and Transport Master Plan were developed for the bigger town centres of Riversdale, Stilbaai and soon Heidelberg and Albertinia as well. The objective of these Master Plans are to address future scenarios for roads and transport development and propose future upgrades for the following:*

- *Road classification*
- *Operation conditions*
- *Road infrastructure*
- *Parking*
- *Public Transport*
- *Pedestrians and,*
- *Freight Transport*

The Master Plans are also importantly used as guideline to inform decisions on new developments or rezoning application, contributions to be paid by developers, highlights infrastructure shortcomings, informs budgets and is also used to apply for funding from other state departments.

3. *The Hessequa Integrated Transport Plan (HITP) is a statutory planning document in terms of the National Land Transport Act 2009, (Act 5 of 2009) and its purpose is to address key challenges w.r.t. land transport issues where people's mobility are adversely affected by high transport cost. Land transport in general is characterized by private and public transport and as integrated transport planning attempts to promote public transport usage due to its benefits of being a mass people mover. The HITP identified non-motorised transport (pedestrians and bicyclist) as being the major form of movement within towns due to the relative compact nature of our smaller towns.*

Some of the findings in the HITP indicate that there is a need for improved public transport services in and between towns especially amongst the captive users of the system where no alternative mode exists. Since most users make use of walking within town, there is a further need for improved non-motorised infrastructure. One of the findings of the Eden ITP recommended the undertaking of an Eden Mobility Strategy and in February 2011, the Western Cape Department of Transport and Public Works commissioned the study to be undertaken. The objective of the study is to amongst other things; determine the feasibility of implementing an Eden wide public transport service which will connect all towns in Eden.

Storm water

The principles and procedures for storm water management establishment and formalization were focused on:

- *The hydrological modelling of urban and rural drainage regions*
- *The hydraulic analysis of conduits and natural waterways*
- *The compilation of management scenarios*
- *To identify, prioritize, find solutions and costing to upgrade sub-standard systems*
- *Maintenance management*

The storm water management system comprises of the following modules:

- *Hydrological modelling module. This module forms the basis of all urban modelling processes and management procedures*
- *Flood lines module which incorporates the most important information extracted from flood line studies conducted using different hydraulic and hydrological software packages. The data are represented in tables as well as graphically.*
- *As-built data capturing module which is divided into two separate sub-modules and which differentiates between two as-built collection methods namely:*
 - *Plan data collection from plans labelled as such*
 - *Site data collection from site visits.*

The Hessequa storm water management system was completed in June 2007. The objectives of the study were to identify, analyse and quantify storm water problems in the areas as listed in the pavement management system. The storm water management system further envisaged to find solutions and costs associated with upgrading storm water in Hessequa and to provide guidelines regarding storm water drainage through developing and existing residential areas.

It was found that all areas in the Hessequa Municipal area do not have a sufficient storm water system to accommodate a true 1 in 20 year flood scenario. The resulting measures to address such deficiencies reflect in the cost estimates which can be summarised as follows:

Total new infrastructure: R24.8 million
Upgrading existing infrastructure: R 4.1 million

These figures represent new infrastructure and upgrades to be implemented across the Hessequa municipal area and in order for the storm water system to function as per the Guidelines for Human Settlement Planning and Design.

It is therefore also clear that a significant backlog exist in the provision of new storm water reticulation in the Hessequa Municipal area and the municipality is tasked to maintain an existing

system with an estimated replacement value of approximately R168 million (V& V report of June 2007)

Municipal Buildings

The primary objective of the rapid assessment of the Hessequa Building Maintenance Management Plan (HB MMP) was to inspect each facility and note physical or operational deficiencies. The information gathered in the field would then be imported into a life cycle cost model and used to calculate the repair and replacement cost of the particular facility.

Given the financial and time frame limitations, we drastically reduced the list of buildings to be assessed in the field from 275 to 166. The most important buildings were however included in this reduced list.

- *The State of the Buildings was determined from the fieldwork collected in February 2010. The lifecycle model which hosts all of the gathered information tells us the following:*

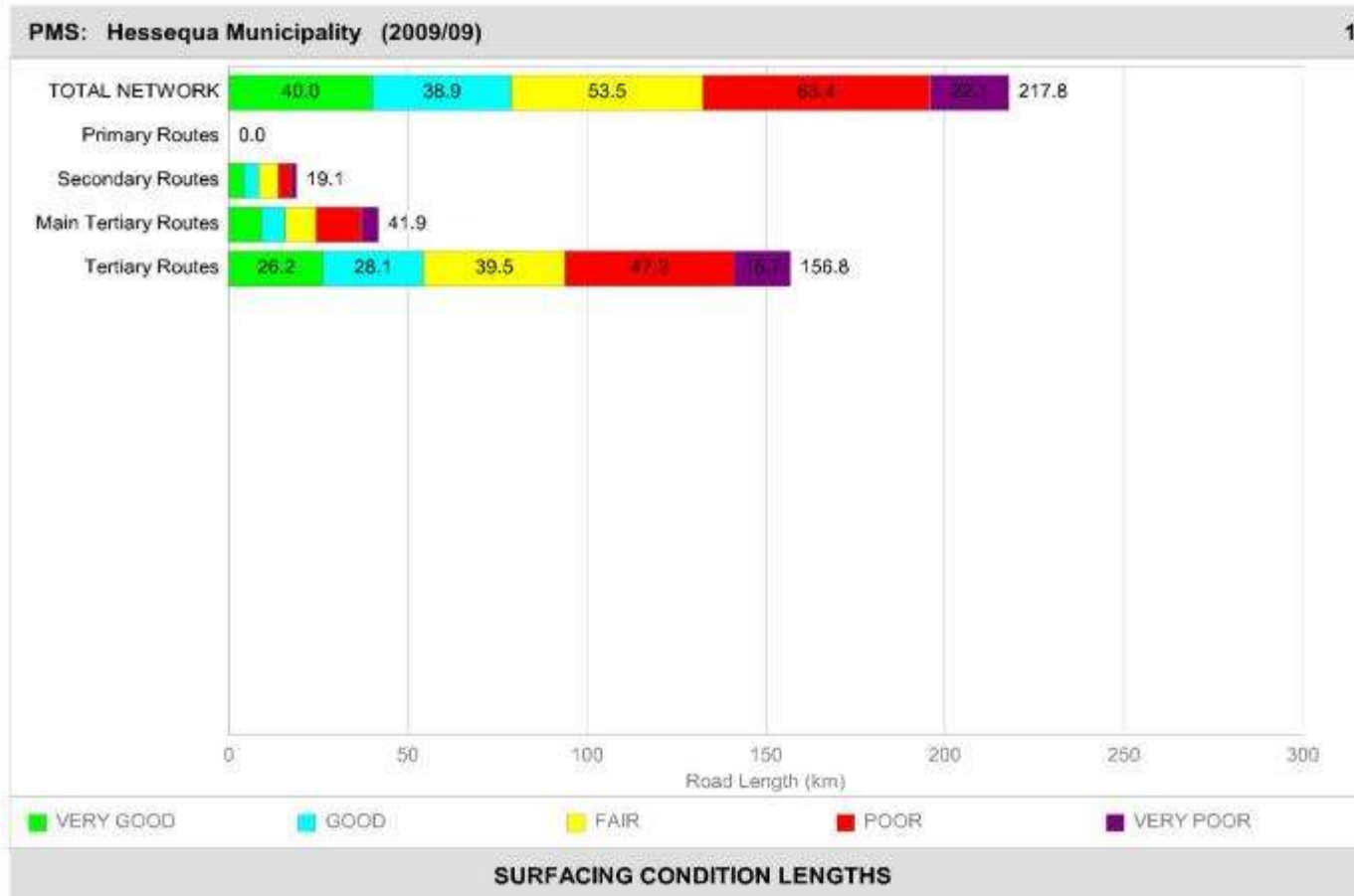
What buildings do you we own and where it is?

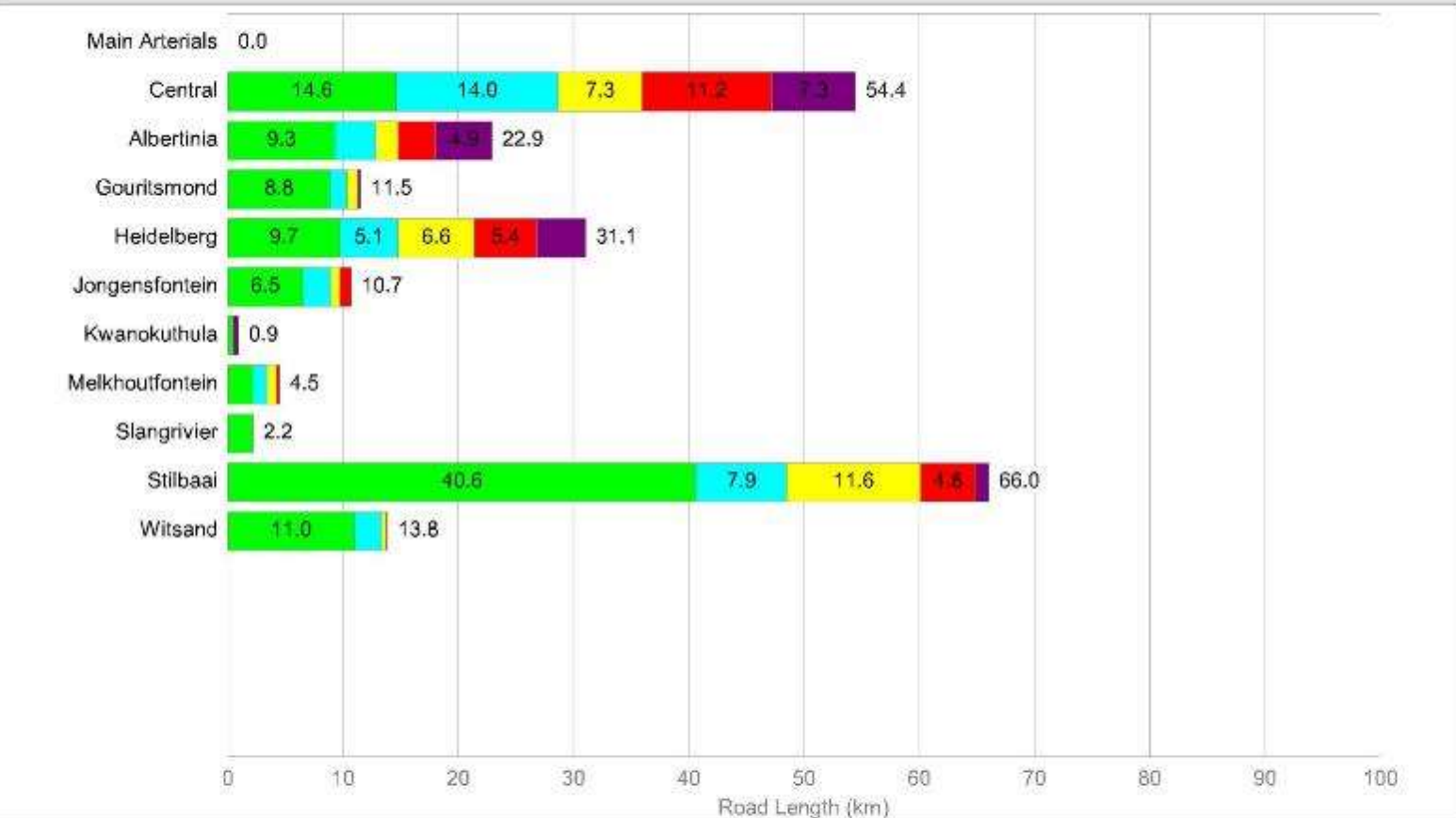
What are these buildings worth? (Replacement value)

What is its condition and expected remaining service life? (Condition and Capability Analysis)

Hessequa Municipality is responsible for the management of municipal buildings which have an estimated current replacement cost (CRC) of R233,666,005 based on current Rand value (February 2010) by the time the building assessment was carried out

Infrastructure Overview



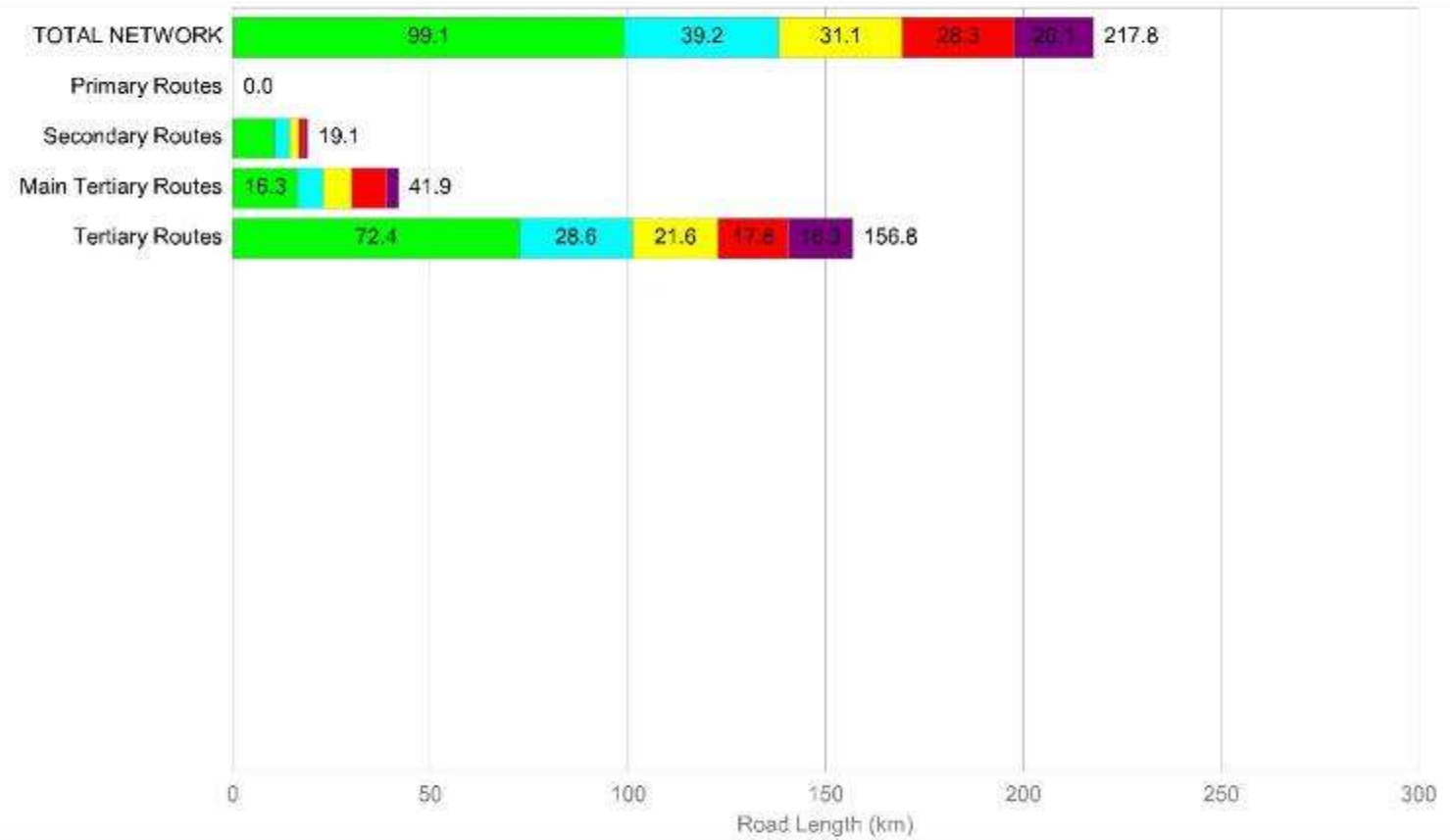


■ VERY GOOD
 ■ GOOD
 ■ FAIR
 ■ POOR
 ■ VERY POOR

STRUCTURAL CONDITION LENGTHS

PMS: Hessequa Municipality (2009/09)

1



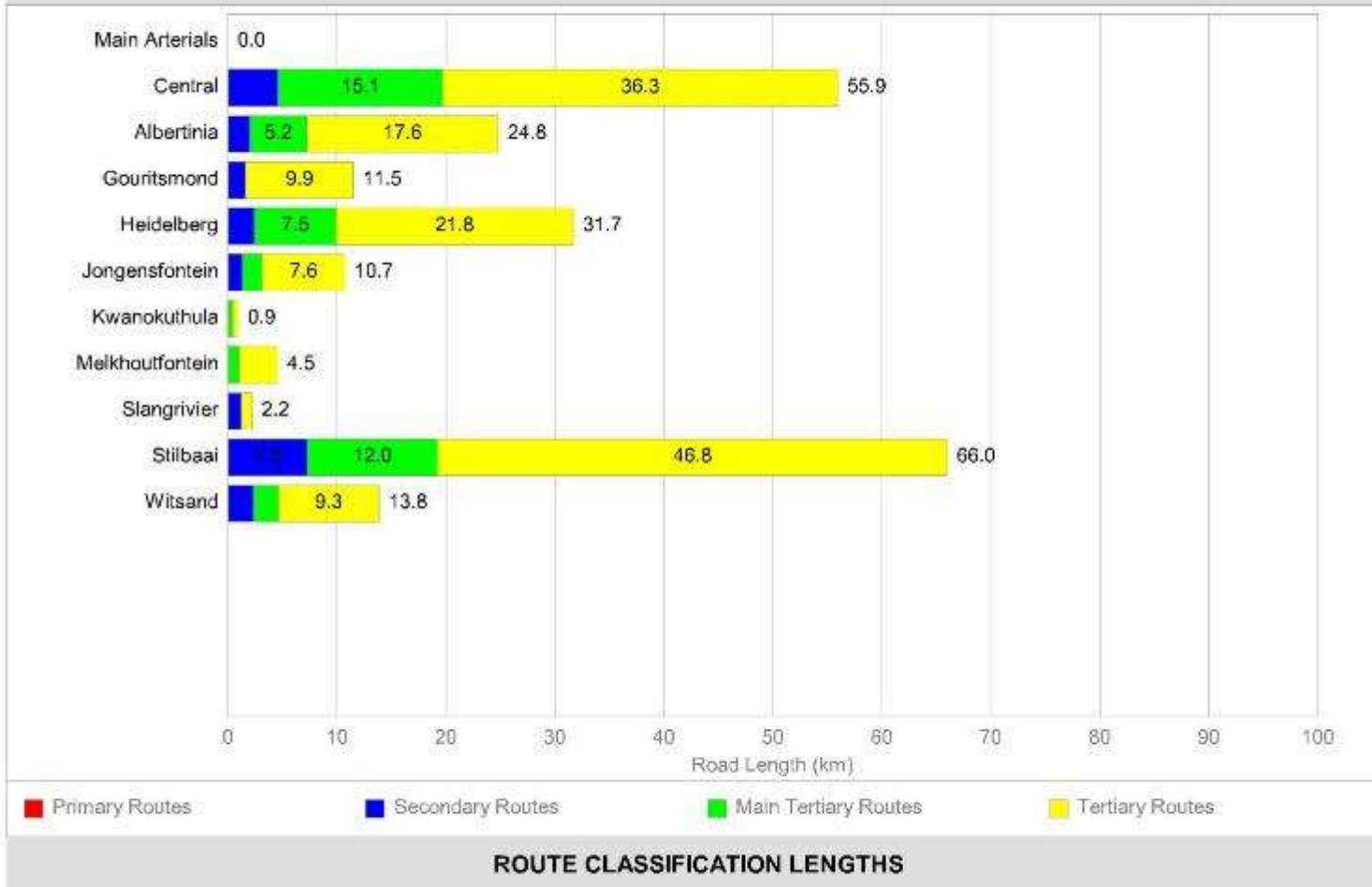
■ VERY GOOD
 ■ GOOD
 ■ FAIR
 ■ POOR
 ■ VERY POOR

STRUCTURAL CONDITION LENGTHS

PMS: Hessequa Municipality (2009/09)

1





PDO 15 & 16: WASTE MANAGEMENT

PDO:		Refuse Removal in accordance with Service Standards through Licensed Sites		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Integrated Waste Management Plan	Draft	2014

For the purpose of determining the waste quantities in Hessequa Municipality, the population statistics from census (refer Paragraph 1.3) were used to calculate the total tonnage of municipal solid waste (MSW), using typical waste generation figures per person of each sector of the community.

Volumes of General Waste generated

It follows that domestic waste generation in Hessequa can be depicted as follows:

Table 2-1: Waste Volumes calculated for Hessequa Municipality

Main Town	Sub-area	Population (2013)	Waste Generated in Tonnes/year (2013)	Population (2020)	Waste Generated in Tonnes/year (2020)	Average Waste Generation Factor for Area in kg/p/d
Albertinia	-	1 909	602	2 193	691	0.86
Albertinia	Theronville	3 896	1 163	4 476	1 336	0.82
Garcia State Forest	-	273	85	313	98	0.85
Gouritsmond	-	601	232	691	266	1.06
Groot-Jongensfontein	-	344	180	396	207	1.43
Grootvadersbos State Forest	-	20	16	23	19	2.28
Heidelberg	-	8 258	2 549	9 485	2 929	0.85
KwaNokuthula	-	955	220	1 097	253	0.63
Hessequa	Heidelberg SH	513	156	589	180	0.84
Hessequa	Melkhoufontein SH	865	256	993	294	0.81
Riversdale	-	13 293	4 401	15 270	5 055	0.91
Riversdale	Riversdale SH	1 026	364	1 178	418	0.97
Slangrivier	-	2 910	648	3 343	744	0.61
Stilbaal	-	944	402	1 084	462	1.17
Stilbaal	Stilbaal SH	123	75	141	86	1.67
Stilbaal	Stilbaal-Wes	2 672	1 230	3 069	1 413	1.26
Witsand	Port Beaufort	257	80	295	92	0.86
Total		38 858	12 660	44 636	14 542	0.89

The above totals exclude rural population and include waste that is generated by holidaymakers over the festive season. Also included is commercial waste and industrial office waste as these are collected by the municipality. What is not included is the industrial waste which is generated and managed by the industries themselves.

Weighbridge readings

A few records were provided where the refuse collection vehicles of the Heidelberg service area were weighed at the Sentraal-Suid Koöperasie to determine the weight of refuse carried when full. See Section 2.6 below where the total tonnages are discussed.

Recoverable Material Volumes

The Department of Environmental Affairs and Development Planning (DEA&DP) commissioned a study in 2007 to determine the characterisation of the disposed waste at various landfills in the Eden District. From that study, although a relatively small once-off sample was analysed, the anticipated average waste composition of the Eden District can be derived to include the following recyclable materials (by mass):

Paper and Card board:	18%
Plastics:	13%
Glass:	11%
Metal:	5%

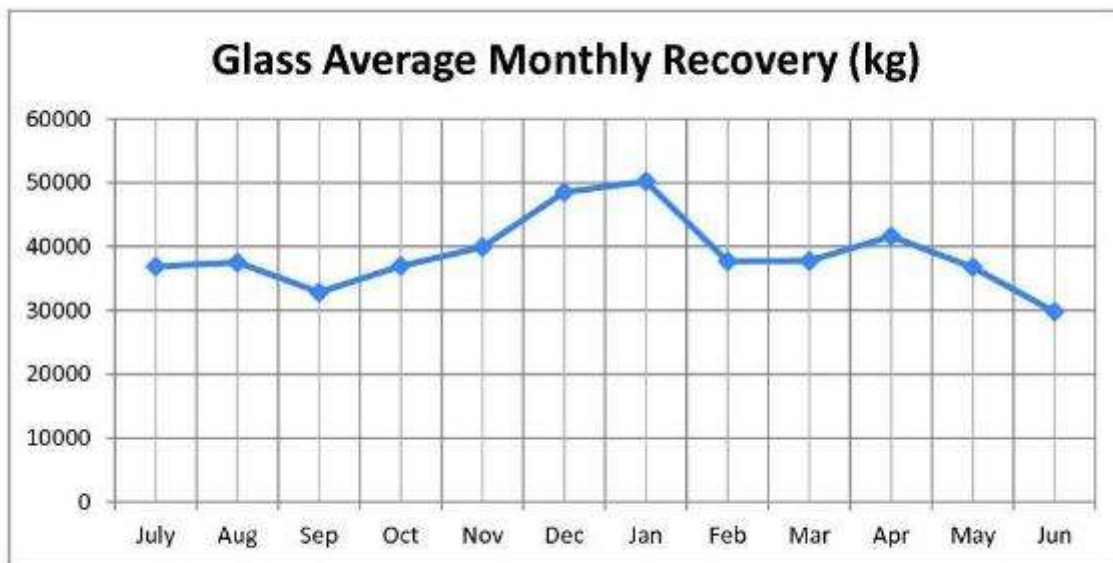
From the waste composition as reflected above, it can be calculated that the total volume of recoverable materials that are theoretically available in the waste stream will be as indicated in Table 2-2. These characterisation percentages were applied to the waste stream of the permanent population.

Seasonal increase

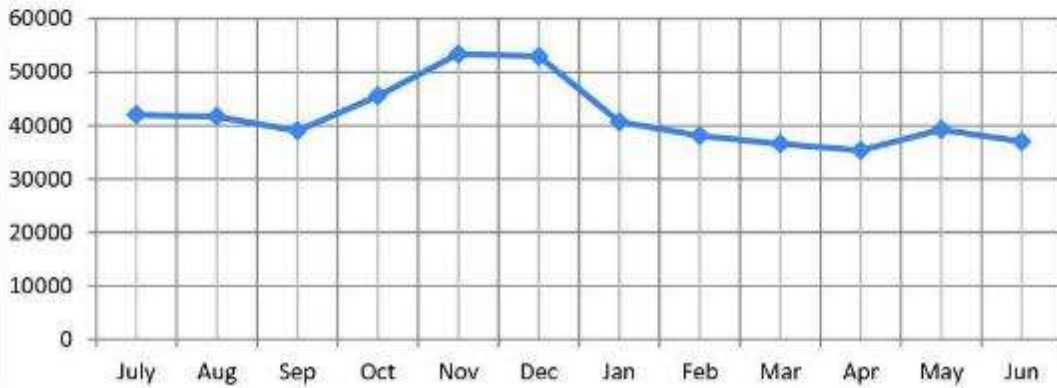
From accurate waste data that have been recorded over the past three years in the Overstrand Municipality, it was possible to quantify the seasonal increase that holidaymakers have on recoverable materials in the waste stream. The average recycled monthly quantities outside the holiday season were calculated along with the averages of the holiday season so that the total percentage increase over this period could be obtained.

These percentages can be applied to similar municipalities like Hessequa, which are coastal and experience an influx of holidaymakers during season. The increases will not be exactly the same, but will be applicable when the percentages are applied to the permanent waste stream of Hessequa Municipality as these percentages are indicative of the behaviour of holidaymakers. This means that the same percentage increases can be expected in similar municipalities.

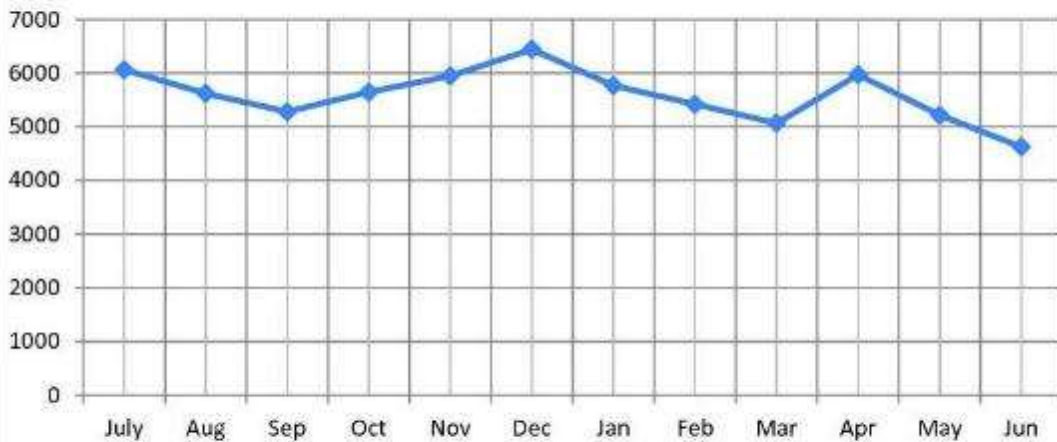
The graphs below illustrate the seasonal increase for glass, paper & cardboard, tins and plastics.



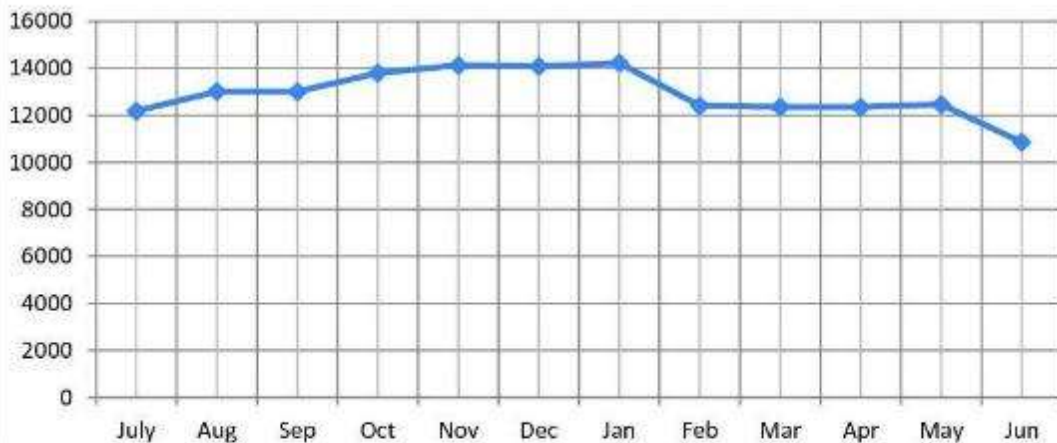
Paper & Cardboard Average Monthly Recovery (kg)



Tins Average Monthly Recovery (kg)



Plastic Average Monthly Recovery (kg)



From the data the following percentage increases over season were obtained:

Glass: 48% increase
 Paper & Cardboard: 35% increase
 Tins: 17% increase
 Plastics: 13% increase

Table 2-2: Volumes of Available Recoverable Materials

Main Town	Sub-area	PAPER/ CARD (t/a)	PLASTICS (t/a)	GLASS (t/a)	METAL (t/a)
Albertinia	-	98	71	60	27
Albertinia	Theronville	189	136	115	52
Garcia State Forest	-	14	10	8	4
Gouritsmond	-	38	28	24	11
Groot-Jongensfontein	-	31	22	19	9
Grootvadersbos State Forest	-	3	2	2	1
Heidelberg	-	415	300	254	115
KwaNokuthula	-	34	25	21	10
Hessequa	Heidelberg SH	25	18	16	7
Hessequa	Melkhoutfontein SH	42	30	25	12
Riversdale	-	721	521	441	200
Riversdale	Riversdale SH	60	43	37	17
Slangrivier	-	101	73	62	28
Stilbaai	-	67	49	41	19
Stilbaai	Stilbaai SH	13	9	8	4
Stilbaai	Stilbaai-Wes	207	150	127	58
Witsand	Port Beaufort	13	9	8	4
Permanent Pop. Total		2072	1496	1266	576
Seasonal increase:		77	21	65	10
Total		2149	1517	1331	586

The above theoretical figures give a total of approximately 5584 tonnes per annum, which is 44% of the generated waste stream. It should be noted that this reflects the recyclable portion of the waste stream only as the mathematical representation. The full 44% cannot be seen as recoverable in the practical sense.

Due to the methods of collection, i.e. the collection of mixed un-separated household waste, a large amount of deterioration and contamination of potentially recoverable material takes place. Post-collection recovery (as is currently the norm in South Africa) implies that only a part of the above tonnages are available for recovery and recycling, due to contamination. For that reason separation at source is considered to be the preferred methodology to increase the volumes and value of recovered materials. Even with source separation some contamination still takes place, but less than mixed bag waste.

Although experience has shown that participation by the public is largely economy driven, the current trend is that separation at source, which implies that recoverable materials are separated by the home owner and "given" to the municipality (or Service Provider) for free, is mainly supported by the middle and higher income groups, whereas the low and very low income groups support buy-back centres or swap-shops where recoverable materials are bought/traded from the residents.

However, recently acquired data illustrates that the implementation of source separation only leads to a 1% increase in over-all recovered material volume. This small increase may be attributed to the fact that source separation was only implemented in a certain group of neighbourhoods and not throughout the whole of the area where the data was received. If one looks at the statistics per neighbourhood, the increase in material recovery is reportedly 15%. With these relatively small gains in recovery, the Municipality should evaluate the economic feasibility of implementing a source separation system. It is still the preferred collection method, but expensive to implement and would probably receive lower priority as opposed to alternative strategies and action plans that need to be executed by the Municipality in the upcoming years.

Statistics obtained from the various "separate bag" collections as are currently practised on a private contract base in the City of Cape Town, indicate that separation at source participation rates of up to 85% are achievable in the higher income groups. More recent statistics obtained from the Drakenstein Municipality show that participation rates are significantly lower. The Middle income group participation rates vary between 12-25% and the High income group participation vary between 35-40%. The degree of contamination in the "separate bag" is significantly lower and the average "tailings" percentage achieved is approximately 10%. (Source: WastePlan)

With the assumed strategy of source separation and "clean" Material Recovery Facilities where the source separated materials are sorted into its various groups and sub-groups, and assuming that only middle and higher income group communities will be participating in source separation, it can be calculated that the current (2013) recovery volumes will be as indicated in Table 2-3.

Table 2-3: Calculated Volumes of Recovery of Source Separated Materials

Main Town	Sub-area	Participating Waste (t/a)	PAPER/CARD (t/a)	PLASTICS (t/a)	GLASS (t/a)	METAL (t/a)
Albertinia	-	230.3	8.7	1.8	11.1	1.2
Albertinia	Theronville	412.4	15.6	3.2	20.0	2.1
Garcia State Forest	-	33.0	1.2	0.3	1.6	0.2
Gouritsmond	-	119.5	4.5	0.9	5.8	0.6
Groot-Jongensfontein	-	118.9	4.5	0.9	5.8	0.6
Grootvadersbos State Forest	-	12.7	0.5	0.1	0.6	0.1
Heidelberg	-	929.7	35.1	7.3	45.0	4.6
KwaNokuthula	-	21.6	0.8	0.2	1.0	0.1
Hessequa	Heidelberg SH	55.9	2.1	0.4	2.7	0.3
Hessequa	Melkhoutfontein SH	82.2	3.1	0.6	4.0	0.4
Riversdale	-	1847.0	69.8	14.4	89.4	9.2
Riversdale	Riversdale SH	163.3	6.2	1.3	7.9	0.8
Slangrivier	-	38.1	1.4	0.3	1.8	0.2
Stilbaai	-	231.4	8.7	1.8	11.2	1.2
Stilbaai	Stilbaai SH	51.6	1.9	0.4	2.5	0.3
Stilbaai	Stilbaai-Wes	759.3	28.7	5.9	36.7	3.8
Witsand	Port Beaufort	29.5	1.1	0.2	1.4	0.1
Total		5136.6	194.2	40.1	248.6	25.7

Assumptions for Source Separation:
(Based on actual data from WastePlan)

80% participation
21% recovery of available Paper and Cardboard
6% recovery of available Plastics
44% recovery of available Glass
10% recovery of available Metals

The above "realistic" volumes can be increased when additional facilities such as buy-back centres are commissioned in low and very low income group communities.

Paper and Cardboard

Paper and Cardboard form the foundation for any recovery venture, due to the relative stable demand and numerous recycled products made from recovered paper.

Waste paper is transformed from one type to another during the recycling process. The supply and demand for waste paper, although stable, is cyclical in nature, and therefore marketing patterns have to be adapted accordingly.

Some of the factors that contribute to this cyclical demand for recovered paper are:

- difficulty for mills to carry large stock
- periodic mill shut-downs result in fluctuations in demand
- paper stock is considered perishable and thus hazardous to store
- space for storage of stock is limited and costly

Some materials produced with recycled paper pulp include: newspapers, packaging, bags, tissue and towels, corrugated boxes, shoe boxes and files, egg cartons and fruit packing layers.

If paper and cardboard products are clean and separated into different types, significantly higher prices are fetched for the recovered materials.

Glass

Glass recovery for recycling has had a very erratic history, due to only one recycler having a monopoly in the market. When the capacity of the kilns is full, the price used to drop dramatically due to an over-supply and no demand. Fortunately this situation has stabilized and a constant market for recovered glass is currently prevailing.

The separation of glass is very successful in separation at source activities since it is easy to identify by the home owners. Recent experience in the City of Cape Town has shown that most home owners whom participate in separation at source also wash their glass products before putting it in the recyclables bag.

Plastic

Several types of plastics are typically recycled, i.e. PET (transparent plastic bottles e.g. 2 litre cool drink bottles), HDPE (milk containers), LDPE and mixed plastics. Recycled PET is used in the manufacture of small moulded products, such as handles, sporting goods and furniture. Recycled HDPE is used for producing flowerpots, dustbins and a variety of other containers. Mixed plastics are normally used for the manufacture of outdoor furniture, pallets, and plastic timber.

The recent introduction of a levy on shopping bags has caused the amounts arriving at the landfill to reduce dramatically. Less plastic bags are disposed of, as they are recovered and are now manufactured of better quality and thicker plastic.

In order to recycle plastics using current traditional methodology, it has to be sorted into the various categories, and washed if contaminated by the other wastes. Alternative technologies are currently being evaluated (also in South Africa) that could eliminate the need for sorting of plastics.

Metal

Metals are the single most recoverable item in the waste stream. Very little degradation takes place during collection. It follows that a relatively small amount ends up in the waste stream, as all types of metal are removed for re-sale at various stages of the waste handling process.

One of the major components of ferrous wastes is the steel can (95% of all cans in the Metropolitan Areas). Non-ferrous metals such as Aluminium and Copper are very scarce in our waste streams, due to its extremely high salvaging value. These are usually removed at source.

Economic Sustainability of Waste Recovery

Although the recovery of materials of value from the waste stream for recycling or re-use is one of the basic operations in future integrated waste management, the question regarding its financial and economical sustainability should always be asked and answered.

Local experience over the last decade has shown that the South African recycling market, or rather the recycled product market, is very small and very susceptible to unforeseen activities, e.g. if one paper mill burns down, the effect on the waste paper market, and the prices, is significant. The South African "market" is simply too small to absorb these types of set-backs.

For this reason it is commendable that D:EA&DP had a study conducted into sustaining the local recycling industry.

But one must consider the economical sustainability and not only the financial sustainability. Economic sustainability considers the whole life-cycle cost and not only the rands and cents of a specific financial year and taking into consideration the avoided costs of airspace saving and also the cost on the environment for the resultant smaller utilisation of virgin resources. An interesting stipulation in the Waste Act, Section 17 (1) (a), is that one may not recover materials from waste if it costs more environmental resources to recover, than it would to dispose of that material – a good example of the total or life-cycle costing principle.

Prices for recovered materials vary greatly from city to city and province to province, from baled to unbaled, from dirty to clean and from material type. External factors also play a significant role such as the oil price, e.g. due to a previous low crude oil price of approximately US\$43 per barrel had caused new plastic to be cheaper than recycled plastic – cheaper, not necessarily more economical. The result was that recyclers at that moment (January 2009) could not even give their LDPE plastic away where only a month before it was sold for R1500/tonne.

The above does not imply or insinuate that recovery should not be supported, but that both recovery AND the establishment of a recycled goods market should be supported. This is an aspect that cannot be addressed on a local authority level, but must be addressed on a Provincial and/or National level to optimise economy of scale.

Benefits must also be shared. For example, if a municipality saves airspace and transport costs due to recovery, a portion of that saving (avoided costs) should be passed on to the recovery effort to ensure that it is sustainable. If not, as was proven in SA previously, the recovery effort closes down and the municipality loses its avoided cost saving.

The June 2013 prices for recovered materials delivered in Cape Town are displayed in Table 2-4.

Table 2-4: June 2013 Prices of Recovered Materials in Waste Stream

MATERIAL	PRICE IN RAND/TON FOR BALED MATERIAL
Card board	750
White Paper	1200
Newsprint	600
Glossy Paper	450
Mixed Paper	500
Metals (Mainly cans)	1700
Glass (All colours, Crushed)	400
Plastic (PET, No 1, White, Blue, Green)	3400
Plastic (PET, No 1, Brown)	1000
Plastic (HDPE, No 2)	2200
Plastic (LDPE, No 4)	1800
Plastic (Polypropylene, No 5)	2000
Plastic (Polystyrene, No 6)	1300

Priority Waste Streams

Tyres

In accordance with the recently published Tyre Regulations the disposal of tyres to landfill in its current format was only allowed up to June 2011, where after all tyres that are landfilled, must be quartered. After June 2014 no tyres, quartered or otherwise, may be landfilled. The municipality will have to develop an action plan in accordance with the Tyre Regulations to manage tyres generated within the municipal area. However, there is quite some confusion regarding the tyre regulations. The action plan can be in place, but until there is greater clarity surrounding these regulations, no action needs to be taken.

age

An option would be to make use of the Enviroserv Tyre Treatment Facility in Bellville South, which has recently begun operations.

highly desirable to be able to switch between waste management methods - further emphasising the hazards of relying too heavily on a single policy option instead of a combination of policies.

The Integrated Waste Management Plan of Hessequa Municipality is a requirement of the Waste Act and this plan will be carried out through the upcoming years. This plan takes into account the Municipality's legal obligations regarding waste avoidance, recovery, disposal and general management.

The implementation instruments or action plans defined in the following section are laid out in a manner which reflects the waste management hierarchy, putting the emphasis on waste avoidance and minimisation, with specific waste streams looked at in detail.

HESSEQUA MUNICIPALITY'S IMPLEMENTATION INSTRUMENTS


IMPLEMENTATION INSTRUMENTS FOR WASTE AVOIDANCE

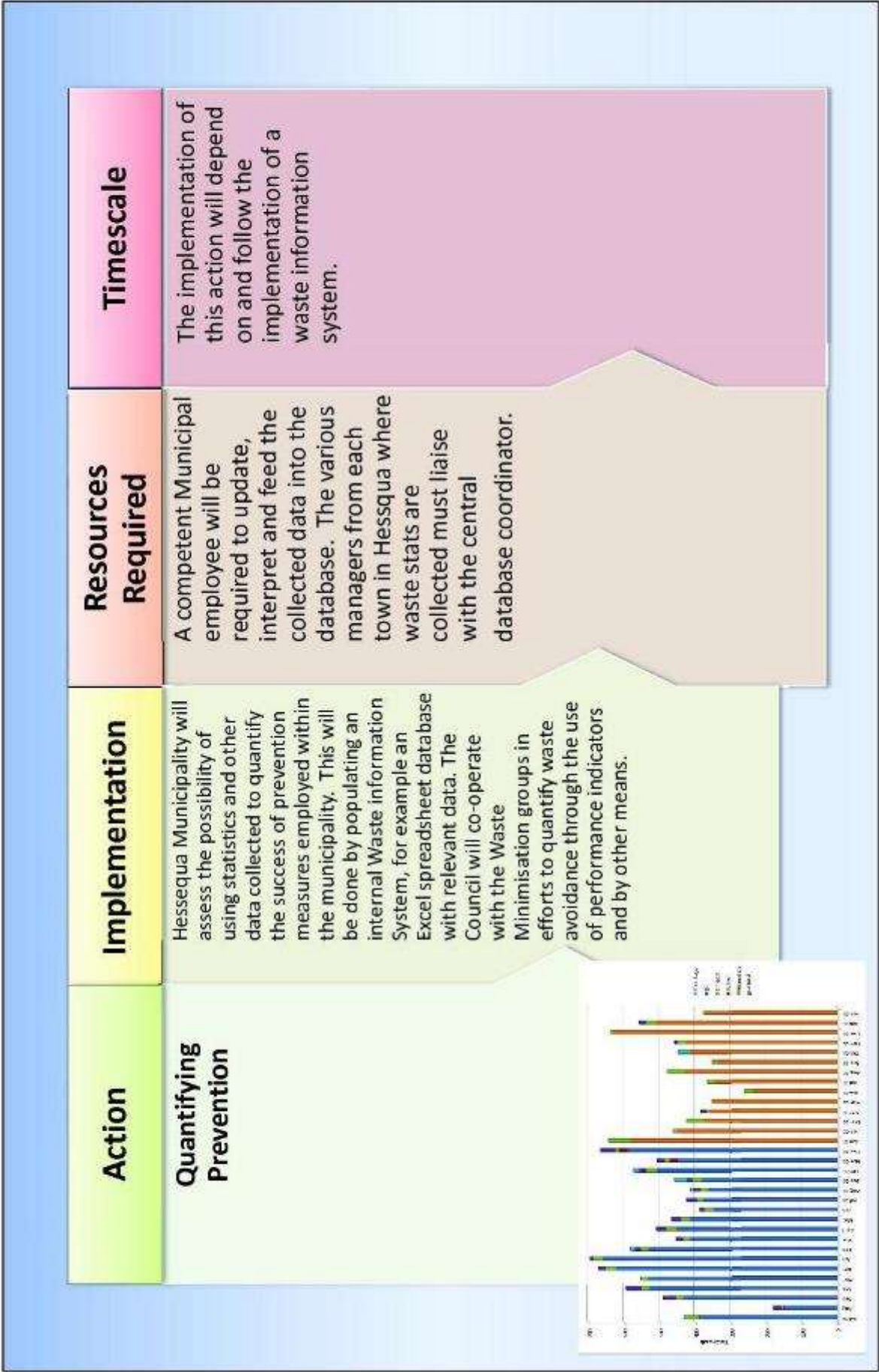
Waste Avoidance is the primary focus of the National Waste Management Strategy and as such must be the priority of any Integrated Waste Management Plan. Waste Avoidance is defined as the action that avoids the entry of material into the waste stream, that is, when the generator of the potentially waste material exercises the decision to do something else with that material rather than to put it out for waste collection. The following are typical examples of waste avoidance:

- Composting of the organic/green waste at home,
- Self-delivery of glass/cardboard/newspaper/PET to recycling bins or school recycling projects
- Re-use of empty jars as storage containers at home,
- Reprocessing of pips, peels and lees to produce tartaric acid and grape seed oil,
- Reclamation of drum containers
- Recovery of wet or spilled grain for animal feed,
- Recovery of fruit and food solid waste component as animal feed,
- Recovery of chemicals from industries
- Recovery of electronic equipment
- Changing raw materials of industrial processes to produce recoverable industrial waste

From the above it is clear that waste avoidance will result not only in less material to be disposed but also in less material to be collected by the waste collection system.

The following are Hessequa Municipality's plans for the promotion of waste avoidance in its area:

Action	Implementation	Resources Required	Timescale
<p>Public Awareness and Education</p>	<p>Hessequa Municipality will continue to support the Eden District Wise up on Waste campaign which includes a road show visiting all the Municipalities of the Eden District.</p> <p>Informative flyers will be distributed and public talks conducted.</p> <p>General advertising on billboards, waste bins and collection vehicles to promote recycling and waste minimisation. Constant exposure of these concepts to the public is very useful to raise awareness.</p>	<p>Hessequa Municipality will conduct the roadshow in partnership with the Eden District Municipality.</p> <p>Partnership with other stakeholders like the Department of Education should be explored.</p> <p>Mr Wesso will liaise with Mr Hubbe of the District Municipality. A project co-ordinator can be appointed by Mr Wesso if he does not handle the process himself.</p> <p>The project co-ordinator will also be responsible to oversee the distribution and content of the flyers that are handed out to the public.</p> <p>A graphic designer may be commissioned to design the awareness advertising posters and billboards.</p>	<p>The public awareness campaign for both the generators of waste as well as the service providers, including training and education of staff and council members should start once the IWMP has been approved by Council. The action however does not have an end date due to the continuous nature thereof.</p>
			




IMPLEMENTATION INSTRUMENTS FOR WASTE REDUCTION

Waste Reduction is the secondary focus of the National Waste Management Strategy in that all waste that cannot be avoided, must be reduced. In terms of definition it represents the actions required to, once the generator of waste has made the decision that a material(s) is waste and entered it into the waste stream, remove that material from the waste stream for re-use, recycling, treatment/conversion, composting, etc. and by such action prevent the material from being disposed. Typical examples of waste reduction are as follows:

- Separate collection of source separated materials
- Separate collection of spent oils, solvents, print cartridges, x-ray and photographic developers by recovery contractors,
- Kerbside collection of recyclable material by informal salvagers
- Composting of green wastes at composting facility
- Recovery of recyclable material at Material Recovery Facility (MRF)
- Recovery of recyclable material at waste disposal site

The following are Hessequa Municipality's plans for the reduction of waste within its functional area.


Action	Implementation	Resources Required	Timescale
<p>Post Collection Recovery</p>	<p>Hessequa Municipality will investigate the possibility to expand the source separation initiative in all areas. Provides the opportunity for private recyclers to expand their services or new ones to establish.</p> <p>The option to recover waste at the proposed transfer station should be explored.</p>	<p>To be determined in the investigation.</p>	<p>Ongoing</p>
			

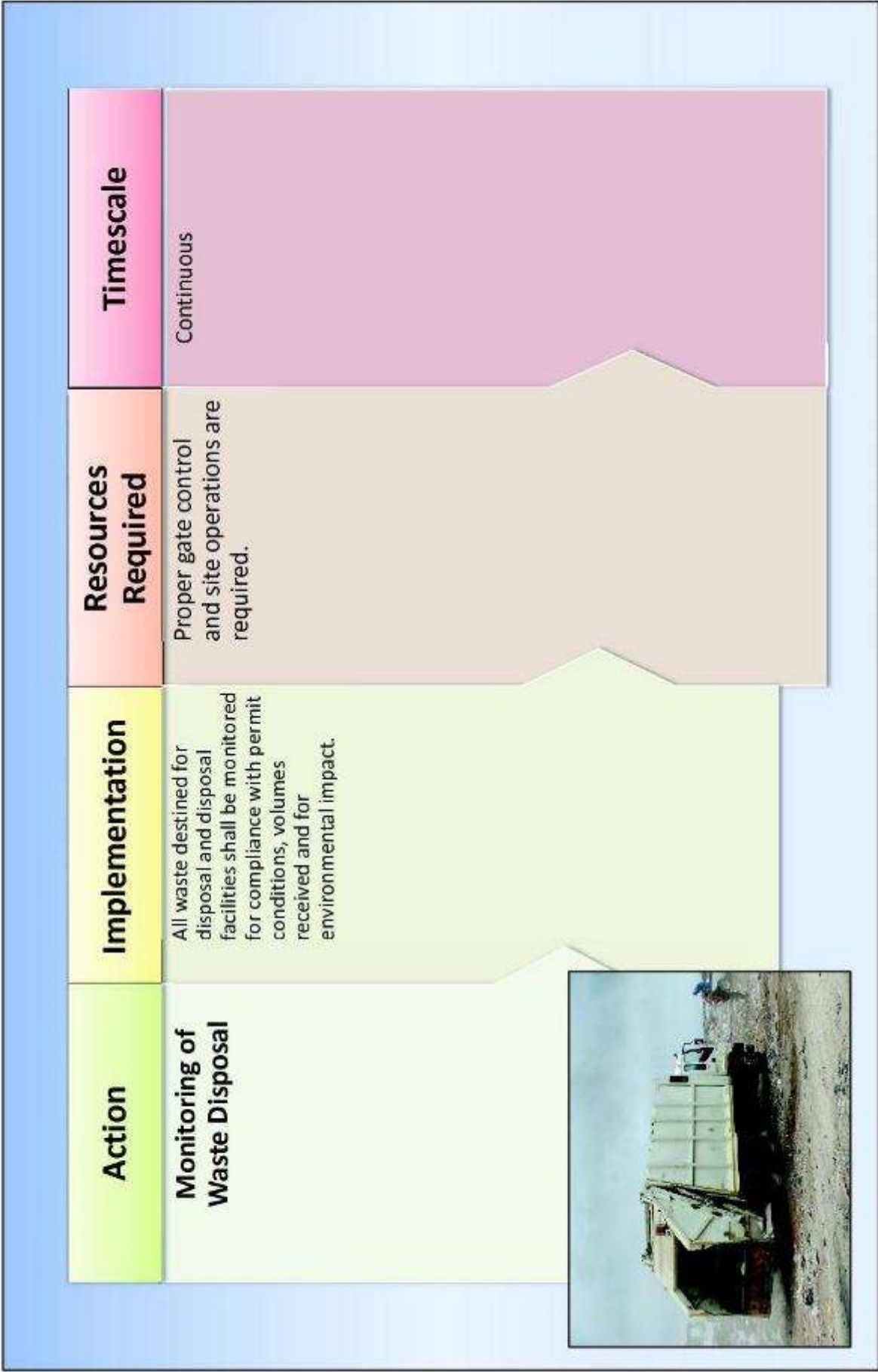
Action	Implementation	Resources Required	Timescale
<p>Garden Waste Chipping & Builder's Rubble Crushing</p>	<p>Hessequa Municipality will investigate garden waste chipping and builder's rubble crushing at the established garden waste and builder's rubble sites.</p>	<p>To be determined during the investigation. The volumes of garden waste will determine the size of chippers required. The builder's rubble volume will determine the size crushers required. Approximately three workers per machine will be required.</p>	<p>2014-2015</p>
			

IMPLEMENTATION INSTRUMENTS FOR WASTE DISPOSAL

The disposal of waste by landfill is considered to be the least desirable option in the Waste Management Hierarchy. The volume of waste to be disposed is a measurement of the success achieved with waste avoidance and waste reduction.

The following are the Municipality's plans for the disposal of residual wastes within its functional area:

Action	Implementation	Resources Required	Timescale
<p>Engineered Waste Disposal Facilities</p> 	<p>The disposal of non-recoverable waste will only be allowed at properly engineered waste disposal sites that are licensed by the relevant statutory authority and that are operated and audited in terms of the relevant permit conditions. Unlicensed sites are to be licensed or closed and rehabilitated.</p>	<p>The identified sites marked for closure will need to be assessed by a consultant to determine the required closure and rehabilitation costs. An EAP will need to be appointed to conduct the license application processes.</p>	<p>This action is already partially being adhered to but implementation requires the continuous establishing of sufficient airspace (capacity) at these waste disposal facilities. The Eden District Municipality has applied for establishing a regional waste disposal facility. This will replace Hessequa municipality's use of the PetroSA site.</p>



Action	Implementation	Resources Required	Timescale
<p>Formalising, Controlling or Eliminating Informal Salvaging</p>	<p>No informal salvaging was observed during the site visits in Hessequa Municipality. Since there is no evident problem, it can easily be prevented with the proper security measures. The Melkhoutfontein disposal site requires access control. Informal salvaging can be formalised and controlled for example by establishing a material recovery facility on the site where the need justifies such a solution. By doing this, the health and safety risk to the salvagers is addressed and the operations on the landfill will be improved. This is not job creation in essence, but creates a far better work environment and quality of life of these individuals.</p>	<p>None at present.</p>	<p>No immediate action is necessary in Hessequa Municipality.</p>



IMPLEMENTATION INSTRUMENTS FOR WASTE MANAGEMENT IN GENERAL

Although the National Waste Management Strategy focuses mainly on waste avoidance, reduction and disposal and as such these three activities form the heart of any Integrated Waste Management Plan, certain other waste management activities need also to be addressed in order to achieve proper waste avoidance, reduction and disposal.

The following are the municipality's plans for waste management in general:



* The cost to analyse and review the existing tariff structure will be approximately R50,000.00 , with the assistance of a waste management consultant. After this first tariff review, the annual review can be done in-house without the assistance of a consultant.

Data Compilation

Hessequa Municipality will continue to gather accurate data regarding domestic, commercial and industrial waste generation and collection. The Municipality will endeavour to aggregate the data collected from each town for analysis.

These procedures will include:

- details of direct and indirect costs;
- number of tonnes collected;
- number of bin lifts;
- number of properties serviced; and
- number of outdoor staff.

The following performance indicators will then be produced annually:

- average cost per ton collected;
- average cost per employee;
- average cost per property serviced;

- cost per bin lift;
- tonnage collected per property;
- tonnage collected per employee; and
- number of properties serviced per employee.

This will tie up with the Waste Information System.

Cleansing

The Hessequa Municipality will ensure the general cleansing of the municipal area.

HESSEQUA MUNICIPALITY'S IMPLEMENTATION SCHEDULE

The implementation of the above actions towards Integrated Waste Management must be scheduled in such a way that it is realistic, achievable, financially feasible and publically acceptable. The attached schedule provides an indication of the proposed implementation of the above actions.

IWMP MONITORING AND REVIEW

For the IWMP to be an effective and relevant tool and guide for integrated waste management in the Hessequa Municipality, it will need to be monitored and reviewed. Monitoring relates to the goals and targets set out in the IWMP and whether they are being achieved or pursued. Reviewing relates to the document and the projects themselves which will require regular updates to stay up-to-date, specifically the implementation schedule. The proposed implementation schedule as well as allocated budget may change at any time and these changes, if any, need to be reflected in the reviewed IWMP to avoid confusion.

The following diagram illustrates the initial review cycle when a new IWMP is developed:



The date on which the final IWMP second generation document is approved, must be recorded and will serve as the base date on which further monitoring and review dates are based. This is also the start date of the approved implementation schedule. The following diagram illustrates the review steps that must be followed after the final IWMP is published.



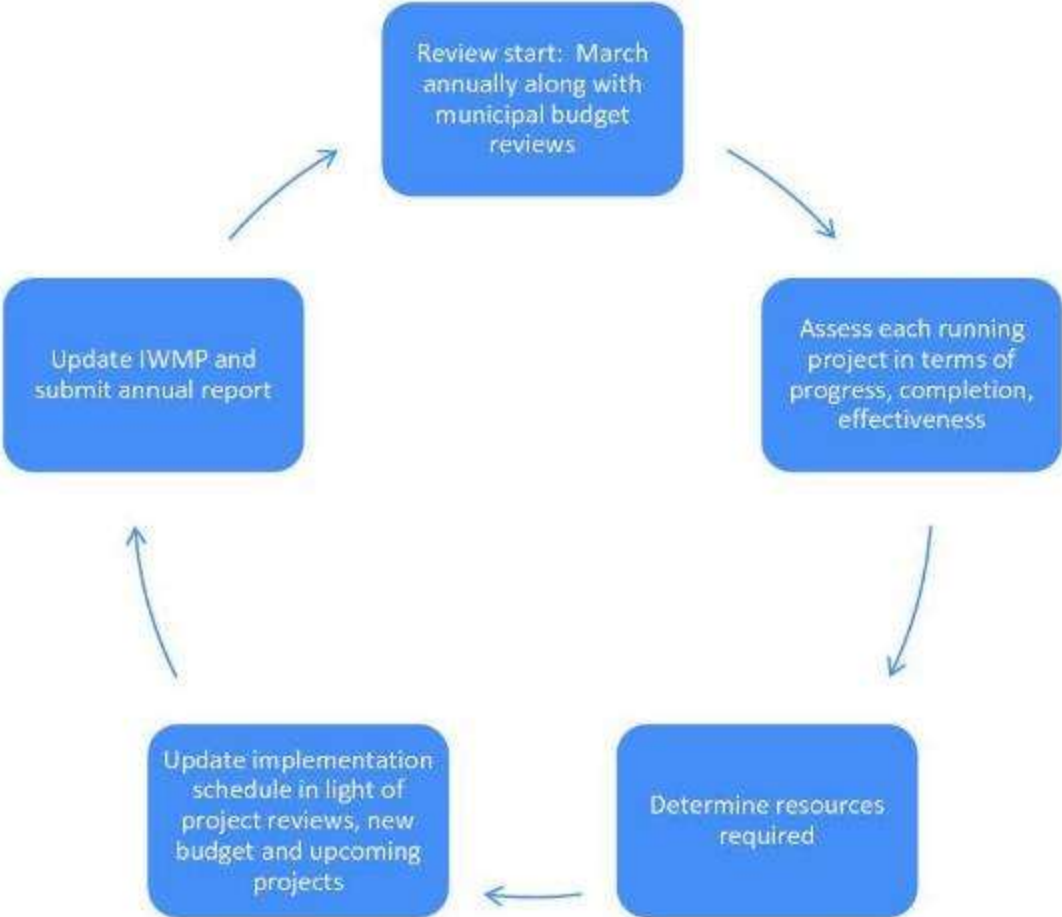
The annual implementation reports will be submitted by the Hessequa Municipality and will be compiled by the solid waste manager, Mr Wesso, or to whom the task is delegated by him. The annual report must contain the approved implementation schedule of the IWMP and the progress thereof of the past year. Based on the progress and possible new budget allocations, the implementation schedule of the IWMP must be updated and included in the annual report. This new implementation schedule must provide for 3 upcoming years from the report date.

The progress of each task on the implementation schedule, if under way according to the schedule for that year, must be summarised and the estimated completion date must be updated. The reasons for the lack of progress or practical difficulties must be stated along with a summarised action plan to adhere to the schedule as close as possible.

The report must further discuss the effectiveness of completed projects. For example, when a new weighbridge has been commissioned, the collected data must be reported on and added to the IPWIS. Also the participation rates of source separation can be monitored along with the public awareness and education campaign. See **Annexure 3** for an example of a project review form which can be used to track the success and effectiveness of the waste management projects and added to the annual report.

Wherever issues are reported or identified in the projects, these issues must also be evaluated in terms of the relevant legislation and by-laws. It must be stated if there is relevant legislation applicable to the issue and if so, was it the lack of enforcement, for example, that caused the issue. If no relevant legislation exists, it must be noted to adapt the by-laws accordingly in future revisions.

Below is the proposed review cycle of the IWMP and its projects:



CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The Project Team, with the assistance of Municipal Officials, has undertaken an analysis of the current municipal solid waste management activities within Hessequa Municipality.

The analysis has shown that the Hessequa Municipality has through the years committed themselves to the delivery of a collection and disposal service for all its residents. In recent years the more sustainable approach with regard to waste minimisation and reduction has been adopted and is to be expanded in the upcoming years.

The chapters of this Integrated Waste Management Plan report describe the way in which the municipality is currently conducting solid waste management and how to strategically move towards a sustainable waste management system whereby the focus will shift to the avoidance and reduction of waste rather than to the disposal thereof. It also lists the strategies of the municipality in terms of waste avoidance, waste reduction and waste disposal.

During the process of the implementation of the municipality's IWMP, and arising from the public consultation process that is forthcoming, further input and/or corrections to the report may come to light that will then be added as a revision to the report.

The analysis of the current waste management system has shown the following:

- all formal residential erven are receiving a weekly door-to-door waste collection service
- all collected general municipal waste are transported to either the Droëkloof, Steynskloof, Slangrivier or PetroSA waste disposal sites, depending on the location of the collected waste
- all green waste and builder's rubble are disposed at the Albertinia, Gouritsmond, Witsand and Melkhoutfontein waste disposal facilities
- large volumes of illegally dumped general waste is present at the Melkhoutfontein site
- most healthcare risk wastes are managed by private contractors
- good waste recovery is being done by private recyclers
- no significant waste avoidance is being done
- no significant public awareness and education, apart from the Eden District Road Show, is being done in the Municipality

With the current waste management system focussing on getting the waste into the waste stream and disposing of it in an acceptable manner, and with the future integrated waste management system focussing on waste avoidance and waste reduction, the municipality requires a set of strategic objectives on how to transform from the current management system to the future management system.

The strategic objectives for integrated waste management in Hessequa Municipality can be summarised as follows:

- To ensure that Waste Management in the Hessequa Municipal Area complies with South African and International environmental standards so that it is beneficial to industrial and agricultural growth and the public's right to a clean and healthy environment.
- To minimise the entrance of material of value into the waste stream.
- To reduce all waste so that nothing of value nor anything that can decompose, gets disposed.
- To store, dispose or treat all waste that cannot be avoided nor reduced at licensed facilities with regular operational and environmental monitoring and in accordance with regulatory requirements.

For these strategic objectives to be met, a series of implementation instruments (action plans) will need to be implemented. These implementation instruments as well as time framework within which it should be addressed are described in this report but need to be fully detailed at a later stage. The instruments are the following:

- Public Awareness and Education
- Quantifying Prevention
- Post Collection Recovery
- Post Collection Composting
- Engineered Waste Disposal Facilities
- Monitoring of Waste Disposal
- Collection Service Review

- Data Compilation
- Cleansing

The above instruments, through implementation via their action plans, will ensure that waste management in Hessequa Municipality focuses on avoidance and reduction rather than collection and disposal, but simultaneously maintaining the practical balance between the various waste management functions.

Since the highest priority for transforming the current management system is undoubtedly depending on public acceptance and ownership, the Public Awareness and Education instrument will receive preference in the implementing framework.

RECOMMENDATIONS

A comprehensive analysis and assessment of solid waste management in the Hessequa Municipal area has been done and key strategies have been determined to aim the municipality towards sustainable and integrated waste management.

It is therefore recommended that the next stage of the process of implementing the Integrated Waste Management Plan be proceeded with, that entails the consultation process with the public and the development of detail action plans and key performance indicators for future monitoring of the municipality's successes in waste management service delivery.

Public Awareness

The first step in educating the public about waste is to make them aware of any new waste management procedures and facilities available to them.

Another reason to focus on educating the public will cause a greater awareness of waste minimisation. This will reduce waste generation rates which will in turn reduce transport volumes and costs. It is important to also provide feedback to the public of the success of their efforts, for example publishing month to month volumes of waste diverted from being landfilled.

To reduce the contamination of recyclables, the current source separation strategy can be expanded. The investment/reward ratio must be of such nature to support the implementation thereof. This may require some further investigation into the results of other areas outside the Municipal boundaries where source separation is currently implemented.

By-laws

The existing by-laws should be revised into an Integrated Waste Management By-law. This by-law should include appropriate penalties, inform and instruct industries to submit Industry Waste Management Plans and industry waste information and quantities. It should also set out the requirement to health risk waste generators to be registered.

Waste Collection and Transport

The current collection service and its composition should be reviewed. Part of the Hessequa collection fleet is due for replacement and it must be ensured that the appropriate vehicles are acquired. This can be done by reviewing the function and route of each vehicle. It has been shown that where an appropriate vehicle is used, it can replace several inappropriate vehicles used for the same function.

This possible reduction in fleet size can ultimately reduce labour and transport costs by vast amounts per annum as well as improve efficiency.

Waste reduction

Hessequa Municipality should investigate to chip garden waste and crush builder's rubble at the existing garden waste sites.

Waste reduction at the proposed solid waste transfer station will be possible.

Waste Disposal

It must be ensured that all waste management facilities are regularly audited. Regular audits will ensure that these facilities are operated correctly and efficiently. Ensuring the correct operations will maximise the results of efforts of waste reduction and recovery and therefore the benefits thereof.

The following items must be included in the Hessequa Municipality IDP:

- The licensing and construction of a new solid waste transfer station which will follow an investigation into its optimal location
- The licensing of all unlicensed sites
- The rehabilitation of all identified closed disposal sites

PDO 17: ATTAIN BLUE DROP STATUS

PDO:	#17	Attain Blue Drop Status by 2016		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Water Services Development Plan	Approved	2011
2.	Plan	Water Safety Plan	Draft	2014

Water Services Delivery, Resources & Infrastructure Planning

For any Local Government to supply sustainable water services to their customers it is important to regard the issues listed below in planning and implementation to ensure continuous service delivery at the required standards. The issues are important aspects within the Water Services Development Planning process for the specific area of authority. The information provided below are required issues that need to be addressed in an IDP as reflected in the IDP Analysis Framework and was extracted from the detail WSDP Module 1 document compiled for the municipality.

WASP Adoption Status

Status	Modules: All/1/2/3 or 4	Date Submitted
Interim	Module 1,2,3	31 March 2011
Draft		
Adopted		
Annual Review		
New		
Public Viewed		

[Link to Topic 1 page 1 in WSDP Module 1](#)

Knowledge Overview

Demographics

Number of People	50952
Total Number of Settlements	16
Total Number of People: Urban	36084
Total Number of People: Rural	14868
Total Number of Settlements: Urban	15

Total Number of Settlements: Rural	1
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[Link to Page IV in WSDP Module 1](#)

Associated Services

Public amenities consumer types	Type	No. Of consumer units (HH)	No. Of consumer units with access to:				
			None or inadequate Supply		Communal supply	Controlled volume supply	Uncontrolled volume supply
			Water	Sanitation			
Police Stations	Urban	5	0	0	0	0	5
	Rural	0	0	0	0	0	0
Magistrate offices	Urban	3	0	0	0	0	3
	Rural	0	0	0	0	0	0
Businesses	Urban	236	0	0	0	0	236
	Rural	0	0	0	0	0	0
"Dry" Industries	Urban	81	0	0	0	0	81
	Rural	0	0	0	0	0	0
Office Buildings	Urban	0	0	0	0	0	0
	Rural	0	0	0	0	0	0
Prisons	Urban	2	0	0	0	0	2
	Rural	0	0	0	0	0	0
Schools	Urban	15	2	1	0	0	12
	Rural	27	6	8	0	0	15
Hospitals	Urban	1	0	0	0	0	1
	Rural	0	0	0	0	0	0
Clinics	Urban	7	0	0	0	0	8
	Rural	0	0	0	0	0	0
"Wet" Industries	Urban	0	0	0	0	0	0
	Rural	0	0	0	0	0	0

Backlogs: Water Need Description & Status Of Supply

Water Priority	Water Need Description	Settlements	Population	Households
Definition 1	No Water Services	1	116	39
Definition 2	Inadequate RDP Infrastructure Need: Extension Required	0	0	0
Definition 3	Inadequate RDP Infrastructure Need: Upgrade Required	0	0	0
Definition 4	Inadequate RDP Resource Need	0	0	0
Definition 5	Inadequate RDP Management Need: O&M Required	0	0	0
Definition 6	Inadequate RDP Management Need: Refurbishment Required	0	0	0

Definition 7	Inadequate Housing Interim Solutions	0	0	0
Definition 8	Inadequate Housing Permanent Solutions	10	12480	3147
Adequate:	Standpipe	0	0	0
Adequate:	Yard Connection	0	0	0
Adequate:	House Connection	16	38356	11682
TOTALS		27	50952	14868

Planning Strategies For Inadequate Supplies

Water Priority & Levels of Supply		Future Plan to address the issue		Future Strategy to address the issue	
Water Priority	Water Need Description	In Place?	Sufficient?	In Place?	Sufficient?
Definition 1	No Water Services	Yes	Yes	Yes	Yes
Definition 2	Inadequate RDP Infrastructure Need: Extension Required	N/A	N/A	N/A	N/A
Definition 3	Inadequate RDP Infrastructure Need: Upgrade Required	N/A	N/A	N/A	N/A
Definition 4	Inadequate RDP Resource Need	N/A	N/A	N/A	N/A
Definition 5	Inadequate RDP Management Need: O&M Required	N/A	N/A	N/A	N/A
Definition 6	Inadequate RDP Management Need: Refurbishment Required	N/A	N/A	N/A	N/A
Definition 7	Inadequate Housing Interim Solutions	N/A	N/A	N/A	N/A
Definition 8	Inadequate Housing Permanent Solutions	Yes	Yes	Yes	Yes

Future Plans To Address Service Delivery & Growth And Development

Water Priority	Water Need Description	Are the future plans indicated in 2.4 sufficient to address service delivery at :		Do future plans cater for the Growth & Development strategy	Are these plans included in Module 3 of the WSDP (Provide reference)
		RDP LEVEL	HIGHER LEVEL		
Definition 1	No Water Services	Yes			
Definition 2	Inadequate RDP Infrastructure Need: Extension required				
Definition 3	Inadequate RDP Infrastructure Need: Upgrade required				
Definition 4	Inadequate RDP Resource Need				

Definition 5	Inadequate Management Need: RDP O&M required				
Definition 6	Inadequate Management Need: RDP Refurbishment required				
Definition 7	Inadequate Housing Interim Solutions				
Definition 8	Inadequate Housing Permanent Solutions	Yes			

Free Basic Water

Is there a Free Basic Services Policy in Place? YES

Subsidy Targeting Approach	Current % of HH's requiring FBW	% of HH Targeted: Water	% of HH Targeted: Sanitation
Rising block tariff		100%	100%
Service level targeting		100%	100%
* Credits to Water account		100%	100%
* Credits to Sanitation account			
* Number of units requiring free basic services (Water)		Unknown	
* Number of units requiring free basic services (Sanitation)			Unknown
Number of units with access to free basic services		2997	2997

Sector Integration

Consultation and Integration with other Sector Plans to incorporate their needs

Sector	Interaction (None, Limited, Partial, Good, Excellent)
Agri-Culture	None
Mining	None
Tourism	None
Public Works programmes	None
Other 1:	
Other 2:	
Other 3:	
Other 4:	

INTERACTION

To which extent has interaction taken place?

None - 0%

Limited - 10%

Partial - 30%

Good - 75%

Excellent - 90%

Project Lists

Total Number Of Projects

Total number of projects	99
Total number of projects: Water	49
Total number of projects: Sanitation	46

Levels Of Service

Total number of projects aimed at Basic Levels of Services	
Total number of projects aimed at Higher levels of Services	
Total number of projects aimed at System Improvement	

Population Benefitting

	Water	Sanitation
Basic Levels of Services		
Higher levels of Services		
System Improvement		

Funding Sources (Rm) [2010/2011]

MIG	8.320271
RBIG	0
ACIP	0
DROUGHT RELIEF	0
MUNICIPAL INTERVENTION	0
DWA	0
Own/Other	0
TOTAL	8.320271

Detail Project Lists [2010/2011]

Description	Services Type	Programme type	Project Primary Class	Proposed project funding (RM)		
				09/10	10/11	11/12

Project number	Name & Description	W: Water S: Sanitation	Water Services WIB: Internal Bulk WRB: Regional Bulk WT: Treatment WWT: Waste Water Treatment WR: Reticulation SS: Sanitation Service H: Housing O: Other	B - Basic H - Higher S - System Improvement	Total	Total	Total
HQ0708001	Telemetry system - AB	Water O&M Management: Refurbishment	Water Reticulation		0	0	0.2
HQ0708003	Albertinia: Colour remove plant	Water Infrastructure Upgrade	Water Treatment Works		0	0	0.5
HQ0708005	Backup borehole pumps - AB	Water O&M Management: Refurbishment	Water Internal Bulk		0.05	0.55	0.06
HQ0708006	Albertinia: Rehab fountains	Water Infrastructure Upgrade	Water Internal Bulk		0	0.08	0.1
HQ0708008	Upgrading of water network - Oosdorp - HB	Water Infrastructure Upgrade	Water Internal Bulk		0.1	0	0
HQ0708010	Backup borehole pumps - WS	Water O&M Management: Refurbishment	Water Internal Bulk		0.025	0.028	0.031
HQ0708013	Replace low-pressure waterworks - RD	Water Infrastructure Replace	Water Treatment Works		0.3	0.4	0.5
HQ0708014	Backup Water pumps - RD	Water O&M Management: Refurbishment	Water Internal Bulk		0.015	0	0.05
HQ0708016	Water valves for "Berglyn" - RD	Water O&M Management: Refurbishment	Water Reticulation		0.015	0.05	0.05

HQ0708017	Replace water valves strategic places - SB	Water O&M Management: Refurbishment	Water Reticulation		0.05	0.05	0.05
HQ0708025	Air valves - Extension 2 - SR	Water O&M Management: Refurbishment	Water Reticulation		0	0.015	0.015
HQ0708026	Prepaid water meters	Water O&M Management: Refurbishment	Water Reticulation		0.5	0.7	0.52
HQ0708034	Reservoir and surge line to Platbos - Stilbaai East - SB	Water Infrastructure Upgrade	Water Internal Bulk		2.5	0	7.5
HQ0708037	New Reservoir - HB	Water Infrastructure New	Water Internal Bulk		2.266	0	0
HQ0708040	Backup sewerage pump - HB	Sanitation O&M Management: Refurbishment	Sanitation Bulk		0.06	0.07	0.075
HQ0708045	Colorimeter - RD	Sanitation O&M Management: Refurbishment	Internal Sanitation		0	0	0.02
HQ0708047	Submersible pump - RD	Sanitation O&M Management: Refurbishment	Internal Sanitation		0.03	0.03	0.035
HQ0708048	Stilbaai: WWTW phase 2 (Kwezi V3 report)	Sanitation Infrastructure Upgrade	Sanitation Bulk		0.5	0	2.0
HQ0708056	Sludge pump - SR / HB / AB	Sanitation O&M Management: Refurbishment	Sanitation Bulk		0.015	0.016	0

HQ0708059	Replacement of sewerage line - Braak - AB	Sanitation Infrastructure Replace	Sanitation Bulk		0.5	0	0
HQ0708062	Housing - Sewerage provision - HB	Sanitation Infrastructure New	Sanitation Bulk		0.120	0	0.0308
HQ0708063	Moving of Sewerage works - HB	Sanitation Infrastructure Replace	Sanitation Bulk		12.598	0	0
HQ0708067	Upgrading of Sewerage pump stations - SB	Sanitation Infrastructure Upgrade	Sanitation Bulk		0	0	3.0
HQ0708070	Housing - Sewerage provision - SR	Sanitation Infrastructure New	Internal Sanitation		0	3.125	1.773
HQ0708072	Heidelberg: Rehabilitate WWTW [0086/S/05/06]	Sanitation Infrastructure Upgrade	Sanitation Bulk		0	0	0.887
HQ0708073	Albertinia: New Bulk Water Supply [0120/W/05/05]	Water Infrastructure New	Water Internal Bulk		1.063	0	3.186
HQ0708074	Heidelberg: Bucket Eradication: New Sewer Pump Station Phase 2 [0571/S/07/07]	Sanitation Infrastructure New	Sanitation Bulk		0.406	0	0.353
HQ0708107	Riversdale: 1237 m x 315 mm R gravity pipe	Sanitation Infrastructure New	Sanitation Bulk		0.5	0	0
HQ0910001	Housing - Water Provision	Water Infrastructure New	Water Reticulation		0.652	0.344	0

HQ0910002	Housing - Water Provision	Water Infrastructure New	Water Reticulation		0	0	1.417
HQ0910003	New Reservoir - RD	Water Infrastructure New	Water Internal Bulk		0	2.716	2.327
HQ0910005	Housing - Sewerage Provision - SB	Sanitation Infrastructure New	Internal Sanitation		0	0	2.080
HQ0910006	Slangrivier: New Oxidation Ponds Ph2 [WC0838/S/10/11]	Sanitation Infrastructure New	Sanitation Bulk		0	0.041	0.674
HQ0910007	Slangrivier: New Bulk Water Pump Station & Rising Main [WC0625/W/08/10]	Water Infrastructure New	Water Internal Bulk		5.075	0.288	0
HQ0910008	Slangrivier: New Oxidation Ponds [WC0839/S/10/11]	Sanitation Infrastructure New	Sanitation Bulk		0.212	0.832	4.164
HQ0910010	Heidelberg East: New Sewer Pump Station & Rising Main [WC0628/S/07/08]	Sanitation Infrastructure Replace	Sanitation Bulk		0.803	0	0.919
HQ1011002	Upgrading of sludge dams	Sanitation Infrastructure Upgrade	Sanitation Bulk		0	1.500	1.500
HQ1011003	Investigate alternative Water Sources - HQ	Feasibility Only	Strategic Planning		0	3.0	0
HQ1011004	Upgrade Bio filter	Sanitation O&M	Sanitation Bulk		0	0.07	0

		Management: Refurbishment					
HQ1011005	Backup sewerage pump - RD	Sanitation O&M Management: Refurbishment	Sanitation Bulk		0	0.075	0
HQ1011013	New Waste Water Treatment Works: Mechanical & Electrical Installation [WC0911/S/10/11]	Sanitation O&M Management: Refurbishment	Sanitation Bulk		4.280	1.641	0
HQ1011014	Sewer Reticulation - Albertinia Ph 10 [1964/S/06/08]	Sanitation Infrastructure New	Internal Sanitation		0.798	0	0.0019
HQ1011015	Housing Sewerage Provision - AB	Sanitation Infrastructure New	Internal Sanitation		0	0.073	0
HQ1011016	Water Provision - AB	Water Infrastructure New	Water Reticulation		0	0.0147	0
HQ1011017	Flow Meter for Sewerage	Sanitation O&M Management: Refurbishment	Internal Sanitation		0	0	0.035
HQ1011018	Emergency Generator for Sewerage Pump station	Sanitation O&M Management: Refurbishment	Internal Sanitation		0	0.5	0
HQ1011019	Bio filter for Sewerage Works	Sanitation O&M Management: Refurbishment	Sanitation Bulk		0	0.5	0

Approved Budgets in The Met Allocations

Are there approved budgets in the MTEF allocations for all these projects?

Income Subsidies From:	Housing	Trading Services							Grand Total
		Environmental Protection	Waste Management (solid waste)	Waste water management	Road transport	Water	Electricity	Other Trading Services	
		RM	RM	RM	RM	RM	RM	RM	
National Government									
Provincial Government									
Local Government									
Other									
Grants (including the equitable share) from:									
National Government									
Provincial Government									
Local Government									
Other									
Spent conditional grants									
Metering & Billing Income									
Other Income									
Deficit			-0,141	-3248		-6053	-13740		
Total Income	15625		9721	16536	300	23245	92683		

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Preparation & Maintenance

Is there an Operation & Maintenance Plan in place?

YES

Water Services Infrastructure:

Existing Groundwater Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	
Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes



Z - Zero Compliance
 1 - Below minimum requirement
 2 - Minimum basic requirement
 3 - Above minimum requirement
 N/R Not Required

Existing Surface water Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	
Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes

Existing Water Treatment Works Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	
Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes

Existing Pump Station Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	
Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes

Existing Bulk Pipeline Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	

Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes

Existing Tower & Reservoir Infrastructure

Staff to perform the function	3
Budget to perform the function	3
Sufficient for:	
RDP	
Higher level services:	Yes
the Growth & Development Strategy of the WSA:	Yes

[Link to Topic 6 Page 14 - 17 in WSDP Module 1](#)

Financial Viability, Income, Metering & Billing

Residential: Water

	URBAN	RURAL
Units Supplied	9890	0
Metered %	98	0
Billed %	98	0
Not Metered	2	0
Income Received %	92	0
Non Payment %	9	0

[Link to Topic 10 Page 34 in WSDP Module 1](#)

Industrial: Water

	URBAN	RURAL
Units Supplied	7	0
Metered %	100	0
Billed %	100	0
Not Metered	0	0
Income Received %	91	0
Non Payment %	9	0

[Link to Topic 10 Page 34 in WSDP Module 1](#)

Commercial: Sanitation

	URBAN	RURAL
Units Supplied	509	0
Metered %		0
Billed %	98	0
Not Metered	N/A	0

Income Received %	90.2	0
Non Payment %	9.8	0

[Link to Topic 10 Page 35 in WSDP Module 1](#)

Industrial: Sanitation

	URBAN	RURAL
Units Supplied	7	0
Metered %		0
Billed %	100	0
Not Metered	N/A	0
Income Received %	90.2	0
Non Payment %	9.8	0

[Link to Topic 10 Page 35 in WSDP Module 1](#)

Water Resource Development

Water Resources Development W.R.T. Demand Management, Water Balance Issues And Ecological Reserve?

Is there Water conservation and demand management strategy in place?	Yes
Is there Budget to perform the function	Yes
Sufficient Personnel perform the function	Yes
Adequate for Higher Level Services	Yes
Does the municipality have a strategy in place to meet 2014 targets?	Yes

Water Resource Management

Conjunctive use of surface – and groundwater (Number of settlements)

Ground Water	8
Surface Water	8
Conjunctive Use	0

[Link to Topic 8 Page 22 in WSDP Module 1](#)

Water Balance & Losses

Water Losses (%)

Raw Water Bulk Loss	
Treated Water Loss :Bulk	
Treated Water Loss :Internal	

[Link to Topic 8 Page 24 in WSDP Module 1](#)

Water Balance (Volume Units in M³/d)

Bulk	
Usage	
Discharged	
Balance value	

[Link to Topic 8 Page 24 in WSDP Module 1](#)

Contracting & Licensing

References to the status of all contracting and licensing issues

FUNCTIONS	% in place
GENERAL FUNCTIONS	80%
BULK & RETAIL FUNCTIONS	60%
WATER SERVICES PROVIDERS	80%

[Link to Topic 11 Page 37 – 38 in WSDP Module 1](#)

Contracting Issues

GENERAL FUNCTIONS	Policy in Place	Budget to perform the function	Personnel to perform the function	Gazetted	Council approved	Adequate for Basic Services
Policy development						
Indigent Policy	Yes	Yes	Yes	Yes	Yes	Yes
Free basic water policy (including equitable share)	Yes	Yes	Yes	Yes	Yes	Yes
Free basic sanitation policy	Yes	Yes	Yes	Yes	Yes	Yes
Procurement policy	Yes	Yes	Yes	Yes	Yes	Yes
Credit control & debt collection policy	Yes	Yes	Yes	Yes	Yes	Yes
Regulation and tariffs						
Water Services bylaws with conditions as required by the Water Services Act	Yes	Yes	Yes	Yes	Yes	Yes
Mechanisms to ensure compliance with bylaws	Yes	Yes	Yes	Yes	Yes	Yes
Tariff structure	Yes	Yes	Yes	Yes	Yes	Yes
Tariffs promulgated	Yes	Yes	Yes	Yes	Yes	Yes

Water Services Providers	Name	Contract type	% Consumers served by the WSP
Retail water	Overberg Water Board	Unknown	Unknown
Sanitation	Hessequa Municipality	Not Applicable	100%

[Link to Topic 11 Page 37 – 38 in WSDP Module 1](#)

Licensing Issues

CURRENT Water sources	Number of sources	Current abstraction (Mm ³ /A)	Licensed abstraction (Mm ³ /A)	Community water supply	
				Rural	Urban
Groundwater	18	0.699	2.795	Unknown	Unknown
Surface Water	2	1.501	1.578	Unknown	Unknown
External Sources (Bulk purchase)	1	0.798	0.798	Unknown	Unknown
Water returned to source	0	0	0	0	0

FUTURE Water sources	Number of sources	Current abstraction (Mm ³ /A)	Licensed abstraction (Mm ³ /A)	Community water supply	
				Rural	Urban
Groundwater					
Surface Water					
External Sources (Bulk purchase)					
Water returned to source					

[Link to Topic 9 Page 26 in WSDP Module 1](#)

Quality & Monitoring

Monitoring

% Compliance to drinking water acceptable limits	98%
% Compliance to effluent release acceptable limits	Unknown

Water Quality

Is there a Water Quality Plan in Place?

Yes

WATER QUALITY	% or Number of / Yes No	Policy in Place	Budget to perform the function	Personnel to perform the function	Gazetted	Council approved	Adequate for Basic Services
Reporting on quality of water taken from source: urban & rural	100%	Yes	Yes	Yes	Yes	Yes	Yes
Quality of water returned to the resource: urban	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quality of water returned to the resource: rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Is there a Pollution contingency measures plan in place?	100%	Yes	Yes	Yes	Yes	Yes	Yes
Quality of water taken from source: urban - % monitored	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quality of water taken from source: rural - % monitored	0%	N/A	N/A	N/A	N/A	N/A	N/A
Quality of water returned to the source: urban - %	100%	Yes	Yes	Yes	Yes	Yes	Yes
Quality of water returned to the source: rural - %	0%	N/A	N/A	N/A	N/A	N/A	N/A
Are these results available in electronic format? (Yes/no)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
% Time (days) within SABS 241 standards per year	98%	Yes	Yes	Yes	Yes	Yes	Yes

[Link to Topic 9 Page 27 in WSDP Module 1](#)

Chapter 3 – Social Well-Being

PDO 4: LIBRARY SERVICES

PDO:	#4	Continued Library Services Delivery		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Guide	Provincial Manual for Public Libraries	Review Due	DCAS
2.	Ordinance	Ordinance 16 of 1981, Provincial Library Service	Gazetted	1990

Given that public libraries are a provincial mandate, provinces are required to budget for them from their provincial equitable share and own revenues. Hessequa Municipality in this regard are the agent that provide the service with no cost to the municipality. With this service comes a range of library material that are available on loan to the public like books, periodicals, newspapers, CDs, videos and professional publications.

In Albertinia, Gouritsmond, Heidelberg, Riversdale and Vermaaklikheid the staff visit the elderly and also people with disabilities. The staff of Albertinia, Gouritsmond, Heidelberg, Riversdale and Stillbaai also do home visit to people who are not in a position to leave their home, Schools and NGO's on request. Hessequa Municipality has 13 libraries in the different town and rural areas with an amount of 16565 members.



Services rendered by the Libraries in Hessequa:

- Management of books and reading material
- Research areas with material, books, encyclopedias, etc.
- Thematic exhibitions in libraries
- Study groups
- Reading programs for children
- Library visits for educational purposes
- Computers and Internet Centres for research purposes

PDO 8: SOCIAL DEVELOPMENT

PDO:	#8	Implement Social Development Projects as planned and budgeted		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Social Development Strategy	In Review	2014

Analysis of Hessequa – Our People

Introduction & Important Notes

The Hessequa Municipality is located along the southern shoreline of Africa from the Gourits River in the east to the Breede River on the western border. Towards the north the Langeberg mountain range forms a border between Hessequa and the Klein Karoo.

The geographical layout of Hessequa Municipality is one of the most unique in the Western Cape, as Hessequa is a region with many towns as a result of amalgamation that happened between 6 small municipalities in 2000. As it is titled, this profile of Hessequa is based on the 2011 national census of South Africa with the formal Supercross Datasets, provided by Statistics South Africa, of South Africa. This is the only source for the 2011 statistics used in this profile and the 2001 Supercross Datasets was used to include the 2001 census statistics. Only statistics released by Statistics South Africa through aforementioned datasets was used.

Ward Based Information

All of the statistics included in the profile referenced by ward. When electoral wards are used to sort statistics it is important to remember that ward demarcations change regularly. Due to Hessequa being a region, any changes in ward demarcations cause major changes in the statistics. Furthermore wards do not constitute of a specific community or area type, but in all cases wards include multiple communities and are it important to acquaint one with the demarcations of the wards to ensure a perfect understanding of the communities included in a certain set of ward information. On the positive side however, even though Hessequa experienced major changes in ward demarcations in 2011 from that what it was in 2006, the changes that was made returned basically to the same demarcations for 2001. This creates the perfect opportunity then to clearly compare wards with one another without considering

the inclusion or exclusion of complete communities in the figures. The map on the next page clearly shows the 2001, 2006 and 2011 demarcations of wards. There are minor changes between 2001 and 2011, but all these changes are in the rural area and could only cause a fraction of a percentage variation.

During March 2013 all census information will be released in main and sub-place recodes, which means individual towns would be able to be profiled. This profile will be updated with a more detailed breakup of communities once released by StatsSA.

Structure of the Profile

The profile seeks to create an image of certain aspects at a time and is loosely structured by looking at the overall population profile first. Secondly a focus on the rural population that will quantify by ward the population located in non-urban environments. Thirdly the profile looks at the household profile of Hessequa which includes a services profile. The profile concludes with a detailed look at the economic profile of Hessequa based on **official definitions** and the labour force count or households.

Population Profile of Hessequa

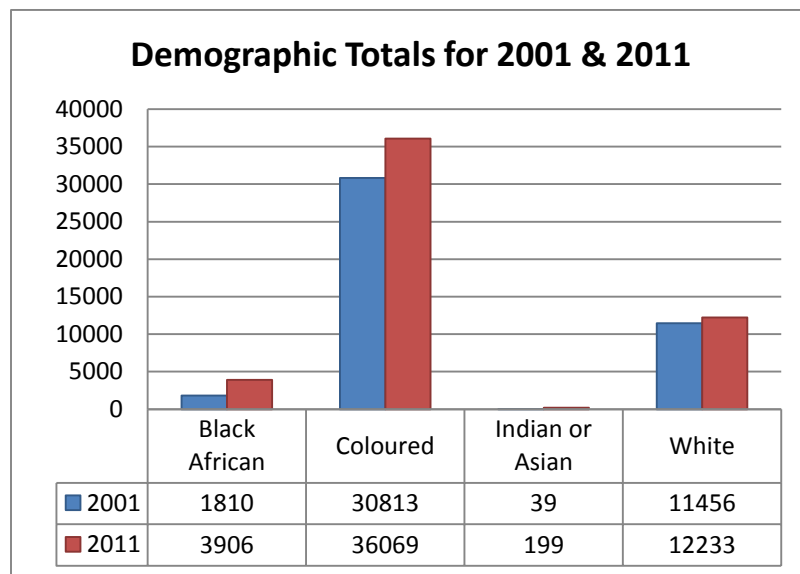


Figure 3 - Population Totals by Race

During 2007 StatsSA released a publication known as CS2007 which attempted to help municipalities with statistical information for planning as the 2001 Census information was aging rapidly. Hessequa objected strongly to the findings of this publication as it stated that the Hessequa population declined from 2001 – 2007 by almost 5 %. Hessequa did not accept this information and

with the 2011 Census information being released, we are glad to see that Hessequa is growing in terms of population and not getting less.

From this chart it is clearly visible that the Coloured population is by far the largest represented people group in Hessequa with Whites second and Black African third. Indian or Asian people are scarcely represented in Hessequa.

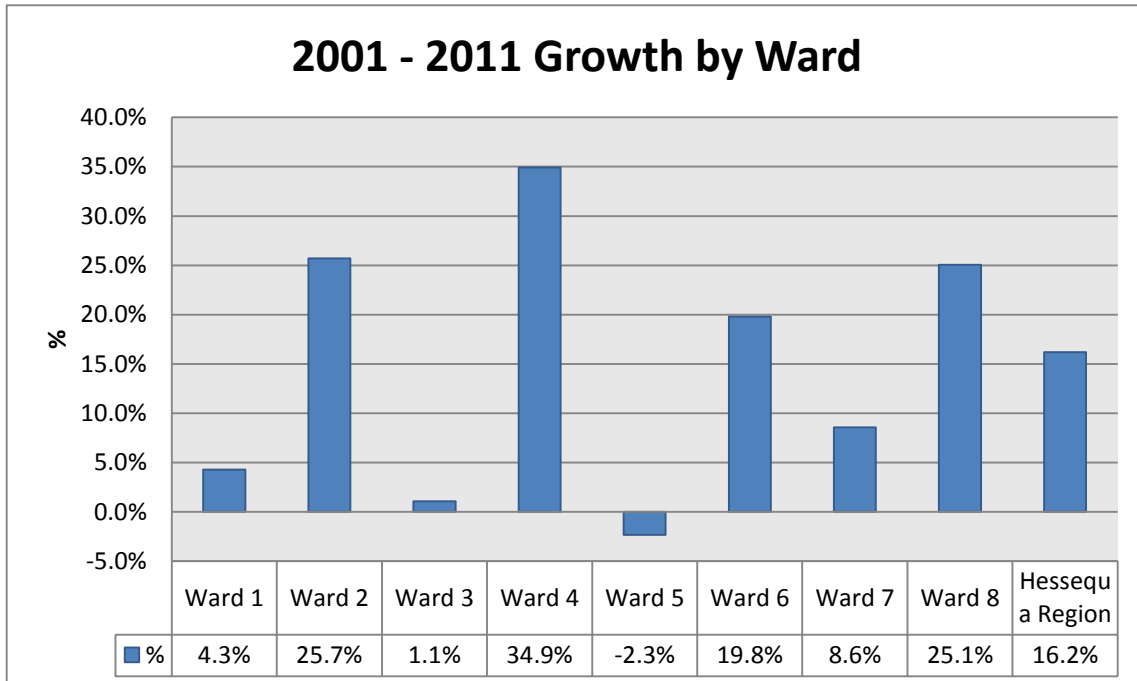


Figure 4 - Growth Rates of Wards

The above figure shows the growth rate of each ward with the Hessequa Region average on the right hand side of the chart.

It is clearly visible to see that Ward 4 experienced the largest growth of almost 35% since 2001 and Ward 2 second most with 25.7%. Ward 8 follows with 25.1% and on the other side of the spectrum it was surprising to see Ward 5 experiencing a negative growth of -2.3%. This seems like a somewhat problematic figure, but is confirmed in various other statistics that will be displayed in this profile. There is a close relation between Ward 4 & 5 as the ward demarcations literally divide a relatively high density community in two. With the implementation of a low-cost housing project within ward 4 which serve the community mentioned of ward 5 primarily. The IDP highlights this as an important issue which led to the IDP adopting area based planning, instead of ward based planning principles.

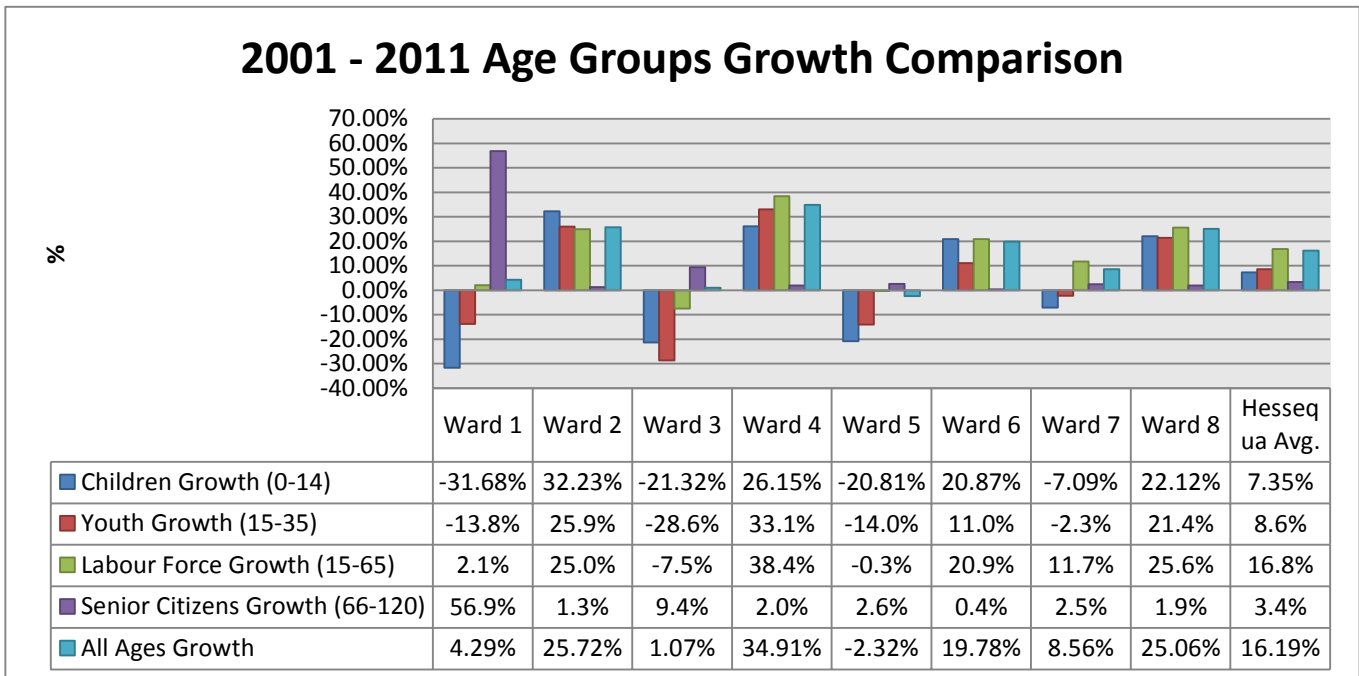


Figure 5 - Ward Growth by Age Groups

Figure 6 is very important to a region’s profile as it shows in which age group the growth or decline happened. This starts to show what changes within the economic and social structure of a given ward is taking place. Please note that Figure 6 does not imply that children or senior citizens got more or less. It shows in which age group the growth or decline was the strongest or weakest. All the above mentioned information includes rural and urban areas. The following summary for each ward will reflect the findings of Figure 6.

Ward1 – Stilbaai, Melkhoutfontein, Gouritsmond & Rural Area

- Ward 1 experienced a below average growth in general and a sharp decline in ages 0 – 35. The labour force in general grew by 2.1%, which implies that the growth in the labour force was primarily located between the ages of 35 – 65. Ward one shows the highest categorical growth in Hessequa with a growth of 56.9% in the senior citizen category.

- Ward 2 experienced an above average growth in general with the lowest growth in senior citizens in contrary to ward 1. It is important to note the large growth in children below the age of 14 in ward 2. This growth impacts various aspects of government services such health and education.
- Ward 3 showed a very slow growth rate over the last 10 years. A sharp decline in children and youth, as well as decline in residents of ages 36-65. The second highest growth rate for senior citizens, was recorded in Ward 3.
- Ward 4 displayed the highest growth in all of Hessequa over the last 10 years which is primarily in the labour force category. With Ward 4 being a mostly rural ward and including a low cost housing area of Heidelberg this could be due to various factors.
- Ward 5 is the only ward in Hessequa that showed an average growth that is negative over the last 10 years. Once again it is important to note that many people who would be classified as “backyard dwellers” would have moved to ward 4 due to the low-cost housing project. This creates a problem for planning as it is a high density community being cut in half by the demarcation of electoral wards.
- Ward 6 experienced a growth which is very close to the Hessequa average. It recorded the lowest growth in senior citizens and interestingly enough, a relatively low growth in the youth age group(ages 15-35). Ward 6 also consists of a relatively high density of rural population, ward 6 suffered the largest decline in rural population of all the wards in percentage. See page **Error! Bookmark not defined.** for more detail concerning rural/urban comparisons.
- Ward 7 counted a less than average growth from 2001-2011. The growth category is primarily the more senior component of the labour force. It recorded a negative growth for children and youth.
- Ward 8 experienced above average growth, except for senior citizens. It is interesting to note that the growth pattern is consistent over children, youth and the 36-65 age group of the labour force. This is a possible indication that the communities in ward 8 is stabilised and not experiencing so much migration as other communities in Hessequa.

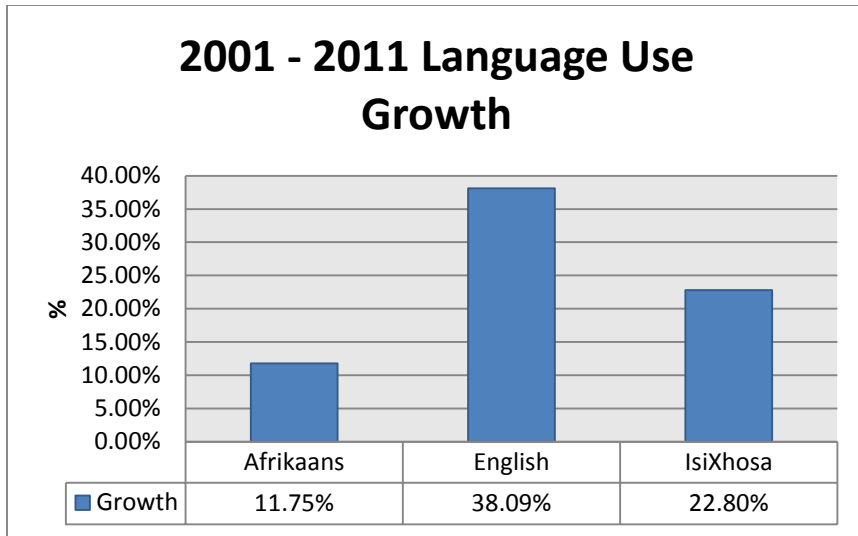


Figure 6 - Language Use Growth

Figure 4 shows the language growth in Hessequa, comparing the 3 main languages used in Hessequa. Figure 5 shows the percentage language use in Hessequa in relation to the other 8 official languages of South Africa (Other). Clearly Afrikaans is the language spoken the most to a total of 90%. English growing to 4% and IsiXhosa 2%.

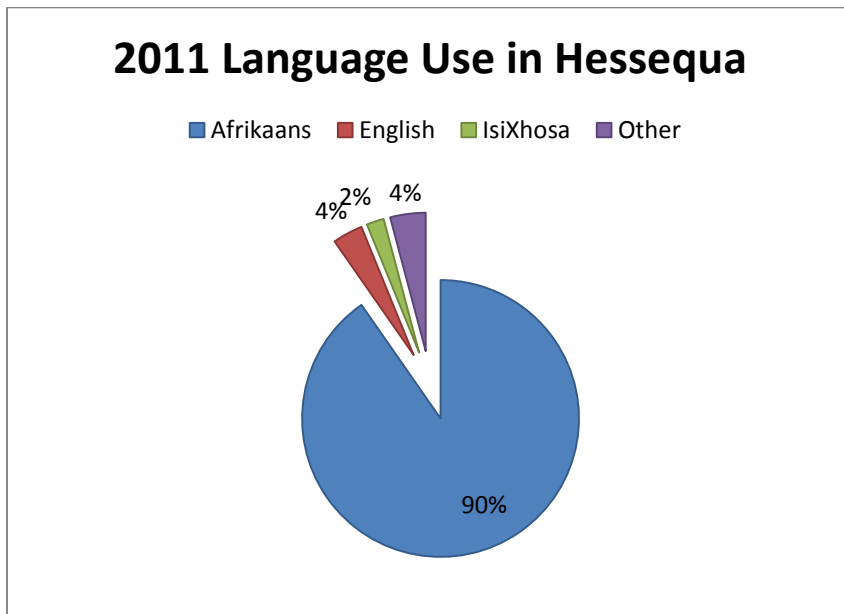
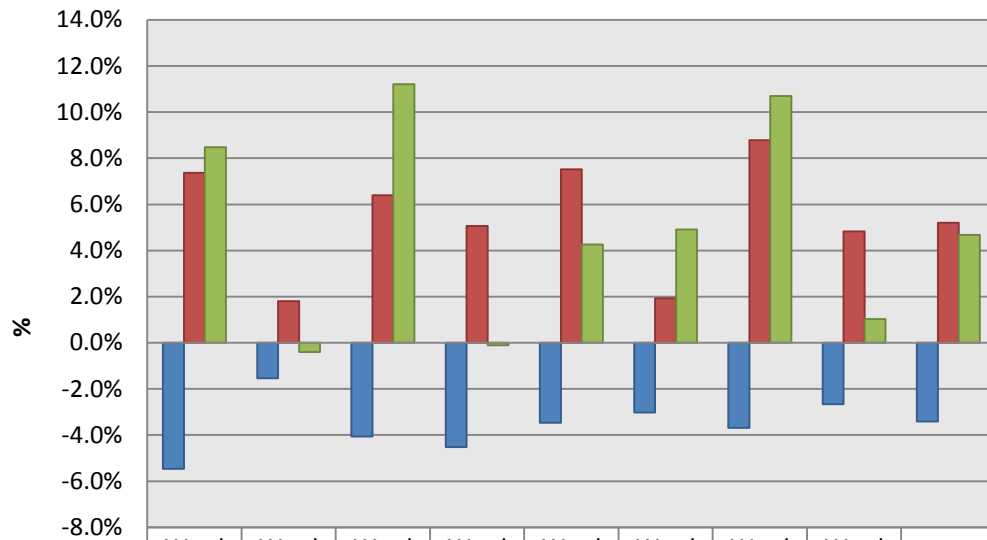


Figure 7 - Language Use Percentage

2001 - 2011 % Growth in Educational Levels per Ward



	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
No schooling	-5.5%	-1.5%	-4.1%	-4.5%	-3.5%	-3.0%	-3.7%	-2.7%	-3.4%
Grade 12 / Std 10 / Form 5	7.4%	1.8%	6.4%	5.1%	7.5%	1.9%	8.8%	4.8%	5.2%
All Other Total	8.5%	-0.4%	11.2%	-0.1%	4.3%	4.9%	10.7%	1.0%	4.7%

Figure 8 - Education Levels Growth

Education is one of the most important statistical analysis indicators to come to grips with what is going on in a community’s well-being. Hessequa experienced a positive shift towards better educational levels per applicable person during the last 10 years across the region, however it is important to mention a fractional decline in education levels in Ward 2. This is really troublesome as it needs to be investigated as it is an isolated statistic within the region. The key indicators for educational levels are No Schooling & Grade 12(Matric). As development requires, no schooling should be in decline and the amount of children completing school should be getting better. This is the fact in Hessequa with an average growth of 5.2% in children finishing Grade 12.

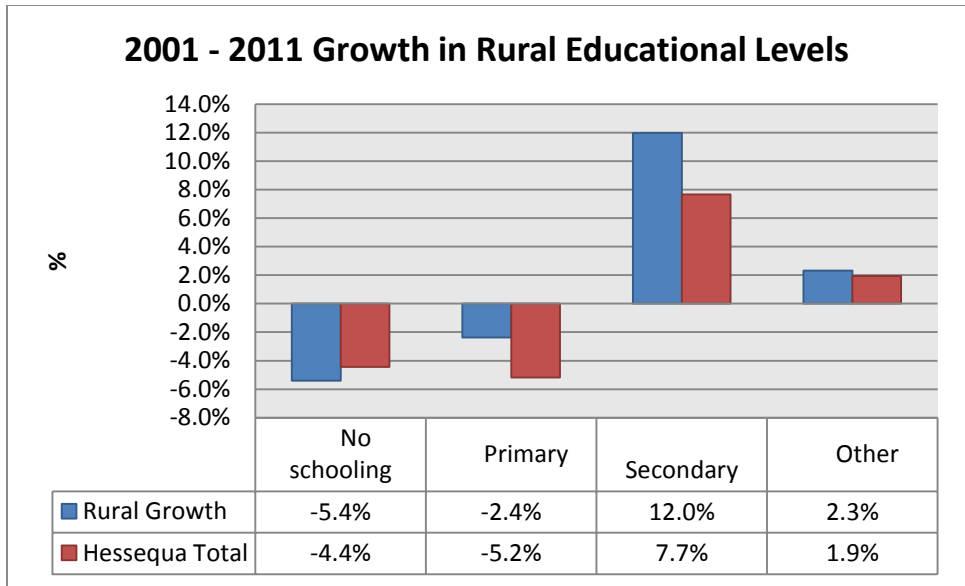


Figure 9 - Rural Educational Levels Growth

An important statistic to look at is the difference between the educational levels of people in the urban areas and that of those in the rural areas. Figure 7 clearly shows how far the rural resident in general is behind the urban resident who is exposed to much more opportunities. This information should be the starting point for various services of government to consider. In general one could say that the rural areas are about 6-8 years behind in development to that of urban residents and is shown in Figure 8.

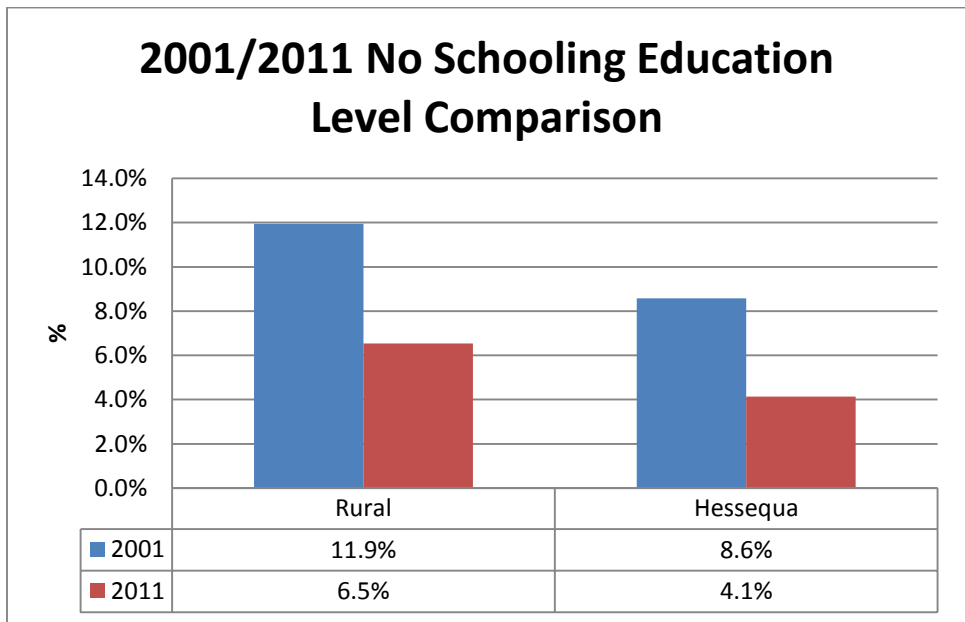


Figure 10 - Urban / Rural No Schooling Comparison

Rural Profile

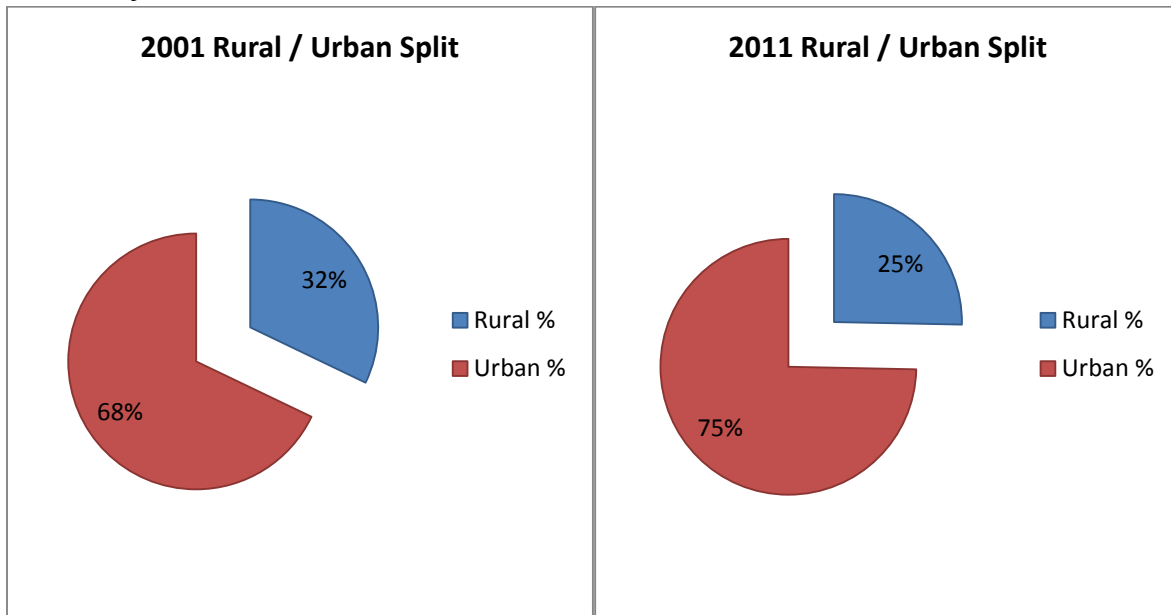


Figure 11 – 2001 & 2011 Rural / Urban Split

In Figure 9 we see the drastic decline in rural population from 2001 to 2011. The question remains, where are these people going? The general assumption is that when people leave the farm, they end up in informal structures in an urban environment and needs to be helped through the low cost housing schemes of the municipality. Other datasets have indicated that labour absorption in the commercial agricultural sector almost halved over the last 10 years. The population statistics really proves this to be true.

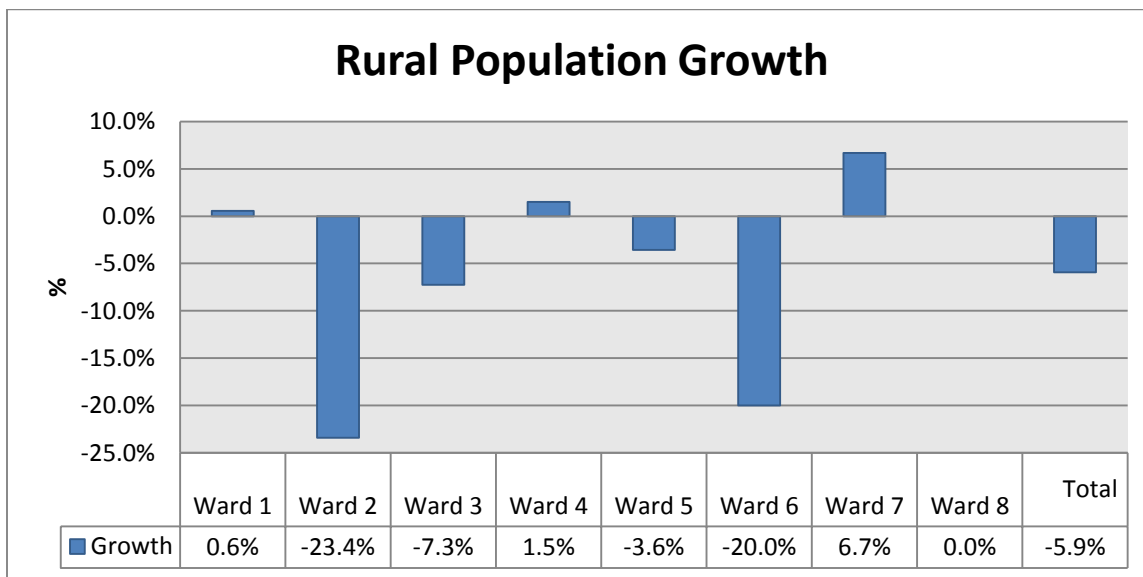


Figure 12 - Rural Population Growth

Figure 10 shows the growth in rural areas. Hessequa in general shows a negative growth of -5.9% in the rural areas. Ward 7 alone shows a reasonable amount of growth, but still far below the general growth rate of Hessequa of 16.2%

Table 1 gives a detailed breakup of gender and total population per ward for the rural and urban areas. The important column in Table 1 is the growth figures. We can see the negative growth of wards 2 and 6.

Table 1- Rural/Urban Population Figures per Ward

Urban / Rural Residents Split & Growth													
	Farms		Small Holdings		Rural Total		Total		Rural %		Growth	Urban %	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011		2001	2011
Male													
Ward 1	943	954	0	0	943	954	3159	3273	29.9%	29.1%	-0.7%	70.1%	70.9%
Ward 2	732	586	364	0	1096	586	2784	3677	39.4%	15.9%	-23.4%	60.6%	84.1%
Ward 3	1530	1394	63	0	1593	1394	2389	2285	66.7%	61.0%	-5.7%	33.3%	39.0%
Ward 4	918	1394	0	73	918	1467	2745	4249	33.4%	34.5%	1.1%	66.6%	65.5%
Ward 5	0	0	183	76	183	76	2714	2766	6.7%	2.7%	-4.0%	93.3%	97.3%
Ward 6	919	597	405	218	1324	815	2829	3275	46.8%	24.9%	-21.9%	53.2%	75.1%
Ward 7	542	949	275	220	817	1169	2699	3146	30.3%	37.2%	6.9%	69.7%	62.8%
Ward 8	0	0	0	0	0	0	2084	2854	0.0%	0.0%	0.0%	100.0%	100.0%
Total	5584	5875	1290	587	6874	6462	21403	25525	32.1%	25.3%	-6.8%	67.9%	74.7%

Continued on next page.

Female													
Ward 1	825	931	0	0	825	931	3296	3471	25.0%	26.8%	1.8%	75.0%	73.2%
Ward 2	716	527	316	0	1032	527	2777	3808	37.2%	13.8%	-23.3%	62.8%	86.2%
Ward 3	1458	1375	36	0	1494	1375	2398	2554	62.3%	53.8%	-8.5%	37.7%	46.2%
Ward 4	818	1247	0	79	818	1326	2759	4207	29.6%	31.5%	1.9%	70.4%	68.5%
Ward 5	0	0	193	85	193	85	3197	3011	6.0%	2.8%	-3.2%	94.0%	97.2%
Ward 6	912	589	159	200	1071	789	2719	3641	39.4%	21.7%	-17.7%	60.6%	78.3%
Ward 7	562	870	275	192	837	1062	3070	3163	27.3%	33.6%	6.3%	72.7%	66.4%
Ward 8	0	0	0	0	0	0	2499	3263	0.0%	0.0%	0.0%	100.0%	100.0%
Total	5292	5539	979	556	6271	6095	22716	27117	27.6%	22.5%	-5.1%	72.4%	77.5%
Total													
Ward 1	1768	1885	0	0	1768	1885	6455	6744	27.4%	28.0%	0.6%	72.6%	72.0%
Ward 2	1449	1113	679	0	2128	1113	5560	7485	38.3%	14.9%	-23.4%	61.7%	85.1%
Ward 3	2989	2770	99	0	3088	2770	4787	4839	64.5%	57.2%	-7.3%	35.5%	42.8%
Ward 4	1736	2642	0	152	1736	2794	5504	8456	31.5%	33.0%	1.5%	68.5%	67.0%
Ward 5	0	0	376	161	376	161	5911	5777	6.4%	2.8%	-3.6%	93.6%	97.2%
Ward 6	1831	1186	564	418	2395	1604	5548	6916	43.2%	23.2%	-20.0%	56.8%	76.8%
Ward 7	1104	1819	550	412	1654	2231	5769	6309	28.7%	35.4%	6.7%	71.3%	64.6%
Ward 8	0	0	0	0	0	0	4584	6117	0.0%	0.0%	0.0%	100.0%	100.0%
Total	10876	11414	2269	1143	13145	12557	44118	52642	29.8%	23.9%	-5.9%	70.2%	76.1%

Household Profile of Hessequa

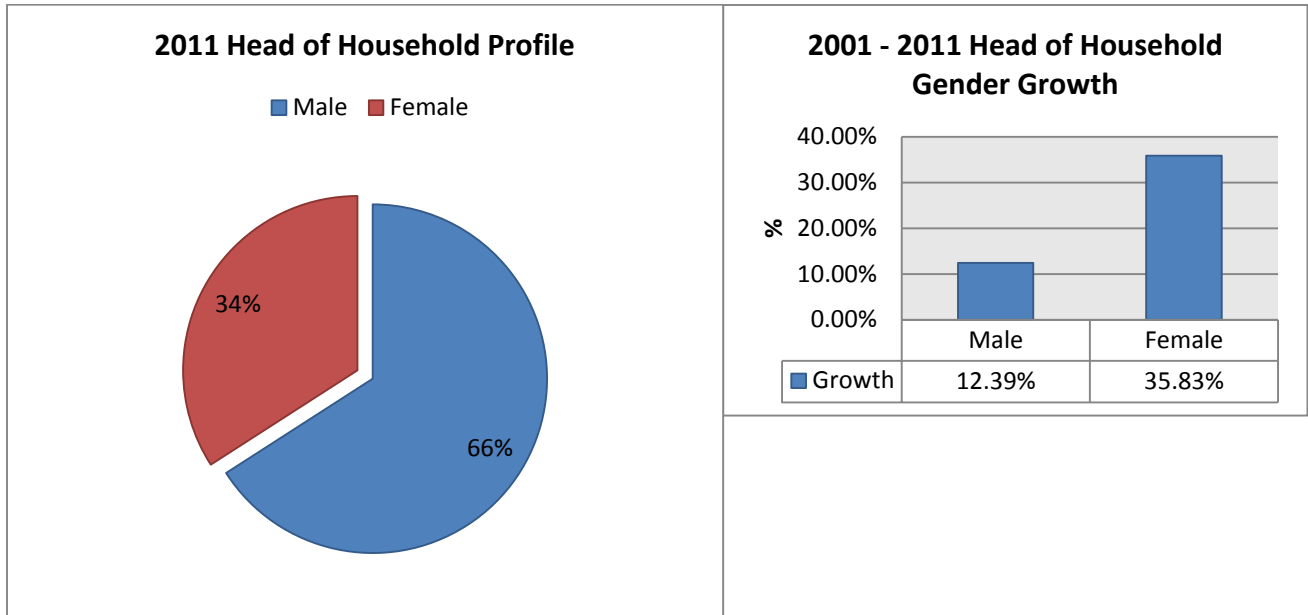


Figure 13 - 2011 Head of Household Profile & Growth Profile

Figure 11 contains information about the 2011 Head of Household Gender and we see that 66% of all households are headed by Males and 34% by Females. The adjoining figure displays the growth between Male and Female headed households and a significant growth in Hessequa was experienced in the number of Female Headed Households. The various factors influencing this growth can be debated; however this profile chooses not to read anything into the statistics.

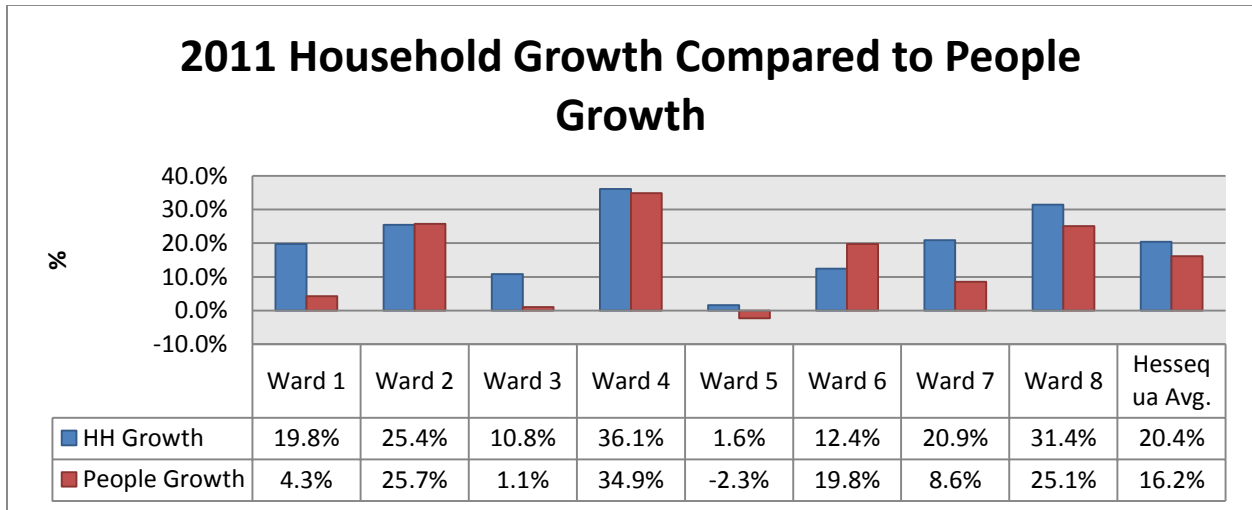


Figure 14 - Household Growth by Ward

Figure 12 compares the growth of population with the growth in households. Individual wards can immediately be identified where the amount of households grew notably. This would then be Ward 2, 4,

7 and 8. These are all wards where major low-cost housing projects influenced the way communities grew. With ward 4 and 5 closely related, the migration of population is clearly visible between these wards.

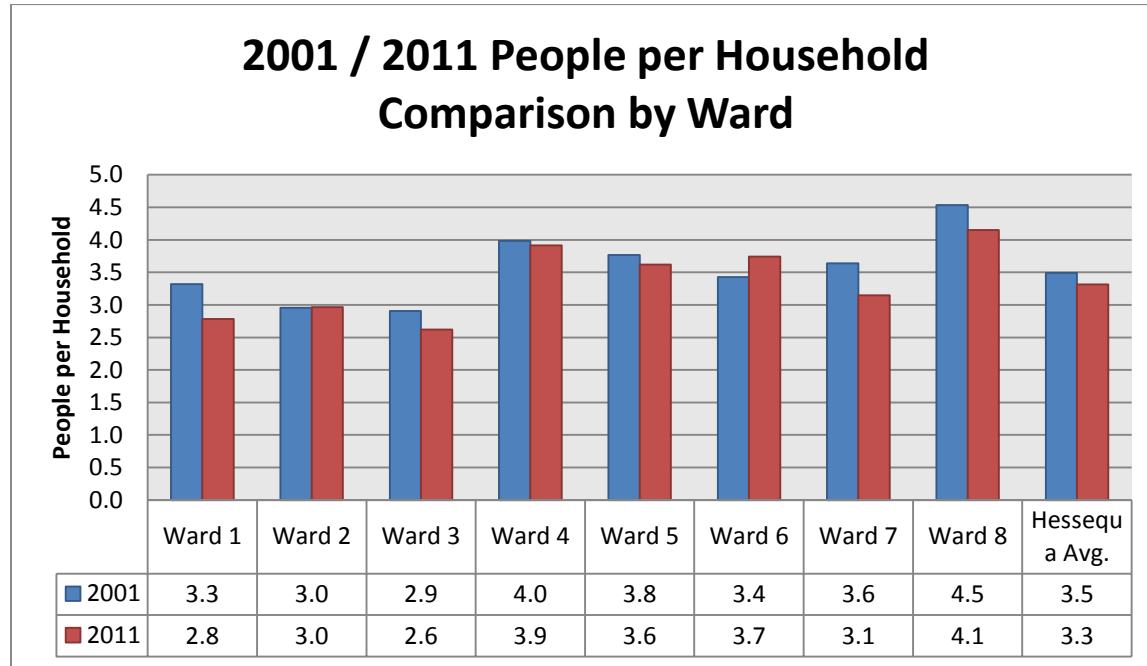
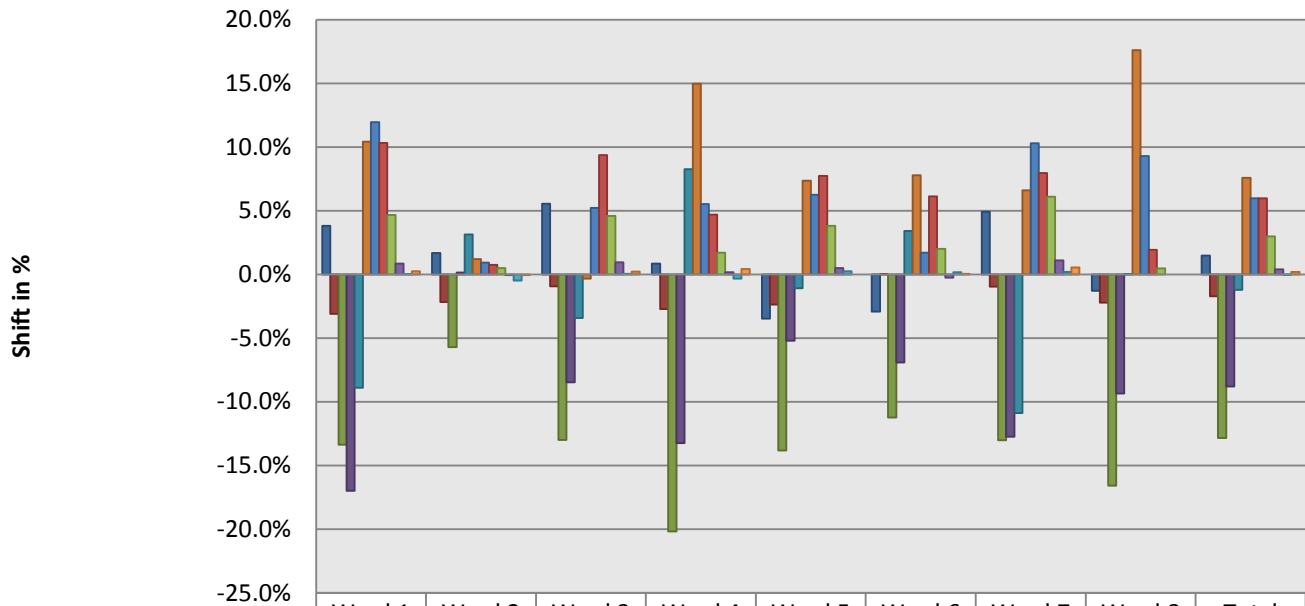


Figure 15 - Average Residents per Household per Ward

To continue with the comparison between population and households, the average amount of people per household is also an important indicator to look at a community to understand the changes within any given area. Two wards do not show positive growth. Ward 2 indicates no growth or decline at all. It remains in 2011 on 3 residents per household in general, which is lower than the Hessequa average. Ward 6 experienced strong population growth, but not equal growth in households which results in an increase in the average household population from 3.4 to 3.7. A possible cause for this, when compared to other information in this profile, is that the immense movement from people from the rural area into an urban environment within the borders of ward 6. Ward 6 is surrounded geographically by the rural areas of ward 7, which would naturally result in people moving to ward 6 or 8 as the urban area of ward 7 mostly consists of middle to high income communities. For the region of Hessequa the average people per household decreased from 3.5 to 3.3.

2001 - 2011 Shift in Annual Household Income (Inflation not Considered)



	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
No income	3.8%	1.7%	5.5%	0.9%	-3.5%	-2.9%	4.9%	-1.3%	1.5%
R1 - R4 800	-3.1%	-2.2%	-0.9%	-2.7%	-2.4%	0.0%	-1.0%	-2.2%	-1.7%
R4 801 - R 9 600	-13.4%	-5.7%	-13.0%	-20.2%	-13.8%	-11.2%	-13.0%	-16.6%	-12.8%
R9 601 - R 19 200	-17.0%	0.2%	-8.5%	-13.3%	-5.2%	-6.9%	-12.8%	-9.3%	-8.8%
R19 201 - R 38 400	-8.9%	3.1%	-3.4%	8.3%	-1.1%	3.4%	-10.9%	0.0%	-1.2%
R38 401 - R 76 800	10.4%	1.2%	-0.3%	15.0%	7.4%	7.8%	6.6%	17.6%	7.6%
R76 801 - R153 600	12.0%	0.9%	5.2%	5.5%	6.3%	1.7%	10.3%	9.3%	6.0%
R153 601 - R307 200	10.3%	0.8%	9.4%	4.7%	7.7%	6.1%	8.0%	1.9%	6.0%
R307 201 - R614 400	4.7%	0.5%	4.6%	1.7%	3.8%	2.0%	6.1%	0.5%	3.0%
R614 401 - R1 228 800	0.8%	0.0%	1.0%	0.2%	0.5%	-0.2%	1.1%	0.0%	0.4%
R1 228 801 - R2 457 600	0.0%	-0.5%	0.0%	-0.3%	0.2%	0.2%	0.2%	0.0%	0.0%
R2 457 601 and more	0.2%	0.0%	0.2%	0.4%	0.0%	0.1%	0.5%	0.0%	0.2%

Figure 16 - Annual Household Income

The figure above does a comparison of annual household income between all households per ward, and in total, for 2001 and 2011. It is important to note that this figure does not represent the total amount per category, but rather the change in contribution to a particular income category. If a specific category's value is negative, it implies that the contribution in terms of households within that given category have decreased since 2001. The most notable change is the decrease in average households living in the smaller income categories and the larger portion of households who are forming part of the larger income categories. The graph in general shows a shift in all households towards the larger income categories. Even though the general picture looks good for Hessequa as the average household income have improved, this chart also shows a bit of a negative reality. Wards 1, 3 and 7 showed a very strong growth in the amount of households which do not have an annual income. The stranger aspect of this is that these 3 wards would in general always be considered to be the "higher income" wards. Secondly it can also be interpreted as a symptom of a semi-stagnant economy. It shows that those who do have a form of income have developed over the last 10 years, but it also shows the reality that new labour opportunities are not created.

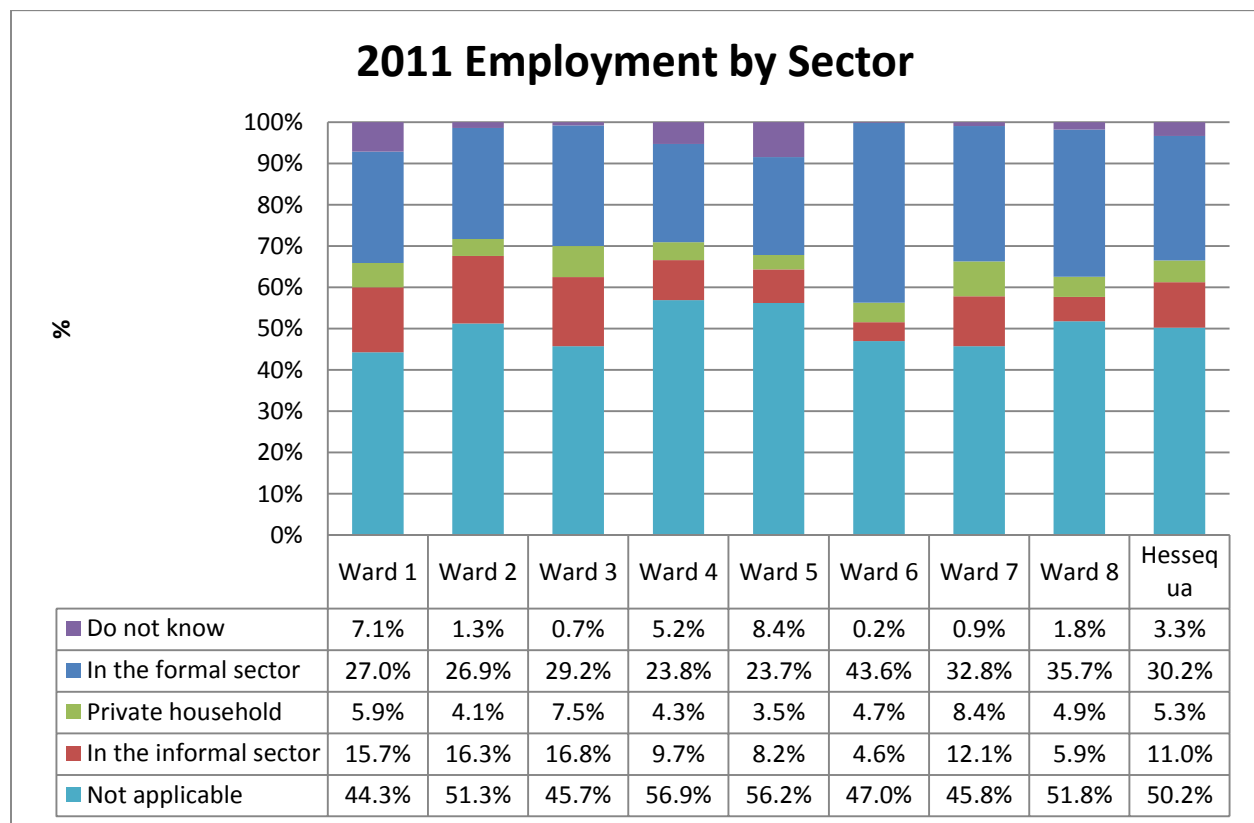


Figure 17 - Employment by Sector

The above figure shows the employment percentages by employment sector. The low percentages in the formal sector is troublesome to note. A second issue that needs attention is the vast percentages of

people represented by the “not applicable” category. Also important to note is that these figures are all based on the official definitions of employment.

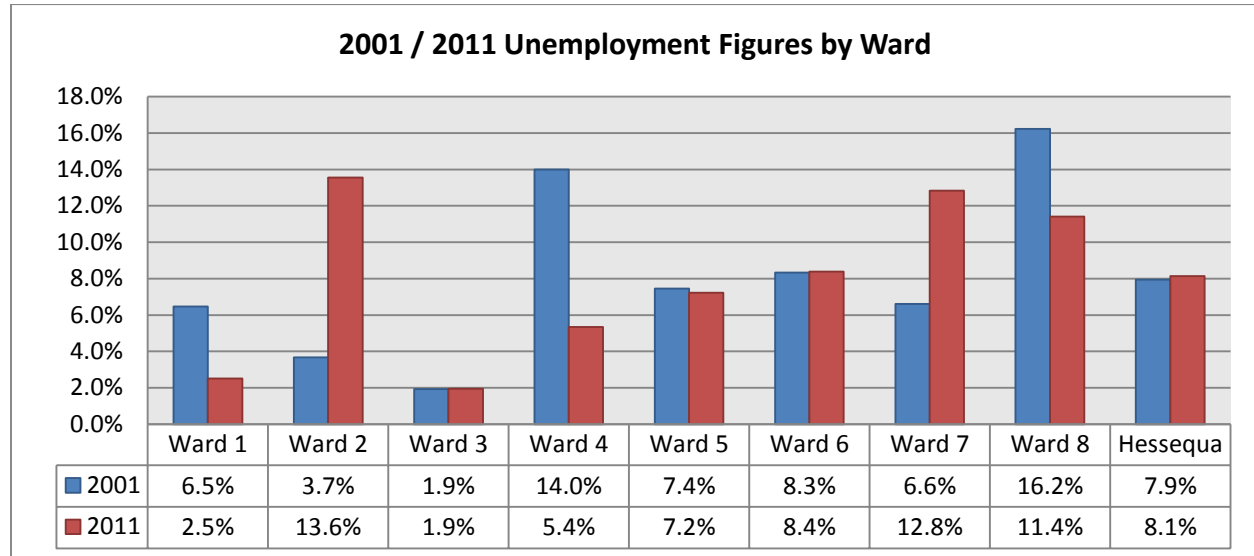


Figure 18 - Unemployment Figures, Official Definition

The official definition of unemployment could sometimes be a bit of a controversial subject, but these figures show clearly that in Hessequa unemployment went up in general to 8.1%. Ward 4 showed an immense decline in unemployment, which is comforting to see, but in ward 2 and 7 these figures are troublesome to note a strong growth in unemployment.

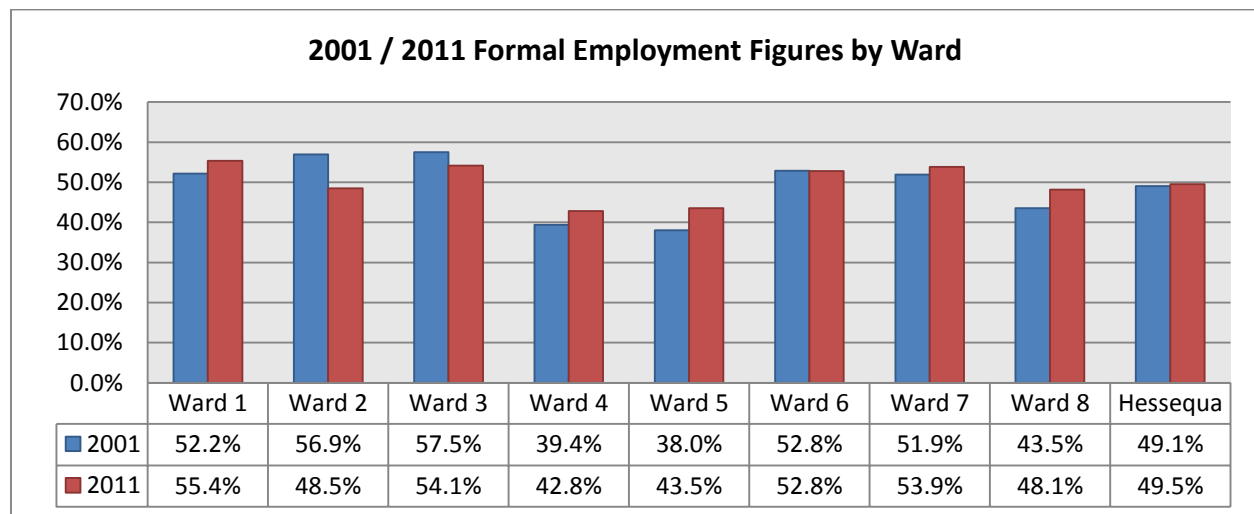


Figure 19 - Formal Employment

The figure above shows the percentage of population per ward who is formally employed, irrelevant of which sector. This seems to be in contrast to the unemployment growth and decline on the previous page, which is a clear indicator of economic activity which does not form part of the formal economy. An

informal economy that might possibly be employing people, or being economic inactive. The following figure shows this phenomenon in a more summarised manner. Vast amount of people within the communities of Hessequa cannot be categorised as employed or unemployed.

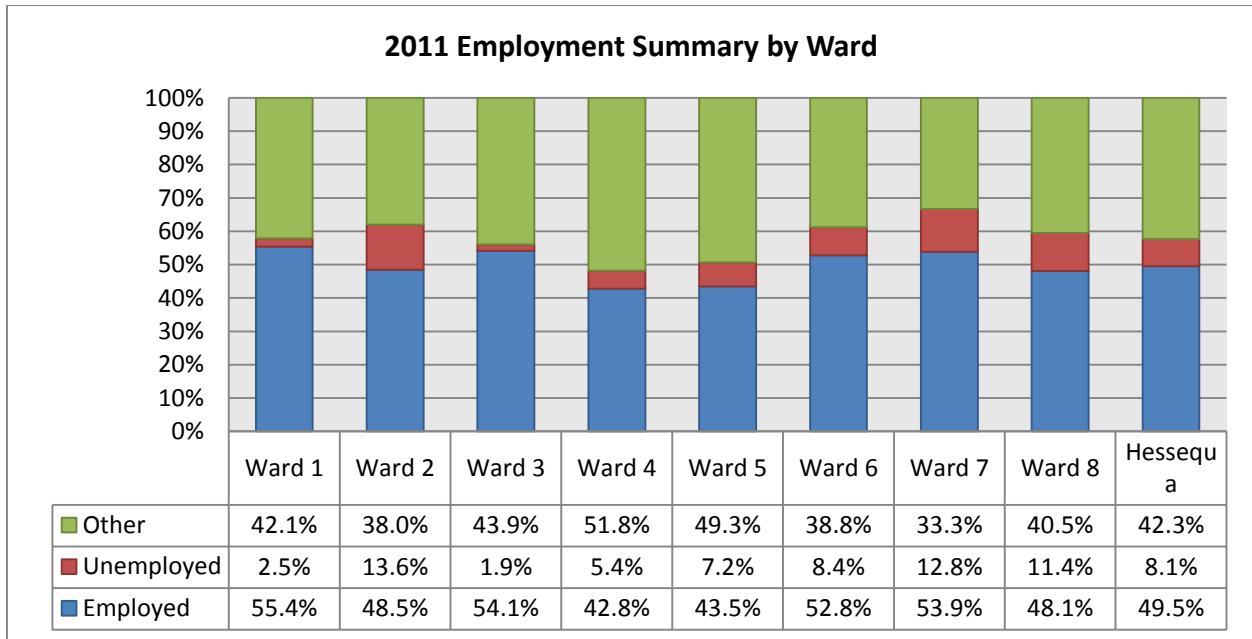


Figure 20 - Employment Summary by Ward

One of the most important outcomes of this profile is Figure 31. It highlights the inefficiency of the conventional “employed/unemployed” measurement. It shows that more than 42% of the labour force cannot be categorised either employed, or unemployed.

There are various factors that are playing a role in these figures. Social grants are possibly the biggest factor, but another phenomenon is that of informal trade. The so-called “informal economy” has become a method of survival for households to secure their own livelihood.

As a result of this inefficiency of measurement, a well-defined project to quantify the reality of the informal economy is advised.

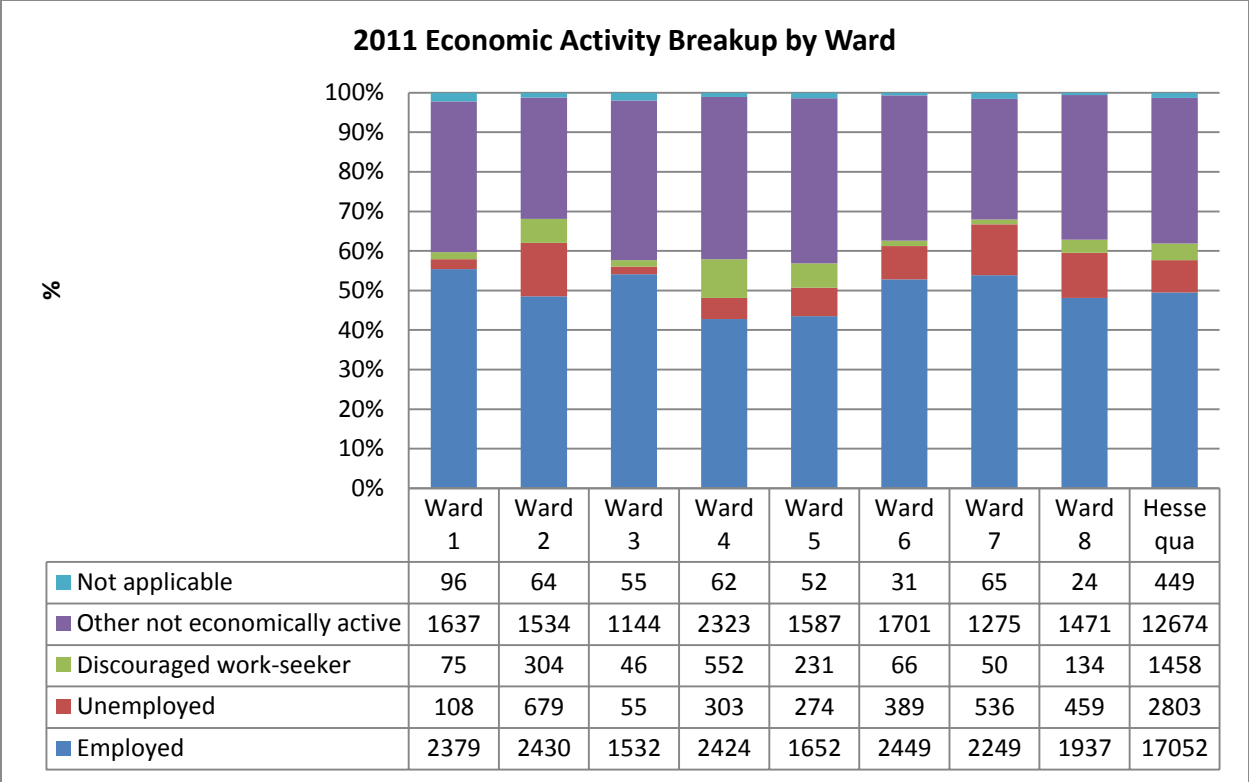


Figure 21 - Economic Activity by Ward

It is important to note the breakup of the composition in economic activity. As councillors and officials, many excuses and complaints are heard about the conditions in which people live. The fact is however, when a clear framework is given, such as the formal definitions of employed, unemployed, etcetera, it is hard to argue the statistics coming from a census, or even a statistically sound sample survey. There are various factors influencing this reality which is displayed in the figure above, but this profile does not seek to engage these factors, but would like to create the platform for robust debate concerning this information and the factors which shape our communities.

Household Tenure Status

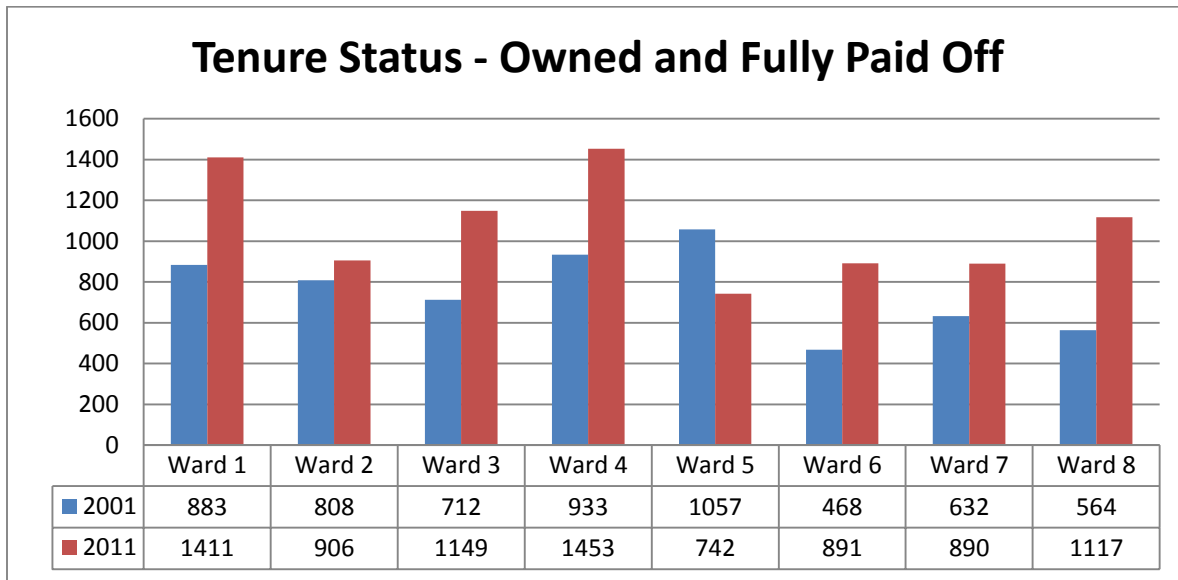


Figure 22 - Tenure Status, Owned and Paid Off Fully

The figures containing information of tenure status can be confusing, as it does not represent percentages that can be compared to one another. It is important to then look at each figure on its own and look at the amounts. The graphs only display the numbers graphically and does not illustrate the statistics within the context of the other indicators listed in this section. Figure 14 shows that the amount of fully paid off households increased in every ward throughout Hessequa region.

Figure 15 shows the amount of people living in a residential unit which is owned but not yet paid off. The statistics differ depending on ward.

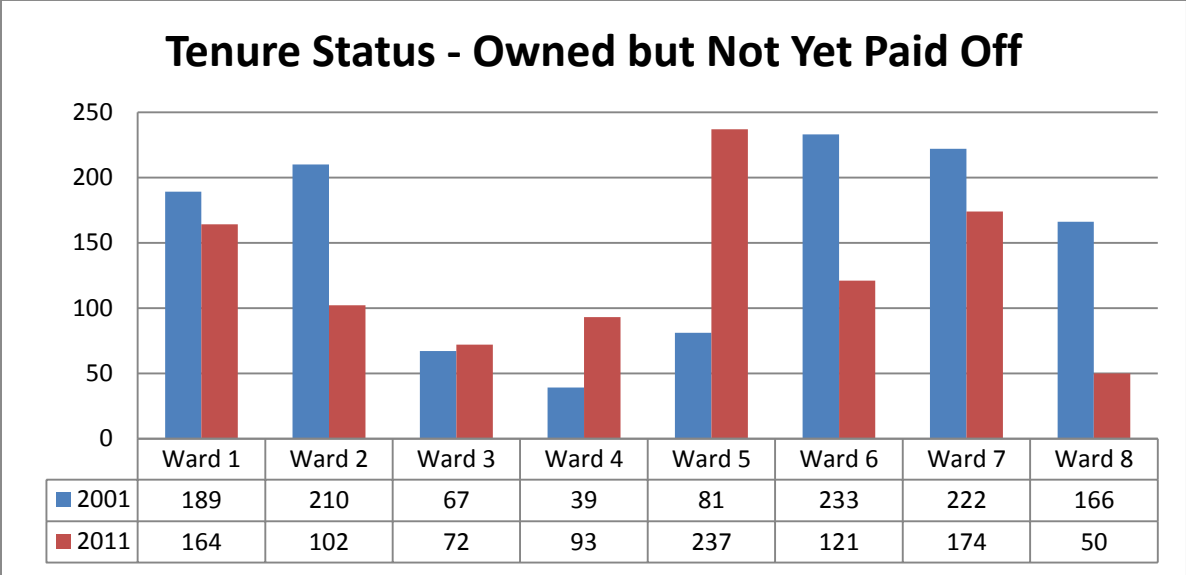


Figure 23 - Tenure Status, Owned but not yet Paid Off

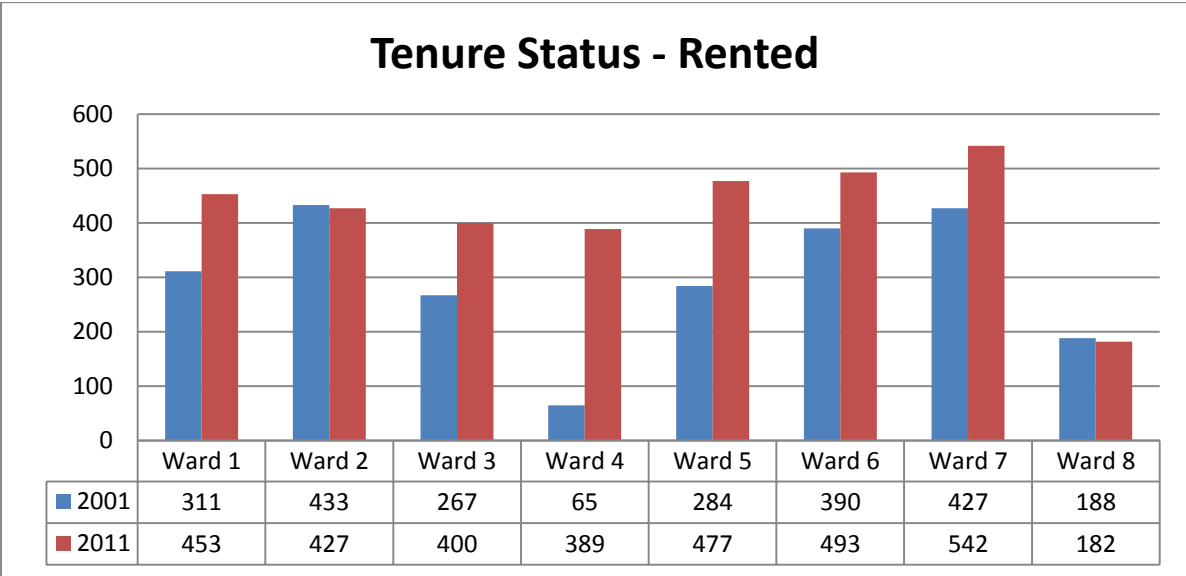


Figure 24 - Tenure Status - Rented

Figure 16 shows the amount of households making use of rental units. Once again we see the impact of a population that is growing in general with a sharp increase in demand for rental units. However this is not true for communities in Ward 8 and 2. This could be due to 2 very large low-cost housing projects being completed in these wards with people receiving ownership of their houses.

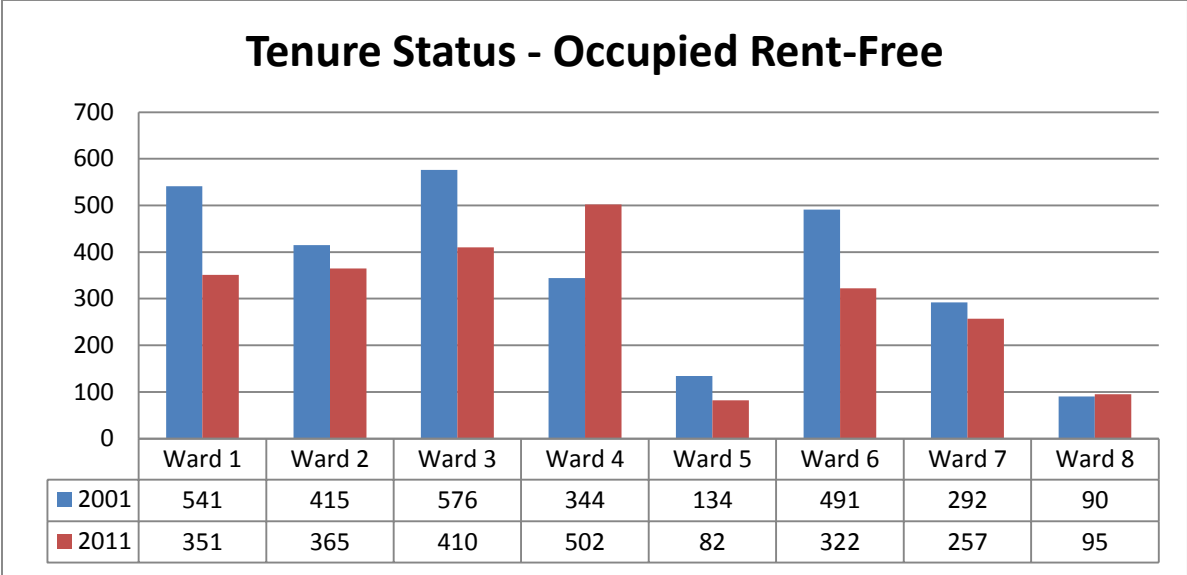


Figure 25 - Tenure Status - Occupied Rent Free

Figure 17 shows the amount of households being occupied by residents without paying any rent. The amount differs vastly between wards with wards 4 being affected the most.

Household Services Profile of Hessequa

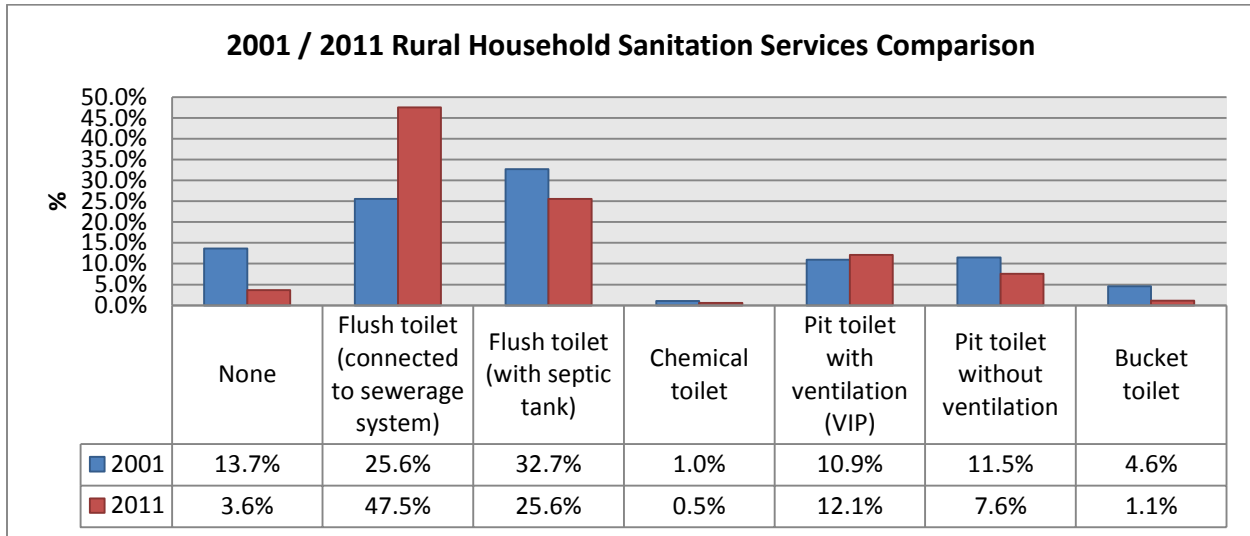


Figure 26 - Rural Household Sanitation Services

As already mentioned, Hessequa consists of large rural areas and would it be important to separate the services profile between rural and urban. Many times the services profile differs vastly between urban and rural areas and if it is not separated, the general standard of service delivery, in urban areas specifically, would be negatively affected. On the other hand it might be interpreted that most areas do not have service delivery issues, but the rural households in general are far worse off than the average urban household in terms of services rendered. We do however see a vast improvement in rural sanitation services from 2001. The amount of households making use of a flush toilet system doubled and the amount of households making use of illegal bucket systems are less than a quarter of what was in 2001.

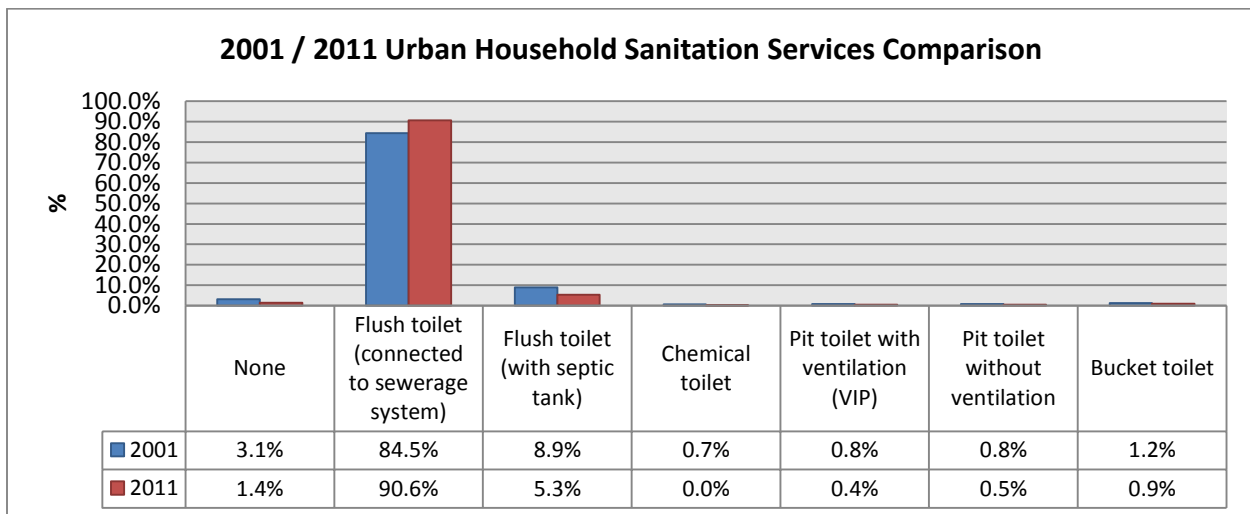


Figure 27 - Urban Household Sanitation Services

In terms of urban areas, a growth to almost 91% for water born sanitation systems realised by 2011.

2001 / 2011 Hessequa Average Household Sanitation Services Comparison

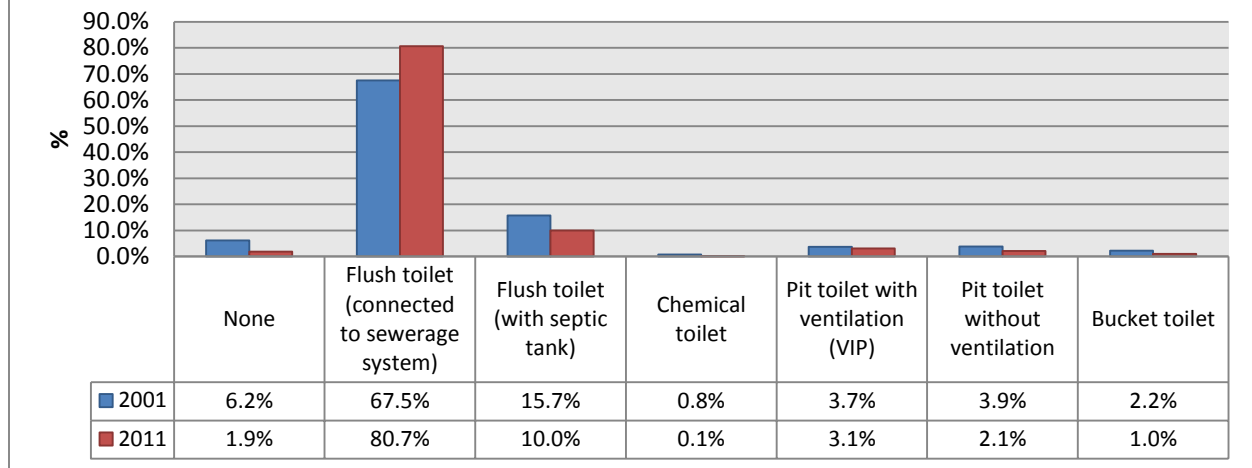


Figure 28 - Hessequa Average Household Sanitation Services

Figure 20 shows the general figures for the Hessequa region and immediately it is clear how the realities of the rural areas almost vanish as the overall picture does look good. In other words, it remains important to separate urban and rural figures when it comes to services rendered as the municipality is only directly responsible for the urban residents. This should be used to measure performance of a local council, but on the other hand the importance of development in rural areas can be isolated and focused on as an issue that needs desperate attention.

For more detailed information about sanitation services broken down in ward levels as well, please refer to Table 2 on the following page.

Table 2 - 2001 / 2011 Detailed Household Sanitation Services Comparison

2001 / 2011 Detailed Household Sanitation Services Comparison																		
	Ward 1		Ward 2		Ward 3		Ward 4		Ward 5		Ward 6		Ward 7		Ward 8		Total	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Rural																		
None	65	44	128	18	85	29	37	22	21	0	70	7	89	11	0	0	496	133
Flush toilet (connected to sewerage system)	42	292	70	103	181	291	58	526	36	23	314	94	228	414	0	0	929	1743
Flush toilet (with septic tank)	294	232	249	132	287	236	221	44	21	0	93	212	24	80	0	0	1189	937
Chemical toilet	0	3	0	0	6	10	28	3	0	0	0	0	3	4	0	0	37	20
Pit toilet with ventilation (VIP)	97	46	35	82	172	134	24	91	18	11	39	48	12	31	0	0	397	443
Pit toilet without ventilation	62	45	151	32	81	110	84	26	6	1	3	45	30	18	0	0	417	277
Bucket toilet	6	18	42	0	60	7	0	4	0	2	25	4	33	5	0	0	167	41
Total	566	696	675	371	872	829	451	725	102	48	545	415	420	582	0	0	3631	3667
Urban																		
None	6	28	9	12	27	2	30	49	45	2	128	29	6	34	31	8	282	166
Flush toilet (connected to sewerage system)	1232	1530	955	2054	732	933	679	1118	960	1407	933	1324	1145	1280	961	1418	7596	11064
Flush toilet (with septic tank)	139	123	212	80	3	76	53	164	371	99	3	11	0	86	18	13	799	652
Chemical toilet	3	0	0	1	0	0	50	0	3	1	0	0	3	1	0	0	59	3
Pit toilet with ventilation (VIP)	3	1	6	2	3	2	55	34	6	7	0	3	0	0	0	3	73	52
Pit toilet without ventilation	0	2	18	1	0	0	45	30	3	5	3	8	3	3	0	9	72	59
Bucket toilet	0	14	0	1	9	0	15	9	81	24	0	47	3	4	3	10	111	110
Total	1383	1729	1201	2151	774	1016	927	1434	1468	1547	1067	1433	1160	1422	1013	1474	8993	12206
Total																		
None	71	73	137	30	112	32	67	72	66	2	198	37	95	46	31	8	778	299
Flush toilet (connected to sewerage system)	1274	1822	1026	2157	913	1224	737	1644	996	1431	1247	1418	1373	1693	961	1418	8526	12807
Flush toilet (with septic tank)	433	355	462	213	290	312	274	209	392	99	96	223	24	167	18	13	1988	1589
Chemical toilet	3	3	0	1	6	10	78	3	3	1	0	0	6	6	0	0	96	23
Pit toilet with ventilation (VIP)	100	47	41	84	175	136	79	126	24	18	39	51	12	31	0	3	470	494
Pit toilet without ventilation	62	47	169	33	81	110	129	56	9	6	6	53	33	21	0	9	489	336
Bucket toilet	6	32	42	1	69	7	15	14	81	27	25	51	36	8	3	10	278	151
Total	1949	2425	1876	2522	1646	1845	1379	2160	1570	1595	1612	1848	1580	2004	1013	1474	12624	15873

This table displays the amounts of households per category, per ward and also for rural, urban and the Hessequa region. Here the decline in rural households are clearly visible with a total of 3631 of the 2001 total of 12 624, which was roughly a third of all households of Hessequa. This number increased barely to 3667, but equates only to about a quarter of the 15 873 households of 2011.

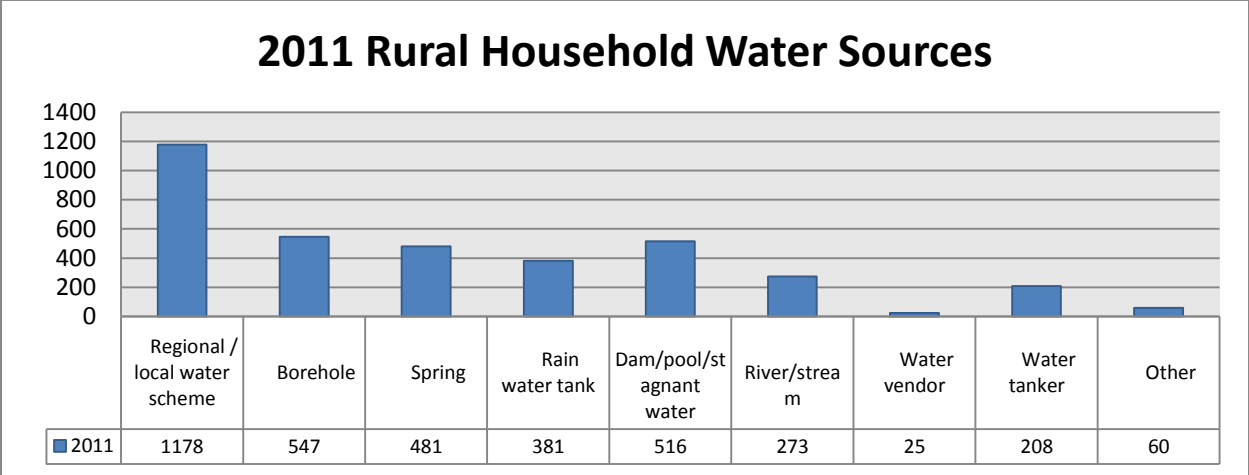


Figure 29 - Rural Household Water Sources

Figure 21 clearly shows the backlogs in terms of water services in the rural areas. Various sources are made use of by households in the rural area. When compared to urban water services, Figure 22 shows the number of households making use of water provided by a services operator.

These figures only denote the 2011 information as a comparison between 2001 and 2011 is not possible due to the indicators being very different from one another. During the 2001 census questions about how far the water source was away from the household was included, but in the 2011 census no reference to distance was made part of the questionnaire.

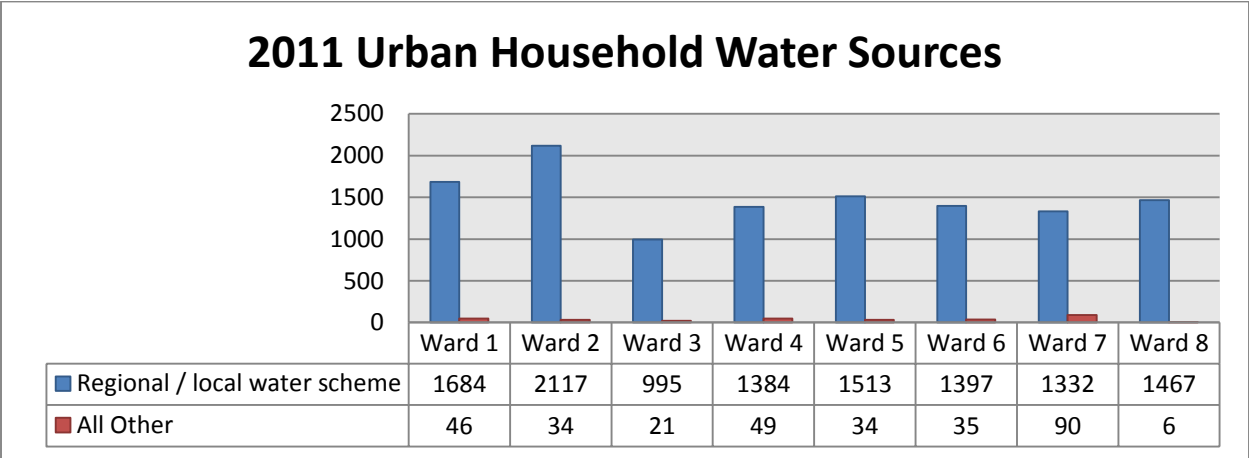


Figure 30 - Urban Household Water Sources

On the following page a detailed breakdown of the rural and urban household statistics are listed in table format for comparing ward information.

Table 3 - 2011 Rural Household Water Sources

2011 Rural Household Water Sources

2011	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
Regional / local water scheme	44	11	264	618	9	34	197	0	1178
Borehole	273	24	222	7	0	5	17	0	547
Spring	187	47	79	0	1	43	124	0	481
Rain water tank	52	143	92	36	0	28	29	0	381
Dam/pool/stagnant water	69	25	64	32	21	171	134	0	516
River/stream	11	75	63	2	6	83	33	0	273
Water vendor	3	2	7	3	0	9	1	0	25
Water tanker	47	45	26	10	9	37	32	0	208
Other	10	1	10	17	1	4	16	0	60
Total	696	371	829	725	48	415	582	0	3667

Table 4 - 2011 Urban Household Water Sources

2011 Urban Household Water Sources

2011	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
Regional / local water scheme	1684	2117	995	1384	1513	1397	1332	1467	11888
All Other	46	34	21	49	34	35	90	6	317
Borehole	7	8	2	3	1	3	7	1	32
Spring	7	5	0	3	2	0	16	1	35
Rain water tank	5	7	1	1	2	1	6	1	24
Dam/pool/stagnant water	8	0	12	28	18	9	18	0	92
River/stream	2	0	0	0	0	2	2	1	7
Water vendor	3	4	3	0	3	1	24	0	38
Water tanker	12	9	1	3	2	8	14	1	51
Other	2	1	2	11	6	11	3	1	38
Total	1729	2151	1016	1434	1547	1433	1422	1474	12206

Refuse removal is not a service that is rendered to rural communities, but it is important to separate the rural and urban statistics to get a clear picture of the levels of service delivery in the urban areas as all information is demarcated in wards

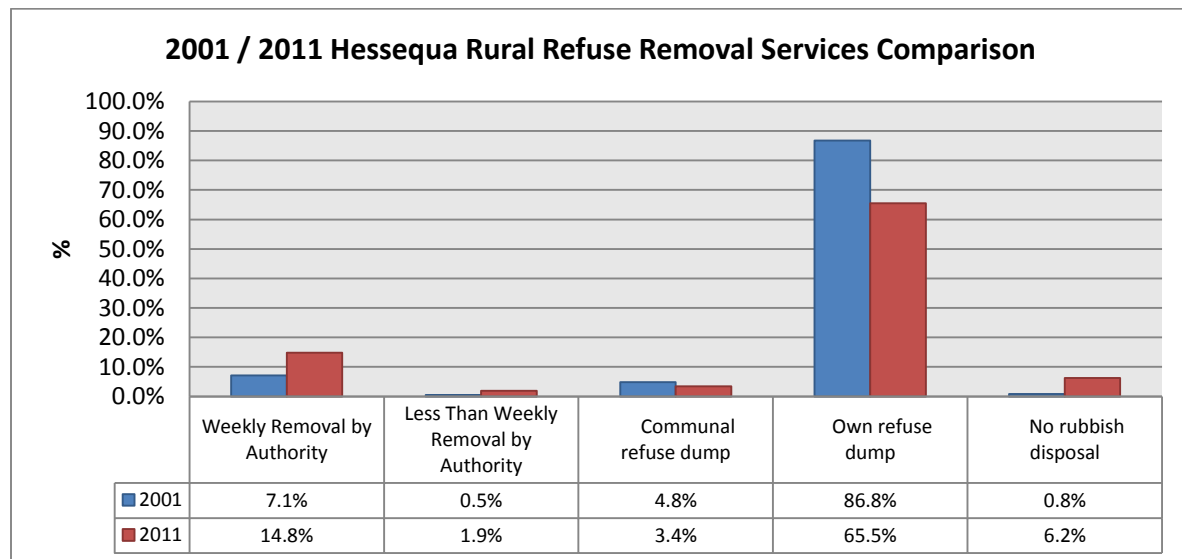


Figure 31 - Rural Refuse Removal

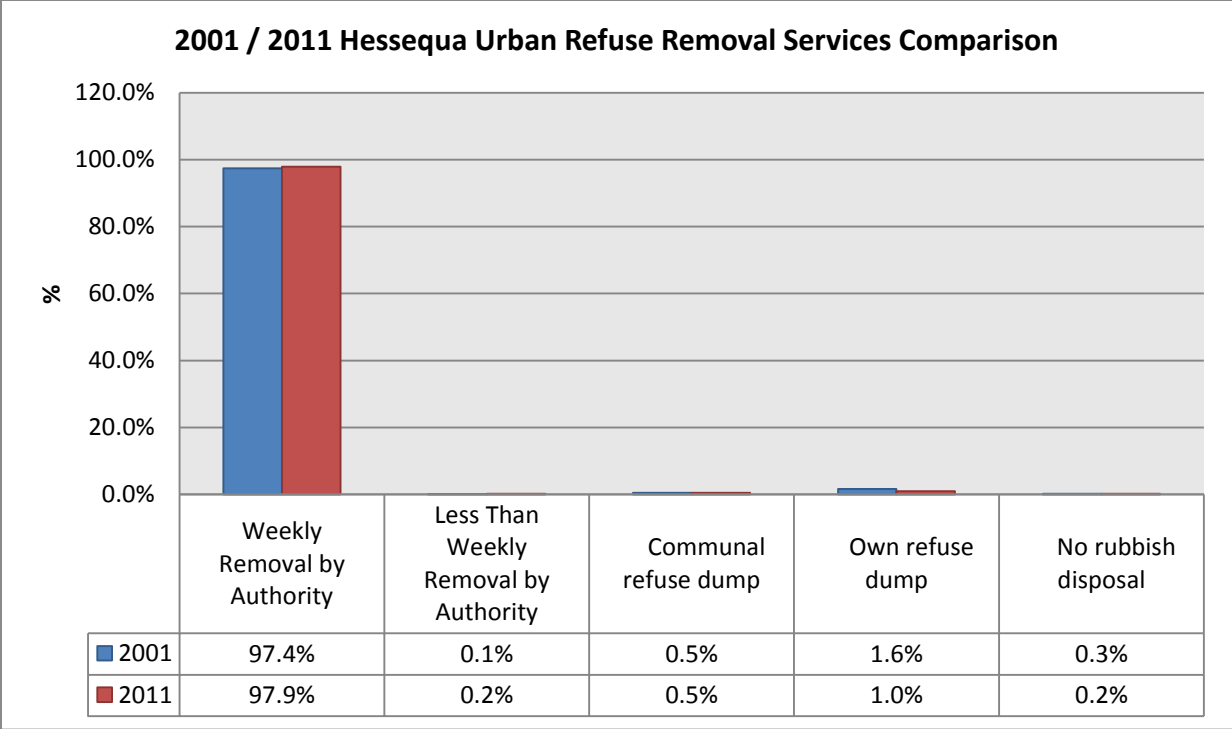


Figure 32 - Urban Refuse Removal

Hessequa has always been proud of the high quality of refuse removal services it renders to its communities. It is good to notice the slight improvement from 97.4% to 97.9% in weekly removal throughout the financial year.

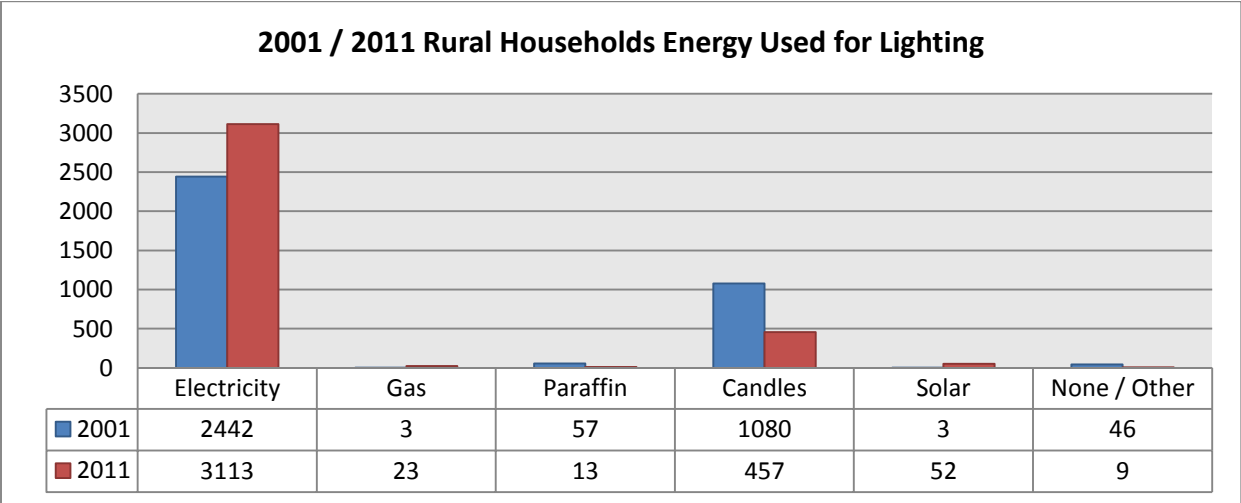


Figure 33 - Rural Households Energy Used for Lighting

In terms of the energy used for lighting in rural areas it is comforting to see the rapid decline in the amount of households which uses candles as primary energy source for lighting. It is also interesting to note the rise in amount of solar or alternative energy usage in households. A decline in paraffin usage is also noted.

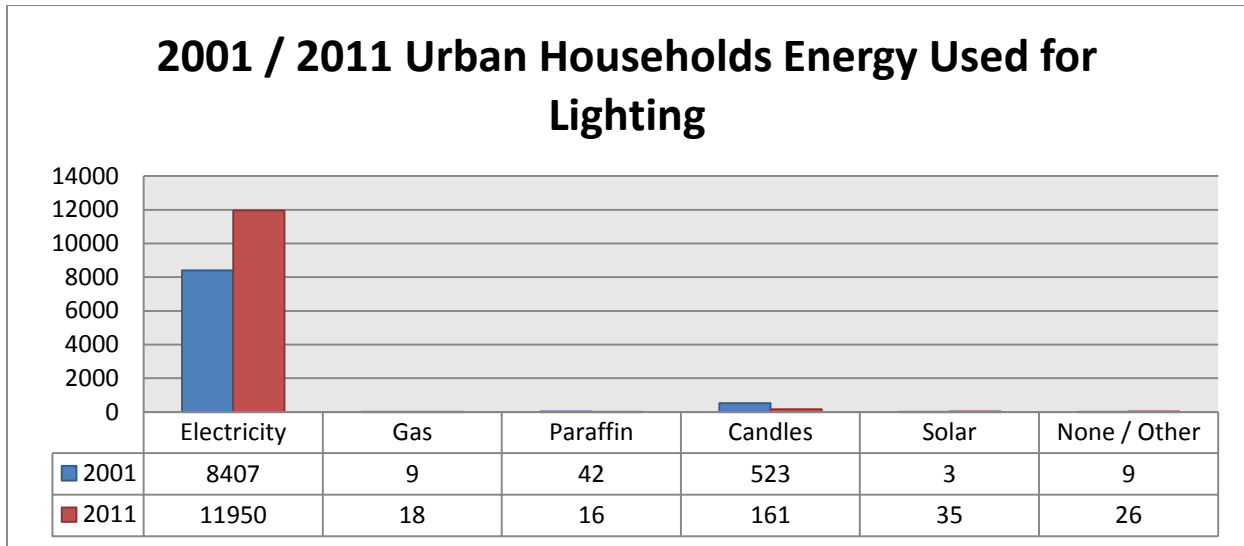


Figure 34 - Urban Households Energy Used for Lighting

In terms of urban households energy usage for lighting, the sharp rise in electricity usage and decline in the amount of households making use of candles is a vast improvement. Once more the usage of alternative energy sources have improved.

The table on following page gives a detailed breakdown of energy usage statistics for Hessequa by ward.

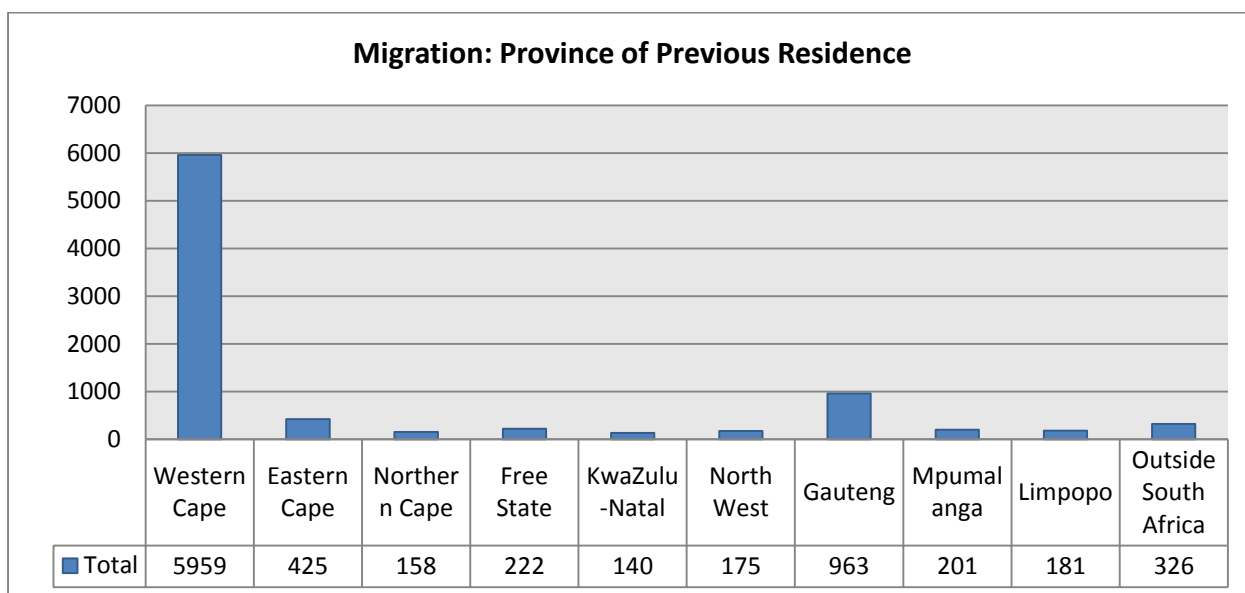
Table 5 - 2001 / 2011 Household Energy for Lighting Comparison

2001 / 2011 Household Energy for Lighting Comparison

	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total									
Rural																		
Electricity	381	546	416	310	543	651	321	661	66	40	401	373	315	532	0	0	2442	3113
Gas	0	5	3	3	0	8	0	4	0	0	0	2	0	2	0	0	3	23
Paraffin	12	10	21	0	3	1	3	1	6	0	12	0	0	0	0	0	57	13
Candles	167	106	229	57	299	148	128	53	30	8	128	39	99	45	0	0	1080	457
Solar	0	29	3	0	0	17	0	2	0	0	0	1	0	3	0	0	3	52
None / Other	6	0	3	2	28	5	0	3	0	0	3	0	6	0	0	0	46	9
Total	566	696	675	371	872	829	451	725	102	48	545	415	420	582	0	0	3631	3667
Urban																		
Electricity	1338	1665	1168	2113	726	1011	790	1397	1305	1512	1037	1406	1112	1389	931	1457	8407	11950
Gas	0	2	0	7	0	2	0	3	6	1	0	0	3	1	0	1	9	18
Paraffin	9	4	0	0	3	0	6	0	15	0	0	9	0	3	9	0	42	16
Candles	33	35	33	20	45	2	129	27	142	29	30	16	45	23	67	9	523	161
Solar	0	15	0	5	0	1	0	3	0	2	0	2	0	3	3	5	3	35
None / Other	3	7	0	7	0	0	3	5	0	2	0	0	0	3	3	2	9	26
Total	1383	1729	1201	2151	774	1016	927	1434	1468	1547	1067	1433	1160	1422	1013	1474	8993	12206

Migration

Migration plays an important role in terms of the Hessequa population landscape. The following indicators attempt to create a profile of who, from where and how much are migrating into the Hessequa region.



Summary and Important Notes

To summarise the profile, the following few notes and comments are stated. It does not seek to encompass all the realities of this profile, but rather focus on issues that most probably will impact planning processes in a municipal context.

1. **Growth.** A positive population growth in Hessequa of 16.19% was recorded for the 2001 – 2011 period. Wards 4 and 5 needs to be singled out as areas where deeper analysis is needed for a clearer picture concerning population migration within the community, but crossing ward borders.
2. **Education.** In general it is a positive picture that is created of the Hessequa educational levels. However it is important to highlight Ward 2 in displaying a significant growth in children and youth, but recording a negative growth in terms of education levels.
3. **Rural Growth.** From the figures it is clearly visible that during the past 10 years a vast amount of people migrated from the rural areas into urban environments. Various factors contribute to this, but issues relating to this needs to be considered in planning and interaction with the various role-players in the Hessequa community.
4. **Rural Development.** As the figures have shown, rural residents have access to much less services and opportunities than an urban resident. Even though municipalities receive a minor tax income from land owners, the future of rural residents needs to be considered in developmental planning.
5. **Household Gender Growth.** As the figures show, there was a large increase in the amount of female headed households. Without trying to enforce a historically male dominated approach, it is important to discuss the effect of policies on the social fabric of any community. Female headed households are in many examples also single parents which, according to welfare institutions, are not the best environment to raise the leaders of tomorrow.
6. **Employment / Economic Activity.** Even with the growth of unemployment to 8.1% for 2011, it is still about half the official unemployment rate of the country. It seems that labour absorption is slow in growth and should the analysis of these economic indicators be considered as a separate process. It is shocking that 42% of the labour force of Hessequa cannot be classified as employed or unemployed. A clear profile of how households do earn an income is needed and should the Social Grant figures also be considered. An in-depth study of the informal economy is advised.

Hessequa Thusong Service Centre Strategic Plan

Vision, Aim and Purpose

- The vision of the department is the social and economic development, upliftment and empowerment of youth, women, the disabled, children, the elderly and people living on the street and people with HIV & AIDS within the boundaries of the Greater Hessequa.
- It plans to do so through a process of facilitation, co-ordination and networking with services rendered by role players (inter-governmental and NGO's) in the field. This does not mean that the department will not undertake programs of its own, but that it will be selective in deciding on programs of own initiative in order to prevent duplication of services.
- Our aim is to ensure that Hessequa Municipality delivers on its mandate as a developmental agent by mainstreaming the Rights Based Approach through all service delivery.
- The purpose of this is to ensure that the rights of the vulnerable people within our boundaries are protected and that cognisance of their needs is taken in service delivery by the Municipality thereby contributing towards poverty alleviation and development among these vulnerable **groups**.

Mission

- Promote integrated Social development and Developmental Social Services that will be accessible, affordable and appropriate to disadvantaged communities.
- To promote Developmental Social Welfare aimed at the youth the aged, disabled persons, families, children and the empowerment of women.
- Promote comprehensive service delivery through a sustainable Multi-Purpose Centre.
- To improve the quality of live of the total community within the Hessequa Municipal area through the provision of appropriate and accessible Developmental Community Services in collaboration with the communities to be served as well as other partners in a suitable manner.
- Promote integrated arts, cultural, capacity building and sport programmes and services that are accessible and address the cultural and recreational needs of the community, with special emphasis on the youth.

The Mission of the Department of Social Development can be proposed as:

To ensure the provision of comprehensive, integrated, sustainable and high quality social development services against vulnerability and poverty, and to create an enabling environment for sustainable development in partnership with those committed to building a caring society

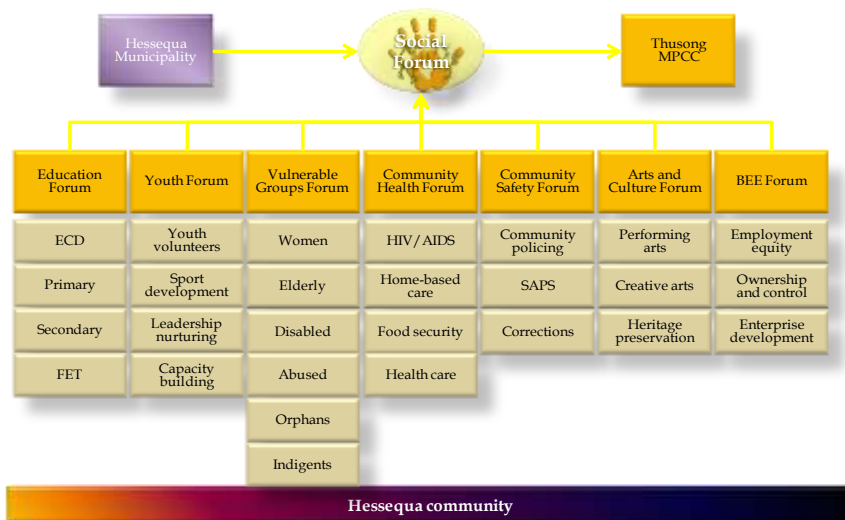
Programme	Action	Objectives	Time frames	Outcomes What impact
HIV / AIDS	<p>Education and awareness, treatment care and special events. These includes:</p> <ul style="list-style-type: none"> Information sessions at taverns, businesses, Distributions of condoms, School camps, training in food gardening, clothing banks and major awareness days on Youth, Women, World Aids day, Heritage day Greate one Youth friendly Health Facility 	<p>To increase the knowledge pertaining the HIV/ AIDS situation.</p> <p>Reducing the amount of new cases of HIV/ AIDS.</p> <p>To urge especially young people to make informed choices regarding their sexual life.</p>	ONGOIN G	<p>To improve the circumstances of Aids orphans</p> <p>To support Aids victims</p> <p>Building of a Healthy community</p>
Substance Abuse	<p>Campaigns (Alcohol and drug abuse and organise crime) Establish support groups</p> <p>Establishment of Substance abuse action committees</p> <p>Youth camps</p>	<p>To increase the size and scope of Substance abuse programmes with the aim on early intervention programmes.</p>	ongoing	<p>Sustainable programs to ensure that especially youth to take control of their own lives.</p> <p>The number of substance abuse action committees established.</p>
Children and Families	<p>Draft policies for youth, gender, disability, children and the elderly and HIV & AIDS</p> <p>Family days</p> <p>Co –ordinate and facilitate services rendered by role players focusing on Families and children</p> <p>Link with relevant service providers providing safety nets and raise awareness</p>	<p>Care , protect and develop vulnerable groups and people with special needs</p>	Ongoing	<p>Establishment of structures for Children and Families in collaboration with role players in the community</p>
Disability Services	<p>Protective workshops/ employment</p> <p>Awareness on the rights of people living with disability</p>	<p>To ensure a more integrated collaborative approach to facilitate the mainstreaming of issues of</p>	Ongoing	<p>To have a disable policy in place to guide council in terms of issues facing people with disability</p> <p>The establishment of policy for disable people to make use of facilities</p>

	Mainstreaming issues affecting people living with disabilities within service delivery of the centre	people with disabilities The economic empowerment of people with disabilities		to gain access to information and buildings
Institutional Capacity	Do skills and needs assessment within the department Capacity building programmes	To equip people with the necessary skills to better their working environment	Ongoing	Number of trained people within the Centre
Youth Development	Projects : Train the trainer workshops (HIV/AIDS, Mentoring and Home based Care volunteers. The establishment of a Hessequa youth council to monitor the needs of young people. HIV/AIDS, Drug& Alcohol abuse, Environmental Management, Crime Prevention awareness programmes. Programmes on career choices, After care, Computer literacy, Drivers licence, Entrepreneurial training, Personal management training etc. Promote sport amongst young people in line with the National Sports and Recreational Plan.	To implement different preventory programmes Life skills development Develop intervention strategies Establishment of a Hessequa youth council Education and Training projects Sport development	Ongoing	Decrease in youth delinquency Alleviation of poverty Decrease in tendency to do crime To Create a self-reliant community
Older Persons	Awareness programs on the rights of older people Service clubs Sporting codes and support programmes for older people	To co-ordinate and facilitate services rendered by role players focusing on older people To be aware of the needs relating to issues of older people and address it	Ongoing	Eradication of violence against older people in communities Increase independence

		through mainstreaming within the IDP of the Municipality and linking them with budget resources and in other spheres of government		
Sport & Culture	Establishment of town sport forums Sporting clinics Infrastructure development Sport Awards Celebrating Cultural days Culture Awareness programmes Library days Literacy days and activities	To promote sport and cultural development as a tool of crime prevention and healthy live stiles within the community	Ongoing	The establishment of a Sport culture within the Hessequa Awareness of our rich cultural heritage by developing a pride in history and culture of our nation, hence bringing together different cultures to celebrate our diversity and togetherness

The establishment of a Hessequa Social Advisory committee and the finalization of the ` is our departments main objective for this financial year.

Hessequa Social Advisory Committee



The sectoral focus areas and their subdivisions relating to specific activities are shown according to the current situation in Hessequa. Strategically Hessequa Municipality needs to coordinate these activities through a Social Forum and provide a central contact point at the Thusong Centre in Riversdale. The composition of the Social Forum can be structured to include the following representatives:

- Municipal representatives
 - Executive, Management, Department
- Sectoral representation
 - Forum chairpersons
- Service organisation representatives
 - Organisation heads
- Centralise actions in Thusong Centre
 - One contact point for social actions

In addition the Municipality can facilitate the dialogue and action by:

- Providing a secretariat
- Mobilising community interns for specific social actions

The Current Hessequa Thusong Service Centre Basket of Services

District Municipality	Local Municipality	Office Space allocation	Service Providers
EDEN	HESSEQUA	Permanent	Cape Access
		Temporary office space	South African Revenue Services (SARS)
			Dept. of Home Affairs
			Dept. of Labour
			CCMA
			CPS

List of Outstanding Departments according to the Six Block Model

Public Services:

Office space Allocation	Service Provider
Permanent	Dept. Home Affairs / Access to official personal documents Dept. Labour / Unemployment Insurance fund, Unemployment Data Base.

Education and Skills Development Services:

Office Space Allocation	Service Provider
Permanent	Dept. Education/ Universities

Local Economic Development:

Office space Allocation	Service Provider
Temporary	SEDA/ Small business advice, support and development

Information and Communication Activities:

Office space Allocation	Service Provider
Temporary	GCIS / Communication of government information and on-site guidance regarding services

Statistics of the Hessequa Thusong Centre (Excluding service Points.)

Service Provider	Public/ Private/Civil Society	Services Rendered	Frequency	Total Beneficiaries reached for annum
Dept. Home Affairs	Public	Registration of births, I.D. documents, passports, etc.	Between 2 and 4 times per month	2560
Dept. of Labour	Public	Applications for UIF and Labour Issues	Twice per month	1191
ALL PAY	Public	Pay Outs	Three times per month	8264
CPS	Public	Re-Registration for grants	2 weeks this annum	1199
SARS	Public	Tax clearances, registrations, education etc.	Once per month	569
CCMA	Public	Hearings	Three/ Four times per month	439
SEDA	Public	Entrepreneurship/Small Businesses	Once or Twice per month	262
CAPEACCESS RIVERSDALE e-Centre	Public	E-Centre (Free Computer & Internet Access)	Situated within the Thusong Service Centre	4 529
SASSA	Public	Applications for grants	(Temporary) 2 days per week	612
Meetings/ Ngo's/ Political organisations/ Local Municipality/ Hall bookings (weddings, birthdays etc.)	Civil Society	Conference and Hall facilities	Monthly/ Weekends	6 023

TOTAL BENEFICIARIES REACHED THIS ANNUM: 25648

Plan of Action to address community needs

Hessequa Thusong Service Centre Action Plan				
	Action	Responsible official	Stakeholders involved	Timelines
	Establish a permanent Home Affairs office at the Thusong Service Centre			
	To have follow up meetings with the Department of Home Affairs on the commitment letter to open a permanent office at the Thusong Centre	Thusong Service Centre Manager and Manager Social Development	Thusong Service Centre Manager, Manager Social Development and Regional Home affairs office	August 2014
	Council has already approved the establishment of a permanent office			

Expanding the education services offered at the Thusong Service Centre				
	A Telematic centre has been established in the centre for distance learning			

Establishing a Temporary SEDA office at the Thusong Service Centre				
	Arrange a meeting with the SEDA Regional office	Thusong Service Centre Manager and Manager Social Development	Thusong Service Centre Manager, Manager Social Development and Regional SEDA office	June 2014 (SEDA DO VISIT THE CENTRE TWICE PER MONTH)

Establishing a Temporary GCIS office at the Thusong Service Centre				
	Arrange a meeting with the GCIS Regional and Provincial office	Thusong Service Centre Manager and Manager Social Development	Thusong Service Centre Manager, Manager Social Development and Regional and Provincial GCIS office's	July 2014

Financial Model

Local:	<ul style="list-style-type: none"> • Lease Agreements (Rental Revenue) • Infrastructural Maintenance • Municipal Services • Operational and Programme Funding
Provincial:	<ul style="list-style-type: none"> • Operational Funding - Human Resources • Market Related Rent • Programmefunding • Training
National:	<ul style="list-style-type: none"> • Capital funding • Operational and Programme funding

Budget

2012/2013	2013/2014	2014/2015	2015/2016
R 88 000	R 145 780	R 86 208	R 146 874

Budget Breakdown

Financial Year	Description
2012/ 2013	The amount of R 88 000 was allocated for general repairs and maintenance, the painting of the building furniture and equipment and disabled toilet.
2013/2014	The amount of R 145 780 has been allocated , the breakdown is as follows: R 30 000 – Paving R 30 000 – Fencing R 85 780 – General repairs and maintenance
2014/2015	R 86 208 – General repairs and Maintenance
2015/2016	The amount of R 146 874 has been allocated, the breakdown is as follows: R 60 000 – Lappa at braai area R 86 874 – General repairs and maintenance

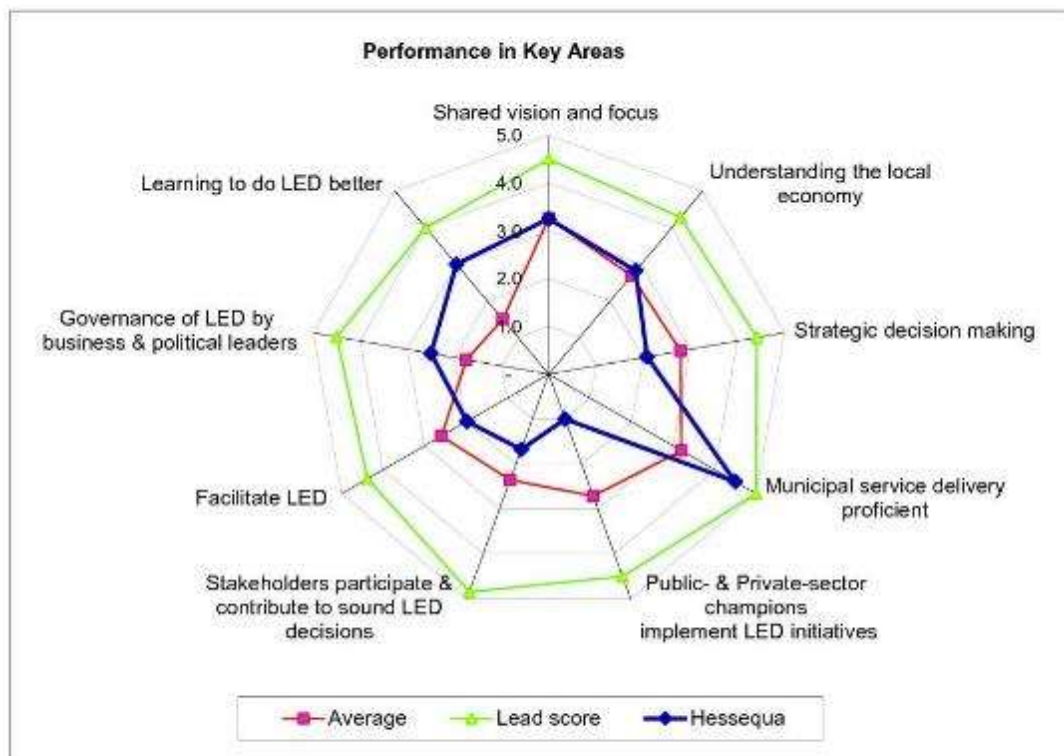
Chapter 4 – Economic Growth

PDO 9: LED AND TOURISM INITIATIVES

PDO:	#9	Implement LED and Tourism Initiatives through the implementation of the LED Strategy		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Strategy	Economic Development Strategy	Draft	2014

Economic Analysis

The state of LED maturity of the municipality was assessed in January 2013. The municipal performance in the 9 key performance areas is depicted in more detail on the radar plot. This is compared with the top performer scores and the group average. The distance between the blue line and the green line on the radar plot visually indicates how much this municipality can learn from the better performers. The centre is 0 and a maximum score 5 is on the outside.



Since this assessment, the municipality has diligently worked at improving its LED competency through a number of interventions. As a consequence, improvements will become evident from the pending LED maturity assessment in February 2014. Extensive learning has taken place, including leadership development and facilitation skills. Stakeholder participation, understanding of the economy and strategic decision-making have all improved substantially. Once the initiatives in this document are implemented successfully, the implementation scores will also move upward. LED competency at the municipality is falling into place.

LED competency in organised business benefitted from some representatives participating in the LED leadership and governance training. Further capacity building of chambers of commerce and sector bodies in economic development facilitation practices, will also assist to speed up economic development.

The sectoral composition of Hessequa economy is as follows according to the 2013 Mero report.

Table 3.2 Eden District economy: Sectoral composition by municipality: 2011 (%)

Sector	Kannaland	Hessequa	Mossel Bay	George	Oudtshoorn	Bitou	Knysna	Eden
Agriculture, forestry and fishing	19.8	15.7	3.2	3.0	6.2	4.5	4.2	6.0
Mining and quarrying	0.0	0.2	0.1	0.2	0.1	0.1	0.2	0.2
Manufacturing	21.3	16.5	22.1	13.9	16.0	13.6	13.0	16.0
Electricity, gas and water	1.5	1.4	1.9	1.6	1.0	0.9	1.4	1.8
Construction	6.2	7.0	9.3	8.2	5.7	11.3	11.8	8.1
Wholesale and retail trade, catering and accommodation	9.9	14.2	16.6	16.4	13.9	32.8	23.0	17.7
Transport, storage and communication	2.0	7.8	4.2	12.9	7.9	4.3	6.6	7.9
Finance, insurance, real estate and business services	24.7	19.0	26.6	26.1	19.1	23.6	25.2	23.4
Community, social and personal services	3.8	5.7	5.0	5.4	6.0	4.5	6.5	5.4
General government	10.0	11.6	11.0	13.3	24.2	4.6	8.1	11.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Quantec Research

Table 6.5 GDP vs Infrastructure levels at municipal level

Municipality	GDP growth	Infrastructure level
Hessequa	1.3%	High
Mossel Bay	7.8%	High
George	4.2%	High
Oudtshoorn	3.8%	Medium
Knysna	6.1%	Medium
Bitou	8.4%	Low
Kannaland	5.5%	Low

Source: Donaldson et al (2010) and Quantec Research

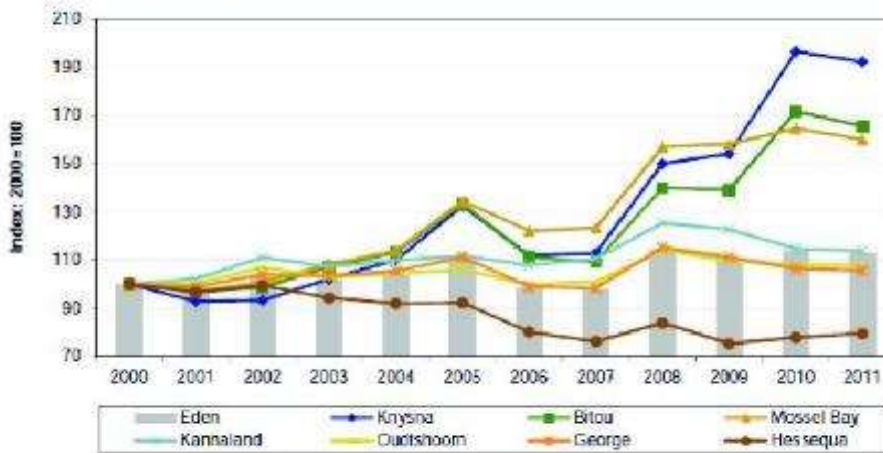
Agri-processing is deemed manufacturing. Tourism is reported as services.

In terms of economic growth over the past decade, Hessequa Municipality appears to be the lagging municipality within the region overall real GDP growth came in at 1.3 per cent per annum, 2000 - 2011. Research conducted by Donaldson et al (2010) revealed that according to the infrastructure index the

Municipality performs well. This is matched by its relatively high investments in infrastructure which accounted for 17 per cent to the total infrastructure expenditure in the Eden District.

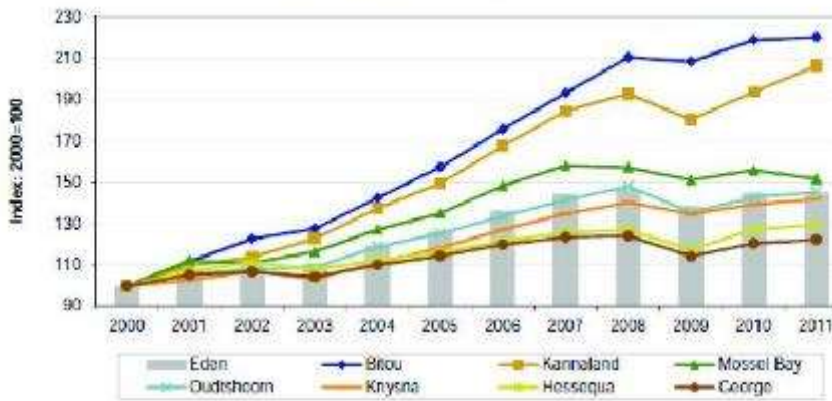
However Hessequa Municipality appears to be struggling and lagging in comparison to other municipalities within the district (see figures on the next page). The mismatch between infrastructure and growth could rest on various economic challenges the Municipality faces. The agricultural sector and the mining and quarrying sector did not perform well over the years 2000 - 2011 contributing to the Municipality's relatively weak performance. The shrinking agricultural sector has impacted adversely on the retail and wholesale sector. The problem appears to be declining agriculture with insufficient growth in secondary economic activity. Nonetheless, the Municipality has the advantage of a strong infrastructure base that certainly can support its economic activity once the challenges faced by the different sectors are addressed.

Figure 3.3 Eden District: Growth in agriculture, forestry & fishing by municipality: 2000 - 2011



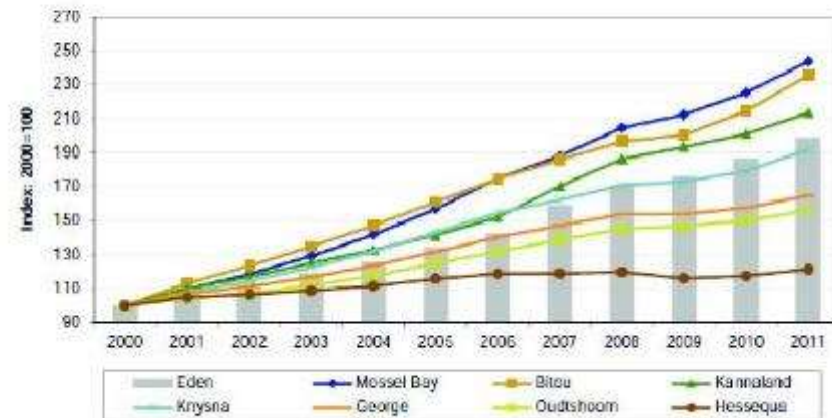
Source: Quantec Research

Figure 3.4 Eden District: Growth in manufacturing by municipality: 2000 - 2011

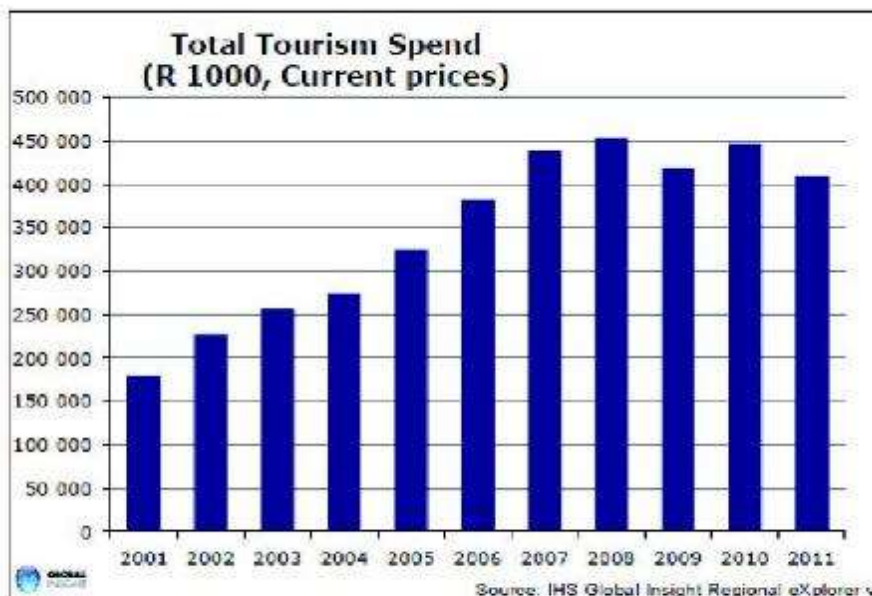
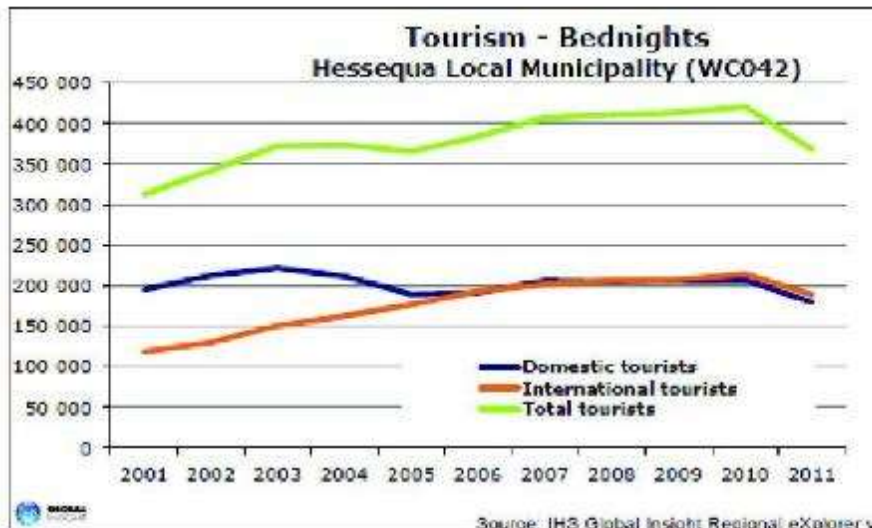


Source: Quantec Research

Figure 3.5 Eden District: Growth in the tertiary sector by municipality: 2000 - 2011



Source: Quantec Research



The charts (source : IDP +?) indicate that the tourism sector is declining in recent years, initially due to economic crises, but subsequently as a consequence of deteriorating competitiveness. The tourism development investment clearly did not yield the desired consequence of competing well with other garden route attractions.

When looking at changes in population count by age group category, the competitive advantage of Stilbaai as a retirement destination is confirmed. Ward1 – Stilbaai, Melkhoutfontein, Gouritsmond & Rural Area experienced a growth of 56.9% over the past decade in the senior citizen category.

According to the 2013 MERO report, the comparative advantage of the Eden district are as follows:

Table 3.4 Revealed comparative advantage of the Eden District economy

	Eden District		South Africa		LQ ratio 2011
	GDP % share	Ave growth	GDP % share	Ave growth	
	2011	2000 - 2011	2011	2000 - 2011	
Agriculture, forestry and fishing	5.5	1.1	2.4	2.0	2.25
Mining	0.2	4.1	5.9	0.0	0.03
Food, beverages and tobacco	5.2	4.9	2.9	2.4	1.73
Textiles, clothing and leather goods	0.7	5.3	0.8	2.8	0.92
Wood and paper; publishing and printing	1.5	0.7	1.5	1.4	1.02
Petroleum products, chemicals, rubber and plastic	3.8	4.8	4.3	3.7	0.88
Other non-metal mineral products	0.9	2.3	0.8	1.6	1.53
Metals, metal products, machinery and equipment	1.5	5.2	3.3	3.5	0.45
Electrical machinery and apparatus	0.3	4.7	0.5	3.5	0.63
Radio, TV, instruments, watches and clocks	0.1	4.9	0.3	4.6	0.39
Transport equipment	0.8	6.0	1.7	5.5	0.50
Furniture, other manufacturing	1.6	3.8	1.4	2.4	1.14
Electricity & water	1.5	0.6	2.0	2.0	0.74
Construction	8.7	10.3	3.4	7.3	2.58
Wholesale & retail trade	15.0	5.2	12.9	3.9	1.15
Catering and accommodation	3.0	7.4	1.0	3.5	3.10
Transport & storage	4.9	4.8	5.5	3.7	0.88
Communication	2.8	7.1	4.6	7.4	0.60
Finance and insurance	5.8	8.3	8.4	6.4	0.69
Business services	18.5	6.8	15.3	5.2	1.21
Community, social and personal services	5.3	5.0	6.1	3.1	0.87
General government	12.4	4.5	15.2	2.5	0.81
Total	100.0	5.2	100.0	3.6	1.00

Source: Quantec Research/CER

Tourism, construction (as a consequence), agriculture and food (agri-processing) are confirmed.

In summary, despite declining growth, there still exists a substantial agriculture base in Hessequa, consisting mainly of wheat, canola, red meat, dairy and others. Limited agro processing exists (manufacturing sector in stats) which is beneficial for agriculture. There is an established Tourism sector which is vulnerable due to a very seasonal demand and increasing competition from neighbouring areas. Government services and social grants also contribute to the economy, both through service provision and through spending. These “engines” generate the money that circulates in the local economy. This automatically enables growth of retail and other services.

Competitive advantages and disadvantages

The main competitive advantages and disadvantages identified in the PACA process are listed below.

Sector	Firm competitiveness	Market context	Business environment
General, Retail- and Services Sector	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Strong intellectual human capital 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Lifestyle Farming <input checked="" type="checkbox"/> Tourism opportunities <input checked="" type="checkbox"/> N2 Road travelers 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Safety and tranquility <input checked="" type="checkbox"/> Lower operational cost than in Metropoles <input checked="" type="checkbox"/> Municipal service delivery of high standard <input checked="" type="checkbox"/> Near to logistical infrastructure i.e. N2, Airport, Railway
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Lack of credit card facilities <input checked="" type="checkbox"/> Petty rivalry instead of economic co-operation <input checked="" type="checkbox"/> Poor, unprofessional services <input checked="" type="checkbox"/> Lack of skilled personnel associated with services <input checked="" type="checkbox"/> Certain individuals resist development purely because of personal convenience 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Seasonal visitors <input checked="" type="checkbox"/> Retail sector competes with neighbouring areas (e.g. George and Mossel Bay) <input checked="" type="checkbox"/> High cost of products from outside Hessequa <input checked="" type="checkbox"/> Limited product variety 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Distance from towns and markets <input checked="" type="checkbox"/> High municipal tariffs <input checked="" type="checkbox"/> Lack of skills <input checked="" type="checkbox"/> Economic Development spawns fear of increasing crime rate

Sector	Firm competitiveness	Market context	Competitive business environment
Tourism	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Motivated tourism sector is keen to be improved <input checked="" type="checkbox"/> Sector organised into associations 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Growing number of sport events <input checked="" type="checkbox"/> Heritage and culture tourism 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Beautiful nature, mountain to coast, including beaches and estuaries. <input checked="" type="checkbox"/> Eco-tourism and adventure (variety of product offering that can be packaged) <input checked="" type="checkbox"/> Sleeping Beauty <input checked="" type="checkbox"/> Archeological museum and Julius Gordon collection
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Weak marketing <input checked="" type="checkbox"/> Township tourism not linked to the opportunities and networks <input checked="" type="checkbox"/> Product offering ill defined <input checked="" type="checkbox"/> Limited co-operation around product development <input checked="" type="checkbox"/> Product owners not maximising opportunities to co-operate <input checked="" type="checkbox"/> No clear brand message 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Seasonal visitors 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Weak municipal tourism structure (to many offices and service delivery not on standard) <input checked="" type="checkbox"/> Need for SMME development in the tourism sector <input checked="" type="checkbox"/> Signage not visible, limited impact <input checked="" type="checkbox"/> Riversdale Head Information / tourism office not strategically located

Sector	Firm competitiveness	Market context	Competitive business environment
Agriculture & Agri-processing	<p>Agriculture- and Agri-Processing Sector</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Raw material available for agri-processing <input checked="" type="checkbox"/> Grain with high protein content <input checked="" type="checkbox"/> Unique product e.g. aloe and fynbos <input checked="" type="checkbox"/> Organised Aloe Sector (complementary towards government partnering) 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Opportunity for niche market product development 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Good infrastructure <input checked="" type="checkbox"/> Available skills within this sector <input checked="" type="checkbox"/> Best Aloe Ferox habitat <input checked="" type="checkbox"/> Sufficient water to harvest (Storage capacity challenging) <input checked="" type="checkbox"/> Good climate
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> No partnerships towards the promotion of agri-processing <input checked="" type="checkbox"/> 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Limited development of agri-processing <input checked="" type="checkbox"/> Commodity prices low due to long distance <input checked="" type="checkbox"/> Long distance to markets 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Limited water storage capacity – Riversdal, Albertinia and Witsand <input checked="" type="checkbox"/> No airport for export purposes

Sector	Firm competitiveness	Market context	Competitive business environment
Property Development - and Construction	<input checked="" type="checkbox"/> Investment trust	<input checked="" type="checkbox"/> Retirement village opportunities	<input checked="" type="checkbox"/> Reasonable good infrastructure <input checked="" type="checkbox"/> Secure, safe, rural atmosphere <input checked="" type="checkbox"/> Lifestyle living <input checked="" type="checkbox"/> Available land
	<input checked="" type="checkbox"/> Development cost higher	<input checked="" type="checkbox"/> Inadequate medical facilities – variances in towns with regards to service levels and affordability <input checked="" type="checkbox"/> Material cost higher	<input checked="" type="checkbox"/> Red tape (Legislation, regulations and by-laws) <input checked="" type="checkbox"/> Slow process of approval for development applications <input checked="" type="checkbox"/> Development cost higher (material cost) <input checked="" type="checkbox"/> Struggle to get skilled labour <input checked="" type="checkbox"/> Zoning scheme and regulations not integrated – due to amalgamation

Sector	Firm competitiveness	Market context	Competitive business environment
SMME and Small Farmers Sector	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Sustainable piggery (in need of technical support) <input checked="" type="checkbox"/> Availability of fertile land for vegetables 		
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Sticking to old business practices and resistance to adopt to new trends 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Small businesses battle to meet the demands <input checked="" type="checkbox"/> Limited understanding of market demands 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> By-laws not conducive to start up informal sector <input checked="" type="checkbox"/> Nearest support services e.g. SARS, SEDA in George <input checked="" type="checkbox"/> Limited enterprise development support <input checked="" type="checkbox"/> Limited access to technical expertise <input checked="" type="checkbox"/> Limited ability to access finance <input checked="" type="checkbox"/> Weak model for small farmer development <input checked="" type="checkbox"/> No policy guidelines for allocation of commonage land to small farmers

Strategies for Development

Strategic focus – most promising parts of the economy

- Strong agriculture base exists, consisting mainly of wheat, canola, red meat and dairy.
- Limited Agro processing
- Established Tourism sector subject to very seasonal demand
- Retirement destination with limiting medical services
- Government services and social grants also contribute
- These “engines” generate money that circulates in the local economy
- This automatically enables growth of retail and other services

Synergy between promising parts of the economy

Tourism attracts persons that eventually come to retire in the area. Retirement drives property development and construction. Medical services current constraint – if resolved, retirement sector will grow more. Increased housing and property development generates ongoing and increasing revenue for the municipality. Municipality reinvest in services for citizens. Municipal contracting of locals can increase to circulate more money in local economy.

Increased local agri-processing enables locals to sell agriculture at a price same as at distant markets, without them having to incur increasing transport costs. Agriculture and agri-processing adds to tourism attractions.

Main Strategy hypothesis

Increase tourism growth for direct benefits and spin-off benefit of promoting local retirement sector. Strengthen competitive advantage of Stillbaai as a retirement destination. Increased number of retirees living here will increase local GGP, employment and municipal income.

Promote increased agri-processing investment as a secure local market for agriculture. This makes it easier and more profitable to locally produce related agriculture commodities.

Actively increase participation in the economy by supporting small business. Support small farmers who have found a viable business models, with expertise and market development. Support entrepreneurs to acquire business skills.

Make the municipality more efficient. Add more value by investing more intelligently in support of economic development. Tighten up municipal spend and improve internal efficiencies.

Improve economic development cooperation between public and private sector by building trust, pro-active learning and effective systems of LED governance and facilitation.

Focal area 1: Tourism sector

Located primarily in Stilbaai, Witsands, Gouritsmond, Riversdal and Albertinia (aloe)

Initiatives prioritised to accelerate inclusive economic growth in this focal area are:

1. Destination Marketing (including Retirement)
2. Product "Big Packaging 5 X 5" And Route Development
3. Organised private sector to lead Tourism information / Office
4. Stop Traffic On N2 And Kiss Sleeping Beauty
5. Destination Marketing – Retirement

1. Destination Marketing (including retirement)

<i>What exactly is being proposed? (activity & output)</i>	Develop an effective Destination Marketing Campaign for Hessequa
<i>How will this improve the business environment?</i>	Increased awareness and affinity in target market
<i>How will this contribute to sector competitiveness?</i>	Increase visitors spending Extend season
<i>What value will be added to society as a consequence?</i>	Increase tourism spending Increase jobs in tourism and business sectors
<i>Who will champion and support implementation?</i>	People like Danie Gerryts, Archie van Dyke , Patric Duddy and other players
<i>Sources of funding</i>	Municipality with co-funding from private/public sector and WESGRO

2. Product Packaging "Big 5 X 5" and Route Development

<i>What exactly is being proposed? (activity & output)</i>	Stakeholders process to agree on top 5 X 5 attractions / experiences
<i>How will this improve the business environment?</i>	Make it easier for customers to see value
<i>How will this contribute to sector competitiveness?</i>	Increase affinity for the area and demand for tourism offerings

<i>What value will be added to society as a consequence?</i>	Increase tourism spending Increase jobs in tourism and business sectors
<i>Who will champion and support implementation?</i>	Route Development Service Provider, LED Manager and Tourism Structures
<i>Sources of funding</i>	Municipal budget and private co-funding

3. Organised Private Sector to lead Information/Tourism Offices

<i>What exactly is being proposed? (activity & output)</i>	Instead of municipal information offices, conditional financial support to private sector tourism offices, where feasible
<i>How will this improve the business environment?</i>	Extended more effective tourism information to match market demand.
<i>How will this contribute to sector competitiveness?</i>	Increase access to tourism services
<i>What value will be added to society as a consequence?</i>	Increase tourism spending. Increase jobs in tourism and business sectors
<i>Who will champion and support implementation?</i>	LED Manager and tourism structures
<i>Sources of funding</i>	Municipal budget and private

4. Stop traffic on N2 and Kiss Sleeping Beauty

<i>What exactly is being proposed? (activity & output)</i>	At identified key stoppage points, promote 5 X 5 samples e.g. Kiss Sleeping Beauty (picture frame)
<i>How will this improve the business environment?</i>	Increased awareness and affinity for product range
<i>How will this contribute to sector competitiveness?</i>	Increased stoppings and visits and create marketing opportunities for individual towns
<i>What value will be added to society as a consequence?</i>	Increased tourism spending Increased jobs in tourism and business sectors

<i>Who will champion and support implementation?</i>	Route Development Service Provider and LED Manager
<i>Sources of funding</i>	Municipal and Private Tourism Offices

5. Destination Marketing - Retirement

<i>What exactly is being proposed? (activity & output)</i>	Promote Hessequa as a retirement destination
<i>How will this improve the business environment?</i>	Increased awareness of clearly defined value proposition
<i>How will this contribute to sector competitiveness?</i>	Increase demand for retirement accommodation
<i>What value will be added to society as a consequence?</i>	Increase the permanent inhabitants, rates base and Gross Geographic Produce
<i>Who will champion and support implementation?</i>	Appointed service provider: Part of the destination marketing package and specific marketing material for this purpose
<i>Sources of funding</i>	Private Development and Municipal Partnership

Focal area 2: Property Development and Construction

Initiatives prioritised to accelerate inclusive economic growth in this focal area are:

6. Medical Facilities as Economic Development Priority
7. Invest in Infrastructure that Enhances Income and Economic Development

6. Medical Facilities as Economic Development Priority

<i>What exactly is being proposed? (activity & output)</i>	Support private sector to remove medical and care facility bottlenecks
<i>How will this improve the business environment?</i>	More medical and care benefits for all residents
<i>How will this contribute to sector competitiveness?</i>	Increase demand for local retirement, accommodation and services
<i>What value will be added to society as a consequence?</i>	Increase permanent inhabitants, rates base, jobs and Gross Geographic Produce
<i>Who will champion and support implementation?</i>	Planning Department and Private Developers
<i>Sources of funding</i>	Private Developers

7. Invest in Infrastructure that Enhances Income and Economic Development

<i>What exactly is being proposed? (activity & output)</i>	Council Capital Expenditure Policy informed by Economic Development Rationale
<i>How will this improve the business environment?</i>	Improved Infrastructure for economic development
<i>How will this contribute to sector competitiveness?</i>	Increased opportunity for development
<i>What value will be added to society as a consequence?</i>	Increased investment and broader tax base
<i>Who will champion and support implementation?</i>	Municipality
<i>Sources of funding</i>	Capital Budget

Focal area 3: Agricultural and Agri-Processing

Initiatives prioritised to accelerate inclusive economic growth in this focal area are:

8. Promote / Attract Agri-processing Investment
9. Grow Aloe Ferox Exports (Niche Markets)

8. Promote / Attract Agri-Processing Investment

<i>What exactly is being proposed? (activity & output)</i>	Promote investment in Agri-processing through partnerships and focused campaign
<i>How will this improve the business environment?</i>	Increase local demand for agricultural commodities
<i>How will this contribute to sector competitiveness?</i>	Save costs of transporting goods to distant markets (increased viability of products)
<i>What value will be added to society as a consequence?</i>	Grow job opportunities Agri-processing
<i>Who will champion and support implementation?</i>	Partnerships between Farmers and Municipality
<i>Sources of funding</i>	Municipal Budget and Private Investment

9. Grow Aloe Ferox Exports (Niche Markets)

<i>What exactly is being proposed? (activity & output)</i>	Research and Development for Aloe Industry Develop the product niche markets
<i>How will this improve the business environment?</i>	More export opportunities. Increase Gross Geographic Produce. Increase professional competitiveness
<i>How will this contribute to sector competitiveness?</i>	Support and strengthen the existing competitive advantage
<i>What value will be added to society as a consequence?</i>	Small and Commercial farmer development and job creation
<i>Who will champion and support implementation?</i>	Aloe Council, DTI, USB, LED Manager
<i>Sources of funding</i>	DTI and National Department of Agriculture

Focal area 4: SMME and small farmer development

Initiatives prioritised to accelerate inclusive economic growth in this focal area are:

10. Investigate Commonage and Develop Strong Models - Small Farmers Piggery

11. Business Skills Development Of SMME's

10. Investigate Commonage and Develop Strong Models - Small Farmers Piggery

<i>What exactly is being proposed? (activity & output)</i>	Revisit results of existing research models and develop better business models for small farmers such as piggeries
<i>How will this improve the business environment?</i>	Know-how regarding better business models available and shared with small farmers.
<i>How will this contribute to sector competitiveness?</i>	Improved business model and practices make it easier for more small farmers to succeed.
<i>What value will be added to society as a consequence?</i>	Higher household income levels for successful small farmers.
<i>Who will champion and support implementation?</i>	LED Manager and Department of Agriculture
<i>Sources of funding</i>	Department of Agriculture

11. Business Skills Development of SMME's

<i>What exactly is being proposed? (activity & output)</i>	Arrange regular business skills training courses in Hessequa.
<i>How will this improve the business environment?</i>	Local learning opportunities for informal businesses
<i>How will this contribute to sector competitiveness?</i>	Enhance the business skills of SMME's.
<i>What value will be added to society as a consequence?</i>	More SMME's will succeed.
<i>Who will champion and support implementation?</i>	Municipality
<i>Sources of funding</i>	Municipal Budget

Focal area 5: Responsible and Enabling Public Sector

Initiatives prioritised to accelerate inclusive economic growth in this focal area are:

12. Fast Tracking Applications Relating to Economic Development Opportunities
13. Revoke Special Rates Increase on Accommodation Establishments
14. Municipal Financial Discipline
15. Avail Municipal Assets for Development
16. LED Function Reports to Municipal Manager
17. Establish A Governance Structure 50/50 % Representation from Public and Private Sector

12. Fast Tracking Applications Relating to Economic Development Opportunities

<i>What exactly is being proposed? (activity & output)</i>	Improve development support, municipal process. Fast track the application process
<i>How will this improve the business environment?</i>	Quicker development response from the municipality
<i>How will this contribute to sector competitiveness?</i>	Start development sooner
<i>What value will be added to society as a consequence?</i>	Increased investor confidence in the municipality to facilitate development
<i>Who will champion and support implementation?</i>	Mayor, Chairperson of LED Portfolio, Municipal Manager, Planning and Technical Managers
<i>Sources of funding</i>	None

13. Revoke Special Rates Increase on Accommodation Establishments

<i>What exactly is being proposed? (activity & output)</i>	Change current policy and revoke Council resolution with immediate effect
<i>How will this improve the business environment?</i>	Rates are lower for the relevant accommodation establishments
<i>How will this contribute to sector competitiveness?</i>	Lower operational costs
<i>What value will be added to society as a consequence?</i>	Trust for better economic cooperation between public and private sector
<i>Who will champion and support implementation?</i>	Council
<i>Sources of funding</i>	None

14. Municipal Financial Discipline

<i>What exactly is being proposed? (activity & output)</i>	Explore options to reduce costs to enhance municipal financial sustainability
<i>How will this improve the business environment?</i>	Maintain high level of services at reduced cost
<i>How will this contribute to sector competitiveness?</i>	Reduced business risk associated with municipal service delivery.
<i>What value will be added to society as a consequence?</i>	Sustainability and Stability
<i>Who will champion and support implementation?</i>	Council and Municipal Manager
<i>Sources of funding</i>	None

15. Avail Municipal Assets for Development

<i>What exactly is being proposed? (activity & output)</i>	Encourage the Private Sector to unlock opportunities by utilising municipal assets
<i>How will this improve the business environment?</i>	Catalytic economic development with multiple spin-offs. Strengthen locational competitive advantage.
<i>How will this contribute to sector competitiveness?</i>	New enterprises and investments, expansion of existing local enterprises.
<i>What value will be added to society as a consequence?</i>	Increase Gross Geographic Produce
<i>Who will champion and support implementation?</i>	Council, Municipal Manager, LED Manager and Planning Department
<i>Sources of funding</i>	None

16. LED Function Reports to Municipal Manager

<i>What exactly is being proposed? (activity & output)</i>	Change placement of LED function within the organisational structure
<i>How will this improve the business environment?</i>	Increase Municipal responsiveness to economic opportunities
<i>How will this contribute to sector competitiveness?</i>	Start development sooner
<i>What value will be added to society as a consequence?</i>	Increase investor confidence in the municipal development competency
<i>Who will champion and support implementation?</i>	Municipal Manager
<i>Sources of funding</i>	Operational Budget

17. LED governance structure with 50 % representation from Public and Private Sector

<i>What exactly is being proposed? (activity & output)</i>	Establish an overarching steering structure for LED
<i>How will this improve the business environment?</i>	Improve dialogue and cooperation for economic development. Systematic strengthening of competitive advantage. Establish trust and investor confidence in economic development cooperation.
<i>How will this contribute to sector competitiveness?</i>	More opportunities arise with enabling public sector partnership.
<i>What value will be added to society as a consequence?</i>	Over time, faster economic growth, including increased employment and more citizens living above the poverty line.
<i>Who will champion and support implementation?</i>	Mayor, Chairperson for LED Portfolio, Municipal Manager, Heads of Organised Business
<i>Sources of funding</i>	Operational Budget

Chapter 5 – Safe Communities

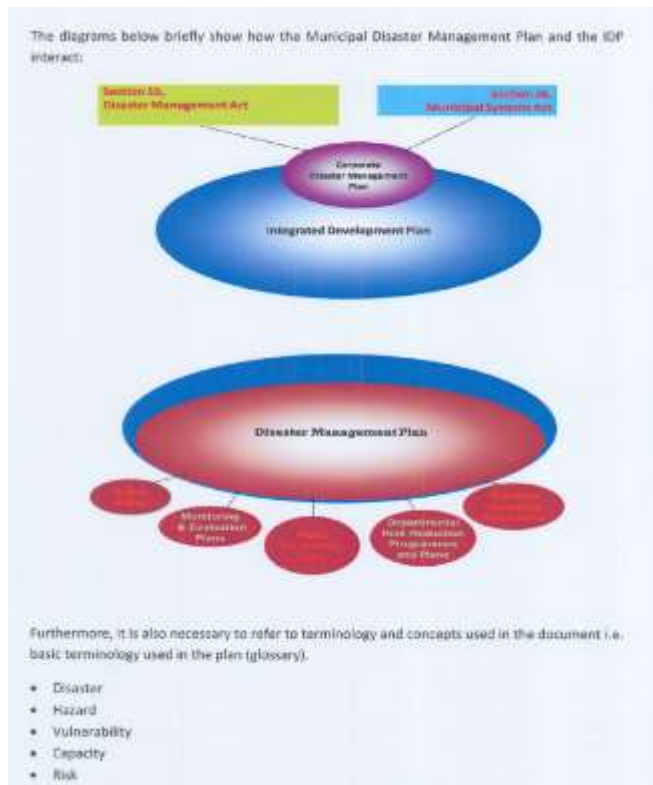
PDO 6: PUBLIC SAFETY

PDO:	#6	Render Public Safety Service		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.				
2.				
3.				
4.				
5.				

Disaster Management

In terms of Act 57 of 2000 stipulates that each Municipality must prepare a Disaster Management Plan/Framework for its area according to the circumstances prevailing in the area after consulting with District Municipality. The formulation and implementation of a Disaster Management plan/framework forms part of the IDP review process for the Hessequa Municipality.





DISASTER MANAGEMENT DEVELOPMENT STRATEGIES

- 1) Initiate a process of Disaster mitigation within the Hessequa Municipal area. Suggested action and projects in this regard include the following:
 - Determine existing hazard risk and vulnerability
 - Promote awareness and the need to reduce and/or eliminate the identified risk and hazards
 - Maintain a database on all identified risk and hazards to study trends and measure effectiveness of disaster management projects, programs and actions.
- 2) Undertake an audit of the preparedness of the Hessequa Municipality and other relevant role-players in dealing with disasters and potential disaster and devise mechanisms to deal with such disasters. Suggested actions and projects in this regard.
 - Based in the identified risk and hazards, do a vulnerability assessment of all related risk and consequences
 - In response to identified disasters and potential disasters, develop contingency plans which will provide a comprehensive framework for disaster preparedness emergency operation and recovery activities.

- Identify appropriate practical mechanisms and systems to be used to disseminate information warnings and operational guidelines.
- 3) Develop appropriate response mechanisms, procedures protocol and methodology to effectively deal with disasters suggested actions and projects in this regard include the following :
- Determine Agencies and role players to be involved
 - Determine the Resources that would be required
 - Determine the budgeting requirements and ensure that all participants in disaster management processes and procedures are adequately trained and equipped
- 4) Identify specific locations and/or communities at risk of disaster and put plans and procedures in place to ensure maximum readiness to deal with such disasters. Suggested actions and projects in this regard include the following.
- Avoid settlements in high risk areas, particularly in floodplains and geologically unstable areas
 - Ensure that geotechnical investigations are undertaken prior to development and that appropriate construction technologies are used.
 - Conduct public awareness and education programs, particularly emphasizing emergency contact numbers and emergency procedures.
 - Determine 1:50 and 1:100 year flood lines prior to development and prohibit development within these flood lines
 - Install new and additional fire hydrants throughout the Hessequa area
 - Establish a 24-hour control centre as contemplated in the Disaster Management Bill to serve the Hessequa Municipal area
 - Acquire equipment for this control centre
 - Establish linkages with districts, provincial disaster management bodies particularly in support of the development of the District Disaster Management Plan.
- 5) Enhance and expand fire stations in the Hessequa area. Suggested actions and projects in support of this strategy include the following :
- Establish satellite fire stations in areas e.g. Gouritsmond, Witsand, Slangrivier
 - Establish existing forums and their activities
- 6) Devise and implement appropriate recovery mechanisms as part of the integrated approach to disaster management in the Hessequa Municipality is an effort to minimize the future potential of hazards, risk and vulnerability suggested actions and projects in this regard include the following :
- Provide sustainable and cost effective development
 - Encourage community empowerment upliftment and self-development programs
 - Evaluate recovery actions to minimize future threats
 - Continually re-evaluate the policies on disaster management

SITUATIONAL ANALYSIS

The first element in the formulation of Disaster Management Plan is to gain an understanding of the territory, terrain and conditions of the area for which such Disaster Management is to be formulated. This will enable the formulation of response strategies based on the realities of the area and the potential disaster risk presented.

The following applies to the Hessequa municipal area and maps and charts should be prepared to represent information.

Element	Description	Implications for disaster management
Extent of the municipal area	The municipal area consist the formal TLC areas of Riversdale, Albertinia, Stilbaai, Heidelberg	N/a
Maximum distance between Riversdale and outer perimeter of area	Approximately 75 km	Impact on response time
Rivers	Breede River; Slangrivier; Goukourivier; Gouritsriver	Potential flooding during rainfall season
Typography	The typography of the areas and features such as mountains must be taken into account	Access may be problematic
Vegetation	Large areas of land are utilized for commercial farming, forestry and livestock	Fire hazards to be considered especially in terms of forestry
Rainfall season	Meteorological conditions Winter rainfall are approximate annual rainfall 640 – 850 mm	Flooding in winter with the potential of fires during the summer

The N2 National Road	<p>Infrastructure</p> <p>Primary Transport corridor consisting of road and rail links runs from west (Cape Town) to the east (George) in a reasonable maintained condition. It is however under pressure because of an increasing number of trucks and busses using the roads.</p>	Road access to the majority of the areas can relatively easily be obtained.
Internal roads	<p>The Municipality has good linkages within and between the municipal areas due to the N2 National Road and numerous provincial roads.</p> <p>Roads in the Municipality area are predominantly dirt roads. Dirt roads tend to be result in accessibility problems during heavy rains. Many of the internal roads are in a poor condition in need of maintenance or upgrading.</p>	Hessequa towns can be fully serviced in times of disaster management but rural areas pose a serious problem due to access during the rainfall season and is problematic.
Railway lines	Only one railway line through Hessequa area.	Train accidents are possible and would need to be responded to.
Airports	There are and airstrip located in Riversdale and Stilbaai.	Airborne response can be utilized in disaster situations.
Bridge	On the border of the Hessequa and Mosselbay is the Gouritsriver bridge. In Riversdale the Soetmelksriver bridge and in Still Bay the Goukouriver bridge.	Provide access across rivers. If damaged accessibility problems need to be anticipated.
Electricity	The urban area of Hessequa towns and immediate surroundings is largely provided with Eskom electricity.	Disaster may result from the misuse of alternative ways of energy/fuel including fires in informal settlements and veld fires.
Water	The population in town and some surrounding	Water quality consumed has impact on general health of

	areas has access to tap water either on site, in the dwelling or at a public tap	the population and vulnerability to diseases.
Hospital	<p>Social Infrastructure</p> <p>Riversdale provincial hospital serves the area to a limited capacity and referrals are made to other greater centre such as Mosselbay, George etc.</p>	Services can be utilized in specific types of disaster management operations. Implications in terms of response times and appropriately reacting to situations.
Emergency services	<p>*Police Stations (6) Stations located within Hessequa (Riversdale, Albertinia, Still Bay, Heidelberg, Slangrivier, Melkhoutfontein</p> <p>*Fire Brigade Service (Eden District Municipality)</p>	Implications in terms of response ability and response time
Community facilities and schools	Various facilities are provided throughout the area. These facilitations are however of a high standard or well maintained	A full audit of facilities to be undertaken to establish usability and potential in disaster situations
Urbanization	<p>Population</p> <p>Population largely considered in rural areas</p>	Emergency and disaster management services located in Riversdale and serve a dispersed community. This has implications for response time.

4. POSSIBLE DISASTERS WITHIN THE HESSEQUA MUNICIPALITY

Various disasters could occur within an area some more likely or regular than others. Each disaster should be managed and planned for in an appropriate and effective way. The following types of disaster could occur within the municipality of Hessequa and appropriate strategies and measures would be required to deal with these.

NATURAL DISASTERS		
Disaster	Repercussions	Coping mechanisms
Floods	Destruction of shelter	Emergency housing
Droughts	Destruction of flood stocks	Transportation
Epidemics	Disruption to supply of electricity, water and sanitation services	Rescue of people
Fires		Taking care and feeding of victims
		Emergency medical care
		Dealing with death and burial arrangements
		Hospitalization and quarantine
		Emergency provision of water and Sanitation
		Fire fighting
		Documentation

HUMAN MADE DISASTERS

Large scale traffic disasters	Destruction of shelter	Emergency housing
Gas explosion	Destruction of food stocks	Transportation
Toxic gasses/hazardous chemicals	Disruption to supply of electricity, water & sanitation services	Rescuing
Factory accidents	Traffic holdups	Taking care of and feeding of victims
Industrial and house fires		Emergency medical care
Train accidents		Dealing with deaths and burial arrangements
Air disasters		Hospitalization
Veld fires caused by humans		Traffic control
Influx		Emergency provision of water and sanitation
		Fire fighting
		Documentation

PROJECTS

The following project have been identified as critical for the successful implementation of as Disaster Management Plan for Hessequa Municipality.

PROJECT 1: STATUS QUO ANALYSIS

Section 3 of this document outlined current circumstances prevalent in the Hessequa Municipality and implications thereof on disaster management. It is critical that this analysis be expanded to include all possible conditions and maps be drawn for these elements that need visual representation and understanding. Aerial photographs or detailed maps for mountain terrains for example could assist in determining appropriate responses to disasters in such areas and possible helicopter landing sites may be identified and predetermined in setting up procedural arrangements. Possible sources of water could also be predetermined in dealing with bush fires or hazardous areas (floods, unstable soil, etc.) identified and responses planned according to specific conditions and circumstances

Action	Goals	Cost
Analysis	2011	R400,000

The entire Hessequa Municipal area needs to be analysed in detail with the aim of identifying all possible disasters, potential hazards and conditions that impact on how easy of difficult it would be in responding to such disasters and hazards.

PROJECT 2

ANALYSIS OF POSSIBLE DISASTERS AND APPROPRIATE RESPONSE:

Section 4 of this document outlined possible disasters and possible response implications. It is however essential that this be done in more detail, determining all possible disasters and potential hazards and the type of responses that would be required in dealing with disaster situations. This would be informed by the status quo analysis and in turn determine equipment and personnel requirement, procedural response mechanisms financial resources etc.

Action	Goals	Cost
Early Warning System	2013	R700,000

PROJECT 3:

A control centre needs to be established in Riversdale serving the Hessequa Municipality in terms of its disaster management goals and objectives. This establishment of this control centre needs to take cognizance and addressing the following elements and requirements.

- Location together with structural and infrastructure requirements
- Equipment including vehicles
- Personnel : both permanent and voluntary
- Roles and responsibilities of the personnel
- Training of all personnel
- The needs and role of a disaster coordinating Committee
- Referrals to be utilized in dealing with disasters
- Procedures to be followed in dealing with disasters
- Linkages to District and Provincial disaster management networks and
- Financial resources and publications.

Action	Goals	Cost
Equipment	2012	R800,000



HESSEQUA FIRE DEPARTMENT

The fire department has adopted a mission statement that reads:

“The Hessequa fire department will strive to provide cost effective, high quality fire suppression and emergency services, public education and support service to the community”

The fire department comprises of 30 full time equivalent employees. The principal function of the fire department is to provide to the community a service such as fire suppression and emergency services, fire prevention and public safety education mitigation of incident involving hazardous materials.

Fire Administration consist of

- 1 fire coordinator
- 1 fire chief
- 1 x senior fire officer
- 27 x fire fighters

These 27 fire officers work a twenty four hour on off schedule and are divided into 2 shifts – 14 personnel each. Each shift currently covers four fire stations with one fire engine, 3 Buffalo vehicles, 4 Bakkie Sakkies, 1 Rescue and fire fighting vehicle and on command vehicle at all times. The coordinator is responsible for supervising all operations involving fire prevention inspections and public education.

COMMUNITY STRATEGIC PLAN:

Indicators of growth include population

- Commercial, single family and multifamily residential construction continue to be strong
- Utility revenues continue to increase from year to year and an expected to maintain that pattern. Change in revenue has been affected by purchased power, cost rate changing, and weather conditions.
- Economic and fiscal indicators demonstrate that the local economy has shown moderate and sustained growth. The growth has temper in the past two years directly impacting the Hessequa ability to provide services. Over the next five years the Fire Brigade will continue to strive towards implementation of the fire protection plan presented to Council.

SWOT ANALYSIS:

The following is an analysis of strength, weaknesses & opportunities apparent to the fire department.

Strengths:

- Public perception of and satisfaction with the fire department
- Quality personnel

- Community growth
- High quality equipment

Weaknesses:

- Number of personnel needed to meet the demands for inspections and public education service
- Number and location of facilities
- Lack of possible revenue

Opportunities:

- Community growth
- Citizen involvement through (volunteers)
- Emerging technology

Threats

- Community growth
- Increased demands for services
- Shifts in strategic priorities
- Citizen expectations

Strategies for addressing swot analysis:

The fire department master planning terms is committed to biter planning in the determination of the central fire and EMS facilities consistent with the needs of an adequate public facility plan: e.g. achieve a 15 minute response time to 90% of the community in the Hessequa area.

We are not so ingenuous as to expect to be capable of delivering emergency services to all areas in our region within this timeframe. However we do aspire to. And are dedicated to, the delivery of emergency assistance to our taxpayers in a manner that will have positive results.

To properly plan for the funding of a fire station, information and cost for architectural and engineering design construction, equipment purchase and personnel selection and training is needed. The fire department re-affirm the following recommendations for a 5 year plan.

- 1) 3 additional stations to serve established areas that are outside acceptable response criteria (Gouritzmond, Witsand, Slangrivier)
- 2) Relocation of station for better service to projected growth areas

Budgetary Impact: Although the recommendation that have been made by the Fire Department and this proposal implementation schedule may seem to be very aggressive, the municipality have a responsibility to the taxpayers in the Municipal area.

Firebreak Program 2012 - 2017

Proposed Schedule for Maintenance of Current Firebreaks							
Town	Ward	KM	2012/13	2013/14	2014/15	2015/16	2016/17
Albertinia	2	1.5	5000	5000	6000	7000	7900
Gouritsmond	1	9.1	20000	20000	22000	24000	28000
Stilbaai	3	17	45000	45000	47000	50000	55000
Stilbaai/Duine	1	3.8	9000	9000	10000	11000	13000
Preekstoel	1	1.7	8000	8000	10000	11000	12000
Monquini/Beach	1	2	7000	7000	7000	8000	9500
Jongensfontein	3	3.8	6000	6000	6000	7000	7800
Heidelberg	5	2	4000	4000	5000	6000	6000
Witsand	4	2	6000	6000	8000	9000	10000
Melkhoutfontein	1	8	30000	30000	35000	38000	42000
Pauline Bohnen	1	7	40000	45000	49000	55000	58000
Total			180000	185000	205000	226000	

Proposed Schedule for new Firebreaks							
Town	Ward	KM	2012/13	2013/14	2014/15	2015/16	2016/17
Albertinia	2	3				12500	
Gouritsmond	1	2.8			13000		
Stilbaai	3	1.5					14000
Melkhoutfontein	1	4		16000			
Preekstoel	1	3	16387				
Pauline Bohnen	1	7		30000			
TOTAAL			16387	46000	13000	12500	

Expansion of Maintenance Plan due to new Firebreaks			
Town	Year	KM	Ward
Albertinia	2015	3	2
Gouritsmond	2014	2.8	1
Stilbaai	2013	1.5	3
Melkhoutfontein	2016	6.8*	1
Preekstoel	2012	1.5*	1
Pauline Bohnen	2012	7*	1
*High Risk			

Analysis of the safety departments in Hessequa

Hessequa Municipality traffic services work with learner and driving licenses, roadworthiness, and also focus on municipal law enforcement. Hessequa municipal area is serviced by 4 police stations, in the towns of Riversdale, Heidelberg Stilbaai and Albertinia which also service all surrounding rural areas. The satellite office in Slangrivier has been un-operated for a period of time now and residents see

this as one of their biggest challenges in terms of safety and security. In terms of Health services Hessequa municipal area have a central hospital in Riversdale and have well equip clinics in Riversdale, Albertinia, Melkhoutfontein, Heidelberg , and Slangrivier. The following diagram illustrate the districts causes of death.

Eden Burden of disease (2010)

Rank	Kanna-land	Hessequa	Mossel Bay	George	Oudts- hoorn	Bitou	Knysna	Eden
1	Tuberculosis (11.7%)	Ischaemic heart disease (12.6%)	HIV/AIDS (14.2%)	HIV/AIDS (14.6%)	Tuberculosis (10.3%)	HIV/AIDS (16.9%)	HIV/AIDS (16.6%)	HIV/AIDS (12.7%)
2	HIV/AIDS (9.2%)	Road injuries (6.9%)	Tuberculosis (8.7%)	Tuberculosis (9.2%)	HIV/AIDS (8.9%)	Interpersonal violence (7.3%)	Interpersonal violence (8.7%)	Tuberculosis (8.5%)
3	Interpersonal violence (7.2%)	Diabetes mellitus (6.9%)	Ischaemic heart disease (6.5%)	Interpersonal violence (8.3%)	Ischaemic heart disease (7.9%)	Lower respiratory infections (7%)	Cerebrovascular disease (7.7%)	Interpersonal violence (6.8%)
4	Road injuries (6.8%)	Cerebrovascular disease (5.4%)	Cerebrovascular disease (5.3%)	Ischaemic heart disease (5.5%)	Cerebrovascular disease (7.3%)	Cerebrovascular disease (6.3%)	Tuberculosis (6.5%)	Ischaemic heart disease (6.3%)
5	COPD (6.7%)	Tuberculosis (4.8%)	Interpersonal violence (5.1%)	Trachea/bronchi /lung (5.1%)	COPD (6.2%)	Tuberculosis (5.4%)	Road injuries (6%)	Cerebrovascular disease (5.7%)
6	Ischaemic heart disease (6.7%)	Interpersonal violence (4.6%)	Diabetes mellitus (4.7%)	COPD (4.9%)	Interpersonal violence (4.9%)	Road injuries (4.7%)	Ischaemic heart disease (4.3%)	Road injuries (4.7%)
7	Cerebrovascular disease (6.2%)	COPD (4.4%)	Lower respiratory infections (4.2%)	Cerebrovascular disease (4.2%)	Road injuries (4.6%)	Trachea/bronchi /lung (4.5%)	COPD (3.9%)	COPD (4.4%)
8	Lower respiratory infections (5.3%)	Trachea/bronchi /lung (4.2%)	Road injuries (4.1%)	Diabetes mellitus (4.1%)	Diabetes mellitus (4.3%)	Ischaemic heart disease (4.4%)	Lower respiratory infections (3.1%)	Trachea/bronchi /lung (4.2%)
9	Diabetes mellitus (3.7%)	Lower respiratory infections (3.6%)	COPD (3.7%)	Road injuries (4%)	Lower respiratory infections (3.6%)	Self-inflicted injuries (4%)	Trachea/bronchi /lung (3%)	Lower respiratory infections (4.2%)
10	Trachea/bronchi /lung (2.8%)	Self-inflicted injuries (2.9%)	Trachea/bronchi /lung (3.7%)	Lower respiratory infections (3.8%)	Hypertensive heart disease (3.6%)	COPD (3.2%)	Fires, hot substances (2.9%)	Diabetes mellitus (4.1%)

PDO7: INTEGRATED HUMAN SETTLEMENTS

PDO:	#7	Development of Integrated Human Settlements through various Housing Instruments		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Hessequa Human Settlements Plan	Approved	2013
2.	Policy	National Housing Code of 2009	Approved	National
3.	Framework	Spatial Development Framework	Approved	2013
4.	Policy	Housing Beneficiary Selection Policy	Draft	2014

Roles And Responsibilities Of Different Spheres Of Government

The Housing Act, and later the National Housing Code (promulgated in 2000, pursuant to section 4 of the Housing Act), sets out the roles and responsibilities of the three tiers of government in respect to housing. It is important to understand the roles and responsibilities of the three tiers of government in the context of the provision of housing and the allocation/selection of potential beneficiaries in respect of the various housing delivery programmes.

National Department of Human Settlements:

National must establish and facilitate a sustainable national housing development process by formulating housing policy. It must also monitor implementation through the promulgation of the National Housing Code and the establishment and maintenance of a national housing data bank and information system.

Provincial Department of Human Settlements:

Provinces must act within the framework of national housing policy and create an enabling environment by promoting and facilitating the provision of adequate housing in its province, including the allocation of housing funds to municipalities. The Provincial department plays a support and oversight role in respect of municipalities at various stages of the housing delivery process.

Local government i.e. municipalities:

Municipalities must take all reasonable and necessary steps within the framework of national and provincial housing legislation and policy to ensure that the constitutional right to housing is realized. It should do this by actively pursuing the development of housing, by addressing issues of land, services and infrastructure provision, and by creating an enabling environment for housing development in its area of jurisdiction.

Data Cleanup Programme:

Hessequa Municipality has agreed to the Western Cape Department of Human Settlements request that will undertake data cleanup on the WCHDDBB regarding applicants on the Municipality's housing waiting list. Part of this data cleaning may include screening the data against the National Housing Subsidy System (HSS) to check any inaccuracies in terms of missing details, such as missing ID numbers; whether applicants had been previously been assisted; the number of deceased applicants; as well as verifying of addresses and ensuring that there are no duplications.

Housing Beneficiary Selection Policy

The Western Cape Minister for Human Settlements approved the “Westren Cape Provincial Framework Policy for the Selection of Housing Beneficiaries in September 2012. In terms of the Framework Policy each municipality must approve its own selection policy that is consistent with the Framework Policy before 30 June 2014.

Hessequa Municipality will submit a draft Hessequa Selection Policy in March 2014. The main objective of the policy is to set out the relevant processes and procedures that have to be followed when selecting beneficiaries for new housing projects that result in the beneficiary receiving ownership of a subsidized opportunity.

- The Framework Policy aims to enhance fairness and transparency of processes used by municipalities to select subsidy beneficiaries.
- It sets out the core principles and mechanisms and processes for selection and requires that municipalities develop their own selection policies that are consistent with its core principles.

Hessequa: General Waiting List Data								
Town	Before and Including 2000	2001 to 2007	2008 to 2013	Up to March 2014	No Date	Total	Persons Helped	Persons not Help
Gouritsmond	0	0	15	0	0	15	0	15
Albertinia	464	454	405	19	0	1342	749	574
Stilbaai	0	23	3	0	19	45	0	45
Melkhoutfontein	1	432	174	12	181	800	0	788
Riversdale	281	816	661	79	0	1837	0	1758
Heidelberg	2	972	474	32	448	1928	250	1646
Slangrivier	3	542	188	22	288	1043	250	771
Total	751	3239	1920	164	936	7010	1249	5761

Town	GAP Applications			Persons Helped
	2012	2013	Total	
Gouritsmond	1	0	1	0
Albertinia	38	1	39	0
Stilbaai	1	0	1	0
Melkhoutfontein	73	1	74	0
Riversdal	48	19	67	0
Heidelberg	82	6	88	0
Slangrivier	5	0	5	0
Total	248	27	275	0

Informal Stats:

Hessequa Informal Residential Areas									
Town	Residential Area	Owner	Location	Number of Structures	Water	Sanitation	Electricity	Refuse Removal	Number of Residents
Riversdal	Melrose Place	Hessequa Municipality	Aloe & MS	14	Yes	Yes	Yes	Yes	56
	Kwanokuthula Plankies Dorp	Hessequa Municipality	Plot 5270	75	Yes	Yes	Yes	Yes	284
	Thembanistraat	Hessequa Municipality	Kwanokuthula	38	Yes	Yes	Yes	Yes	152
Heidelberg	Eikeweg	Hessequa Municipality		19	Yes	Yes	Yes	Yes	76
	Dollarsquare	Hessequa Municipality	Plot 558	68	Yes	Yes	Yes	Yes	272
Melkhoutfontein	Harmony Park	Hessequa Municipality	Harmony Park	154	Yes	Yes	Yes	Yes	616
Slangrivier	Bo-Kraal	Community	Bokraal (existing)	55	Yes	Yes	Yes	Yes	220
	Bo-Kraal	Community	Bokraal	32	Yes	Yes	Yes	Yes	120
Total				455					1796

Hessequa Pipeline:

Project Name	Priority Housing Program	No. Stands/Units	Town/Suburb	Erf Number	Estimated cost	Proposed construction	Status
Melkhoutfontein North Services	1 UISP	170	Melkhoutfontein	Various	R6.8 million	2013/2014	Stage 1,2,3 application submitted to province. Awaits BOD
Riversdale GAP Services	1 IRDP/FLISP	40	Riversdale	Various	R1.6 million	2013/2014	Application submitted to Dept Human Settlements
KwaNokuthula Extension South Services	2 IRDP	42	Riversdale	Various	R1.7 million	2013/2014	Application submitted to Dept Human Settlements. 1 ready
Heidelberg - Diepkloof - Dienste	2 IRDP	122	Heidelberg	Various	R4.8 million	2013/2014	N4 Application submitted to Dept Human Settlements
Slangrivier - Consolidation	3 Consolidation	70	Slangrivier	Various	R4.9 million	2013/2014	Application prepared. Gathering supporting documentation
Hessequa - ABS (Access to basic services)	3 ABS		Hessequa	Various		2013/2014	Application submitted to Dept Human Settlements
Melkhoutfontein North - Tops	1 IRDP/UISP/Consolidation	170	Melkhoutfontein	Various	R11.9 million	2014/2015	Application in process
Riversdale GAP - Tops	1 IRDP/FLISP	40	Riversdale	Various	R4 million	2014/2015	Application in process
Riversdale Rentals - Spooonet Building	1 CRU	50	Riversdale	Various	R5 million	2014/2015	Application in process
KwaNokuthula Extension South Tops	2 IRDP	42	Riversdale	Various	R3 million	2014/2015	Application is submitted to Dept Human Settlements
Heidelberg - Diepkloof - Tops	2 IRDP	62	Heidelberg	Various	R4.3 million	2014/2015	N6 Application submitted to Dept Human Settlements
Melkhoutfontein West Services	2 IRDP	250	Melkhoutfontein	Various	R10 million	2014/2015	Planning phase
Heidelberg - Diepkloof - Tops	1 IRDP	62	Heidelberg	Various	R4.3 million	2015/2016	Planning phase
Melkhoutfontein West - Tops	1 IRDP	250	Melkhoutfontein	Various	R17.5 million	2015/2016	Planning phase
Heidelberg/Phase 2 Services	IRDP	494 (220x188)	Heidelberg	Various	R13 million	2016/2017	Environmental Authorisation received, IDPS required
Slangrivier Phase 2 Services	IRDP	213 (125x128)	Slangrivier	Various	R10 million	2017/2018	Environmental Authorisation received, IDPS required
Heidelberg Phase 2 Tops	IRDP	250	Heidelberg	Various	R28 million	2018-2019	Environmental Authorisation received, IDPS required
Slangrivier Phase 2 Tops	IRDP	175	Slangrivier	Various	R18 million	2019-2020	Environmental Authorisation received, IDPS required

Scenario 1

Project Name	Priority Housing Program	No. Stands/Units Town/Suburb	Erf Number	Estimated cost	Proposed construction	Status
Heidelberg Phase 1 Services	1 IRDP	250 Heidelberg	Various	R7 million	2011/2012	Completed
Slangrivier Phase 1 Services	2 IRDP	250 Slangrivier	Various	R7 million	2011/2012	Completed
Heidelberg Phase 1 Tops	3 IRDP	250 Heidelberg	Various	R18 million	2012/2013	Completed
Slangrivier Phase 1 Tops	4 IRDP	250 Slangrivier	Various	R18 million	2012/2013	Ready
KwaNokuthula Extension South Services	5 IRDP	42 Riversdale	Various	R1.3 million	2013/2014	Ready
Melkhoutfontein North Services	6 UBSP	180 Melkhoutfontein	Various	R8 million	2013/2014	Stage 1 and 2 submitted
Melkhoutfontein North Tops	7 UISP/Consolidation	180 Melkhoutfontein	Various	R15 million	2013/2014 & 2014/2015	Planning phase
Melkhoutfontein West Services	8 IRDP	250 Melkhoutfontein	Various	R7 million	2014/2015	Planning phase
Riversdale GAP Services	9 IRDP/FLISP	46 Riversdale	Various	R1.7 million	2015/2016	Planning phase
KwaNokuthula Rental Services and Tops	10 UISP/Social	60 Riversdale	Various	R7 million	2015/2016	Planning phase
Melkhoutfontein West Tops	11 IRDP	250 Melkhoutfontein	Various	R20 million	2015/2016 & 2016/2017	Planning phase
Heidelberg Phase 2 Services	12 IRDP	494 (250+244) Heidelberg	Various	R15 million	2017/2018	Environmental Authorisation received, LUPO required
Slangrivier Phase 2 Services	13 IRDP	353 (175+178) Slangrivier	Various	R10 million	2017/2018	Environmental Authorisation received, LUPO required
Heidelberg Phase 2 Tops	14 IRDP	250 Heidelberg	Various	R20 million	2018/2019 & 2019/2020	Environmental Authorisation received, LUPO required
Slangrivier Phase 2 Tops	15 IRDP	175 Slangrivier	Various	R16 million	2018/2019 & 2019/2020	Environmental Authorisation received, LUPO required

Scenario 2

Hessequa Human Settlements Projects

A new strategic approach is needed for the delivering of Housing in the Hessequa Municipal area, we have challenges with our infrastructure, land and water and not excluding the cost of electricity. Repairs and Maintenance at the end of the day must be covered by the Municipality and in some cases even upgrades must take place before a housing project can start. Contribution from the municipal budget will keep on rising. The demand for low and middle cost housing keep on growing. All over the Hessequa Municipal area housing are on the community's agenda's. . The Hessequa Pipeline address the questions raised at public meetings and budget implications.

The combination of the Data Cleanup program and the Housing Beneficiary Selection Policy will contribute to the strategic approach in terms of numbers on the waiting list, here a decline is estimated.

PDO 10: SPATIAL DEVELOPMENT FRAMEWORK

PDO:	#10	Municipal Planning in line with Spatial Development Framework and other Relevant Planning Legislation		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Framework	Spatial Development Framework	Approved	2013

The Hessequa Spatial Development Framework (SDF) has been updated through the Built Environment Support Programme of the Department of Development Planning and Environment. The Spatial Development Framework was approved by Council in 2013 in terms of the Municipal Systems Act (Act 32 of 2000).

The following section contains the spatial development overview of the Hessequa region and will the findings of the framework for each town be included in the last section of the IDP which contains the area plan for each of the towns in Hessequa. For more information relating to the SDF, please contact the local municipal office or peruse the document at any local library.



HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

STUDIEGEBIED

 Hessequa Munisipaliteit

 Paaie

 Dorpe

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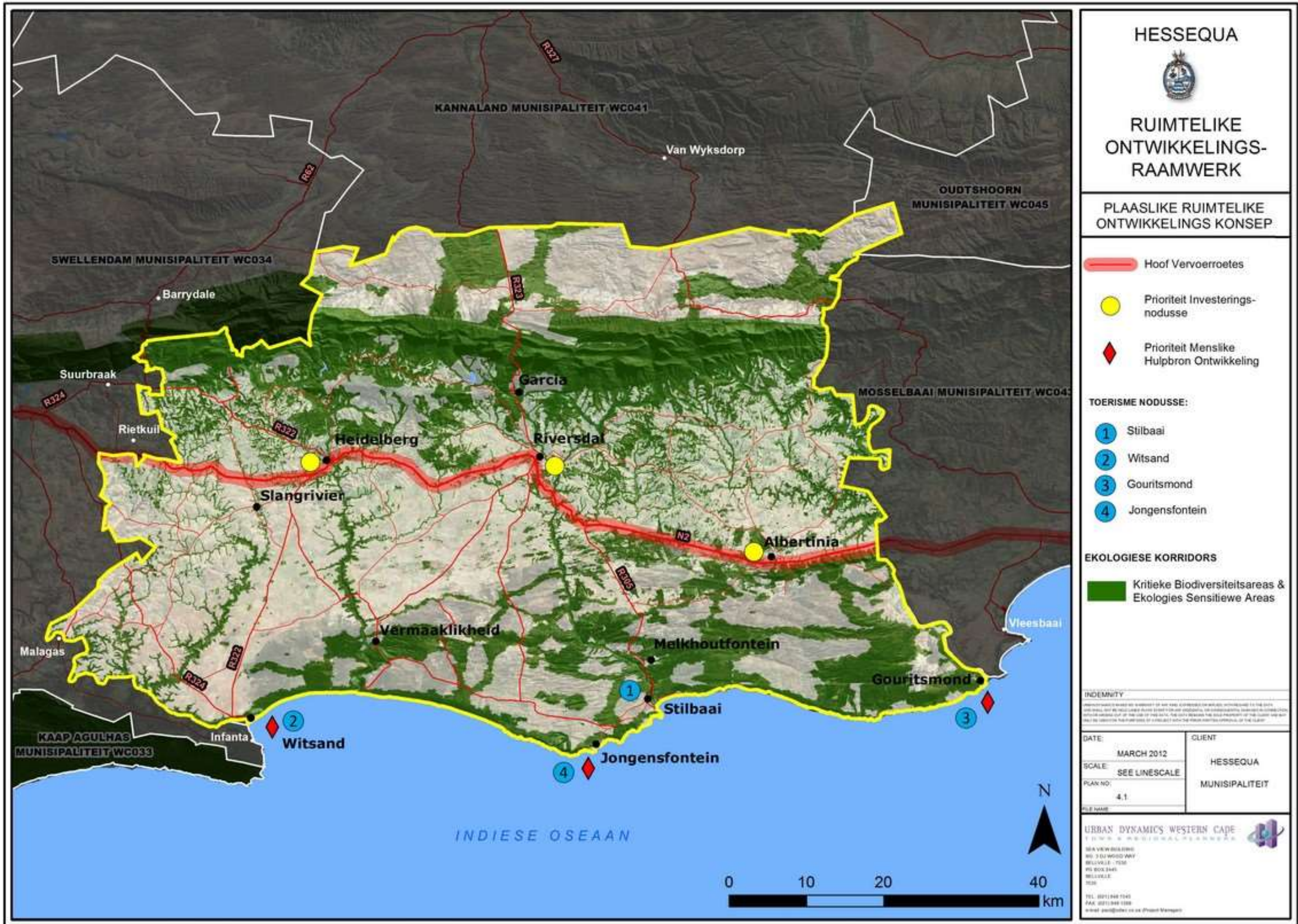
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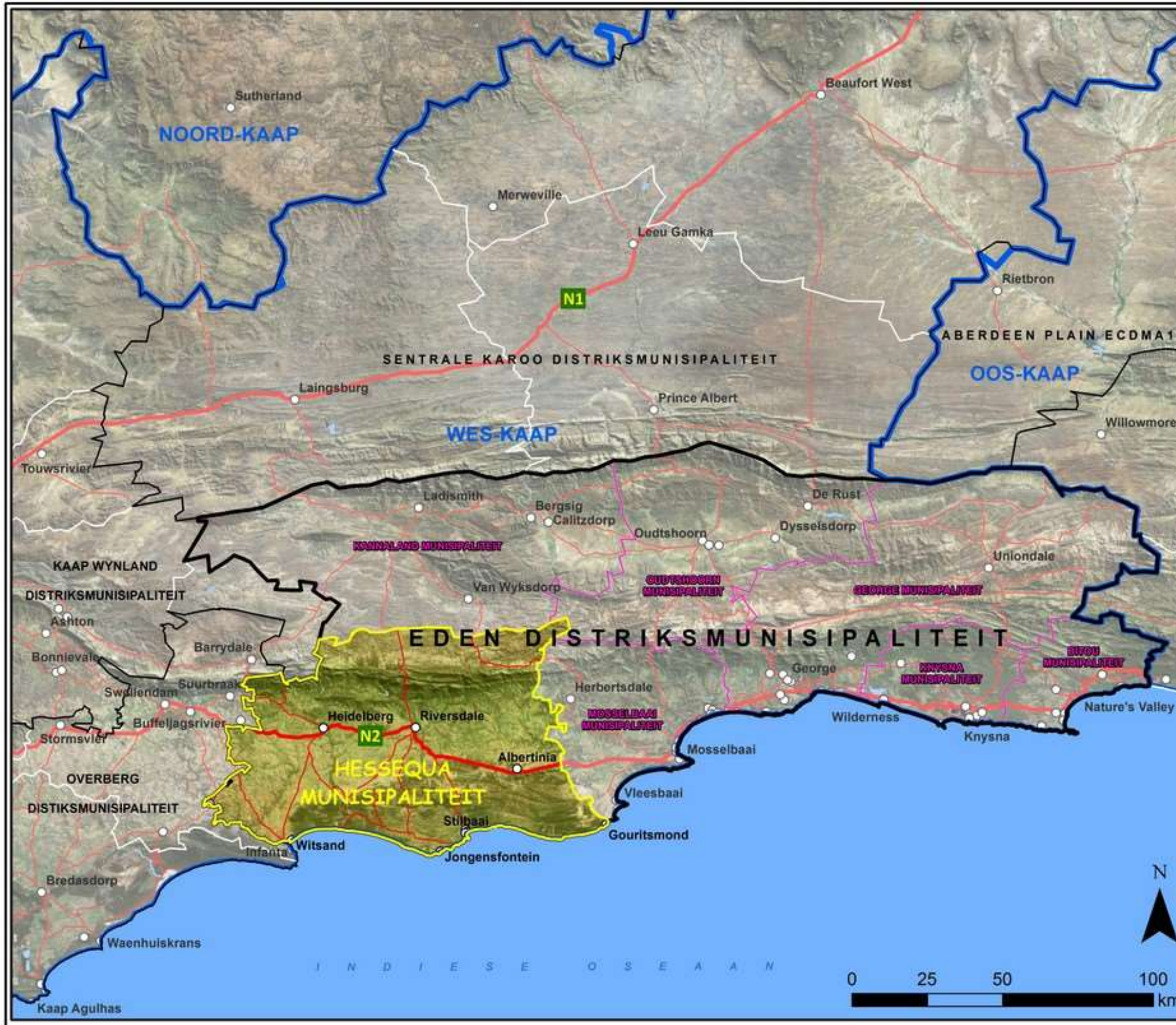
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PLAN NO.:	1.1		
FILE NAME:			

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HESSEQUA


RUIMTELIKE ONTWIKKELINGS-RAAMWERK

STREEKSKONTEKS

- Hessequa Munisipaliteit
- Plaaslike munisipaliteit binne Eden Distriksmunisipaliteit
- Eden Distriksmunisipaliteit
- Provinsiale Grens
- Paaie
- Dorpe

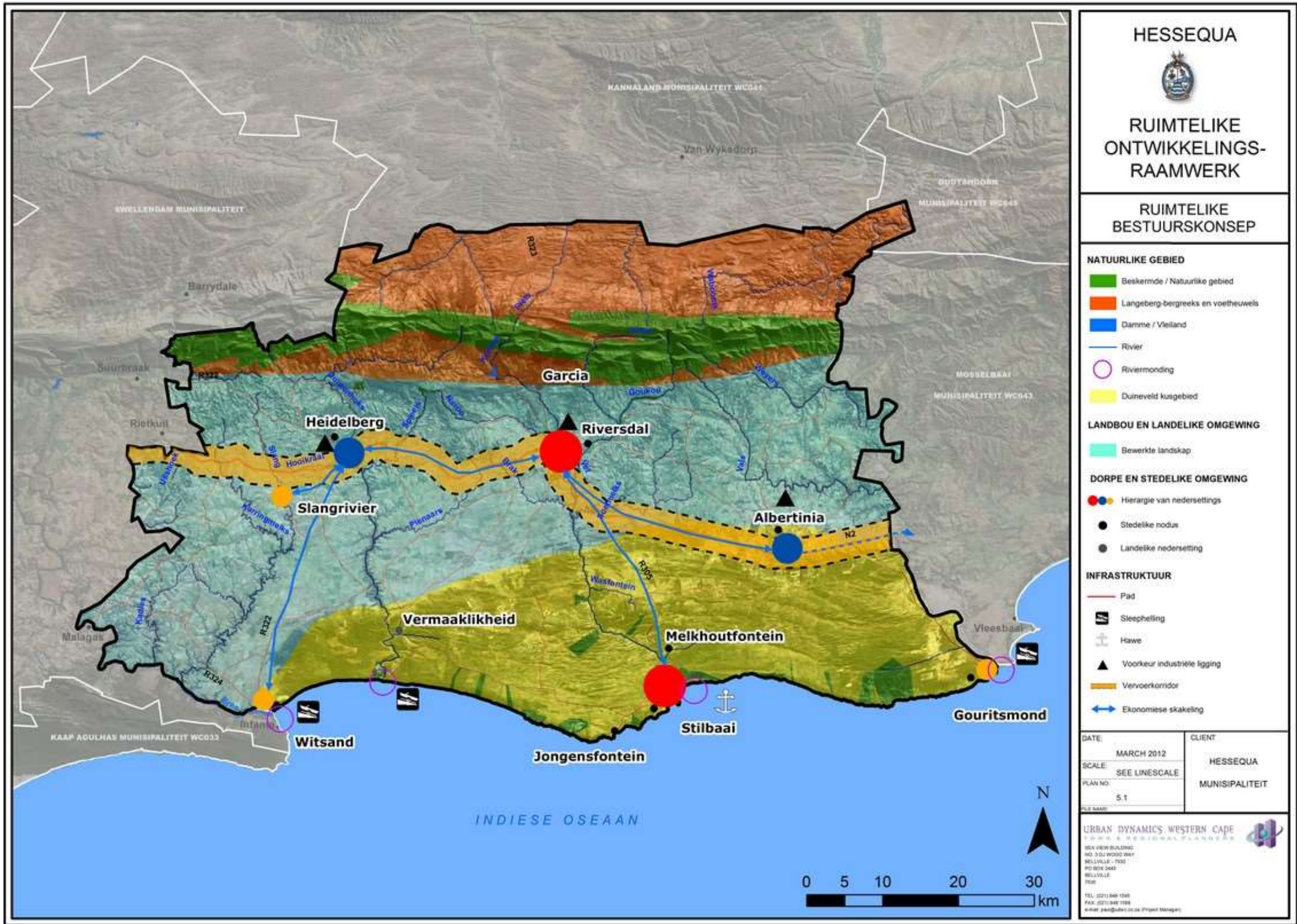
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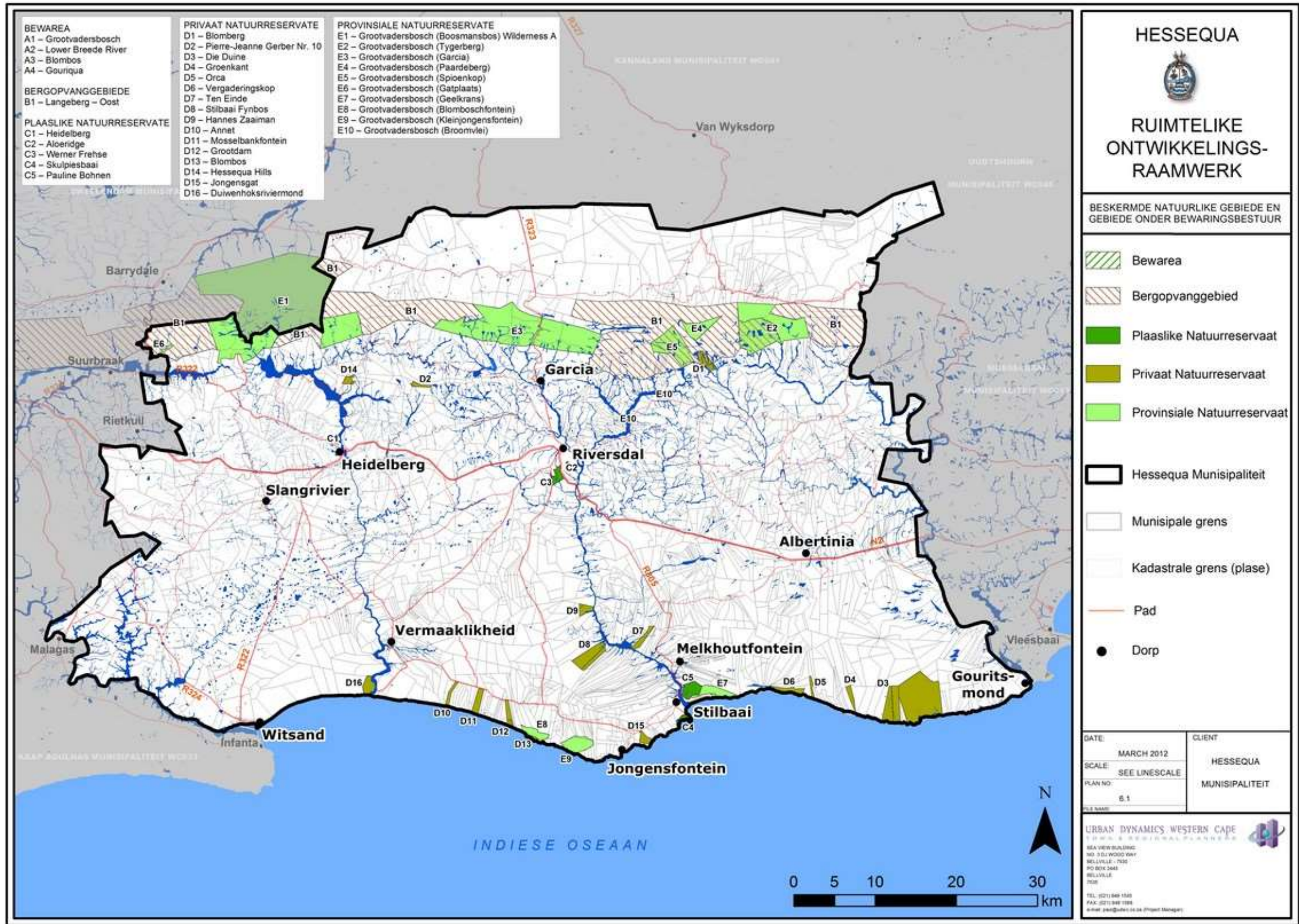
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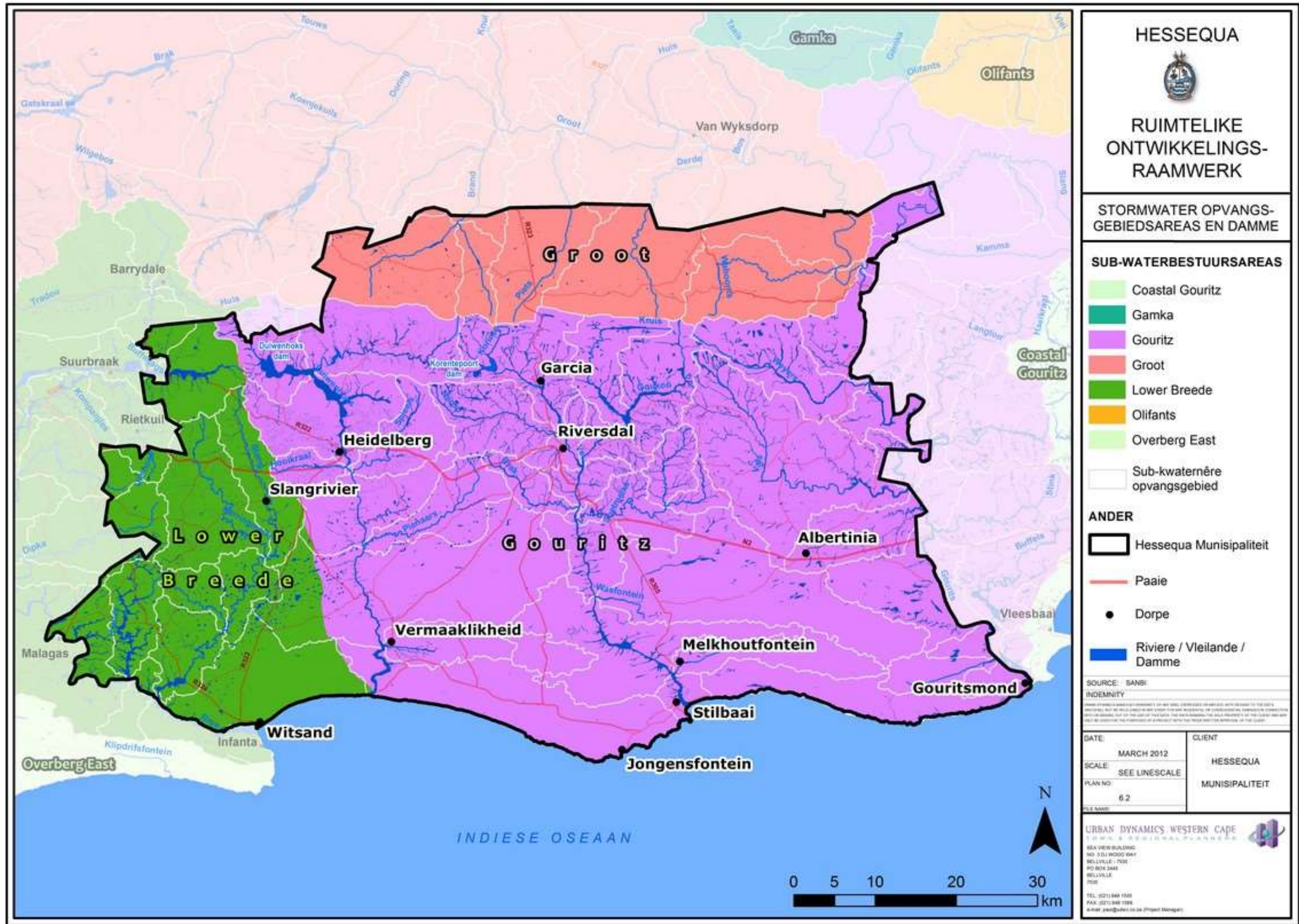
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MARCH 2012	HESSEQUA
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SEE LINESCALE	
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<small>FILE NAME:</small>	

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HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**STORMWATER OPVANGS-
GEBIEDSAREAS EN DAMME**

SUB-WATERBESTUURSAREAS

- Coastal Gouritz
- Gamka
- Gouritz
- Groot
- Lower Breede
- Olifants
- Overberg East
- Sub-kwaternêre opvangsgebied

ANDER

- Hessequa Munisipaliteit
- Paaie
- Dorpe
- Riviere / Vleilande / Damme

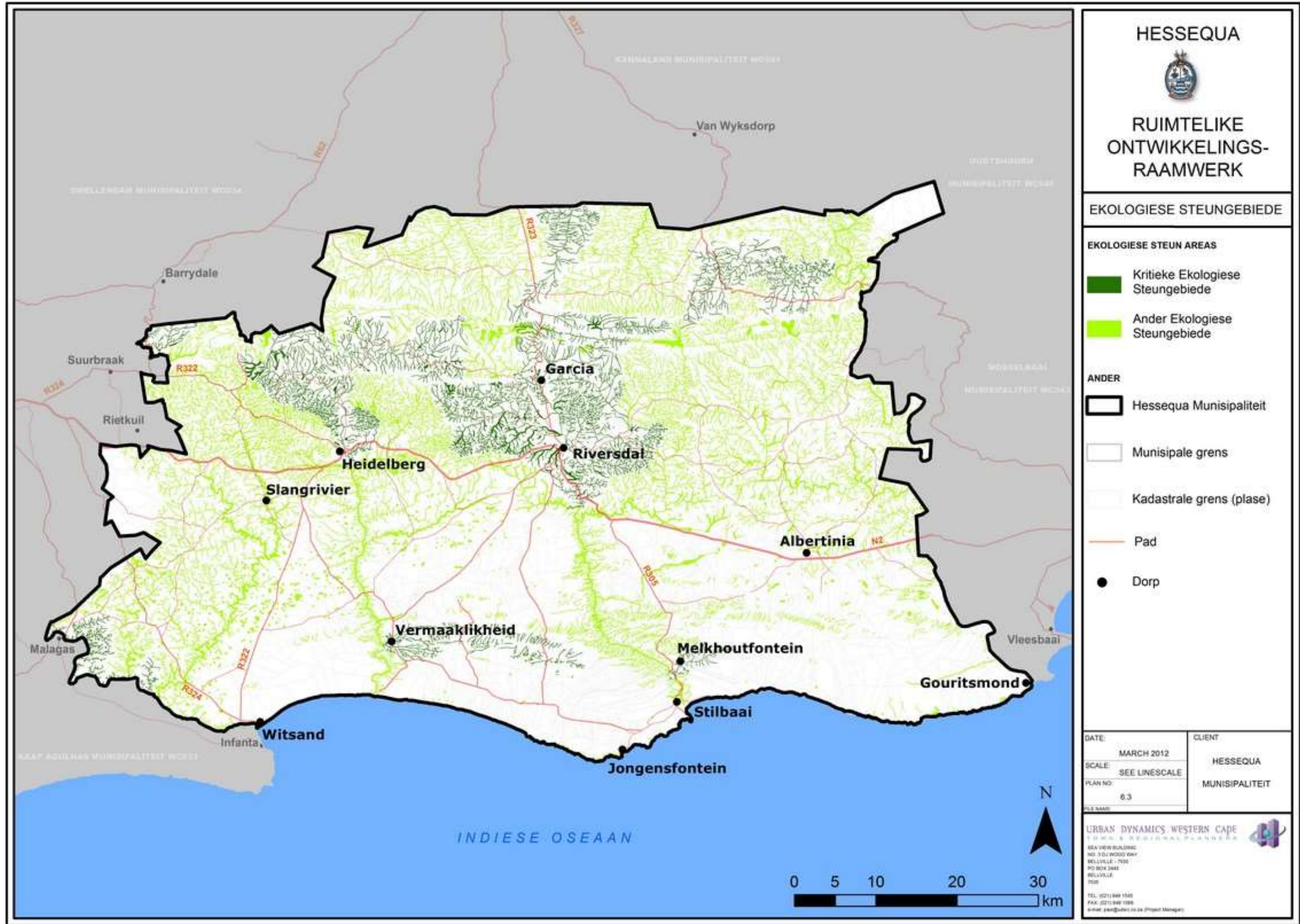
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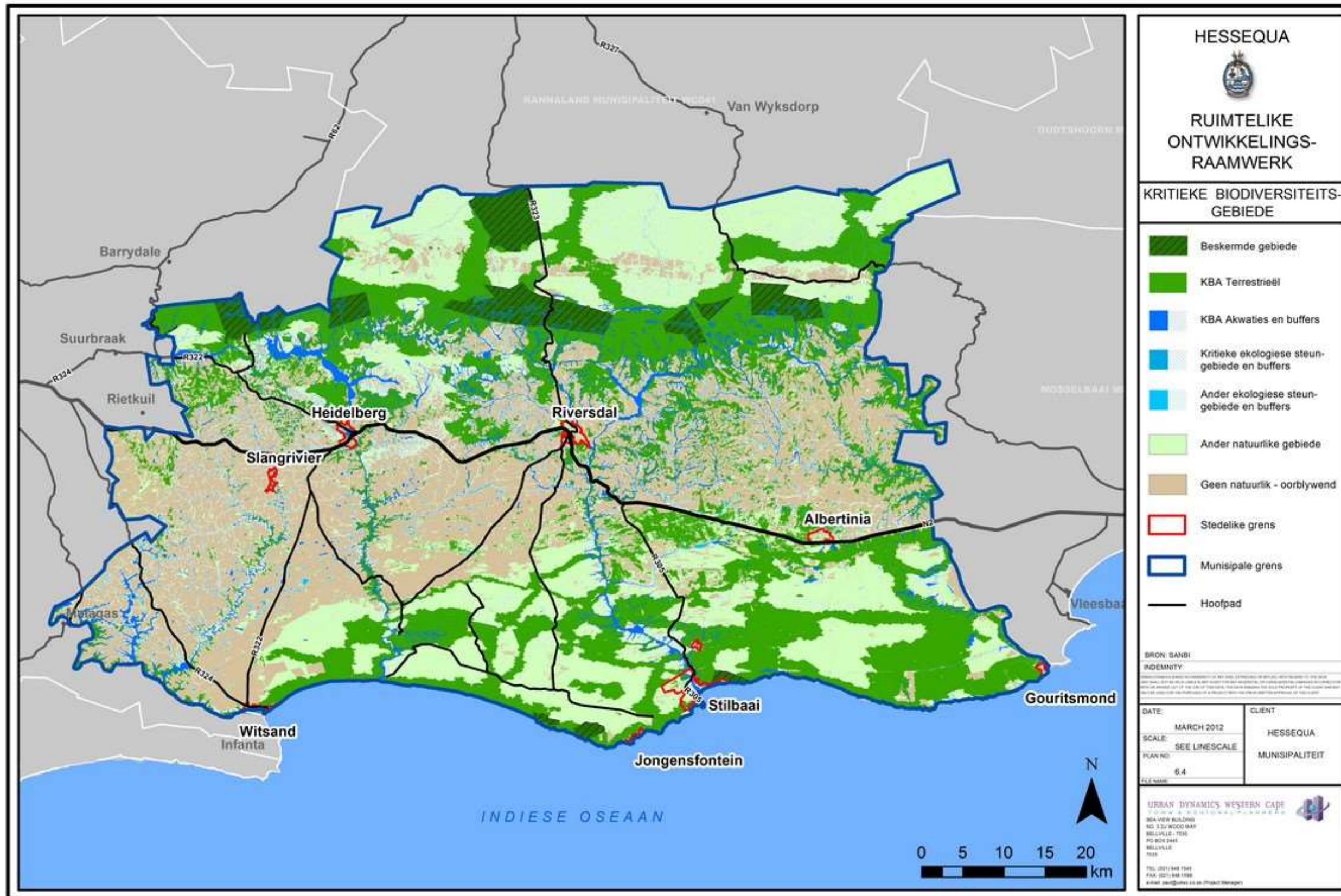
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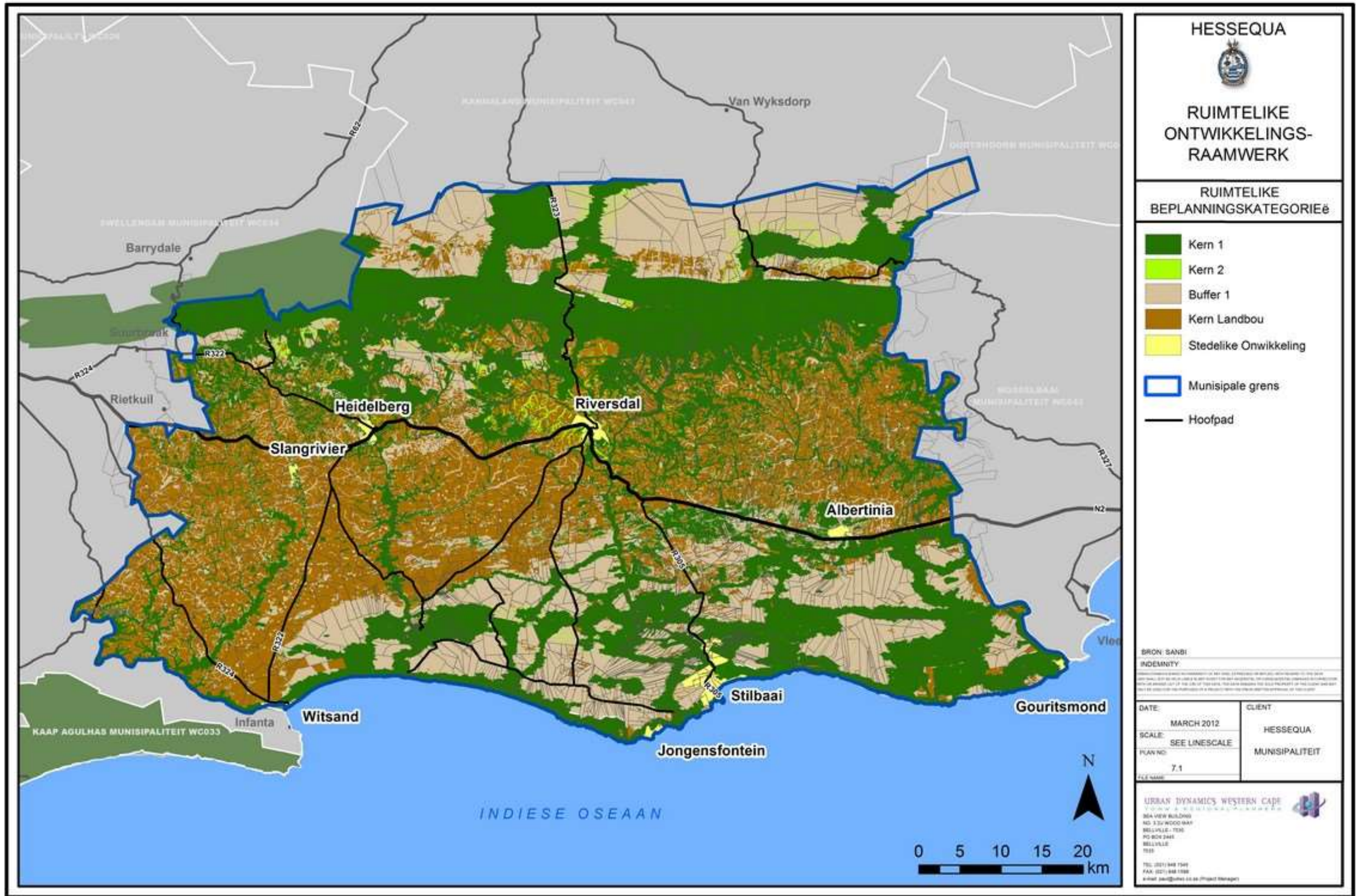
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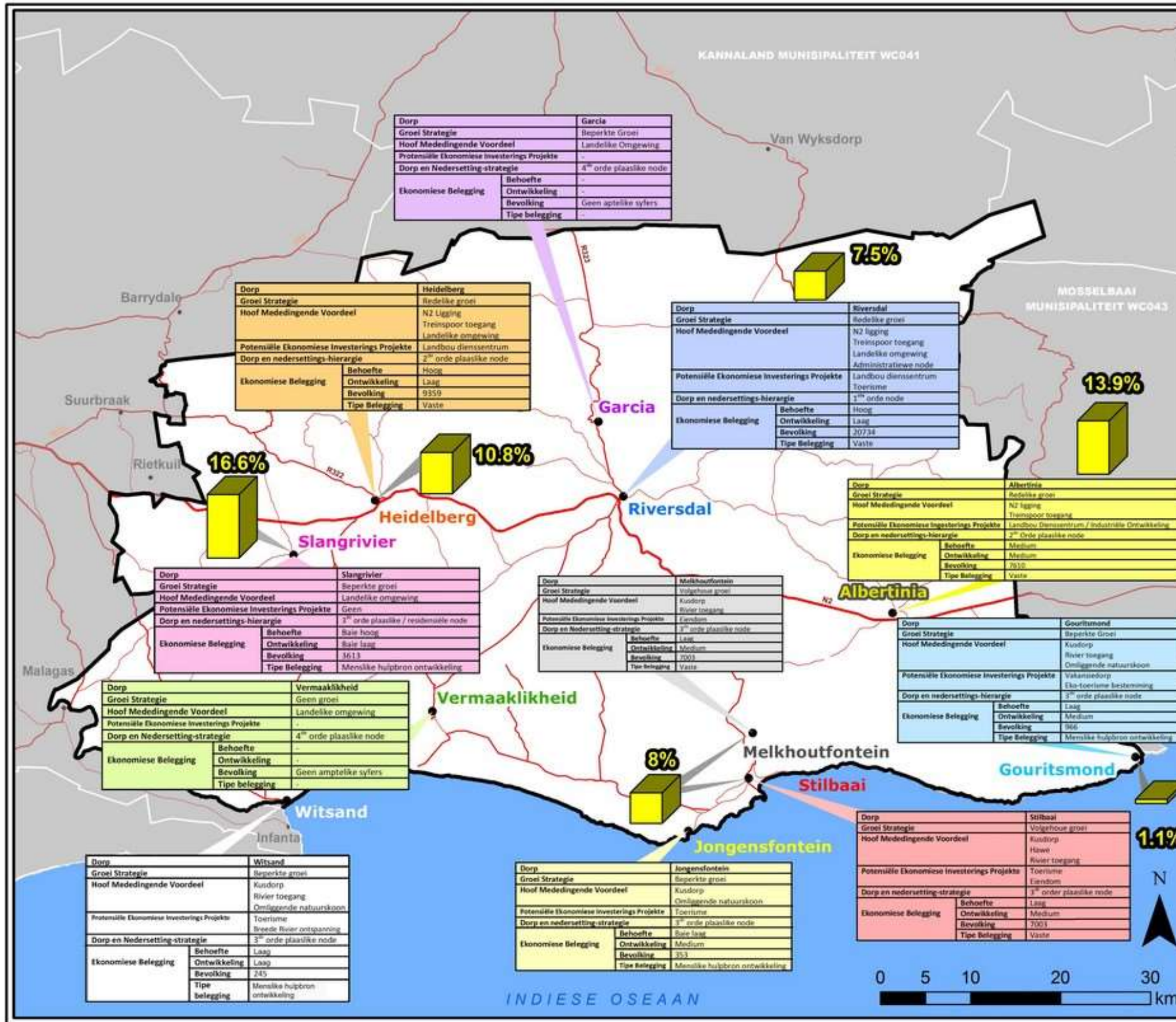
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HESSEQUA

RUIMTELIKE ONTWIKKELINGS-RAAMWERK

ROL EN FUNKSIE VAN DORPE: 'N OORSIG

Hessequa Munisipaliteit
 Paaie
 Dorpe

BEHUISINGSWAGLYS AS PERSENTASIE VAN BEVOLKING

DORP	BEHUISINGSWAGLYS (EENHEDE)	BEVOLKING-SYFERS 2012
Albertinia	1054	7610
Gouritsmond	11	966
Heidelberg	1009	9359
Riversdal	1554	20734
Slangrivier	598	3613
Stilbaai/Melk-houtfontein	559	7003

INDemnITY

DATE: MARCH 2012 CLIENT: HESSEQUA MUNISIPALITEIT

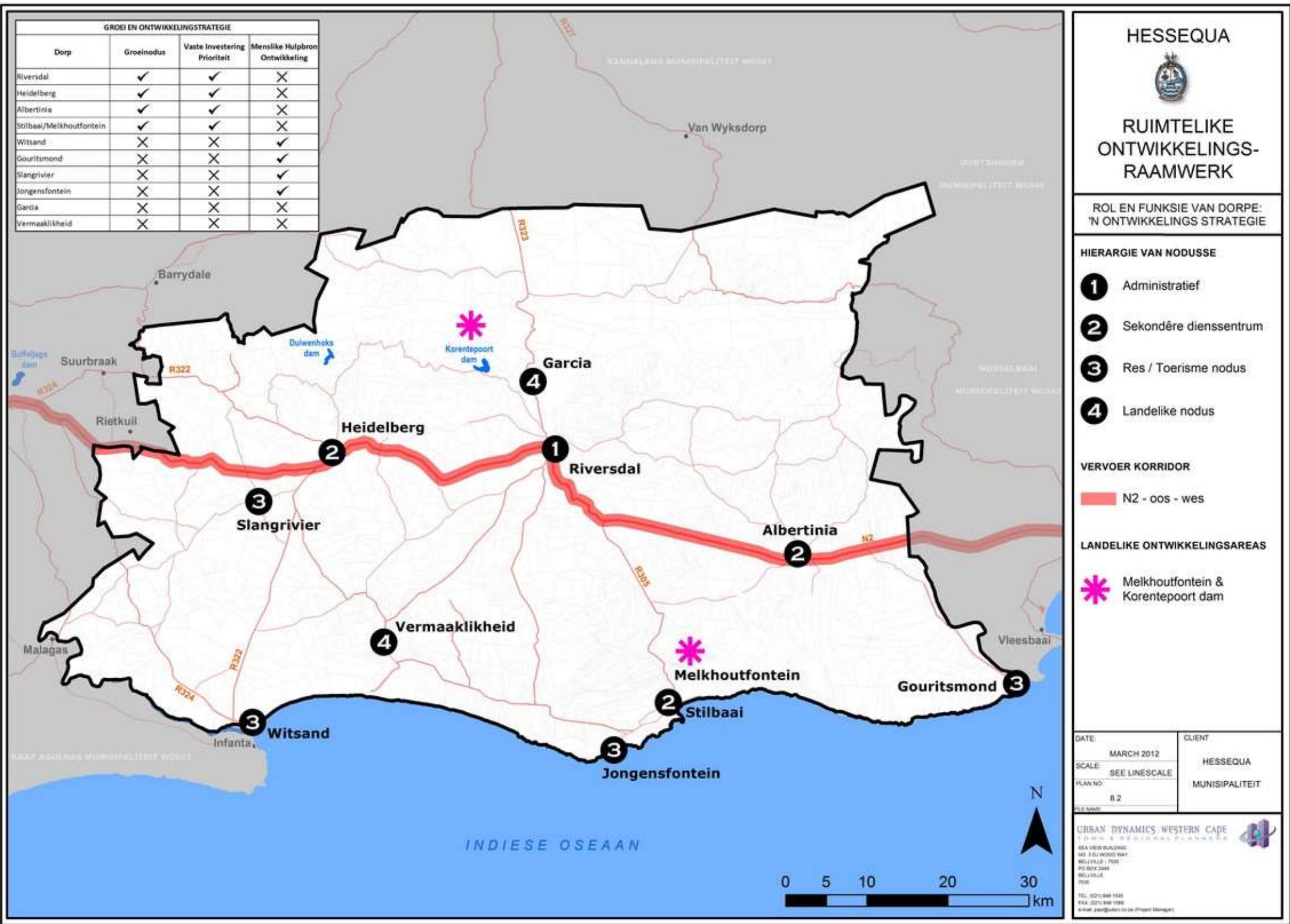
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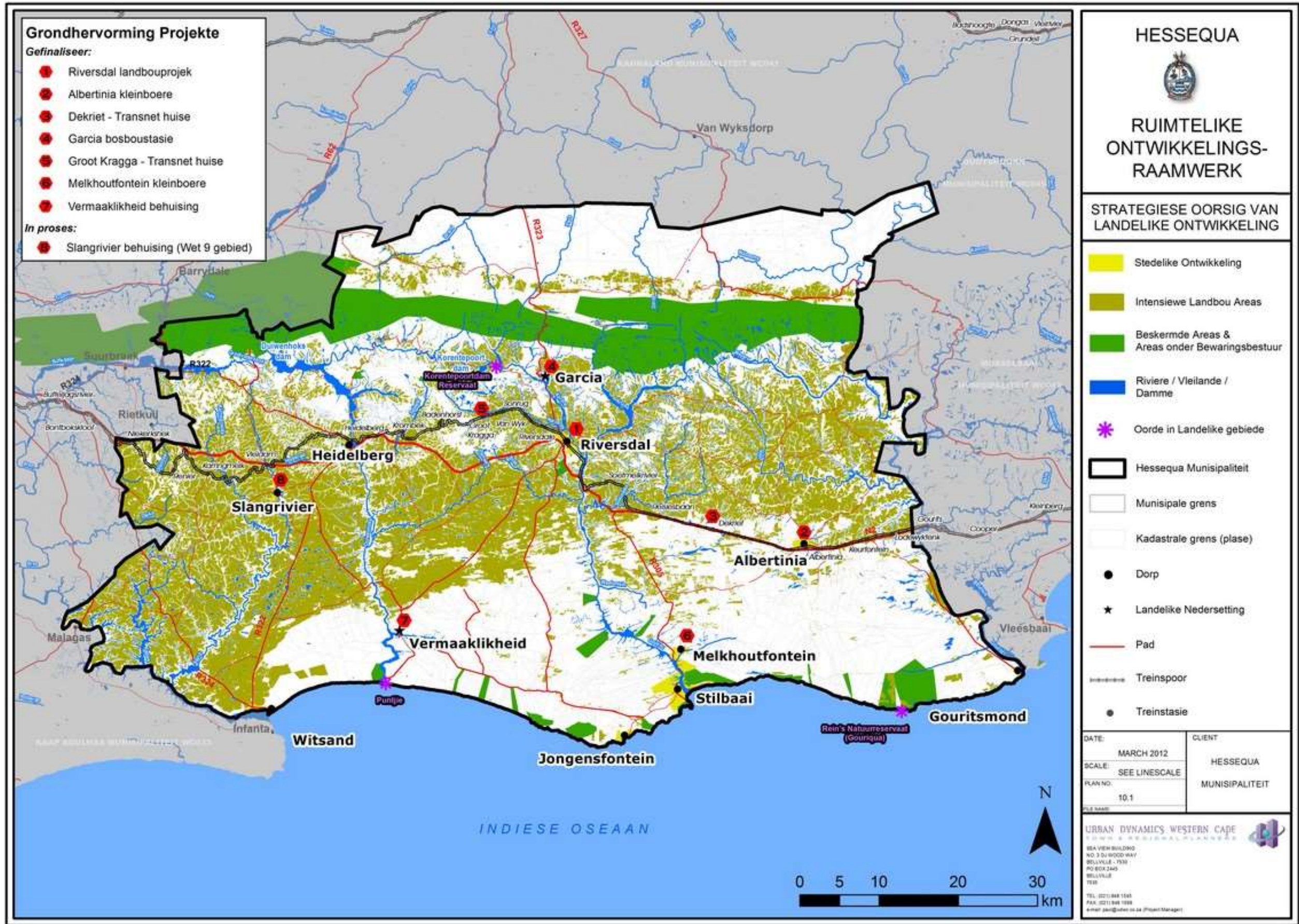
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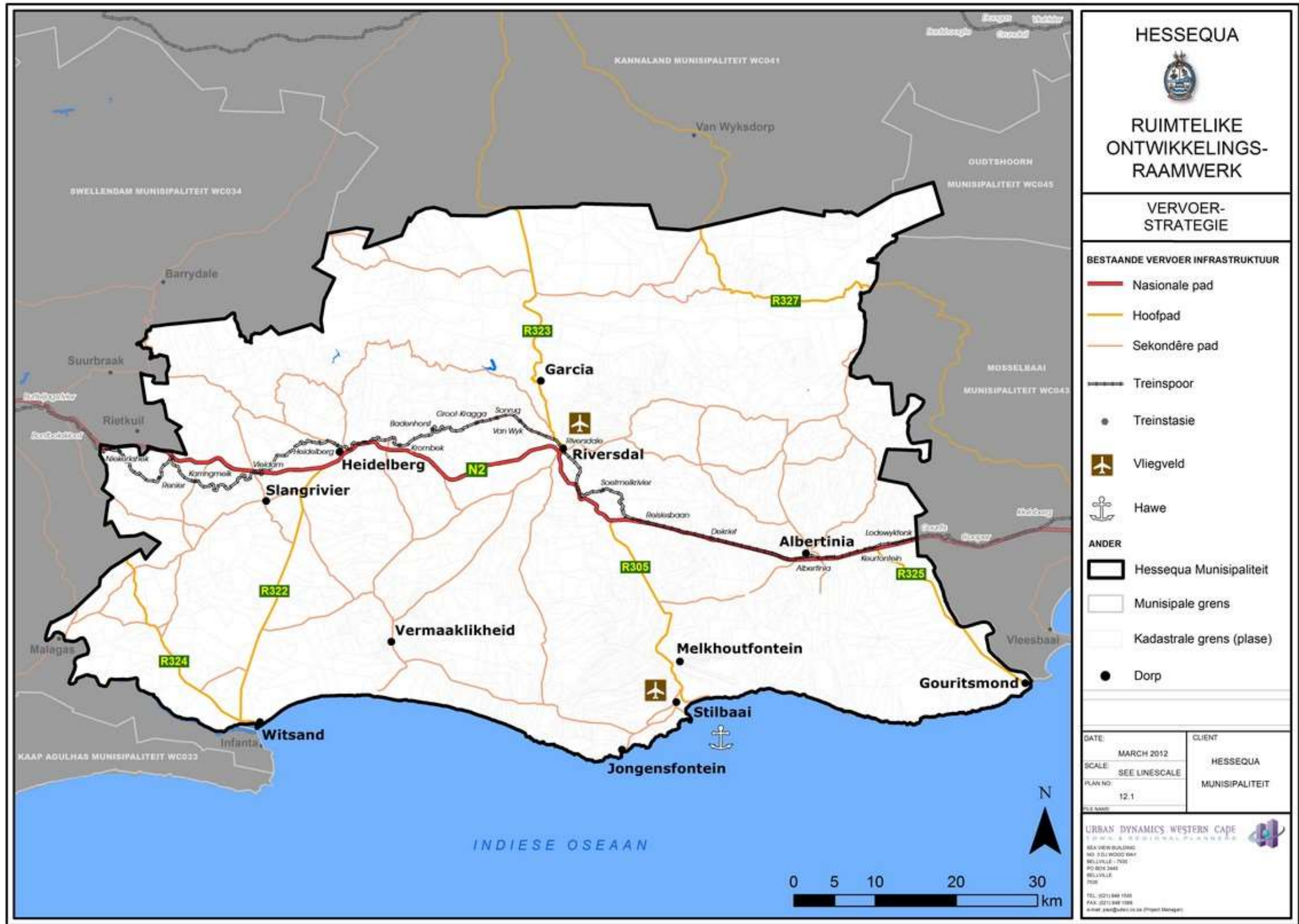
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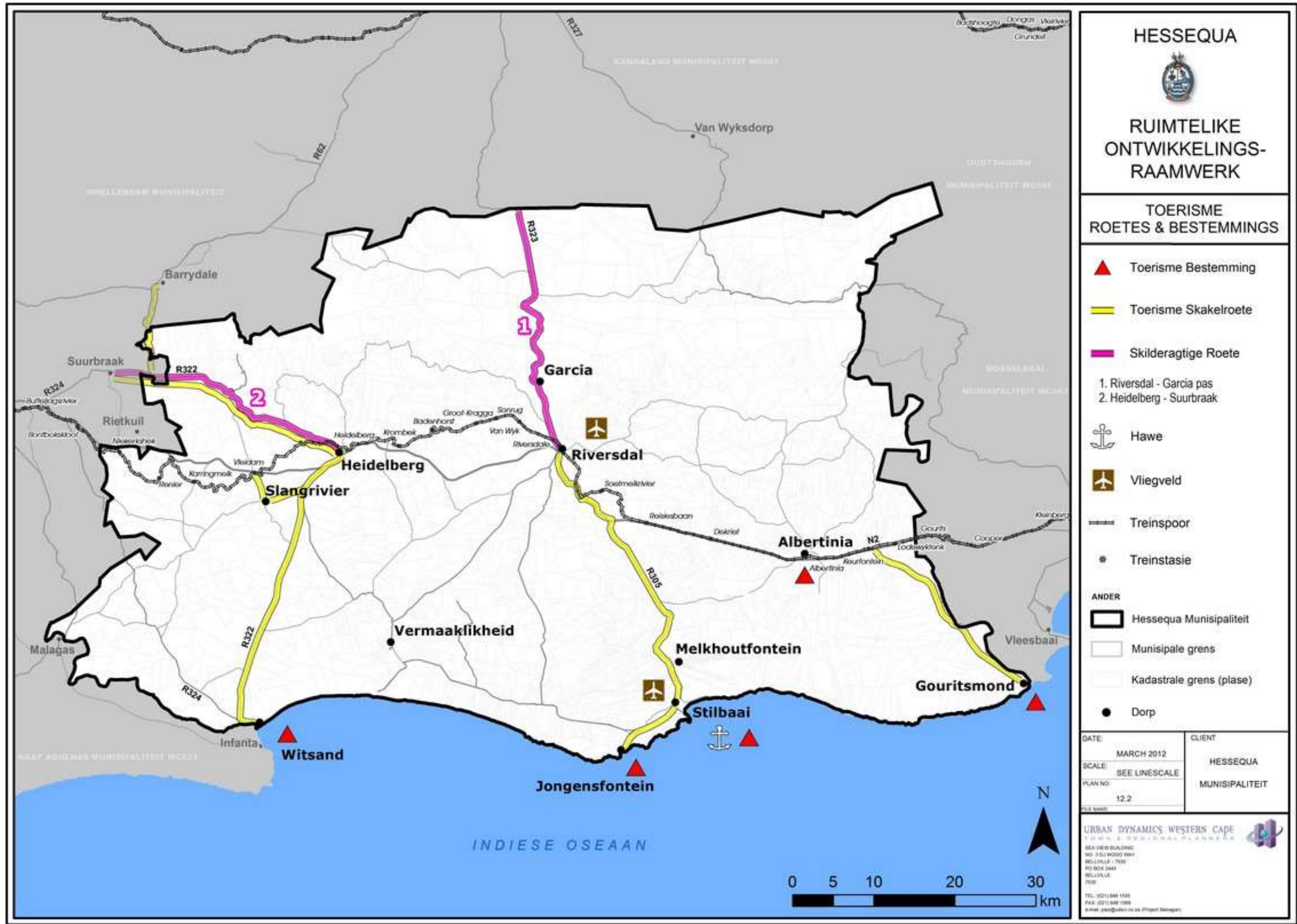
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HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**TOERISME
ROETES & BESTEMMINGS**

-  Toerisme Bestemming
-  Toerisme Skakelroete
-  Skilderagtige Roete

1. Riversdal - Garcia pas
2. Heidelberg - Suurbraak

-  Hawe
-  Vliegveld
-  Treinspoor
-  Treinstasie

ANDER

-  Hessequa Munisipaliteit
-  Munisipale grens
-  Kadastrale grens (plase)
-  Dorp

DATE:	CLIENT:
MARCH 2012	HESSEQUA
SCALE:	MUNISIPALITEIT
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12.2	

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Chapter 6 – Effective Communication & Participation

PDO 3: IMPROVED COMMUNICATION

PDO:	#3	Improved Communication with Internal and External Role-Players		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Policy	Communication Policy	Approved	2014
2.	Policy	Ward Committee Policy	Approved	2014

Hessequa Consumer Satisfaction Survey

The Hessequa Municipality conducted their own Residents Satisfaction Survey during July 2013

This survey is one of the new initiatives by Council to ensure that Batho Pele principles are applied.

Also supported by the Municipal Systems Act, 55 (1):

(O) Developing and maintaining a system whereby communication satisfaction with municipal services is assessed.

The survey was completed in two phases

Phase 1: Personal interviews with 10 % of formal households by temporary field workers.

Target	Voltooi/ Finished	Weier/refused	Vakansie Wonings/ Holiday Homes	Onvoltooi /unfinished	Total
10% van 11 853 formele huishoudings/ 10% of 11 853 formal households	944	16	41	84	1085

Phase 2: An online survey of consumers that received their bills by email

Target/ Teiken	Versend/ Gestuur	Voltooi/ Finished	Geen Terugvoering/ Unresponded	Hop/ Bounced	Onvoltooi /Unfinished
20% van 1947 verbuikers/ 20% of 1947 consumers	1947	313	1634	98	20

Results from the Personal interviews:

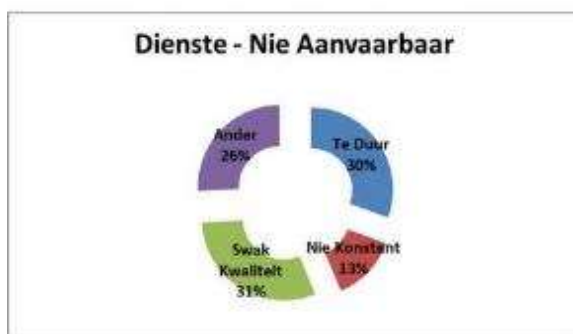
D.m.v. watter medium sal die Munisipaliteit u maklik kan bereik om belangrike inligting met u te kommunikeer?



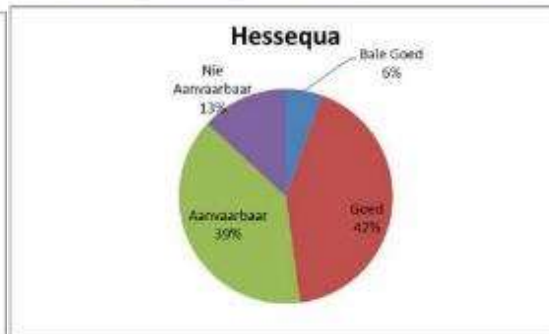
Hoe vind u ons Personeelse gesindheid en toeganklikheid?



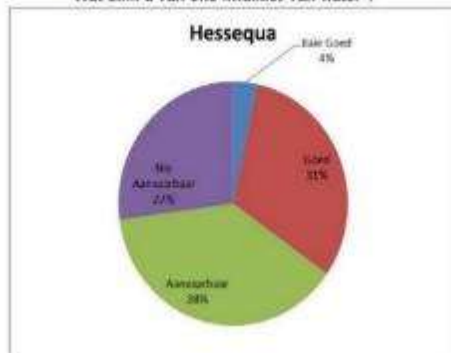
Kies asseblief 'n rede vir u vorige antwoord



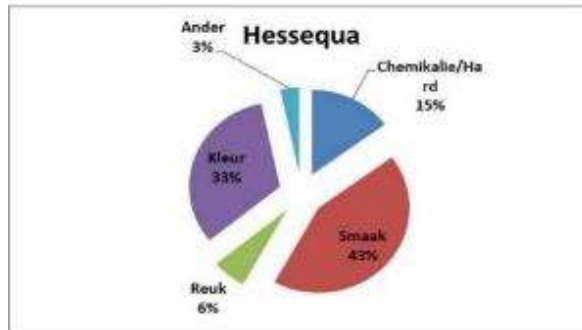
Wat is u opinie oor die dienste wat die Munisipaliteit lewer ?



Wat dink u van ons kwaliteit van water ?



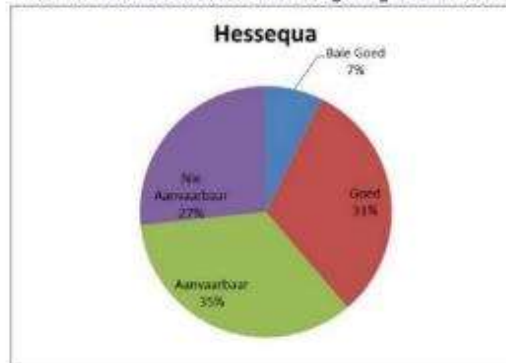
Kies asseblief 'n rede vir u vorige antwoord



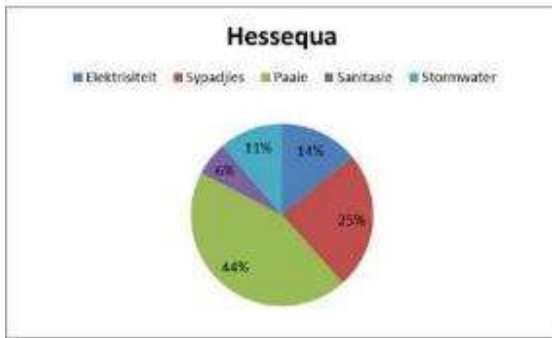
Kies asseblief 'n rede vir u vorige antwoord



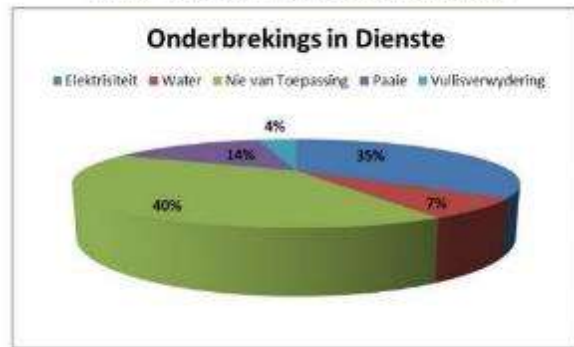
Hoe voel u oor die netheid van die omgewing waar u woon?



Watter diens benodig die meeste aandag in u opinie?



In watter diens ervaar u die meeste onderbrekings?



Bereik u diensterkening u minstens 7dae voor die sperdatum?



Results from the Online Survey:

D.m.v. watter medium sal die Munisipaliteit u maklik kan bereik om belangrike inligting met u te kommunikeer? / Through which medium of communication would you prefer the Municipality to send you important information?

Answer Options	Response Percent	Response Count
Epos / E-mail	93.7%	284
Maandelikse Nuusbrief / Monthly Newsletter	2.6%	8
Suid-Kaap Forum	0.7%	2
Eden FM	0.3%	1
SMS	2.6%	8
Facebook	0.0%	0

answered question 303

skipped question 10

Hoe vind u ons Personeel se gesindheid en toeganklikheid? / How do you perceive the attitude and accessibility of the municipal officials?

Answer Options	Response Percent	Response Count
Nie Aanvaarbaar / Not Acceptable	5.7%	17
Aanvaarbaar / Acceptable	27.0%	81
Goed / Good	43.7%	131
Baie Goed / very Good	23.7%	71

answered question 300

skipped question 13

Wat is u opinie oor die dienste wat die Munisipaliteit lewer? / What is your opinion concerning the services that the municipality is rendering to you?

Answer Options	Response Percent	Response Count
Nie aanvaarbaar / Not Acceptable	11.1%	33
Aanvaarbaar / Acceptable	30.6%	91
Goed / Good	44.8%	133
Baie Goed / Very Good	13.5%	40
answered question		297
skipped question		16
Kies asseblief 'n rede vir u vorige antwoord / Please select a reason for your previous answer		
Answer Options	Response Percent	Response Count
Te Duur / Too Expensive	36.4%	12
Nie Konstant / Not Constant	0.0%	0
Swak Kwaliteit / Poor Quality	21.2%	7
Ander Rede / Other Reason	42.4%	14
answered question		33
skipped question		280
Wat dink u van ons kwaliteit van water ? / What is your opinion about the quality of water provided by the Municipality?		
Answer Options	Response Percent	Response Count
Nie aanvaarbaar / Not acceptable	32.0%	91
Aanvaarbaar / Acceptable	40.1%	114
Goed / Good	20.8%	59
Baie Goed / Very Good	7.0%	20
answered question		284
skipped question		29
Kies asseblief 'n rede vir u vorige antwoord / Please select a reason for your previous answer		
Answer Options	Response Percent	Response Count
Kleur / Color	10.8%	10
Reuk / Smell	4.3%	4
Smaak / Taste	64.5%	60
Chemikalie / Chemical	9.7%	9
Ander / Other	10.8%	10
answered question		93
skipped question		220
Hoe voel u oor die netheid van die omgewing waar u woon? / What is your opinion about the tidiness of the residential area?		
Answer Options	Response Percent	Response Count
Nie aanvaarbaar / Not acceptable	8.1%	23
Aanvaarbaar / Acceptable	24.7%	70
Goed / Good	42.8%	121
Baie Goed / Very Good	24.4%	69
answered question		283
skipped question		30

Kies asseblief 'n rede vir u vorige antwoord / Please select a reason for your previous answer		
Answer Options	Response Percent	Response Count
Onnet / Untidy	17.4%	4
Vergroeid / Overgrown	47.8%	11
Storting / Dumping	13.0%	3
Ander / Other	21.7%	5
answered question		23
skipped question		290
Watter diens benodig die meeste aandag in u opinie? / What service needs urgent attention in your opinion?		
Answer Options	Response Percent	Response Count
Stormwater	5.6%	15
Elektrisiteit / Electricity	13.8%	37
Sanitasie / Sanitation	14.2%	38
Paaie / Roads	44.0%	118
Sypaadjies / Pavements	22.4%	60
answered question		268
skipped question		45
In watter diens ervaar u die meeste onderbrekings? / In which services do you experience the most interruptions?		
Answer Options	Response Percent	Response Count
Huishoudelike Vullis / Waste Removal	3.3%	9
Paaie / Roads	14.4%	39
Elektrisiteit / Electricity	39.1%	106
Water	5.9%	16
Geen / None	37.3%	101
answered question		271
skipped question		42
Bereik u diensterekening u minstens 7dae voor die sperdatum? / Does your rates bill reach you at least 7 days before the payment date?		
Answer Options	Response Percent	Response Count
Ja / Yes	90.0%	252
Nee / No	10.0%	28
answered question		280
skipped question		33

Community Based Planning

Hessequa Municipality was chosen as one of eight Municipalities that received support from the Department of Local Government for the rollout of the Community-Based Planning (CBP) in the Western Cape. The project consists of support for the development of community-based plans that can help to ensure future funding for the development of communities.

Community-based planning (CBP) is a form of participatory planning which has been designed to promote community action and link to the Integrated Development Plan (IDP).

There are four commonly different types of reason why CBP is advocate, to improve:

- To improve the quality of plans;
- To improve the quality of services;
- To improve the community's control over development and
- To increase community action and reduce dependency

Using the CBP approach has a number of benefits including:

- Assistance to municipalities gives effect to the requirements of the Municipal System Act, 2000.
- Moving from consultation to empowering encourages ownership of local development and overcomes dependency.
- Planning from outcomes not problems leads to more realistic and creative planning.
- Plans are more targeted and relevant to addressing the priorities of all groups, including the most vulnerable.
- The Municipality develops a cadre of trained facilitators who can be accredited
- The Municipality has a resource in the trained facilitators on whom they can draw to assist them in identifying community needs.
- Identifying and collaborating on solutions to community needs and priorities assist councilors and ward committees in fulfilling their tasks.
- CBP can play a key role in reconciliation and mobilization by bringing together different sectors of the community.
- CBP can generate mutual understanding between stakeholders.

Some of the Key Principles of CBP are as follows:

- ensuring that *poor people are included* in planning;
- Systems need to be *realistic and practical* using available resources within the district/local government;
- Planning must be linked to a *legitimate structure* that can handle funds;
- Planning should *not be a once off* exercise, but part of a longer-term development process;
- The plan must be *people focused and empowering*;
- Planning and implementation must be based on *strengths and opportunities*, not problems-based;
- Plans must be *holistic* and cover all sectors;
- The plan and process must be *learning oriented*;
- Planning should promote *mutual accountability* between community and officials;
- There must be *commitment* by politicians and officials to implementation.

The scope of community development can vary from small initiatives within a small group, to large initiatives that involve the whole community. Regardless of the scope of the activity, effective community development should be:

- long-term
- well planned
- inclusive and equitable
- holistic and integrated into the bigger picture
- initiated and supported by community members
- of benefit to the community
- grounded in experience that leads to best practices

Aims and objectives

The aims and objectives of this report are to:

- To circulate the information captured during a 4 day training session and a community meeting with ward committee members, councilors, religion leaders and community leaders and members.
- To gain support for Slangrivier Community for a sense of ownership of their area and their plans for development working to a sustainable and integrated community.
- Improved public participation in the process of integrated development
- Enhancing opportunities toward positive outcomes.
- Applying monitoring and evaluation.
- To include this projects into the Municipal IDP.

Methodology

The methodology undertaken for this study involved the following steps:

- Socio-economic analysis of Slangrivier:
 - Using the STATSA census 2011 data
- The key issues and challenges facing:
 - A transect walk (interviews with households, observations of the area's) were done and also information from the IDP were used.
 - Interviews with the School Principal and Health councilor
- A four day training session facilitated by DLG and Hessequa Municipality with,
 - 3 ward committee members
 - 5 community leaders
 - 3 religion leaders
 - 2 councilor's
 - 3 other stakeholders.
- Community meeting with Slangrivier residents (34 people attended)

Swot analysis

This SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis has emerged from the four work shopping sessions held with the Ward Committee Members and stakeholders of Slangrivier.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Community Halls • Municipal Services • School • Clinic • Library • Available Land • Talented positive youth 	<ul style="list-style-type: none"> • Unemployment • Inadequate medical services / clinic not accessible enough / availability of a medical doctor • Inadequate public transport • SAPS not effective • No public phones • Bad conditions of roads – Not maintained • Sanitation-challenges • Inadequate streetlights • School at full capacity / shortage of stuff 	<ul style="list-style-type: none"> • Development of a youth center • Fruit and Vegetable garden • Entrepreneurial development • Job creation initiatives(paving, skills) • Brick and Paving Plant • Extension of School • Tourism 	<ul style="list-style-type: none"> • Finance • Skills • Human resources • Drug and alcohol abuse • Teenage pregnancies • Shortage of Municipal stuff • Alcohol sales on Sunday's • Non removal of garden refuse • Illegal drug houses • Human resources

KEY ISSUES FOR SLANGRIVIER

KEY ISSUES	DESCRIPTION
Poor Socio-Economic Status	<ul style="list-style-type: none"> • Low levels of Education • High levels of unemployment • Poor income generating potential
Local Economic Development	<ul style="list-style-type: none"> • Income leakage • Lacking entrepreneurial skills • Poorly developed infrastructure
Infrastructure	<ul style="list-style-type: none"> • Dispersed rural settlement • Poorly developed rural physical and social infrastructure

SLANGRIVIER DEVELOPMENT STRATEGY

Slangrivier strives towards a united community in pursued of sustainable economic development.

OBJECTIVES:

Moving towards ...

- Infrastructural Development : *To improve infrastructure towards enhancing service delivery*
- Safe and Healthy environment: *To improve the challenges at the Police Station and at the Clinic towards a safer and healthier Slangrivier.*
- Social Development: *To develop the Slangrivier society as a whole*
- Economic Development: *To develop Entrepreneurs and SMME's*

SLANGRIVIER PROJECTS:

The list of the projects below emanated from the 4 day workshops, outcomes from the transcend walk and a community meeting that were held with the stakeholders and the ward committee members of Slangrivier. The list of projects provided below is projects that are considered important and implementable and are prioritized

Project	Current Problem/Challenge	Objective	Sphere of government /Stakeholders	Proposed project / program	Comments and Timeline
Development of Entrepreneurial skills and business:	Lots of people have good skill but are not qualified carpenters, plumbers, builders act	To equip people with qualified skills to become more independent and self-reliant.	Hessequa Municipality Private Sector Community Other Government Departments	Internship Learnership Short Course	Project Plan needs to be prepared July 2014
Development of a Youth Centre	There is no other place than the primary school where young people can partake in projects and programs	<ul style="list-style-type: none"> To help build a community structure that is responsive to the needs of young people Build community capacity 	Hessequa Municipality Private Sector Community Other Government Departments	Establishment of a Youth Centre	Project Plan needs to be prepared July 2014

		Enhance life skills			
Establishment of Safe House.	The community don't have a place where victims can be assist and people coming from rehab centers can be put in programs	To turn a residential home into a safe house and, To assist victims of domestic violence and substance abuse	Hessequa Municipality Dept. Social Development Community Safety Dept. Health	A safe House for Slangrivier	A ward Committee project July 2014
Paving Project:	Lack of job opportunities	To create jobs and bring sustainable projects to the community.	Hessequa Municipality Public Works DTI	Paving Project	Project Plan needs to be prepared July 2014
Tourism Project.	Slangrivier is the gateway to Hessequa and the garden route	A tourism project will be successful	Dept. Tourism Hessequa Municipality Private Sector Dept. Agriculture	Tourism project	Project Plan needs to be prepared July 2014
Development of Flats.	People only drive pass Slangrivier	If there is accommodation people will stay in Slangrivier and visit close by places	Dept. Public Works Hessequa Municipality Dept. Housing	Accommodation in Slangrivier	Project Plan needs to be prepared July 2014

Development of business erven	There are business people in Slangrivier that needs space and also ta attack other businesses	To create jobs and bring sustainable projects to the community	Hessequa Municipality	Business Erven in Slangrivier	Ward Committee Project – refer to SDF July 2014
Community awareness programme.	Substance abuse and other health challenges are high in Slangrivier	To educate the citizens of Slangrivier	Government Departments Community	Community awareness	Project Plan needs to be prepared July 2014
Food Security	Tb and HIV/Aids patients, children and some families have minimum resources	To assist people in need	Government Departments Community	Food Security	Project Plan needs to be prepared July 2014
Improve Police visibility	Lack of SAPS in Slangrivier , Office are closed	A 24 Hour satellite station in Slangrivier to service the residents	Community Safety SAPS Hessequa Municipality	Functional Satellite Station in Slangrivier	Will form part of the Indaba Priorities November 2013
Removal of Garden refuse project	Neighborhoods are not need and the problem is garden refuse that is dumped every where	A community Garden refuse Project	Community Hessequa Municipality	Community Project	Ward Committee project July 2014
Establishment of neighborhood watch	In the absence of visible Police , crime is high and people are not safe	A Neighborhood watch for Slangrivier	Dept. of Community Safety Community	Community Project	Volunteers must arrange a meeting with the CPF

School safety Project	Children are very aggressive and the school needs assistance	Projects will reduce safety risks and enhance school effectiveness	Community Government Departments Hessequa Municipality	School Safety Projects / Fence at School	Challenges needs to be identified and included in the Project Planning / Fence at the school will form part of the Indaba Priorities
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STRENGTHS OF THE CBP PROCESS

Considering that this is the first Community Based Plan (CBP) that has been prepared in Hessequa, there are a few positive contributions we need to note. The participants at the training sessions adopting so fast to the methodology of CBP and not thinking about the group or individuals they represent but thinking a cohesive Slangrivier.

1. The community members present at the public meetings where the information was shared and verified, debating positively towards finding solutions for the circumstances and challenges of the Slangrivier community.
2. The facilitators from DLG, Mr. Japie Kritzinger – (NDP Project Leader), Ms. Buyiswa Jack – (CBP Project Leader), Mr. Mzimasi Tamsanqa – (Co-Facilitator), Ms. Cindy-lee September – (Co-Facilitator) for the manner they shared knowledge and facilitated towards strengthening the Slangrivier community.
 - I. The community is more informed about their strengths and weaknesses and better placed to formulate appropriate plans based on the resources available;
 - II. CBP has enhanced the capacity of the community to plan and prioritize needs;
 - III. CBP has enhanced unity amongst community members.

CONCLUSION

This draft CBP has been prepared for Slangrivier with the focus on projects. As a first attempt at such a plan within the Hessequa Municipality there are many challenges awaiting the implementation. The dedicated official for CBP will continued to formalized the plan and take the projects to the next phase (micro project planning). Partnerships must be reach with the following stakeholders;

- Government Departments
- Private sector ,
- Non-government,
- Community-based sector,
- Social enterpriser and
- the Community of Slangrivier

“We acknowledge that each and every one of us is intimately and inextricably of this earth with its beauty and life-giving sources; that our lives on earth are both enriched and complicated by what we have contributed to its condition...”

Chapter 7 – Accountability, Transparency & Viability

PDO 1: MAINTAINING AN EFFICIENT ORGANISATIONAL STRUCTURE

PDO:	#1	Maintaining an Efficient Organisational Structure		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.				
2.				
3.				
4.				
5.				

Institutional Overview

As part of the IDP process, all strategic interventions were considered and resulted in focused objectives as set out in die section dealing with Pre-Determined Objectives. During this time the Council also revisited the institutional layout of management. The organisational structure which was carried over from the previous council was formed due to different circumstances that caused the structure to change and narrowing the top management level from the previous structure.

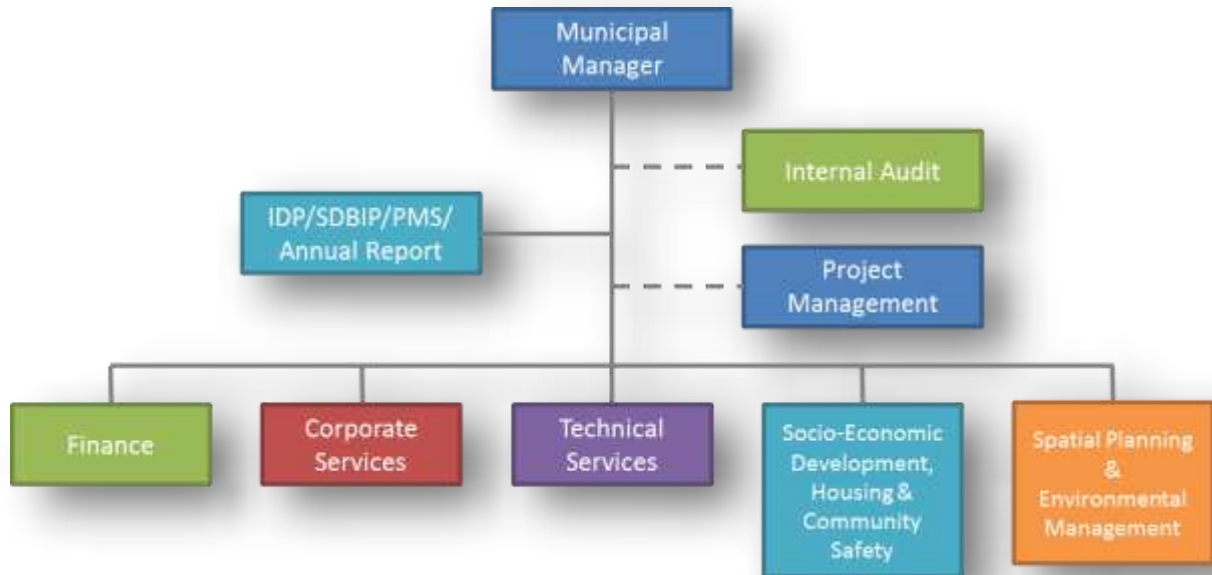
Council adopted this scaled down structure with the following changes as the formal organisational layout for the top layer of management as two senior managers left the service of Hessequa Municipality within the 2012/13 financial year:

1. Administration and Human Resource not being managed by an Acting Manager anymore, but being moved to the previous Manager Legal Services and Community Safety.
2. Community Safety being assigned to the Manager Socio-Economic Development and Housing to establish a one stop “Community Services” department
3. Electromechanical Services, Water, Sewerage and Sanitation Services being added to the Roads, Stormwater, Parks and Resorts to establish a “Technical Services” department

4. Cross-cutting processes like IDP, PMS, SDBIP and Annual Report to be established as a unit in the office of the Municipal Manager

The following diagram displays the organisation layout of management.

Figure 35 - Organisation Layout of Management



PDO 2: MANAGEMENT OF ADMINISTRATIVE SYSTEMS

PDO:	#2	Continued Management of Administrative Systems		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.				
2.				
3.				
4.				
5.				

Municipal Good Governance Project

Hessequa Municipality was fortunate to be able to participate in a project that was launched by the Stellenbosch University in collaboration with the Hans Seidel Trust to enhance good governance in local municipalities. The project stretched across the 2013/2014 financial year with various focuses on different local processes. The project was championed by an experienced, and well qualified, local government specialist, by the name of Werner Zybrands. Various engagements with senior management of the Hessequa Municipality was facilitated to ensure that it is not just a program that focuses on the development of an individual, but to manage the change that is required to implement the strategy, policy and implementation changes that was needed as the project identified shortages in the Hessequa governance processes.

As the project was implemented various governance issues was addressed, but herewith a short summary of all the activities and outputs generated by the project.

This project was well executed in Hessequa due to the capable human resources that facilitated this project. The list on the right shows the direct outcomes of the project, but the most important is the indirect experience and knowledge that was transferred to personell and senior management. Furthermore this project assisted Hessequa to start to understand more “mature” governance principles which allows the executive of Hessequa Municipality more confidence when difficult governance decisions need to be made.

Overview of Good Governance Project Outcomes
Rules of Order Review
Review of Communications Policy
Article 109 Policy - Payment of Legal Fees
Drafting of a Risk Management Policy
Drafting of Article 66 Policy
Review of the Organisational Structure
Article 53 Roles and Responsibilities
Development of Article 32 Committee Framework
Review of By-laws and Policies
Review of Scarce Skills Policy
Review of Succession Policy

PDO 5: MANAGEMENT OF PUBLIC AMENITIES

PDO:	#5	Management of Municipal Halls, Sport Facilities and Leased Properties		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.				
2.				
3.				
4.				
5.				

To be included in Final IDP Review Document

PDO 18: GOOD GOVERNANCE AND PUBLIC PARTICIPATION

PDO:	#18	Good Governance through the enhancement of Legal Services, Integrated Development Planning, Performance and Risk Management and Structured Public Participation		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Framework	Public Participation Framework	Draft	2014

Public Participation Framework

General Principles

The strategic section of Hessequa Municipality is hereby tasked to put more effective public participation processes / mechanisms in place.

- Public participation is seen as an important tool for the development of ownership , and partnerships with the necessary commitment and understanding of all stakeholders . Public participation is also considered the legality of the policy-making processes of government
- Why promote public participation ?
 - It 's a legal requirement .
 - Contribute to more relevant development plans and services that local circumstances and needs addressing .
 - Promote community action in a responsible manner
 - Empowering communities to have control over their lives and livelihoods
- *Basic assumptions that public participation include :*
 - Public participation is designed to determine the values of good governance and human rights;
 - Public participation is recognized a fundamental right of all people to contribute to the management system ;
 - Public participation requires the recognition of the intrinsic value of all our people , invest in their ability to contribute to management processes ;
 - People can participate as individuals , interest groups and communities more generally

The Municipal Systems Act defines the public / community as the following:

- (a) the resident of a municipality
- (b) the ratepayers of the municipality
- (c) any community organizations and non-governmental organization or labor organization or bodies involved in local affairs within the municipality , and
- (d) visitors and other people outside the boundaries of the municipality who , because of their presence in the municipality , make use of services or facilities provided by the municipality

The broad categories of community participation within the municipality must take place is:

- Development , implementation and review of the IDP & PMS
- Preparation of budget

- Monitoring and review of the organization 's performance through the annual report
- Service delivery issues gatehouse of strategic decisions
- Policy Formulation and Ordinances

Legislative Framework

- The idea of public participation in all levels of government are included in the South African Constitution . Chapter 2 of the Constitution include a Bill of Rights , including equality, human dignity, freedom, environment , and the right to housing , health care , food , water , social security , education, access to information . In terms of the roles of national , provincial and local spheres of government the Constitution stipulate ::
 - Section 151 (1) (e) - forced municipalities to the involvement of communities and community organizations in local government to encourage .
 - Section 152 - The objects of local government (is) the involvement of communities and community organizations in the matters of local government to encourage .
 - Section 195 (e) - in terms of the basic values and principles governing public administration - people 's needs must be , and the public should be encouraged to participate in policy designee
- Communities and Municipalities responsibility are explain in articles 5 , 6 , 16 and 17 of the Local Government : Municipal Systems Act (Act 32 of 2000):
 - Section 5 spells out the rights and responsibilities of members of a local community . Point (1) (a) makes it clear that participation through mechanisms may contribute to the decision making processes of the municipality .
 - Section 6 confirms the commitment of a local municipality to improve communication and cooperation between the municipality and communities.
 - Section 16 provides that a municipality a culture of municipal government should develop formal representative government with a system of participatory governance complement , and that the municipality has the right conditions must encourage and create so that the local community in the affairs of the municipality to participate .
 - Section 17 provides that a municipality appropriate mechanisms , processes and procedures to be established by the local community to enable it to participate in the affairs of the municipality to participate ..

Levels of Participation

Level 1

Level 1 is mechanisms of participation mechanisms where the municipality focuses on information regarding an issue across to a group of people with an interest in the subject or anyone to whom it may apply . Level 1 mechanisms may provide an opportunity to the audience / reader / listener to forward inquiries regarding the content of the information communicated .

Billing Information: Information that accompanied the monthly bill

Legal notices: where the public informed of activities or projects , usually on billboards and have an opportunity to create feedback / comments / concerns .

Advertising: in print media a chance for feedback / comments / concerns .

Hessequa Municipality's Website :where information , announcements and documents are made available for feedback / comments / concerns .

Press Releases: where the municipality responding to a question from the audience , programs and projects launched or information of a general nature rehearsed .

Hessequa Thusong Service Centre: Projects and programs such as Jamborees

Eden FM: Radio Timeslots, here the municipality responding to a question from the audience and launch programs and projects

Newsletter :Monthly newsletter that informs residents about issues of importance .

Additional Information: Tenders are also advertised on the municipal website and printed media providing opportunities for communities .

Level 2

Level 2 and 3 are very close to each other , but one major difference . In practice, the sessions are very similar to those of the other , it's just what the outcomes of the session are made to determine whether it is a level 2 or 3 mechanism . Level two focuses heavily on the collection of information for consideration during decision-making processes . Otherwise it can also take the form of official response on issues raised by a particular interest group or organizations on the progress of actions to be taken

- a. Structured surveys
Collection of data from a representative group from the public or specific stakeholders.
- b. Interviews with focus groups ::
Based on structured questions where the data are analyzed with the aim of further planning is considered.
- c. Feedback register:
Owners feedback in terms of the service delivery challenges , priorities and other urgent issues
- d. Community facilitators:
Groups / individuals with clear responsibilities that can provide spesefic knowledge to the public.

Level 3

Although a level 3 practice session might look the same as a level 2 , the outcomes of the session very differently employed in the municipality . Level 3 consultations will seek direct recommendations to the Board to consider approving due to the quality and credibility of the inputs received . A typical example of level 3 mechanisms are the Audit Committee , Oversight and Ward Committees

- a. Community meetings where the MM and / or project team to present unstructured questions about a specific project / program or strategy questions.
- b. Workshops focus groups with experts and stakeholders with a focus on empowering participants .
- c. Specialist training programs usually less than a week.
- d. Advisory committees and panels which aims to formulate recommendations
- e. Task teams aim to make a specific proposal / project implementation and monitoring

Mechanisms for Participation

Newsletters

- Monthly and light only in community projects or events (level 1)
- Mention the main item for the next issue so that their residents questions about the item and can redirect the information out the question also covers . (level 2)

Surveys

- Covers usually more than one service / department / subject gaps to allow the prioritization (level 1)
- Surveys should be more structured so that specific input from focus groups / stakeholders trapped. (level 2)
- Inputs should be prioritized and seen as concrete data that can lead to policies / tariffs adjustment (level 3)

Eden FM

- Fixed time slot where the presenter paper to the representative of the Municipality beforehand by the agent himself drafted (level 1)
- Once the project / policy / tariff explained gives opportunity for people to send SMS and only answer the questions relefante (level 2)

General Public Meetings

- Be well advertised and is usually appropriate location , opportunity for questions and comments (Level 2)
- Has the potential of being disruptive and non-constructive, can lead to situations where the facilitators are unable to maintain a platform where anyone can air their views at all (Level 1)
- Input from the community are documented , distributed to the departments that input and follow through approved the feedback mechanism . (level 2)
- Although the outreach format can serve as a credible level 2 mechanism , it is not necessarily a mechanism that hardly relate to internal processes and interactions that occur in this mechanism many times more generic issues such as housing , bills , jobs and so forth .

Ward Committees

- The functions and powers of the ward committees should be investigated as it is their goal to promote public participation in decision-making at the local level to improve .
- Ward Committees together with the CBP official to ensure that their area plan submitted for consideration in the budget (ward projects) (Level 3)
- The object of a ward committee is to enhance participatory democracy in local government.
- Be an advice body , without any executive powers ;
- Be independent;
- Pursue the interests of the ward residents represent where appropriate , traditional structures as an integral part must include and must be impartial and perform its functions without fear , favor or prejudice exports .
- Mobilize communities to IDP / Budget meetings and also attend ;
- All ward committee members in the IDP community meetings to present assistance to marginalized groups and those who can not read or write ;
- Participate in the conduct of the ward-based planning process ;
- Prioritize community inputs and determine the five (5) top priorities of the ward;
- Provide information on priority issues and problems ;
- Monitor and evaluate performance of the municipality .

Ward Councillor Feedback Meetings

- This mechanism should be considered as a practical application of section 17(2)(e) where feedback is given to communities.
- When Ward Committee meetings are completed, a Ward Councillor can convene a second meeting to provide the opportunity for the audience present to engage with the Ward Committee members on issues relating to their ward.
- The Ward Councillor can make use of this opportunity to give feedback to the audience present on issues raised during previous meetings. (Level 2)
- This mechanism provides an opportunity for community members to experience participatory local government through accountable response from an elected member of Council.

Focus Groups

- The specific interest groups
- The interest groups are organizations on a particular issue focus with focus on the same interests as die munisipale line functions , or not .
- Groups must geïdentifiseerword whose specific interest areas directly related to the ward 's key performance areas eg . community safety forums , chambers of commerce, associations vaninformele dealers / education / , environmental groups , and others .
- These stakeholders should be invited to discuss the matter in question and the Ward / Strategic Services / Project Team meeting or to speak
- Grey Power players can also be seen as individuals with proven knowledge in specific subject areas that can be part of consultation sessions and / or development programs / projects .

Departmental Processes

- Departments drives isolated public participation processes when it comes to their projects and programs .
- This participation processes in a coordinated central point to the outcomes of the consultation process to include in the IDP .
- A practical example of this is the work sessions in communities of the SDF

A renewed focus on people's participation and input

Proposed Public Participation Framework

The proposed framework for public participation in Hessequa Municipality consists of three components of participation processes namely: Broader Public Participation, Focus Groups and Departmental Consultations. Each of these three components fined application through different implementation mechanisms. The following diagram illustrates the three components, but also identify the mechanisms of participation and the level of participation that facilitates the mechanism. The proposed level of participation is the numerical value which mechanism is indicated.



Levels of participation and Feedback

As in section 3 of the document explained, helps the levels of participation to determine who is trying to achieve with the consultation between the municipality and the people on the other side of the proverbial table.

This working document provides an opportunity for the Council to reflect on the different outcomes that can be expected from the sessions. This framework is as detailed as possible compiled all options on the table. Final decisions about the mechanisms and processes that will be used will through the adoption of a new public participation policy worked.

A great need for an interaction or flow of information to take place between the drivers of a process and with interests in a process. This puts the onus of responsibility on the facilitator of the discussion process and should reflect on how feedback to those involved will take place. Along with it a proper process plan that stakeholders prior informed of how the information will be fed back to them.

Coordination of Central Public Participation Processes

The framework suggests that public participation as a formal function recognized in Hessequa Municipality and that it operates as a function of the Data Coordinator . This means that it will be

carried as an overarching, strategic initiative from the Strategic Services division, based in the office of the Municipal Manager.

As part of the central coordination, it is important that a database of all stakeholders and their interests together to implement the right players / stakeholders invited to the table when consulting with a specific focus should occur. A registration process is proposed which will go hand in hand with running a large-scale marketing campaign that focused Municipality wants to communicate with players.

Once a database as a benchmark is used, it will clearly begin to point out in which sectors / issues of interest there is no representation. It offers the opportunity to the IDP Office to actively work sessions with unrepresented communities or groups of people to keep the inaudible voices of many people in the region to formalize Hessequa

Performance Management

Introduction

Performance management is a process which measures the implementation of the organisation's strategy. It is also a management tool to plan, monitor, measure and review performance indicators to ensure efficiency, effectiveness and the impact of service delivery by the municipality.

At local government level performance management is institutionalized through the legislative requirements on the performance management process for Local Government. Performance management provides the mechanism to measure whether targets to meet its strategic goals, set by the organisation and its employees, are met.

The constitution of S.A (1996), section 152, dealing with the objectives of local government paves the way for performance management with the requirements for an "accountable government". The democratic values and principles in terms of section 195 (1) are also linked with the concept of performance management, with reference to the principles of inter alia:

- the promotion of efficient, economic and effective use of resources,
- accountable public administration
- to be transparent by providing information,
- to be responsive to the needs of the community,
- and to facilitate a culture of public service and accountability amongst staff.

The Municipal Systems Act (MSA), 2000 requires municipalities to establish a performance management system. Further, the MSA and the Municipal Finance Management Act (MFMA) requires the Integrated Development Plan (IDP) to be aligned to the municipal budget and to be monitored for the performance of the budget against the IDP via the Service Delivery and the Budget Implementation Plan (SDBIP).

In addition, Regulation 7 (1) of the Local Government: Municipal Planning and Performance Management Regulations, 2001 states that "A Municipality's Performance Management System entails a framework that describes and represents how the municipality's cycle and processes of performance planning, monitoring, measurement, review, reporting and improvement will be conducted, organised and managed, including determining the roles of the different role players." Performance management is not only relevant to the organisation as a whole, but also to the

individuals employed in the organization as well as the external service providers and the Municipal Entities. This framework, *inter alia*, reflects the linkage between the IDP, Budget, SDBIP and individual and service provider performance.

Legislative requirements

In terms of section 46(1)(a) a municipality must prepare for each financial year a performance report reflecting the municipality's and any service provider's performance during the financial year, including comparison with targets of and with performance in the previous financial year. The report must, furthermore, indicate the development and service delivery priorities and the performance targets set by the municipality for the following financial year and measures that were or are to be taken to improve performance.

Strategic performance

Strategic performance indicates how well the municipality is meeting its objectives and which policies and processes are working. All government institutions must report on strategic performance to ensure that service delivery is efficient, effective and economical. Municipalities must develop strategic plans and allocate resources for the implementation. The implementation must be monitored on an on-going basis and the results must be reported on during the financial year to various role-players to enable them to timeously implement corrective measures where required.

This report highlight the strategic performance in terms of the municipality's Top Layer Service Delivery Budget Implementation Plan (SDBIP), high level performance in terms of the National Key Performance Areas, performance on the National Key Performance Indicators prescribed in terms of section 43 of the Municipal Systems Act, 2000 and an overall summary of performance on a functional level. Details regarding specific basic service delivery targets, achievements and challenges will be included in the Annual Report of the municipality.

The performance system followed for the financial year 2010/11

Adoption of a Performance Management Framework

The municipality adopted a performance management framework that was approved by Council during 2009. However, this framework is currently being revised to include more detailed processes and internal control. Once the revised framework has been workshopped by all the various role players the framework will be submitted to Council for approval.

The IDP and the budget

The IDP process and the performance management process are integrated. The IDP fulfils the planning stage of performance management. Performance management in turn, fulfils the implementation management, monitoring and evaluation of the IDP.

The Service Delivery Budget Implementation Plan

The organisational performance is evaluated by means of a municipal scorecard (Top Layer SDBIP) at organisational level and through the service delivery budget implementation plan (SDBIP) at directorate and departmental levels.

The SDBIP is a plan that converts the IDP and budget into measurable criteria on how, where and when the strategies, objectives and normal business process of the municipality is implemented. It also allocates responsibility to directorates to deliver the services in terms of the IDP and budget.

The MFMA Circular No.13 prescribes that:

- The IDP and budget must be aligned
- The budget must address the strategic priorities
- The SDBIP should indicate what the municipality is going to do during next 12 months
- The SDBIP should form the basis for measuring the performance against goals set during the budget /IDP processes.

The SDBIP were prepared as described in the paragraphs below and approved by the Executive Mayor 28 days after the budget was approved. The departmental SDBIP of each Directorate were approved by the Municipal Manager after the budget was approved. KPI's in the Top Layer SDBIP were adjusted after the mid-year assessment and/or after the adjustments budget has been approved. KPI's were adjusted to be aligned with the adjustment estimate and the reason for the change in KPI's was documented in a report to Council for approval. The approval documents have been safeguarded for audit purposes.

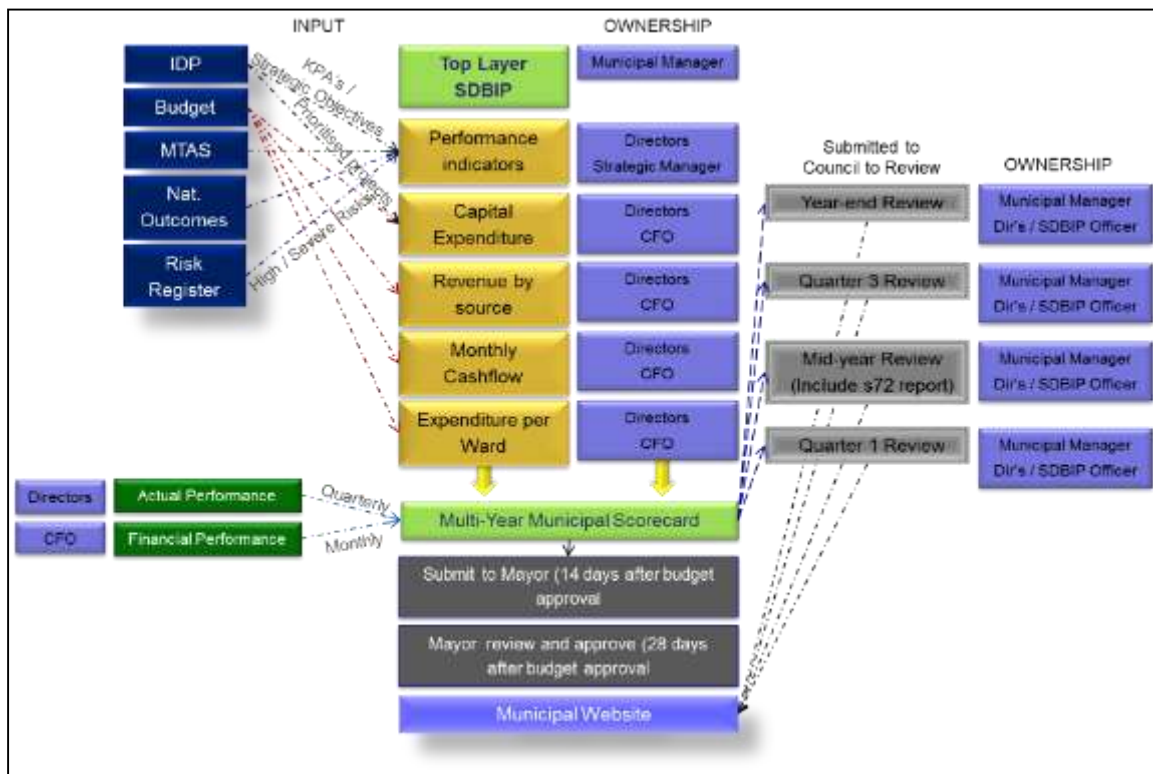
KPI's in the Departmental SDBIP were adjusted during the course of the year assessment and/or after the adjustments budget has been approved. KPI's were adjusted to be aligned with functional requirements and the adjustment estimate and the reason for the change in KPI's was documented in a report to the Municipal Manager for approval. The approval documents have been safeguarded for audit purposes.

The municipal scorecard (Top Layer SDBIP)

The municipal scorecard (Top Layer SDBIP) consolidate service delivery targets set by Council / senior management and provide an overall picture of performance for the municipality as a whole, reflecting performance on its strategic priorities. Components of the Top Layer SDBIP include:

- **One-year** detailed plan, but should include a **three-year capital plan**
- The 5 necessary components includes:
 - Monthly projections of revenue to be collected for each source
 - Expected revenue to be collected NOT billed
 - Monthly projections of expenditure (operating and capital) and revenue for each vote
 - Section 71 format (Monthly budget statements)
 - Quarterly projections of service delivery targets and performance indicators for each vote
 - Non-financial measurable performance objectives in the form of targets and indicators
 - Output NOT input / internal management objectives
 - Level and standard of service being provided to the community
 - Ward information for expenditure and service delivery
 - Detailed capital project plan broken down by ward over three years

The following diagram illustrates the establishment, components and review of the municipal scorecard (Top Layer SDBIP):



Top Layer KPI's were prepared based on the following:

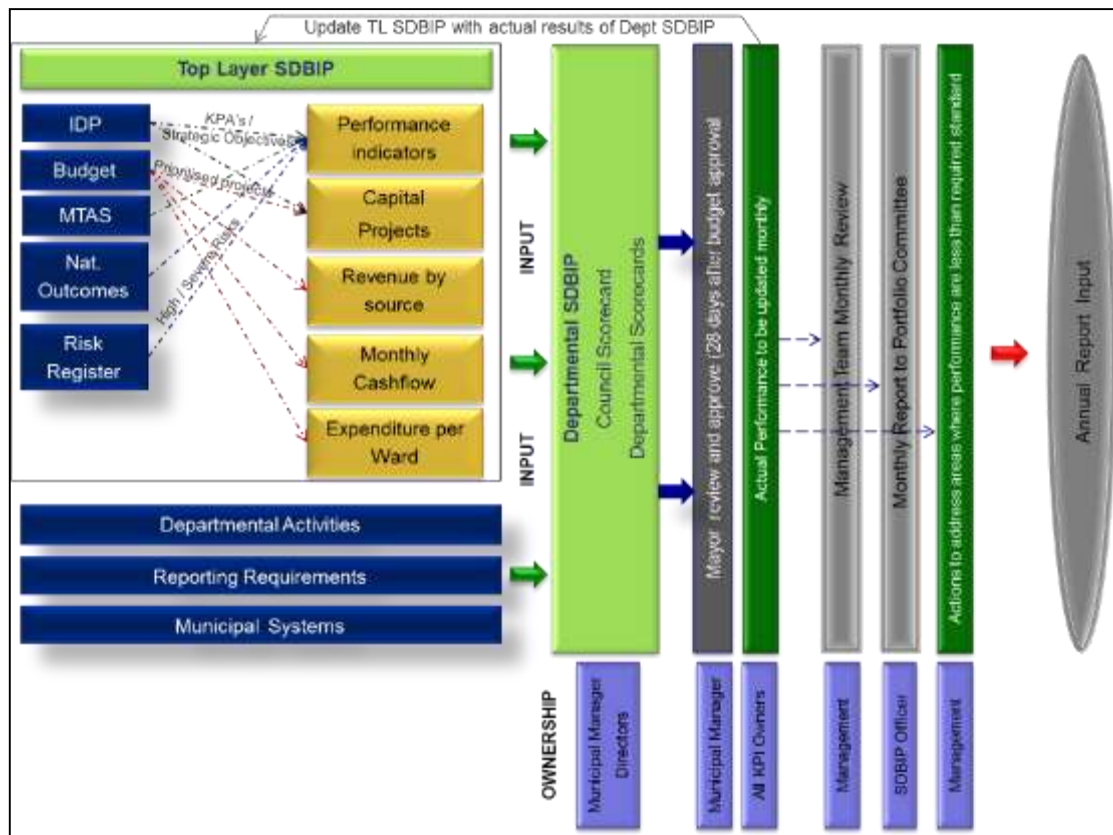
- Key performance indicators (KPI's) for the programmes / activities identified to address the strategic objectives as documented in the IDP.
- KPI's identified during the IDP and KPI's that need to be reported to key municipal stakeholders.
- KPI's to address the required National Agenda Outcomes, priorities and minimum reporting requirements.
- The municipal turnaround strategy (MTAS)

It is important to note that the municipal manager needs to implement the necessary systems and processes to provide the POE's for reporting and auditing purposes.

Directorate/Departmental scorecards

The directorate and departmental scorecards (detail SDBIP) capture the performance of each defined directorate or department. Unlike the municipal scorecard, which reflects on the strategic performance of the municipality, the departmental SDBIP provide detail of each outcome for which top management are responsible for, in other words a comprehensive picture of the performance of that directorate/sub-directorate. It was compiled by **senior managers** for their **directorate** and consists of objectives, indicators and targets derived from the approved Top Layer SDBIP, the approved budget and measurable service delivery indicators related to each functional area.

The following diagram illustrates the establishment, components and review of the departmental SDBIP:



KPI's were developed for Council and the Municipal Manager and for each Directorate. The KPI's:

- Address the TL KPI's by means of KPI's for the relevant section responsible for the KPI.
- Include the capital projects KPI's for projects. The targets are aligned with the projected monthly budget and project plans.
- Address the key departmental activities.
- Each KPI have clear monthly targets and are assigned to the person responsible for the KPI's.

Update actual performance

The municipality utilizes an electronic web based system on which KPI owners update actual performance on a monthly basis. KPI owners report on the results of the KPI by documenting the following information on the performance system:

- The actual result in terms of the target set.
- The output/outcome of achieving the KPI.
- The calculation of the actual performance reported. (If %)
- The reasons if the target was not achieved.
- Actions to improve the performance against the target set, if the target was not achieved.

It is the responsibility of every KPI owner to maintain a portfolio of evidence to support actual performance results updated.

Monitoring of the Service Delivery Budget Implementation Plan

Municipal performance is measured as follows:

- The Directorates review their performance and monthly report their performance in terms of the SDBIP to the Municipal Manager and the respective Portfolio Councillor.
- Monthly submission of IYM reports to Council.
- Mid-year assessment and submission of the mid-year report to the Mayor in terms of section of Section 72(1) (a) and 52(d) of the Local Government Municipal Finance Management Act to assess the performance of the municipality during the first half of the financial year.

PDO 19: FINANCIAL MANAGEMENT

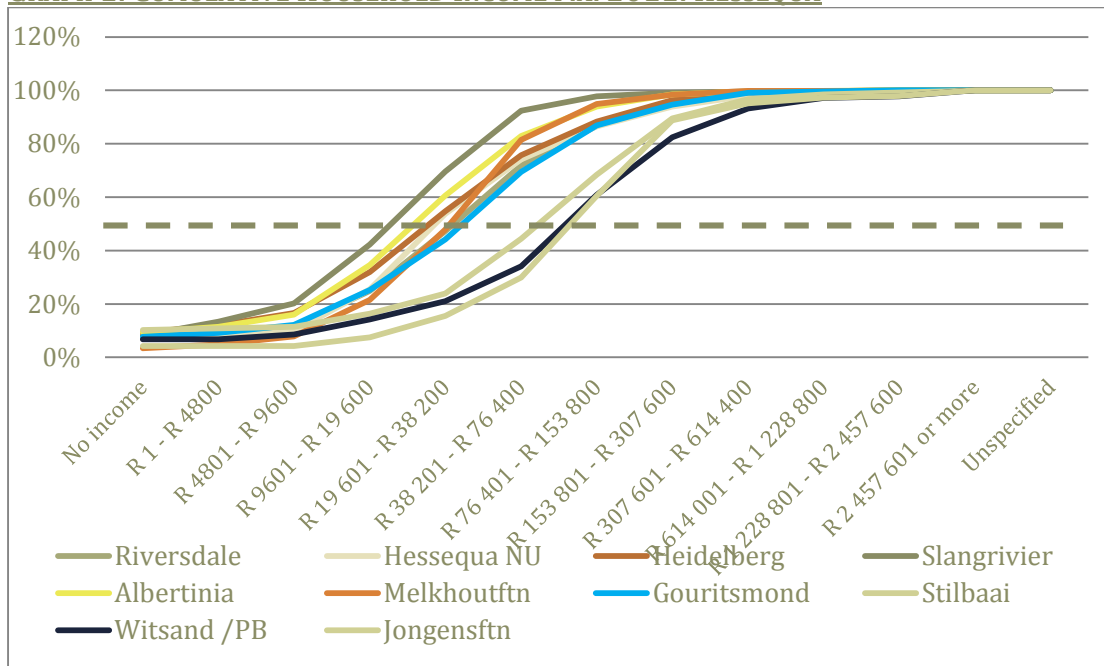
PDO:	#19	Sound Financial Governance, Management and Viability		
Planning Documentation Guiding Pre-Determined Objective				
#	Type	Name (No Dates/Years!)	Status	Approval
1.	Plan	Long Term Financial Plan	Approved	2013
2.	Strategy	Prevention of Fraud & Corruption Strategy	Approved	2014
3.	Policy	Supply Chain Management Policy	Approved	2014
4.	Policy	Tariff Policy	Approved	2014
5.	Policy	Credit Control Policy	Approved	2014
6.	Policy	Indigent Policy	Approved	2014

Long Term Financial Plan

Spatial & Demographic Perspective

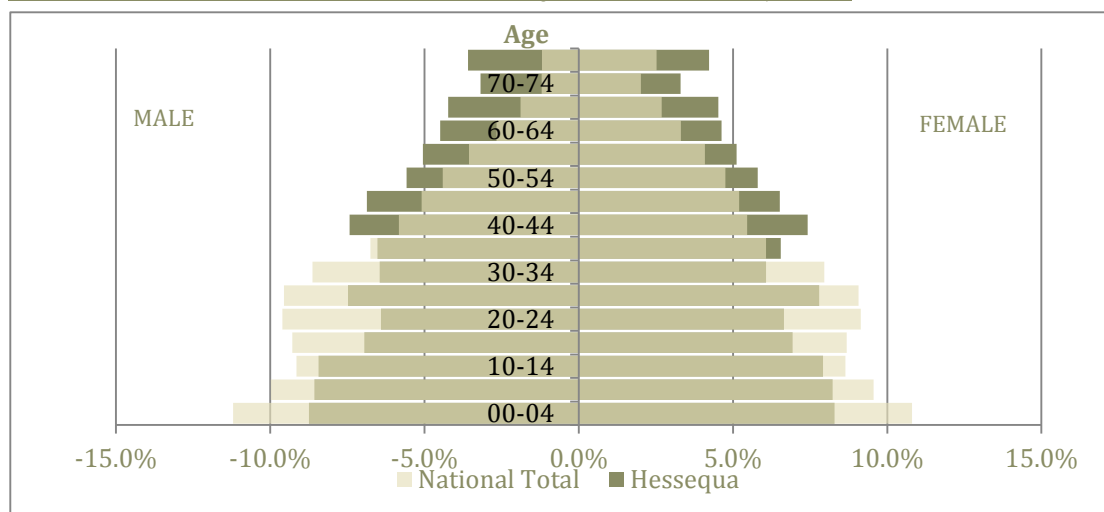
1. Hessequa covers a large area of 5 733km² and is not densely populated. The settlements that make up the municipality are widely dispersed from Albertinia in the east to Heidelberg in the west and from Riversdale in the north to Stilbaai/Jongensfontein in the south, with a number of other settlements in between. The low density and relatively low population of app. 53 000 people scattered throughout the municipality in towns, villages and non-urban areas gives Hessequa a rural character.
2. The relatively modest population growth rate of 1.3% p.a. has decreased in recent years and is expected to further decrease in future.
3. The current annual per capita income of Hessequa is the third highest in Eden DM after Mossel Bay and Knysna. The average annual income per household in Hessequa is R 207 538, but with a significant variation in the distribution of household income across locality as illustrated in Graph 1.
4. The relative prosperity / poverty of the towns is obtained by comparing the median household income for each town with each other. Slangrivier with a median income at the lower end of the income bracket of R19 601 - R38 200 features at the lower end of the graph. Jongensfontein with a median income at the higher end of the income bracket of R76 401 - R153 800 features at the higher end of the graph.

GRAPH 1: CUMULATIVE HOUSEHOLD INCOME P.A. 2011: HESSEQUA



5. The economic active population¹ in Hessequa is below 40% of the population. The official unemployment rate of Hessequa is a relatively low 6.5% or 1 251 people of the 19 289 economic active population. The unemployment figure for South Africa is regarded to be 25.0 % and that for the Western Cape 21.3%.
6. In comparison with the National Total, the population pyramid of Hessequa clearly illustrates the age composition of society. Proportionally Hessequa has more people older than 40 years of age than the National Total. Proportionally there are more people younger than 35 nationally than in Hessequa.

GRAPH 2: POPULATION PYRAMID OF HESSEQUA MUNICIPALITY, 2012



¹ Economically Active Population (EAP): The economically active population (EAP) is defined as the number of people who are able, willing and who are actively looking for, work and who are between the ages of 15 and 65. It thus includes both employed and unemployed people.

Economic Perspective

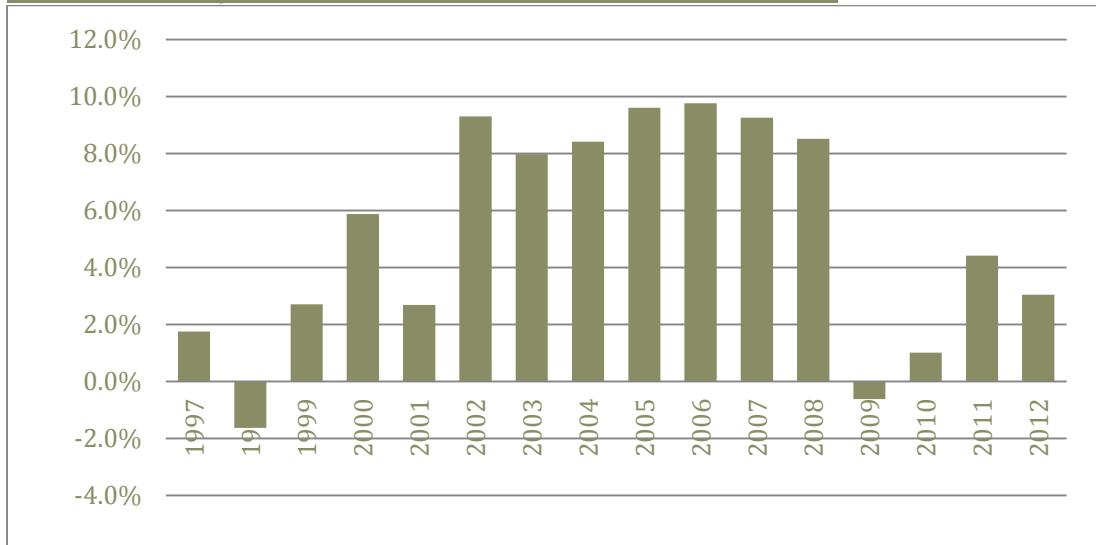
7. Hessequa's total gross economic value add, which reflects the monetary value of the local economy is R2 201 961 million (nominally) or R1 287 864 million in constant (2005) terms with the following sectors making a contribution:

TABLE 1: SECTOR SHARE OF REGIONAL TOTAL

	2002	2012
Agriculture	30.2%	14.3%
Mining	0.1%	0.0%
Manufacturing	4.5%	3.0%
Electricity	0.6%	1.0%
Construction	6.8%	15.6%
Trade	15.2%	20.3%
Transport	9.9%	12.2%
Finance	11.5%	15.0%
Community Service	21.2%	18.5%

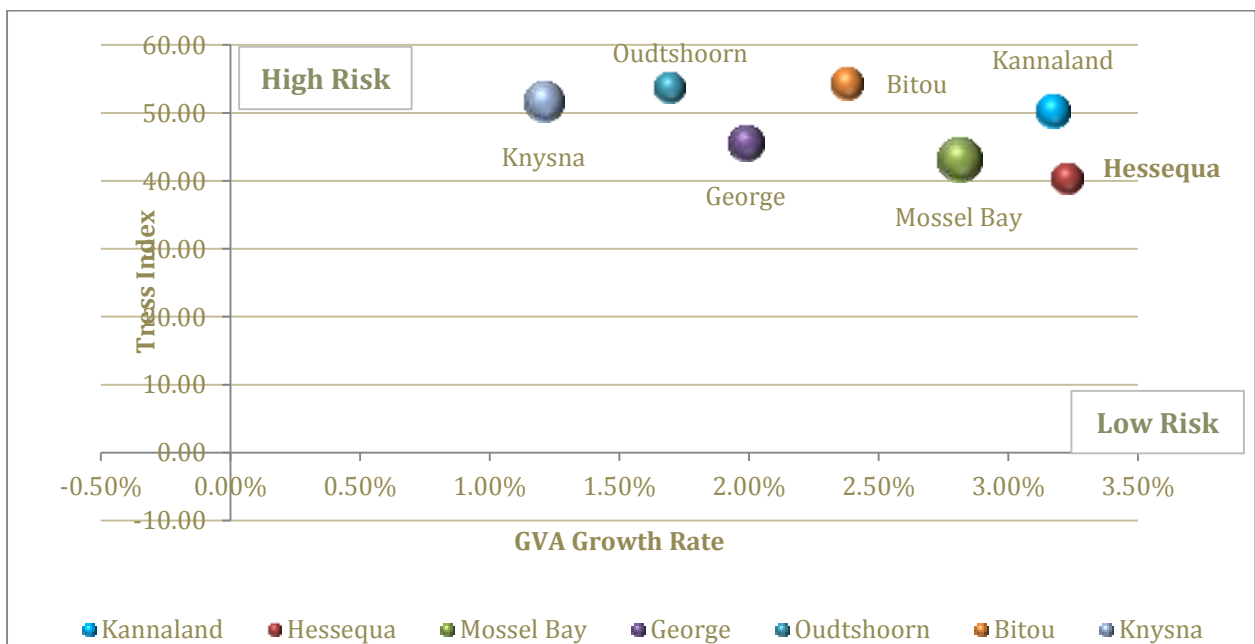
8. The dominant role that agriculture played as a contributor to the local economy 10 years ago (30.2%) has halved and is currently responsible for only 14.3% of the Gross Economic Value Add of Hessequa. Community services' contribution has also declined from 21.2% ten years ago to a current 18.5%. This has, however, remained an important sub-sector of the local economy.
9. The contribution of construction has more than doubled from 6.8% ten years ago to the current 15.6% whilst Trade and Finance both increased their contribution to a respective 20.3% and 15.0% currently. It should be noted that property retail activities form part of finance.
10. Currently the amount of spending related to tourism (leisure, business, people visiting family and friends and other) is in the order of R 308 million per annum, thus contributing 13% to the GDP of Hessequa. (This excludes any capital expenditure such as the purchase of holiday homes). There is however a declining trend of spend, both in absolute terms as well as percentage of GDP.
11. The average annual GVA growth rate for the period since 1997 is 5.3% p.a., but with the cyclical characteristics that the national economy is subjected to.

GRAPH 3: HESSEQUA: ANNUAL AVERAGE GVA GROWTH RATE % P.A.

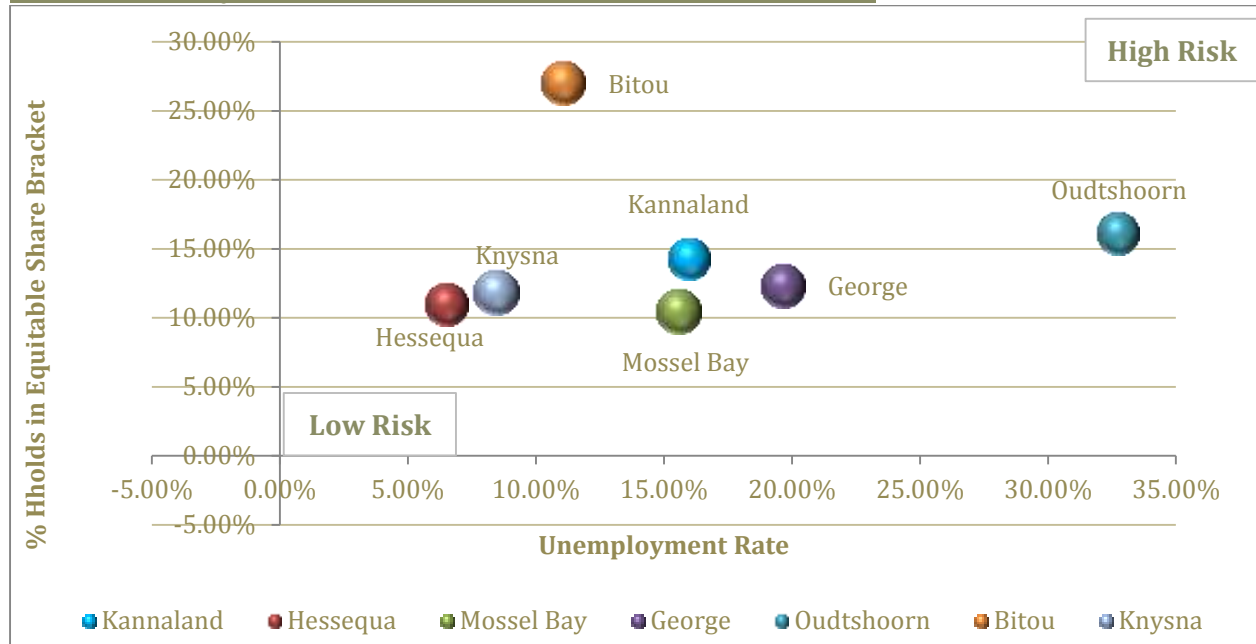


12. IPM has developed the Municipal Revenue Risk Indicator (“MRRI”), which measures the risk of a municipality to generate its own revenues. This risk is on the one hand a function of the economy (GVA, Tress Index and GVA growth rate) and on the other a function of households’ ability to pay (measured by the % of households with income in the equitable share bracket, unemployment rate and Human Development Index).
13. Hessequa’s MRRI is a “Medium to Low” risk to generate own municipal revenue. The following graphs illustrate Hessequa’s relative position in comparison to other municipalities in the district.

GRAPH 4: HESSEQUA: COMPARATIVE ECONOMIC RISK



GRAPH 5: HESSEQUA: COMPARATIVE HOUSEHOLD ABILITY TO PAY RISK



Household Infrastructure Perspective

14. Hessequa’s Infrastructure Index² is higher than that of the average of Eden, Western Cape and South Africa as a whole. In 1996 the index for Hessequa was 0.80 (WC: 0.86 and EDM: 0.80). In 2012 the index was 0.91 (WC: 0.88 and EDM: 0.87). This is an indication of the municipality’s high level of access to infrastructure.
15. In 2012 Hessequa outperformed the provincial average on three of the four services that were investigated, viz. water, sanitation and electricity, and only lags the province in the provision of refuse removal, which is due to the large rural component in the municipality.
16. Very formal and formal housing together constitute a significant 94.6% of dwelling types in the municipality. Informal dwellings constitute a relatively small percentage of 4.0% in 2012. A disproportionate number of non-formal dwellings are located in 4 towns/villages, viz. Riversdale, Heidelberg, Slangrivier and Melkhoutfontein. Jointly they have 89% of all informal dwellings.
17. For 92.3% of households of Hessequa the municipality provides a level of service that exceeds the minimum RDP level of service. However, 9.4% of all households fall within the income bracket of the equitable share formula, i.e. 9.4% of households can only afford a RDP level of service. The gap³ between household level of service and household income in Hessequa is 1.7 percentage points. Although this is not an excessive gap, Hessequa may experience affordability concerns in future.
18. The Auditor General reported in 2011 that the material losses for water amounted to R811 000. We understand that this may be due to a combination of factors, viz. ageing infrastructure and inappropriate metering of bulk water. In the case of Riversdale, the meter that measures the water that the municipality pays to Korrente-Vetterivier Irrigation

² The infrastructure index is a population-adjusted, access-to-service weighted index which measures a region’s overall access to household infrastructure. The index ranges from 0 to 1, where 0 implies that every household in the region is below the minimum level of access to infrastructure, and 1 implying that every household in the region is at the minimum level of access to infrastructure.

³ Gap = % Infrastructure Index - % Household Income above Equitable Share

Board is at the weir of the Korrentepoort Dam, but farmers tap off the line from the weir to the municipal reservoir. It could also be as a consequence of the “take-or-pay” arrangement that the municipality has with Overberg Water in Heidelberg and Slangrivier.

Financial Perspective

19. On reflection of the historical financial performance as documented in the Independent Financial Analysis attached in Annexure 1 it is important to take into consideration the financial strengths and weaknesses of Hessequa Municipality highlighted in this report to set reasonable objectives for the Long Term Financial Plan.
20. The financial administration of Hessequa Municipality has displayed the necessary capacity to implement accounting procedures and policies. These policies can be strengthened by the adoption of this Long Term Financial Plan and the proposed Liquidity Policy and Borrowing, Funds and Reserves Policy.
21. The operational performance of Hessequa Municipality is finely balanced leaving limited room for error as can be deducted from the volatility in the Municipality’s ability to post cash operating surpluses. Over a time series of 8 years Hessequa Municipality posted cash operating deficits in three years and surpluses have reduced annually. This requires much emphasis to be placed on the management of expenditure against real income. As a result of the above pressure, items such as repairs and maintenance may be negatively affected and the scope for redemption of external borrowings will be reduced.
22. Positively Hessequa Municipality has portrayed the ability to effectively collect on its arrear debtors however on the other hand the revenue base of Hessequa Municipality has grown at a reduced rate over the past two financial years.
23. Liquidity has been reasonably managed and as a key viability indicator it is necessary that liquidity be measured as follows:
 - a. Current Assets excluding debtors older than 90 days cover all Current Liabilities at least 1 times.
 - b. Unencumbered cash and investments is sufficient to cover unspent conditional grants, cash backed reserves, short term provisions and at least one month’s of operational expenditure.

As at 30 June 2013, Hessequa Municipality was able to meet the above requirements.

24. The capital funding sources available to the Hessequa Municipality consist of fiscal transfers, own cash generated, gearing through external loans and the sale of assets. The fiscal transfers that have been appropriated to Hessequa Municipality by National and Provincial Government have been effectively utilised. The cash generated from own sources are restricted as there are no funds in the Capital Replacement Reserve and funds generated from operations are limited. Access to external gearing is capped by the size of the operating income base and the Hessequa Municipality’s ability to absorb additional liabilities into its stretched operating budget. The maximum gearing level proposed is 35% of unconditional operating income (at a stretch the sector benchmark of 50% may be considered) and as at 30 June 2013, Hessequa Municipality’s gearing was already at 33%, leaving little room for future gearing. The only other resource for consideration is the sale of investment properties to create future reserves to invest into capital infrastructure. Within the above limitations Hessequa Municipality needs to manage its capital investments.

25. External gearing has been incurred over an amortising term of 10 years making the repayment profile on long term debt relatively short with an average duration of 8 years within which debt is repaid. Lengthening external borrowings to 15 years and sculpting repayments to an escalating profile may alleviate additional pressure on the operating budget and more accurately reflect the growing profile of the revenue base.
26. The operating budget of Hessequa Municipality is presently not fully cash funded and going forward it is important that all expenses in the budget are cash funded, including depreciation charges. Depreciation charges can be utilised to effectively repay external borrowings and the balance should be allocated to a Capital Replacement Reserve.
27. The overall credit score of Hessequa Municipality has deteriorated from a Single A- to a BBB over the 8 year term of independent financial assessment. Factors such as increased gearing, reduced liquidity and limited operational cash flow have negatively impacted on the rating. The rating needs to be stabilised through stringent management of liquidity, levels of borrowing and expenditure management.

Conclusion

28. Benefitting from economies of scale and economies of agglomeration in the provision of infrastructure and services is virtually impossible due to the low density rural character of the municipality with its widely dispersed towns and villages.
29. This same spatial characteristic does however provide the municipality with a comparative advantage of offering “life-style” residential and economic choices to its residents.
30. Whereas Hessequa exhibits relatively low unemployment (compared to national and provincial averages) and relatively high average household income, there are significant variations in household income across locality in the municipality which impacts directly on the ability of cost recovery of services delivered by the municipality.
31. The dichotomy of age distribution across towns from a relatively high proportion of people above the age of 60 in coastal towns and relatively high proportion of younger children in inland towns impacts on the demand for the kind of municipal services and other public sector functions that may be required in future.
32. Whereas no structural changes in the economy of Hessequa is expected that could influence the municipal functions significantly it is heartening to find that the region has shown consistent growth, has diversified away from the dominance that Agriculture and Community Services used to exhibit 10 years ago and shows that Tourism activity in Hessequa is significant, albeit declining proportionally.
33. The regional economy and the ability of households to pay for services delivered by the municipality, rates Hessequa as a “Medium to Low” risk on IPM’s Municipal Revenue Risk Indicator scale. The benefit is that the municipality will be able to generate its own revenue and is not exclusively dependent on the policy environment of other spheres of government. The downside is that municipal revenue will be subjected to the cyclical nature of the economy and the ability of its residents to pay.
34. The municipality has consistently installed infrastructure that provides a high level of service to its residents. This is borne out by a high Infrastructure Index of 0.9 and low levels of backlogs. Asset management requires significant budgetary allocations to maintain and replace infrastructure at the appropriate time in future.
35. There is a gap between the infrastructure provided and the percentage of households able to pay for that infrastructure and the concomitant services. This would indicate at a potential affordability challenges in future.

36. Within the financial constraints highlighted earlier, it will be imperative for Hessequa Municipality to put financial measures in place against which to monitor its performance to ensure that key financial ratios are adequately maintained and that the overall credit score is managed.
37. Financial strengths are to be maintained such as ability to collect arrears, ability to implement fiscal transfers and the ability to provide sensible financial information. Further financial decisions should be based on the true cash performance of the Municipality.
38. Primarily liquidity needs to be effectively managed, followed by the adequate use of the resources available to fund capital investment.

ISSUES IDENTIFIED

39. Pursuant to the findings in the perspectives, IDP processes and interviews conducted with each Departmental Head the following material issues that hold a financial implication for the Municipality have come to light and the impact either positive or negative on the longer term financial position of Hessequa Municipality needs to be considered.

40. **Equitable Share Policy**

Presently under the financial policies approved by Hessequa Municipality the Indigent Policy and the Principles and Policy on Tariffs and Free Basic Services relate to the level of service provided to the indigent community of Hessequa Municipality. According to the Credit Control Policy of Hessequa Municipality any person who has been declared indigent shall be entitled to indigent subsidies for basic services on a basis determined by Council from time to time.

In question is the level of indigent subsidy allocated to the indigent community in comparison to the equitable share formula. The income received to provide basic services should preferably not be less than the allocation made by the Municipality. If the Municipality is financially more compassionate this will lead to affordability concerns as the finances of the Municipality are already finely balanced.

The Indigent Policy caters for cross subsidization from other service charges and although this may be beneficial to the indigent community, it may drain the financial resources of Hessequa Municipality in the longer term. To effectively manage the cost of providing free basic services the actual cost needs to be weighed against solely the equitable share allocation received and should there be short falls the Municipality needs to report the level thereof to Council and annually actively adapt the Indigent Policy as catered for in the Policy.

With the annual revision of the Policy, any material changes in the Equitable Share formula should be taken into consideration. The Council is also encouraged to review the level of infrastructure services provided in an effort to provide more affordable services.

41. **Tariff Policy**

The question was raised during this assignment whether there is scope within in Hessequa Municipality to consider differentiated tariffs for consumers and it was perceived as an unlikely approach to be taken. What is however of importance is that consumers be correctly classified and therefore the correct zoning of properties is important.

In addition any property that places additional pressure on the level of service provided or requires increased capacity from the system provided such as e.g. currently sewage discharges by factories with a high sewage load, e.g. cheese factory, abattoirs which in these cases there is a need to investigate the differentiation of tariffs in more depth.

42. Effective management of Resorts

It is understood that Hessequa Municipality is presently concluding a study on its resorts which will provide useful insight into whether the resorts are profitably managed. It is advised that the business case of each resort be assessed individually to determine the costs to operate these resorts, the current and potential revenues and the most appropriate service delivery system, viz. operated by the municipality, outsourced to the private sector or sold. The challenge is to increase the occupation throughout the year and charge appropriate seasonal tariffs. It is also essential to ring-fence the resorts from a cost point of view to ensure that there is effective cost recovery and accounting for the actual performance of each resort. At a bare minimum the revenue generated by the resorts should at least cover the costs incurred and in the event that this is not feasible the resort should be considered for potential sale thereof.

43. Leveraging and management of land

There is a belief that once the economic environment has improved and the market for developed stands has increased that land sales for purposes of development will once again be an option. Selling land at any price should not be an option and the conditions for the sale of land should be documented in a policy. The policy should also stipulate that funds generated from such sales should be reserved in the Capital Replacement Reserve for future capital investment. The same principles should apply to Investment Properties.

With the sale of land it is also to be considered that guidelines are set for the type of development to be established on the land as well as the availability of bulk services required. New developments should enhance the revenue base of the Municipality.

Further where land or buildings are being rented for social purposes such as buildings, sports grounds, restaurants and accommodation flats the return made on the rentals should be market related and each individual site should at least be breaking even taking into consideration the required maintenance costs.

44. Effective management of Assets

Although Hessequa Municipality has a GRAP compliant Asset Register in place, the assumptions made regarding the useful life of assets need to be verified. The Asset Register should become a tool with which to accurately plan for the future replacement of assets on a more structured and smoothed approach over the longer term to ensure the Municipality has the capital funding sources.

45. External Gearing

Historically external debt has been taken up conservatively over a set term of 10 years and a straight forward repayment amortising repayment profile. The effective management of loans will greatly assist the management of the Municipality's cash flow through considering additional features related to external borrowing.

Drawdowns should take place within the year that funds have been disbursed to projects to ensure that the Municipality is not in an unfunded position. External gearing should be apportioned to revenue generating projects. Grace periods would assist the Municipality in getting projects off the ground and generating a revenue stream before debt repayment commences. And where sculpting of the repayment profile can be applied the profile may be more reflective of the growth in revenue anticipated from the completed project.

The overall debt repayment profile of Hessequa Municipality should be actively monitored to seek opportunities to smooth future repayments within reasonable parameters. The impact of any new debt should be measured in advance.

46. Organisational Review, Management of Staff Costs and related Employee Benefits

Hessequa Municipality's largest expense, the management of the staff component and related costs, is of high importance. Any matters that may materially impact on these costs need to be carefully considered in light of the large increases in costs that will certainly negatively impact on the Municipality's longer term viability. Any considerations to employ more staff need to be reviewed in terms of the financial implication versus the potential efficiency gains. It is also important to correctly cost out staff hours to relevant departments.

Presently sound initiatives such as reduced overtime, reduced number of contract posts and the development of human capacity are considered positive. The consideration of raising the basic salary scale needs to be considered in light thereof that this may represent a large single expense in one financial year that may unduly place pressure on the Municipality. Should an adjustment to salary scales be deemed necessary it should be considered whether implementation of any amendments can be staggered over multiple years.

The financial liability of the Human Resources of Hessequa Municipality is to be fully understood in light of the future needs and the impact thereof on available office space, present staff costs, packages and terms of employment. Pensions over the years were overly generous in that both service years and age was taken into account to calculate an allowance. This policy must be revised for existing employees not on the scheme, and new employees.

In addition it needs to be considered whether automated systems are underutilised in terms of additional functionalities that have not been explored. The full functionality of systems should be utilised especially to communicate with employees in dispersed areas. Accommodation needs are also to be considered as Hessequa Municipality has fully occupied the space to its avail and additional space is required. Solutions considered should take into account the present costs of office space as a base from which to consider future costs as well as the capacity needs over a longer term.

Presently the municipality has engaged with a service provider to conclude an organisational review, the outcome of which could be useful in identifying bottlenecks and work smarter.

47. Potential adding or shedding of functions:

The reduction of traffic services may be beneficial as there will be saving in costs.

The libraries in the municipality are regarded as of high quality and there is a reluctance to shed this function.

The management of grass cutting teams can possibly be managed more efficiently and assigned to other maintenance jobs when not fully utilised.

Marketing in the tourism industry could be a function that should be added to Hessequa's responsibility.

The decision to cease or continue with any additional functions should be on the basis that it has sound financial principles and for this determination more effective and accurate costing is required per function, e.g. functions performed on behalf of Eden District Municipality or Provincial Government.

48. Prioritisation of capital investment to unlock economic and revenue growth

As limited capital funding sources are to Hessequa Municipality's avail and growth in the revenue base has started flattening, it is important that the funds available be firstly apportioned to the replacement of current infrastructure and thereafter be allocated for

new infrastructure projects where there is potential to unlock economic growth and in turn revenue growth such as in the growing town of Stilbaai e.g. the proposed power line, the new western bypass scheduled in 5 years' time and the waste water treatment works in Stilbaai scheduled in 3 years' time.

It is not the role of Hessequa to develop land but it should exercise the right to set guidelines that will steer the nature of developments to benefit growth through models of co-operation between the Municipality & Developers.

The prioritisation of projects in Hessequa as a whole should be done jointly and not independently in the various Departments.

49. Bulk water purchases

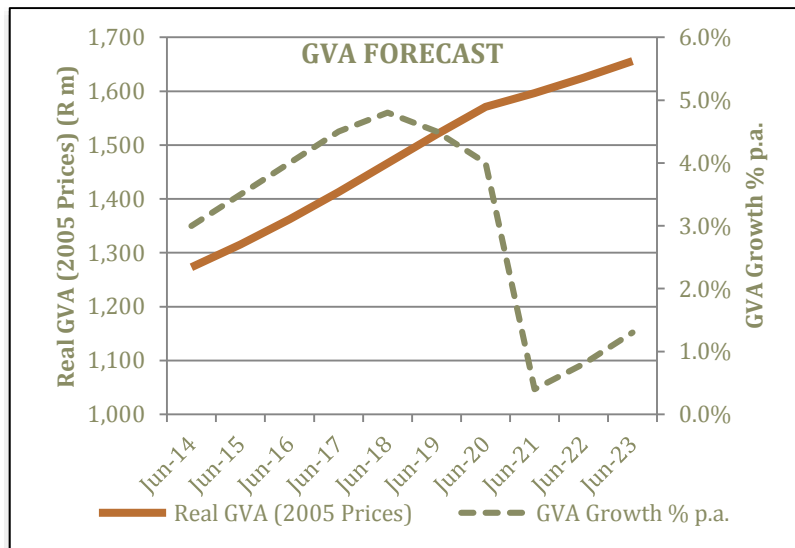
Losses on the distribution of water services in Heidelberg, Witsand and Slangrivier should be investigated as the fee agreed upon with Overberg Water renders the service unprofitable. Hessequa Municipality is charged for the availability of water whilst actual sales are less than the allocation made. The allocation limit should be reviewed in consultation with Overberg Water.

FUTURE MUNICIPAL REVENUES

50. In proposing a long term financial plan, IPM estimated the future municipal revenues. This projection was done with reference to the research done by Schoeman⁴.

51. The future Gross Value Add ("GVA") of Hessequa was estimated based on a view of the future economic growth of the country and the cyclical nature thereof as well as an estimate of future population of Hessequa. The graph below illustrates the Base Case GVA and GVA growth rates used in IPM's model:

GRAPH 6: HESSEQUA: GVA FORECAST

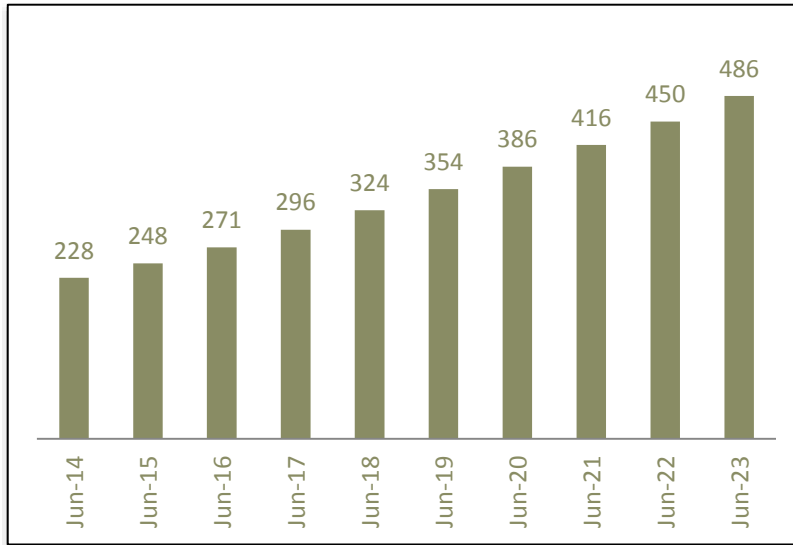


52. The future Municipal Revenue was then calculated by employing the relationship between Municipal Revenues ("MR"), GVA and Population, i.e. $MR = f(GVA, Population)$. This estimate was calibrated against the municipality's forecast of future revenues in its MTREF. The

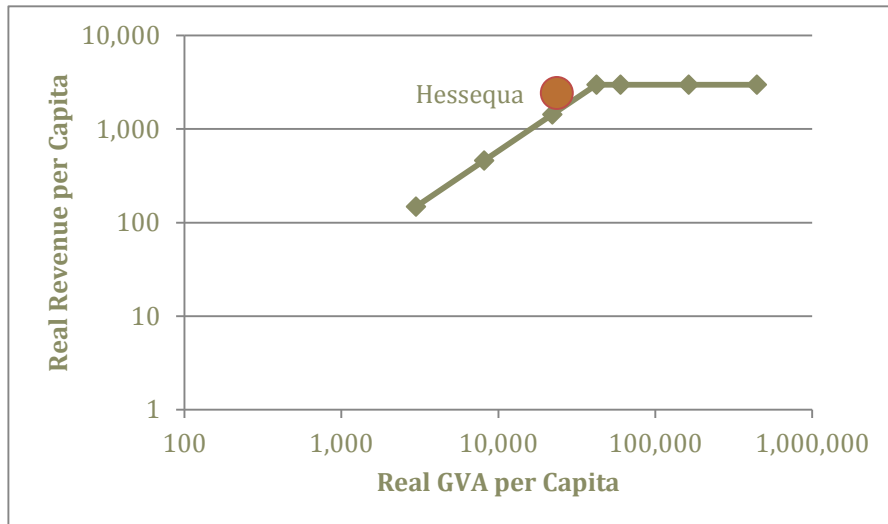
⁴ *Fiscal Performance of Local Government in South Africa - an Empirical Analysis*; Niek Schoeman; UP 22 July 2011; https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=IIPF67&paper_id=40

estimated 10-year municipal revenues (excluding grants) for Hessequa are illustrated in the graph below:

GRAPH 6: HESSEQUA: FORECAST NOMINAL MUNICIPAL REVENUE EXCL. GRANTS, RM P.A.



53. This represents an average annual nominal growth of municipal revenue of 8.6% p.a. over the 10 year period, and is made up of increased revenues due to increased quantities of services delivered as well as increase in tariffs.
54. No structural change in the economy of Hessequa is expected that could influence the municipal revenues for the next 10 years significantly, e.g. no major industrial-, mining- or other major investment is expected in the region.
55. In comparison to the sample of municipalities used by Schoeman in his research, Hessequa is close to reaching its saturation point of municipal revenues as a function of the economy. This is illustrated in the graph below. For Hessequa's Real GVA per Capita of app. R23 600 the Real Revenues per Capita of R2 400 already exceed the model's expected revenues of R1 540 per Capita. In theory a revenue plateau of R2 980 per Capita will be reached once the Real GVA per Capita reaches R42 200. Hessequa is already close to this inflection point.
56. We conclude that there is little potential to generate excessive new revenues other than ensuring that costs are recovered through well designed and judicious application of the tariff structure.



57. Once the annual municipal revenues were determined the ability of the municipality to pay for operational- and capital expenditure and the level of expenditure were estimated based on a range of assumptions, as discussed in more detail further on in this report.

FUTURE OPERATIONAL EXPENDITURE

58. As the review of the current expenditure trends of Hessequa Municipality has indicated there is limited scope to substantially increase any costs without negatively impacting on the overall operational performance of the Municipality, therefore requiring stringent management of the increases in current expenses.

59. In this light it is important that any future variations in expenditure needs to be closely monitored and where possible the impact needs to be anticipated and staggered over multiple years to reduce the impact. The following variations are presently anticipated:

60. Higher than average escalation in Human Resource costs are anticipated with the review of the salary scale threshold presently applied, as this may affect numerous employees. The costs need to be quantified and a staggered implementation approach is to be adopted. Overall the level of staff costs in relation to the total operating expenditure needs to be monitored and an increase in salary scale may in turn require the reduction of staff to be within acceptable and affordable limits. The organisational review that is presently underway may indicate where efficiencies could be gained and where systems can more adequately be used to improve communication and productivity.

61. The cost of delivering services to households that cannot pay for it should be quantified to truly understand the financial impact and burden of providing a service in excess of the equitable share allocation received. It may be necessary to more closely align the indigent policy with the equitable share formula to reduce the drainage on the Municipality's finances.

62. As more emphasis is placed on the management of the Municipality's environmental responsibility within the relevant legislation, the future implications thereof need to be measured and incorporated into the MTREF.

63. As Hessequa Municipality is a marketable destination for international and domestic tourist, consideration should be given to the provision of a possible tourism marketing function by Hessequa Municipality. Although Hessequa Municipality cannot drive marketing initiatives it can create an enabling environment for others to do so.

64. With the recommendation that Hessequa Municipality pursue integrated asset management, a more realistic level of future replacements and appropriate level of repairs and maintenance expenditure will be required to effectively maintain the asset base.

DEMAND FOR FUTURE CAPITAL EXPENDITURE

65. Integrated asset management acknowledges the link between the 3 elements of cost associated with asset management, viz. New Capital Expenditure, Asset Replacement Cost and Repairs and Maintenance Expenditure. The extension of the life of an asset beyond its Useful Life may save on Replacement Costs but will increase the Repairs and Maintenance expenditure. Any new assets created will also have an impact on the Repairs and Maintenance budget in future.

66. By analysing the asset registers and reviewing the IDP of the municipality a feel for the demand of future replacement cost of exiting assets and investments in new assets was obtained.

Asset Replacement Expenditure

67. The “Replacement Cost” at a future “Replacement Date” for all the assets in the asset registers was determined. “Replacement” could also imply rehabilitation, enhancement (upgrade) or renewal (refurbishment) of that asset, but excludes routine repairs and maintenance.

68. The calculation is done mechanistically and does not cater for engineering judgement. The model only uses the Estimated Useful Life of the asset component as a criterion. The model calculates the Replacement Cost of assets for a 10 year period, i.e. up to and including 2023. All assets, excluding land, were reviewed for replacement.

69. The outcome of this analysis is presented in the table below:

TABLE 2: TOTAL REPLACEMENT COST (NOMINAL R MILLION)

	<i>Total</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>
Infrastructure											
Electricity	26.53	3.58	0.53	3.56	0.31	0.57	0.13	1.75	4.20	8.33	3.56
Parks	40.37	0.00	0.54	2.72	6.53	11.69	1.20	0.81	0.00	11.51	5.37
Roads	75.19	6.57	27.95	15.68	3.44	15.79	2.02	2.67	0.61	0.04	0.44
Sanitation	68.87	1.25	1.73	2.03	1.25	37.69	5.46	0.25	0.98	14.16	4.08
Solid Waste Disposal	1.60	0.00	0.67	0.71	0.02	0.00	0.00	0.20	0.00	0.00	0.00
Stormwater	99.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.31	0.00
Water Supply	63.16	2.04	3.36	6.37	3.91	28.88	6.85	0.16	3.62	1.84	6.14
Infrastructure	375.03	13.44	34.78	31.07	15.47	94.61	15.66	5.84	9.41	135.18	19.58
Moveable Assets	97.58	5.58	14.86	13.09	9.21	5.48	11.64	5.69	7.54	18.36	6.14
Land & Buildings	87.17	2.71	6.13	6.12	14.00	3.00	36.56	4.94	5.08	5.74	2.88
Total Replacement Cost (Nominal)	559.79	21.73	55.77	50.28	38.68	103.09	63.86	16.47	22.03	159.28	28.60

70. According to the analysis the nominal replacement cost for the 10-year period amounts to R560 million. This is a mechanistic calculation of the replacement cost of assets in the asset registers that have reached the end of their useful lives.

71. In an attempt to identify opportunities for savings on the estimated replacement cost of R560 million the significant items of replacement were evaluated and are discussed in Annexure 2: Discussion of Asset Replacement Categories.

72. Based on the findings of the evaluation discussed in Annexure 2, we have amended the estimated replacement costs by reducing the amounts and spreading the budget over the 10-year period.

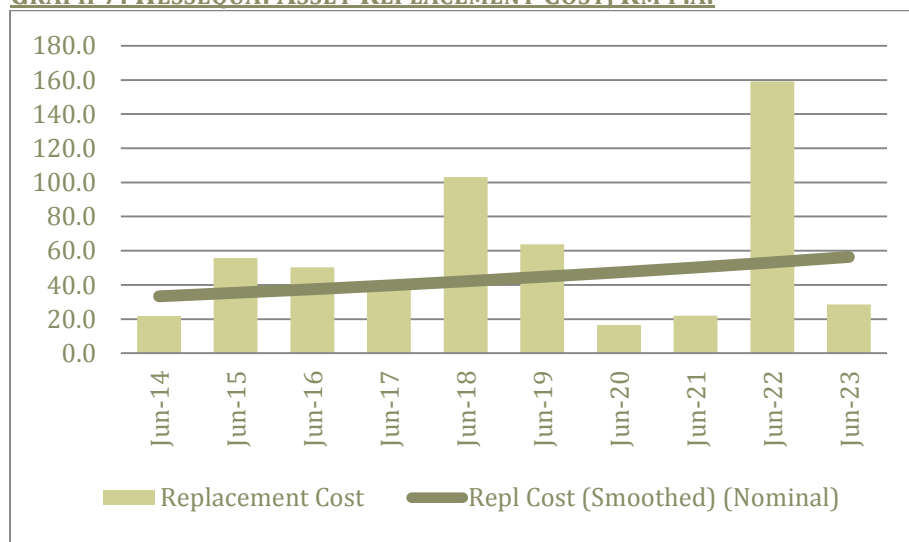
73. This was achieved by reducing the estimated amount of R560 million by R124 million to R436 million and allocating the real (2014) amounts equally to each of the 10 years. And then using an index to revert the amount back to nominal values. The outcome of this calculation is presented in the table below:

TABLE 3: REVISION OF REPLACEMENT COST

	Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Replacement Cost (Nominal)	559.8	21.7	55.8	50.3	38.7	103.1	63.9	16.5	22.0	159.3	28.5
Less: Reduction after assessment	124.0	0.0	5.0	5.0	5.0	29.0	30.0	0.0	0.0	50.0	0.0
Revised Replacement Cost (Nominal)	435.8	21.7	50.8	45.3	33.7	74.1	33.9	16.5	22.0	109.3	28.5
Revised Replacement Cost (Real 2014)	333.9	21.7	47.9	40.3	28.3	58.7	25.3	11.6	14.7	68.6	16.5
Revised Average Replacement Cost (Real 2014)	333.9	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
Revised Average Replacement Cost (Nominal)	440.2	33.4	35.4	37.5	39.8	42.2	44.7	47.4	50.2	53.2	56.1

74. The graph below compares the Replacement Cost as determined from the asset registers and the smoothed Replacement cost after adjustment as described above:

GRAPH 7: HESSEQUA: ASSET REPLACEMENT COST, RM P.A.



New Capital Investment

75. After reviewing the IDP (2013 – 2017) and some of the relevant sector master plans and consulting the executives of the municipality we reached the following conclusions on the indicative new capital expenditure needs of the municipality. A short discussion of the major items of new capital demand is presented in Annexure 3: Discussion of New Capital Investments.

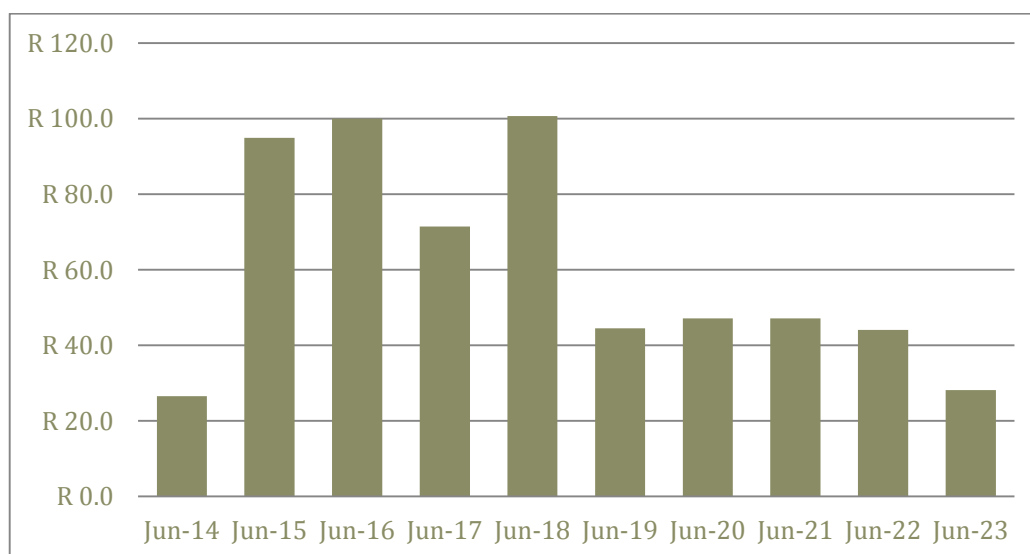
76. An indicative new capital budget based on the assumptions in Annexure 3 is summarised below. This budget is merely an expression of our interpretation of the municipalities future needs as presented to us in the IDP, sector master plans and orally during meetings with the executives.

TABLE 4: NEW CAPITAL EXPENDITURE

New Capex	Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Housing Infrastructure (excl Top Structure)	139.7	10.6	11.2	11.9	12.6	13.4	14.2	15.0	15.9	16.9	17.9
Bulk Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roads	49.7	0.0	0.0	0.0	2.3	44.7	2.6	0.0	0.0	0.0	0.0
Stormwater	47.0	0.0	5.9	6.3	6.7	7.1	7.5	7.9	5.6	0.0	0.0
Water	22.0	0.0	0.0	12.6	9.4	0.0	0.0	0.0	0.0	0.0	0.0
Sewerage	95.4	7.0	41.1	36.6	10.7	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	165.0	9.0	25.3	20.4	14.6	15.4	16.4	20.1	21.3	22.6	0.0
Waste Management	24.3	0.0	0.0	0.0	11.8	12.5	0.0	0.0	0.0	0.0	0.0
Community Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Municipal Buildings	17.4	0.0	8.4	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moveable assets	44.2	0.0	3.0	3.2	3.4	7.6	3.8	4.1	4.3	4.6	10.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total New Capex	604.7	26.6	95.0	100.0	71.5	100.7	44.5	47.1	47.2	44.1	28.1

77. The future new capital expenditure demand is illustrated in the graph below:

GRAPH 8: HESSEQUA: NEW CAPITAL EXPENDITURE DEMAND, RM P.A.

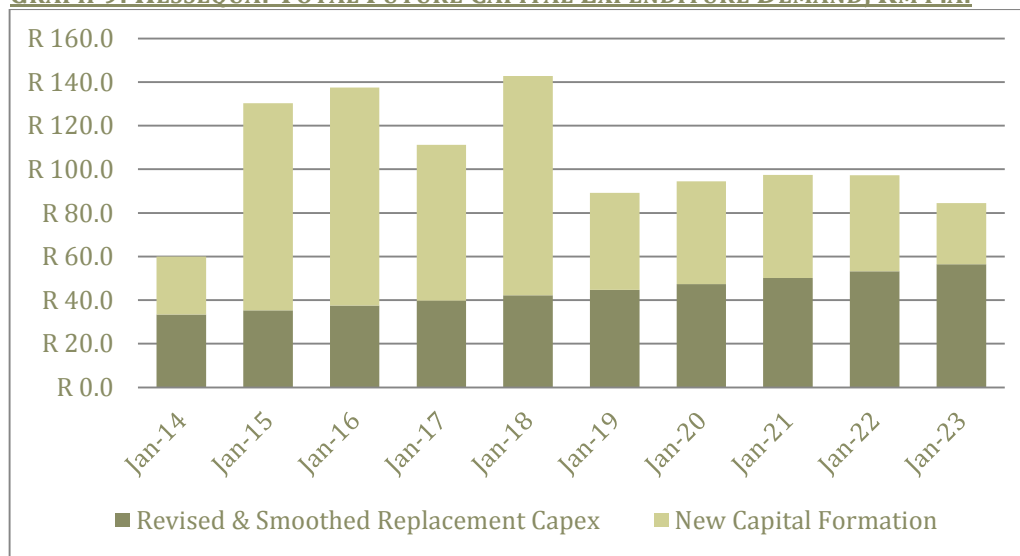


78. The combined total capex required to replace existing assets at the end of their useful lives and invest in new assets is summarised in Table 5 and illustrated in Graph 9 below.

TABLE 5: TOTAL 10 YEAR INDICATIVE CAPITAL EXPENDITURE DEMAND

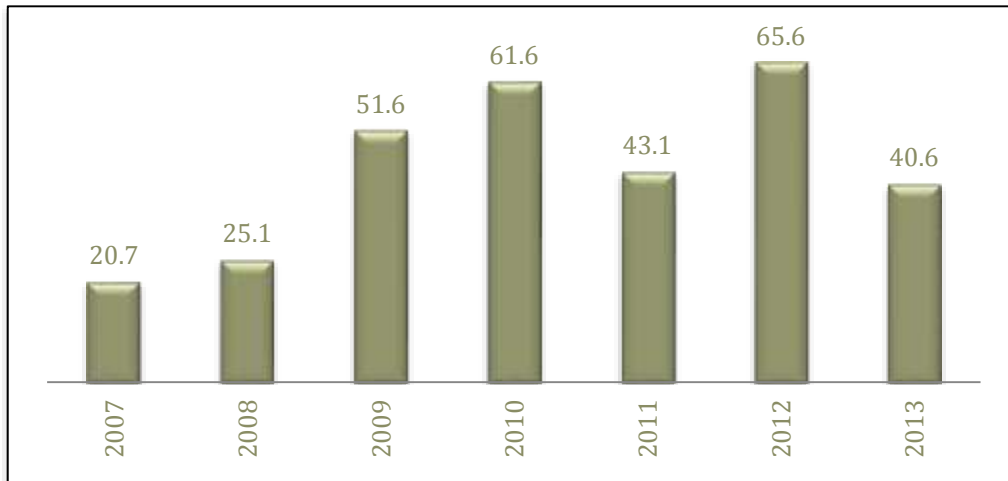
	Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revised Average Replacement Cost	440.2	33.4	35.4	37.5	39.8	42.2	44.7	47.4	50.2	53.2	56.4
Total New Capex	604.7	26.6	95.0	100.0	71.5	100.7	44.5	47.1	47.2	44.1	28.1
Total Capex	1 044.8	60.0	130.4	137.5	111.2	142.9	89.2	94.5	97.4	97.3	84.5

GRAPH 9: HESSEQUA: TOTAL FUTURE CAPITAL EXPENDITURE DEMAND, RM P.A.



79. The total 10-Year Capital Expenditure Demand of R1 045 million is however not affordable. In the next paragraph the Base Case capex affordability will be determined and discussed.
80. Proportionally, the 10-year average replacement cost amounts to 42% of the total capital expenditure. In the light of Hessequa’s relatively high level of infrastructure provision and low level of backlogs, this percentage is realistic, and should be maintained even if the affordability limitations require a downward adjustment of the capital demand expectations.
81. Graph 10 illustrates the historic capex that Hessequa expended, which also demonstrates the municipality’s ability (institutionally) to manage the implementation of a multi-million Rand capex budget.

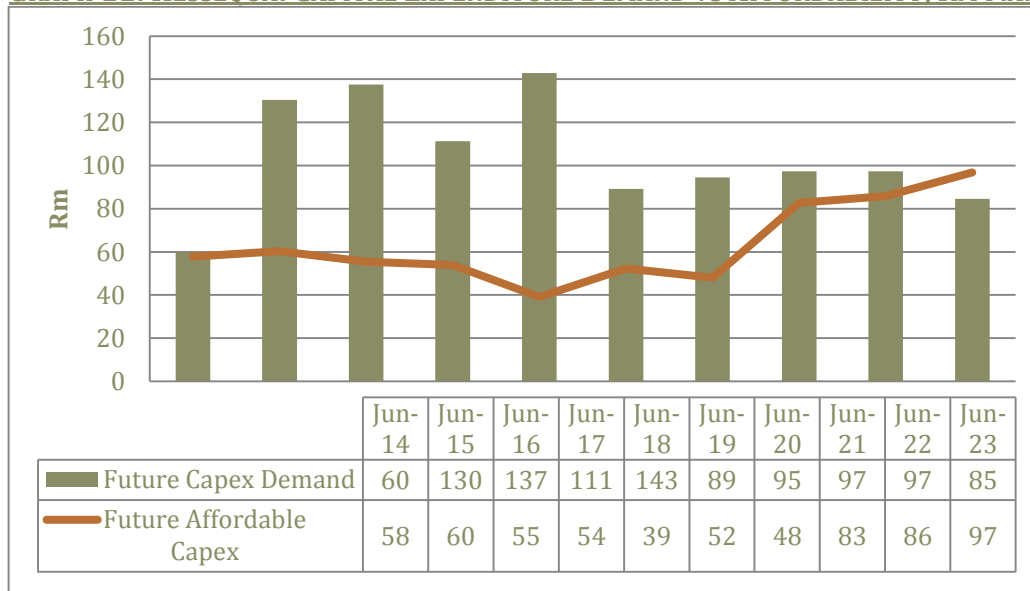
GRAPH 10: HESSEQUA: HISTORIC CAPITAL EXPENDITURE, RM P.A.



AFFORDABILITY OF FUTURE CAPITAL EXPENDITURE

82. IPM has developed a “Capital Investment Model” that forecasts the future capex that a municipality can afford; based on the Revenues it can expect to generate.
83. The cash available to service any new debt is calculated by subtracting from the Revenues as determined in paragraph 54 above a waterfall of expenses, starting with operational expenses, existing debt service, investment for liquidity- and other reserves.
84. The New Debt that the municipality can afford plus any remaining cash as well as estimated capital grants can then be allocated towards capital expenditure.
85. The total 10-year affordable capex amounts to R632 million (nominal) and R466 (constant - 2014) terms. The affordable capex is almost R400 million less than the future capex demand, and requires a substantial adjustment downwards of the capex demand expectations.

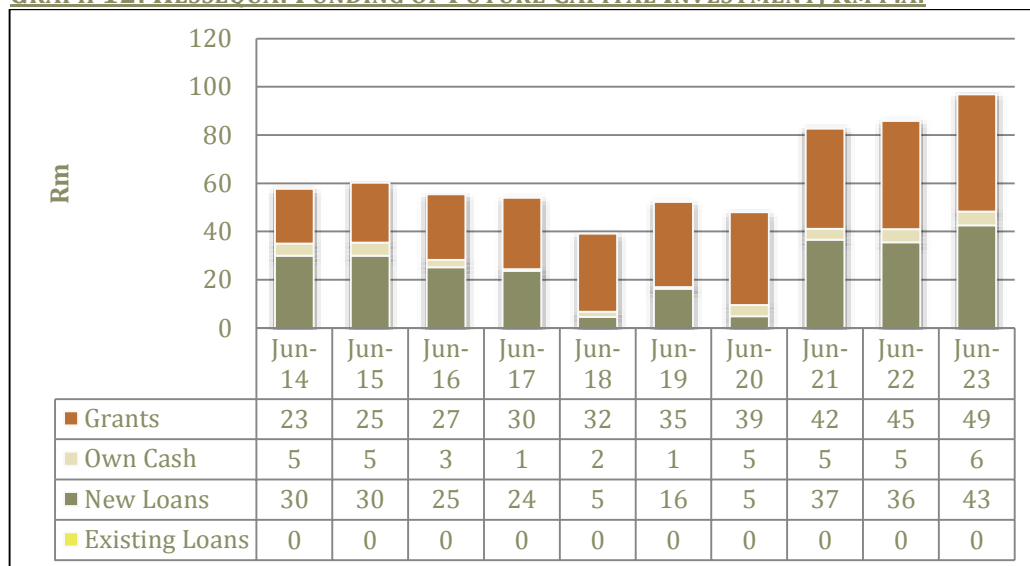
GRAPH 11: HESSEQUA: CAPITAL EXPENDITURE DEMAND VS AFFORDABILITY, RM P.A.



FUNDING OF FUTURE CAPITAL EXPENSES

86. The funding mix to fund the future affordable capex is determined by the model by ensuring that the net cash flow is zero for future years. In accordance with the model the capex may be funded as follows:

GRAPH 12: HESSEQUA: FUNDING OF FUTURE CAPITAL INVESTMENT, RM P.A.



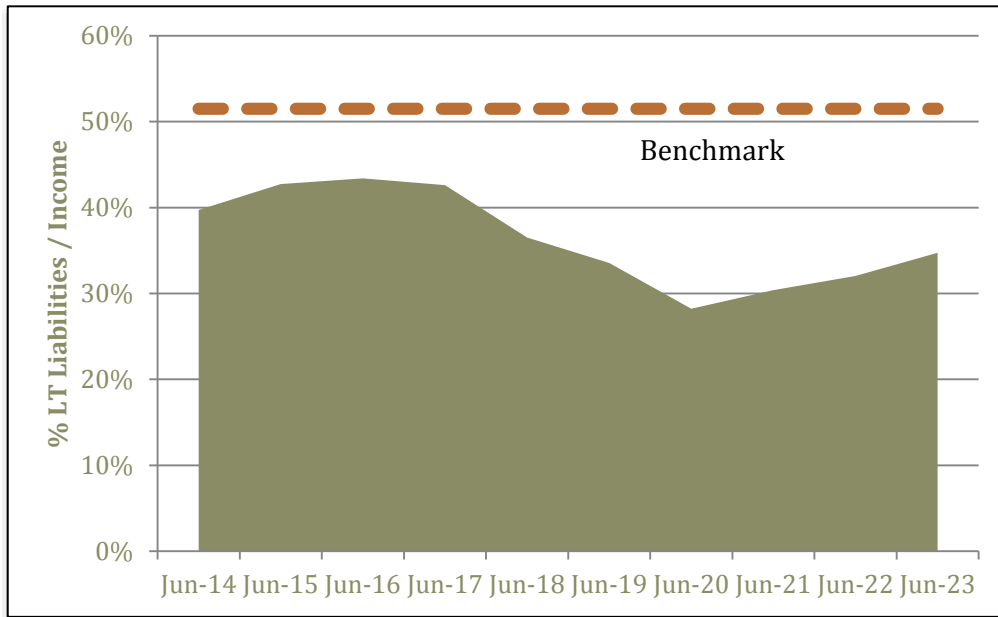
87. The 10-year funding mix consists of the following funding sources:

TABLE 6: FUNDING FUTURE AFFORDABLE CAPITAL EXPENDITURE

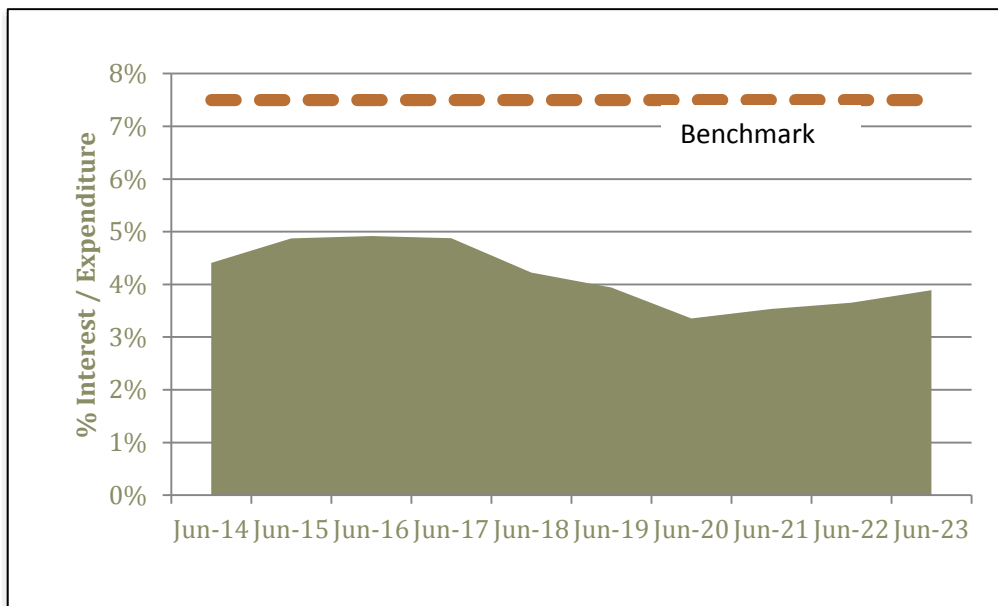
Funding Source	Amount	%
Existing Loans	R 0 m	0.0%
New Loans	R 249 m	39.4%
Own Cash	R 37 m	5.9%
Grants	R 346 m	54.7%

88. The long term liabilities (“LTL”) remain within acceptable industry standards as illustrated in the graphs below. LTL as percentage of Income remains below 50% and the Interest to Total Expense Ratio remains well within the benchmark of 7.5%.

GRAPH 13: HESSEQUA: LONG TERM LIABILITIES AS A PERCENTAGE OF INCOME



GRAPH 14: HESSEQUA: INTEREST TO TOTAL EXPENSE RATIO



FINANCIAL MODEL

89. The proposed financial plan is based on the assumptions in the Base Case Financial Model. We are cognisant that future cash flows may be influenced by a variety of variables. The assumptions made for the Base Case are summarized below. The variables that were kept constant for all scenarios are listed in Table 7 below.

TABLE 7: BASE CASE ASSUMPTIONS: GENERAL

Model Period	10 Years: 1 Jul 2013 to 30 Jun 2023
Population growth rate	Years 1 to 3: 1.15% p.a. Years 4 to 8: 1.10% p.a. Years 9 to 10: 1.00% p.a.
CPI growth rate	6.5% p.a.
Days Receivable	60 days
Days Payable	64 days
Depreciation rate	3.7% p.a.
Investment Property: Acquisition	R0
Investment Property: Disposal	R50 million
No of months liquidity reserve	1 month
% of CRC Assets in Capital Replacement Reserve	0%
Interest Rate on Positive Bank Balance	5%
Interest Rate on Overdraft	10%
Opening balances	30 Jun 2013 FS (adapted)
New debt tenor	15 Years
New debt interest rate	CPI + 3% p.a.
Capital Grants as a % of Total Revenue	10%

90. Most of these variables are self-explanatory. Suffice it to highlight that the CPI growth rate is 6.5% p.a., disposal of investment property of R50 million is assumed and a one month liquidity reserve is required.

91. The variables that were changed for scenario testing are presented in Table 8 below:

TABLE 8: BASE CASE ASSUMPTIONS: SCENARIOS

<u>INPUT VARIABLES</u>										
Projected GVA Growth Rate p.a.										
<i>Year</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>
Model	3.0%	3.5%	4.0%	4.5%	4.8%	4.5%	4.0%	0.4%	7.6%	1.3%
Average										3.3%
Year when structural change in salaries & wages is implemented										2015
Structural change in salaries and wages in 2015									Neg. 10.0%	
Escalation of salaries & wages above CPI										2.0%
Escalation of expenditure on electricity services above CPI										1.5%
Escalation of expenditure on water services above CPI										2.0%
Escalation of expenditure on repairs & maintenance above CPI										1.0%
Collection Rate										99.0%

92. In the Base Case it is assumed that the average 10-year GVA growth rate is 3.3% p.a. In 2015 a structural change in the expenses for Salaries and Wages will be effected that will result in a 10% reduction in this expense item. The major expense items will all escalate at rates slightly higher than the assumed CPI of 6.5% in the 10-year period. The revenue collection rate is 99%, i.e. 1% will be impaired.

93. The outcome of the Base Case is reflected in the table below:

TABLE 9: BASE CASE OUTCOME

10-year average no. of months liquidity	1.0	months
Average annual % increase in Revenue	8.6	% p.a.
Surplus accumulated during 10 years	215	Rm
10-year cash from operations after debt service	24	Rm
10-year LT Debt Raised	249	Rm
10-year capital investment programme	632	Rm
Cash investments after 10 years	44	Rm

94. The Base Case provides that the liquidity reserve of 1 month expenditure can be maintained. The annual average growth in revenues amounts to 8.6% p.a. Over the 10 year period a surplus of R215 million and operating cash after debt service of R24 million is accumulated. Long term debt of R249 million can be raised for a total capital investment programme of R632 million. The summary projected financial statements for the Base Case are presented in Annexure 4: Base Case Summary Projected Financial Statements.
95. A scenario analysis shows the changes in outcome for a change of a number of input variables. In each of the different cases, the deviations from the Base Case are highlighted.

TABLE 10: SCENARIOS: INPUT VARIABLES

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Description	GVA Rate Reduced	GVA Rate Increased	No Structural Change	Increased Structural Change	Increased Costs	Reduced Costs	Increased Impairment	Reduced Impairment
Projected GVA Growth Rate p.a.	2.0%	6.0%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
Year when structural change in salaries & wages is implemented	2015	2015	2015	2015	2015	2015	2015	2015
Structural change in salaries and wages in 2015	-10.0%	-10.0%	0.0%	-20.0%	-10.0%	-10.0%	-10.0%	-10.0%
Escalation of salaries & wages above CPI	2.0%	2.0%	2.0%	2.0%	3.0%	0.0%	2.0%	2.0%
Escalation of expenditure on electricity above CPI	1.5%	1.5%	1.5%	1.5%	3.0%	0.0%	1.5%	1.5%
Escalation of expenditure on water services above CPI	2.0%	2.0%	2.0%	2.0%	3.0%	0.0%	2.0%	2.0%
Escalation of expenditure on repairs & maintenance above CPI	1.0%	1.0%	1.0%	1.0%	3.0%	0.0%	1.0%	1.0%
Revenue Impairment	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%	92.0%	100.0%

96. The outcome for each of these scenarios is summarised in the table below as they relate to relevant dependent variables.

TABLE 11: SCENARIOS: OUTCOME

	Base Case	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Description	Base Case	GVA Rate Reduced	GVA Rate Increased	No Structural Change	Increased Structural Change	Increased Costs	Reduced Costs	Increased Impairment	Reduced Impairment
10-year average no. of months liquidity	1.0	1.0	1.0	0.9	1.0	0.7	1.0	0.2	1.0
Average annual % increase in Revenue	8.6%	8.3%	9.6%	8.6%	8.6%	8.6%	8.6%	8.6%	8.6%
Surplus accumulated during 10 years	222	179	328	138	306	38	466	64	227
10-year cash from operations after debt service	38	7	118	-13	120	-93	284	-86	36
10-year LT Debt Raised	249	86	336	60	317	59	317	30	284
10-year capital investment programme	646	439	828	411	798	409	965	376	679
Cash investments after 10 years	44	44	44	10	42	-82	38	-59	44

97. In the event of Cases 3, 5 & 7 the cash position does not allow for at least one month of liquidity.

98. The 10-year capital investment programme of R965 million is largest in Case 6, when expenses are minimised.

99. In the event that only 92% of Revenues are collected, the 10-year capital investment programme reduces to R376 million. See Case 7, i.e. only grant funds are utilised and no cash or loans are raised to fund capital expenditure (except for the R30m debt raised to fund committed capex at the start of the 10 year period).

100. One combined "Upside"- and one "Downside" scenario were also evaluated:

TABLE 12: UPSIDE- AND DOWNSIDE SCENARIO: INPUT VARIABLES

Description	Upside	Downside
Projected GVA Growth Rate p.a.	5.0%	2.5%
Year when structural change in salaries & wages is implemented	2015	2015
Structural change in salaries and wages in 2015	-15.0%	-3.0%
Escalation of salaries & wages above CPI	1.0%	3.0%
Escalation of expenditure on electricity services above CPI	1.0%	3.0%
Escalation of expenditure on water services above CPI	1.0%	3.0%
Escalation of expenditure on repairs & maintenance above CPI	1.0%	3.0%
Revenue Impairment	99.0%	94.0%

101.The outcome of these two scenarios illustrates the sensitivity of this combination of variables.

TABLE 13: UPSIDE- AND DOWNSIDE SCENARIO: OUTCOME

Description	Upside	Downside
10-year average no. of months liquidity	1.0	0.2
Average annual % increase in Revenue	9.2%	8.5%
Surplus accumulated during 10 years	454	-377
10-year cash from operations after debt service	261	-505
10-year LT Debt Raised	328	30
10-year capital investment programme	960	370
Cash investments after 10 years	41	-480

102.Municipal revenue that is constrained by macroeconomic imperatives and limited to a collection rate of 94% and expenses that are not contained, results in a totally different scenario, from the Upside scenario where liquidity is maintained and a 10-year capital investment programme of R960 million is possible. In the Downside scenario cash is reduced drastically to the extent that on average only 6 days of liquidity is available and the 10-year capital investment programme is reduced to R370 million, with no potential for gearing. The municipality would be in an overdraft position.

LIQUIDITY & RATIO MANAGEMENT

103.Healthy Liquidity is considered the key factor to effectively managing the financial viability of Hessequa Municipality in the longer term in conjunction with the necessary financial ratios against which to monitor actual performance.

104.A draft liquidity policy has been submitted to the Municipality and is attached hereto in Annexure 5, but in essence the policy recommends the following:

Liquidity Ratios

105.Standard Liquidity Ratio (The ability to fully provide for current liabilities with current assets.)

Minimum norm: 1:1

Healthy norm: 2:1

106.Quick Liquidity Ratio (The ability to provide for current liabilities with liquid current assets therefore current assets including only 30 day debtors.)

Minimum norm: 1:1

Healthy norm: 2:1

107.Minimum Liquidity Ratio (Holding sufficient cash and investments to fully provide for the sum of unspent conditional grants, short term provisions, ceded investments and at least one month of operating expenditure (excluding non-cash expenses).

Minimum norm: 1:1

Healthy norm: 1:1 plus an additional month's operational expenditure

108.Overdraft to Total Income (Preferably a municipality should not have an overdraft facility at all at year end, however should an overdraft facility be used it should not exceed 5% of Total Income.)

Minimum norm: 5%

Healthy norm: 0%

109.Other ratios are to be managed at levels applicable to Hessequa Municipality and although industry benchmarks exist it is more prudent to set objectives given the financial context of

Hessequa Municipality. The following ratios are recommended for consideration and it would be prudent to report hereon on a quarterly basis to the Finance Committee:

Operational Ratios

110. Total Accounting Surplus (The ability to post an accounting operational surplus where Total Income exceeds Total Expenditure with a positive margin.)
Minimum norm: Break-even of the above calculation
Healthy norm: Positive margin that is maintained
111. Cash Operating Surplus (The ability to generate surplus cash from operational performance therefore Total Income less conditional transfers less total expenditure excluding non-cash items adjusted for changes in working capital should be positive.)
Minimum norm: Break-even of the above calculation
Healthy norm: Positive margin that is maintained
112. Repairs and maintenance to Total Expenditure (The ability of the municipality to effectively maintain the infrastructure assets from which it derives its primary income.)
Minimum norm: 5%
Healthy norm: 7%
113. Consumer Collection Levels (For a municipality to maintain its viability it should maintain its collection levels at least above 9%. Growth in gross consumer debtors including debts written off in the financial year as a percentage of billed income including equitable share, will provide the non-collection level therefore the difference will indicate the consumer collection level.)
Minimum norm: 95%
Healthy norm: 95%+
114. Staff Costs, Allowances and Wages (The level of staff costs, allowances and wages to total operational expenditure needs to be effectively managed to ensure that costs aren't considered too high, but also that the municipality is not under capacitated and employment levels are too low.)
Minimum norm: 30%
Healthy norm: 30% to 35%

External Gearing Ratios

115. External Loan Liability Paid Coverage Ratio (The ability to at least cover the External Interest and Capital Payable with the cash generated from operations before interest.)

Minimum norm: 1:1
Healthy norm: 2:1
116. External Interest and Capital Paid to Total Expenditure (The percentage of Total Expenditure utilised to service external loan repayments.)
Maximum norm: 10%
Healthy norm: 7.5%
117. External Gearing Ratio (The level to which the municipality has geared itself is calculated as Total External Interest Bearing Debt as a percentage of Total Income less conditional grant funding.)
Maximum: 35%
Healthy norm: 30%

RECOMMENDATIONS THAT CONTRIBUTE TOWARDS THE LONG TERM FINANCIAL PLAN

118. We recommend that the outcome of our assessments and Capital Investment Model are adopted for inclusion in a long term financial strategy:

- Revenue should be increased by at least 2.5 percentage points above the CPI rate p.a. on average through a combination of increased sales of services and increase in tariffs
- In addition to operational income the municipality will have to sell app. R50 million of its investment property or other assets within the next 5 years
- Expenses must be managed prudently and annual increases must be reflected in tariffs
- A cash backed liquidity reserve of at least one month's operational expenses should be maintained
- Structural adjustment of salaries and wages of at least 10% in the first few years of the planning period is desirable. This can be achieved through a rationalisation of employment and prudent management of human resources as already demonstrated by the management of the municipality
- The support that the municipality provides to its indigent population is estimated to be greater than the amount of equitable share that it can recover from the State. This must be addressed in the short term through a maximisation of operational grants and in the medium term a rationalisation of the service level delivered to households that cannot afford the services.
- In nominal terms the municipality can afford a 10-year capital investment programme of app. R632 million (R466 million real - 2014). The demand already exceeds R1 045 million and a clear prioritisation of infrastructure projects must be undertaken. The municipality should not neglect the replacement of its existing assets and a prioritisation should compare the need for new infrastructure with the need of replacing existing infrastructure.
- The actual condition of asset components should be accurately assessed closer to the calculated replacement date with the intention of determining the need for replacement, and if found to be in need, to spread the replacement over a number of years.
- The municipality will be well served by migrating its asset registers from exclusively financial management tools to become decision tools for integrated asset management
- The municipality can afford additional debt in the order of R249 million in the next 10 years.

119. Recommendations emanating from the discussions with Executive Management of the Municipality:

- Rationalise the operation of the various resorts that the municipality owns and operates. This should include an assessment the costs of operation, means to increase occupation throughout the year and charge appropriate seasonal tariffs, identification of other revenue sources and the most appropriate service delivery system, viz. operated by the municipality, management outsourced to the private sector or sold.
- Carefully assess the quantum and timing of future revenues that an investment in infrastructure can generate before making that investment.
- Investigate the differentiation of tariffs in more detail, e.g. charge for sewage load and not just volume.

- Review the organogram with the objective of rationalising employment without reducing service delivery. In particular assess the need for:
 - All of the traffic services
 - Staffing at all tourist service points
 - Multi-tasking and avoidance of acting positions
 - Better utilisation of grass cutting teams
 - Certain agency functions by Eden DM, viz. fire breaks may be done more cost effectively by the municipality
 - Assess the potential of utilising existing systems more effectively, e.g. communication with employees in outlying areas
- Rationalise on the very generous pension policy for employees.
- Revisit rental policy, e.g. flats in Heidelberg and restaurants that are let at a very low rental that does not cover costs.
- Elevate the tourism marketing and facilitation activities (but avoid an implementation role):
 - Promote the natural scenery and the lifestyle choice of its inhabitants as a comparative advantage of the region
 - Promote and facilitate the harbour development at Stilbaai
 - Promote tourism routes through creative branding
- Put strategies in place for reducing non-revenue water, e.g.:
 - Review the “take-or-pay” contract with Overberg Water and negotiate a more cost effective arrangement
 - Determine whether the water that is extracted from the pipeline between the Korrentepoort Dam and Riversdale is paid for.
- Implement a detail maintenance cost accounting system to determine the real maintenance costs as part of integrated asset management.
- Manage the external loan portfolio to:
 - Reduce the average interest rate on debt
 - Ensure that drawdowns match the period within which the cash outflow is anticipated
 - Invest unallocated funds at a reasonable interest rate to minimise the negative carry
 - Take into consideration the type of projects the debt is raised for, which should preferably be income generating assets. Take into account the anticipated completion of the project and determine when first cash flows will be generated from the project to service the debt to avoid the Municipality carrying the repayment of the debt. Consider a grace period on capital repayments until completion of the project.
 - The term of external debt to be managed and where possible to repay debt over a longer amortising term and where applicable on a sculpted repayment profile with an escalation factor.
- Review all financial policies annually to ascertain whether any assumptions have changed and any new financial implications have become evident that may require the terms of policies to be adjusted to alleviate any unnecessary drainage on the finances

of Hessequa Municipality. Two new policies are to be adopted as attached in Annexure 5 (Liquidity Policy) and Annexure 6 (Borrowing, Funds and Reserves Policy).

Supply Chain Management

Introduction

As an organisation, Hessequa Municipality is focused on sustainability, service delivery excellence, local economic development and financial viability. With these values in mind, Hessequa municipality supports the “Proudly South African” campaign; promote “green” procurement and encourage preference for goods and services supplied, manufactured and produced within the Hessequa region.

As the supply chain leader, Hessequa Municipality is committed to improved performance of its supply chain and supplying both its internal and external customers with the highest quality goods and services at the right price, right time, right quantity, from the right supplier, to the right place.

Hessequa Municipality: Vision & Strategic Objectives

A caring municipality where everyone reaps the fruit of cost effective and innovative service delivery, stimulated economic growth and sustainable use of natural resources

- Empowerment of communities through effective communication and participation
- Ensuring a sustainable future through effective conservation and restoration of natural resources, limiting the impact of our presence in the ecology and returning to a heritage of preservation
- An Innovative approach to maintenance of all services and assets, as we develop infrastructure that secures growth in a sustainable manner
- Efficient and cost effective service delivery to all our residents, of the best quality and quantity.
- Development of socially and culturally prosperous and safe communities through strategic investment in integrated human settlement
- A special focus on human development to enhance the social wellbeing of our residents
- Developmental interventions that would stimulate economic growth, to the benefit of all communities
- A prepared local authority with a fit for purpose workforce, creating equal opportunities for all residents in a transparent, accountable and measurable manner

SCM Vision

“To have created and established an Efficient and Effective Supply Chain focused on improved service delivery and the promotion of economic and environmental sustainability aimed at local economic development and enhancing the financial viability of Hessequa Municipality by 30 June 2014

SCM Mission

Hessequa Municipality procure goods and services to provide top quality service delivery for its constituency. These goods and services will be procured through a system which is fair, equitable, transparent, competitive and cost-effective and in line with legislative provisions. Goods and services will be procured by means of sustainable practices in line with organisational objectives.

SCM Values

- Batho Pele (People First)

- Value for money
- Economic and Environmental sustainability
- Ethics (Doing the right thing)
- Service Delivery
- Legislative Compliance
- Risk Mitigation

SCM Objectives

- Improved Service Delivery
- Value for Money
- Local Economic Development
- Risk Mitigation

Major Goals

- Spent 60% of procurement budget on goods and services supplied in the Hessequa region by June 2014
- 100% Legislative compliance by June 2014
- Certified training on Municipal SCM related aspects for all officials involved in SCM by June 2013
- SCM unit 100% capacitated by June 2014 as per current approved structure
- Improve efficiency by reducing the requisition turnover time to an average of 3 working days and 60% of stock items available for immediate use by June 2014
- Zero Audit qualifications for SCM by June 2014

Strategic Action Programmes

Head: SCM – Develop Contract Man & Administration system

Head: SCM – Develop Logistics Management system

Head: SCM - Develop M&E system

Manager Socio-Economic Development & Housing - Develop LED Register

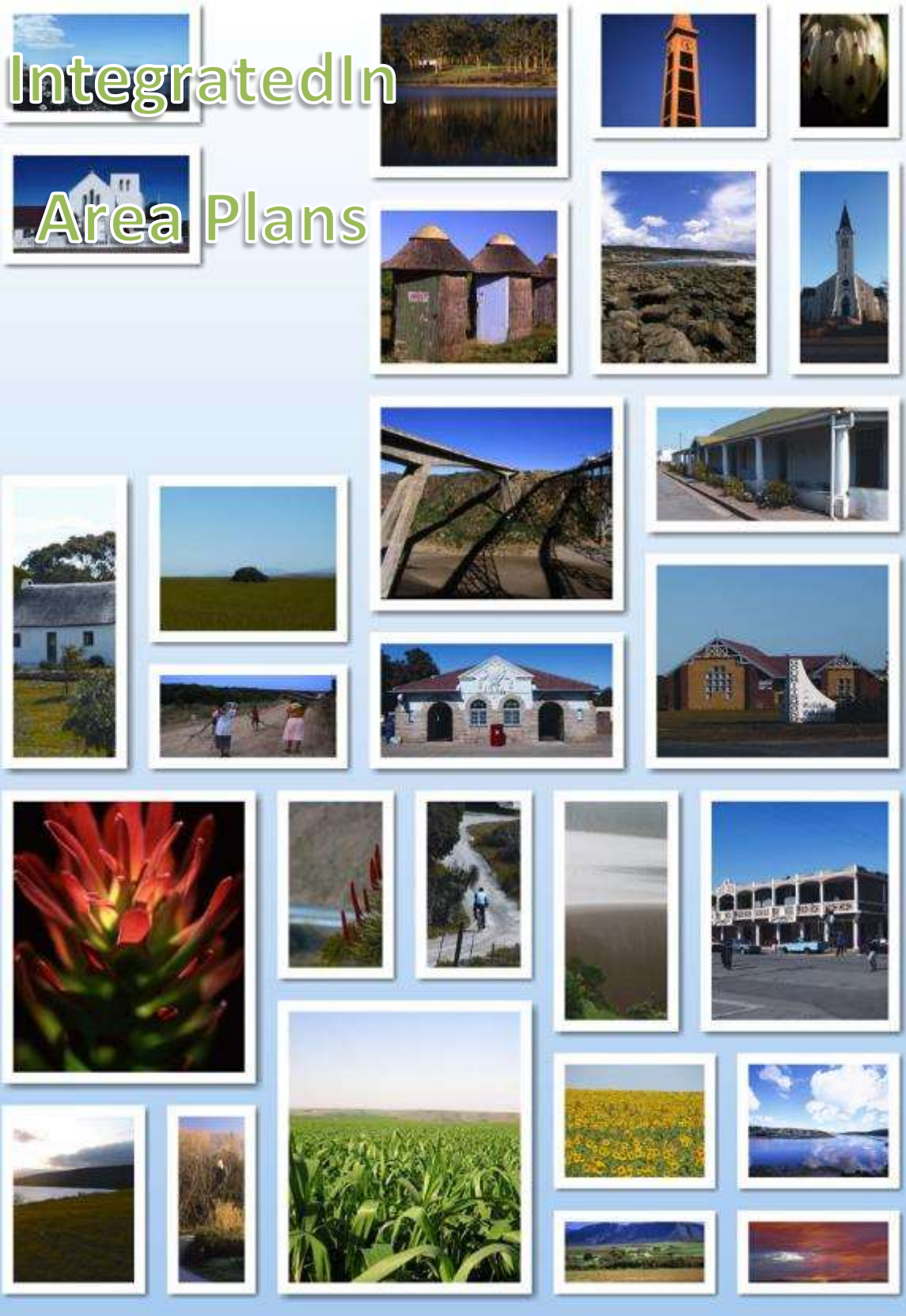
Managers – Conduct needs analysis

EPWP & CDP Champion – Devise and Implement contractor and supplier development programme

Managers Technical Departments - Obtain funding for these programmes

CFO, MM, Council - Capacitate the SCM unit

Integrated Area Plans



Integrated In
Area Plans

ALBERTINIA

Introduction

Albertinia is one of the smaller inland towns of the Hessequa Municipality. It is located on the N2 and about 40km's east of Riversdale and 40km's west of Mosselbay. Albertinia have struggled to develop ways to tap into the economic resource of the N2 and is characterised by the two aloe product factories and two fuel stations next to the N2.

Before 2000 Albertinia was a municipality on its own and became part of the Hessequa region as it forms part of the amalgamation process of municipalities in 2000. The following tables attempts to create a profile of the people living in Albertinia. The StatsSA datasets that were used, allows for the town to be analysed in two neighbourhoods, but jointly, still forms the twon Albertinia.

Population Group & Gender Totals								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Male								
Black African	51	66	67	276	402	470	1083	2142
Coloured	433	42	1122	2076	4389	4076	14639	17358
Indian or Asian	0	2	3	10	9	31	30	100
White	265	543	288	52	1848	1808	5622	5766
Other	0	10	0	14	0	38	0	158
Total	749	663	1480	2428	6648	6424	21374	25525
Female								
Black African	41	66	42	270	247	282	741	1763
Coloured	455	40	1280	2208	4513	4050	16076	18711
Indian or Asian	0	1	0	6	6	36	15	99
White	284	631	362	53	1459	1659	5933	6467
Other	0	5	0	3	0	20	0	76
Total	779	743	1684	2538	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011	2001	2011
Black African	92	132	109	545	650	752	1824	3906
Coloured	888	82	2402	4284	8903	8126	30715	36069
Indian or Asian	0	3	3	16	15	67	45	199
White	549	1174	650	105	3306	3467	11555	12233
Other	0	15	0	17	0	59	0	235
Total	1529	1406	3163	4966	12874	12471	44139	52642

Language Use								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Afrikaans	1454	1132	3040	4750	12349	11564	42058	47548
English	66	111	42	66	243	416	1153	1851
IsiXhosa	3	2	79	56	206	177	742	1066
Other	6	160	3	94	75	314	186	2177
Total	1529	1406	3163	4966	12874	12471	44139	52642

Age Groups								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
0 - 14	446	161	891	1403	3549	3276	11933	12826
15 - 35	470	276	1001	1619	4501	3859	14136	15483
36 - 65	473	575	1029	1716	4232	4595	14499	18952
66 - 120	138	393	242	229	592	741	3571	5381
Total	1529	1406	3163	4966	12874	12471	44139	52642

Education Levels								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
No schooling	113	28	261	255	1527	773	3683	2181
Grade 1 / Sub A	47	11	129	161	517	347	1746	1358
Grade 2 / Sub B	56	6	95	192	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	69	8	131	202	605	498	1803	1743
Grade 4 / Std 2	77	20	159	205	751	609	2192	2122
Grade 5 / Std 3/ABET 2	100	17	239	279	841	638	2625	2198
Grade 6 / Std 4	143	25	238	393	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	97	31	272	404	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	132	87	307	564	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	69	51	158	409	623	791	2539	3689
Grade 10 / Std 8 / Form 3	190	289	282	360	668	893	3295	4545
Grade 11 / Std 9 / Form 4	33	48	102	195	287	310	1254	1898
Grade 12 / Std 10 / Form 5	228	455	396	556	1325	1710	5645	8539
Tertiary	42	149	142	69	608	843	2967	3829
Other	133	180	255	721	1235	1527	3863	7082
Total	1529	1406	3163	4966	12874	12471	44139	52642

Official Employment Status								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Employed	465	353	981	1545	5399	5290	14103	17052
Unemployed	84	57	141	582	258	225	2304	2803
Other	370	411	904	1180	2997	2860	11870	14132
Total	919	821	2025	3307	8655	8376	28277	33987

Dwelling Type								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Formal	466	591	883	1539	3393	3540	11982	15009
Informal	12	7	0	8	102	74	529	772
Other	6	2	8	3	25	32	119	91
Total	484	601	891	1550	3519	3646	12630	15873

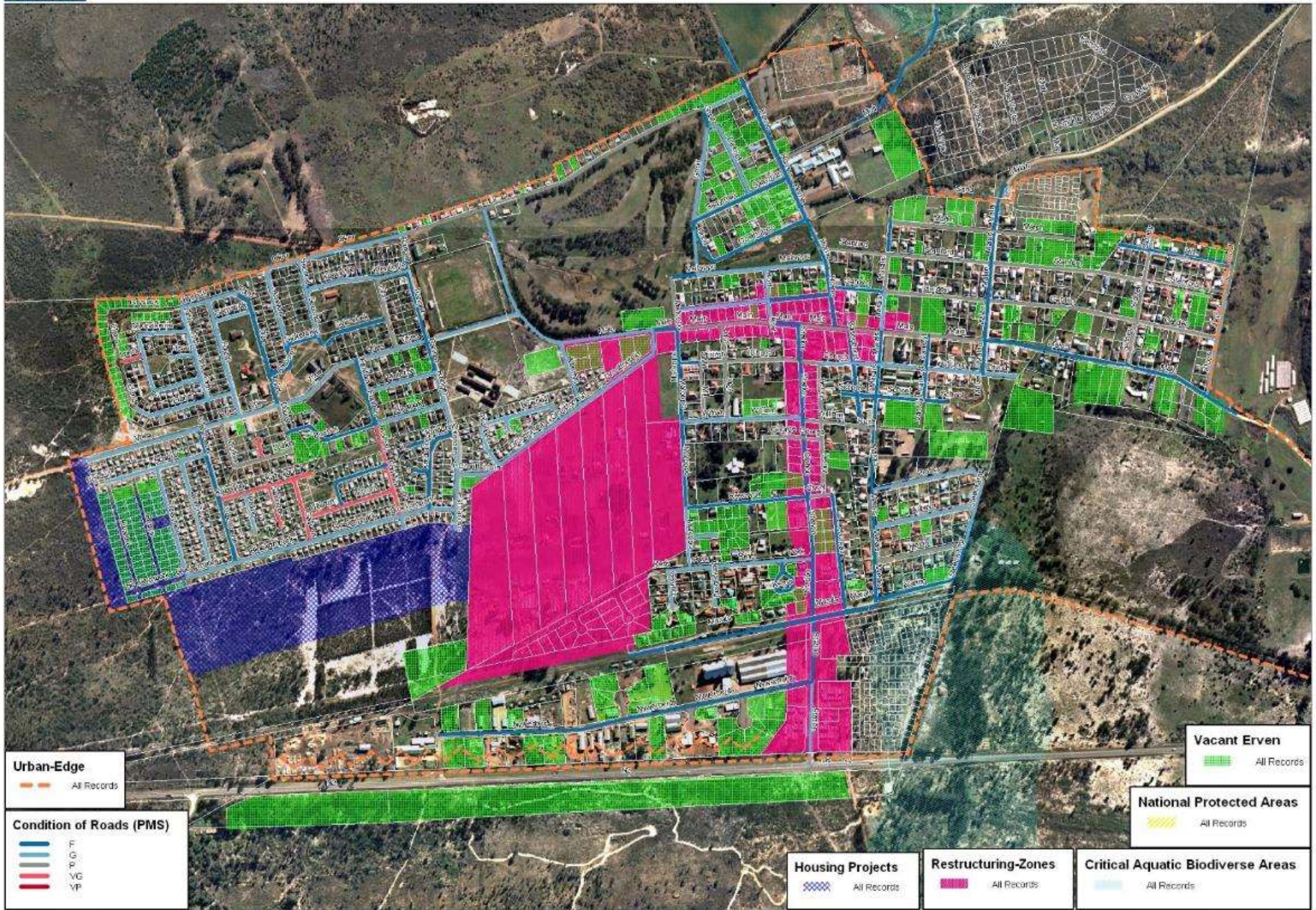
Annual Household Income								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
No income	13	93	48	109	116	247	793	1248
R 1 - R 4800	27	1	28	42	108	28	450	275
R 4801 - R 9600	65	2	118	97	688	78	2026	470
R 9601 - R 19 600	141	96	205	303	1073	555	2904	2241
R 19 601 - R 38 200	113	93	268	467	777	1011	2965	3579
R 38 201 - R 76 400	61	141	157	340	375	755	1848	3570
R 76 401 - R 153 800	44	102	42	135	235	461	1086	2274
R 153 801 - R 307 600	15	53	18	45	71	280	376	1423
R 307 601 - R 614 400	3	13	0	9	25	158	64	567
R 614 001 - R 1 228 800	0	4	6	1	24	54	55	137
R 1 228 801 - R 2 457 600	0	2	0	1	18	10	40	47
R 2 457 601 or more	3	0	0	0	9	11	24	41
Unspecified	0	0	0	0	0	0	0	1
Total	484	601	891	1550	3519	3646	12630	15873

Access to Water Services								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	482	593	871	1547	3084	3370	12010	15508
Piped (tap) water >200m	6	0	9	1	127	27	238	46
No access to piped (tap) water	0	8	0	2	279	249	306	319
Other	0	0	15	0	52	0	76	0
Total	488	601	895	1550	3543	3646	12631	15873

Toilet Facilities								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	473	519	740	1535	878	1755	8509	12807
Flush toilet (with septic tank)	9	76	149	4	1180	957	1993	1589
Chemical toilet	0	0	3	1	31	20	69	23
Pit toilet with ventilation (VIP)	0	0	0	2	377	402	468	494
Pit toilet without ventilation	0	1	0	0	415	277	487	336
Bucket toilet	0	1	0	0	173	38	317	151
None	6	3	3	9	490	133	788	299
Other	0	0	0	0	0	63	0	173
Total	488	601	895	1550	3543	3646	12631	15873

Energy Source for Lighting								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Electricity	473	597	877	1516	2394	3101	10917	15063
Gas	0	0	0	7	12	23	21	41
Paraffin	6	0	3	0	48	13	78	29
Candles (not a valid option)	9	1	15	19	1022	448	1533	617
Solar	0	1	0	3	12	52	18	87
Other	0	2	0	6	55	9	64	36
Total	488	601	895	1550	3543	3646	12631	15873

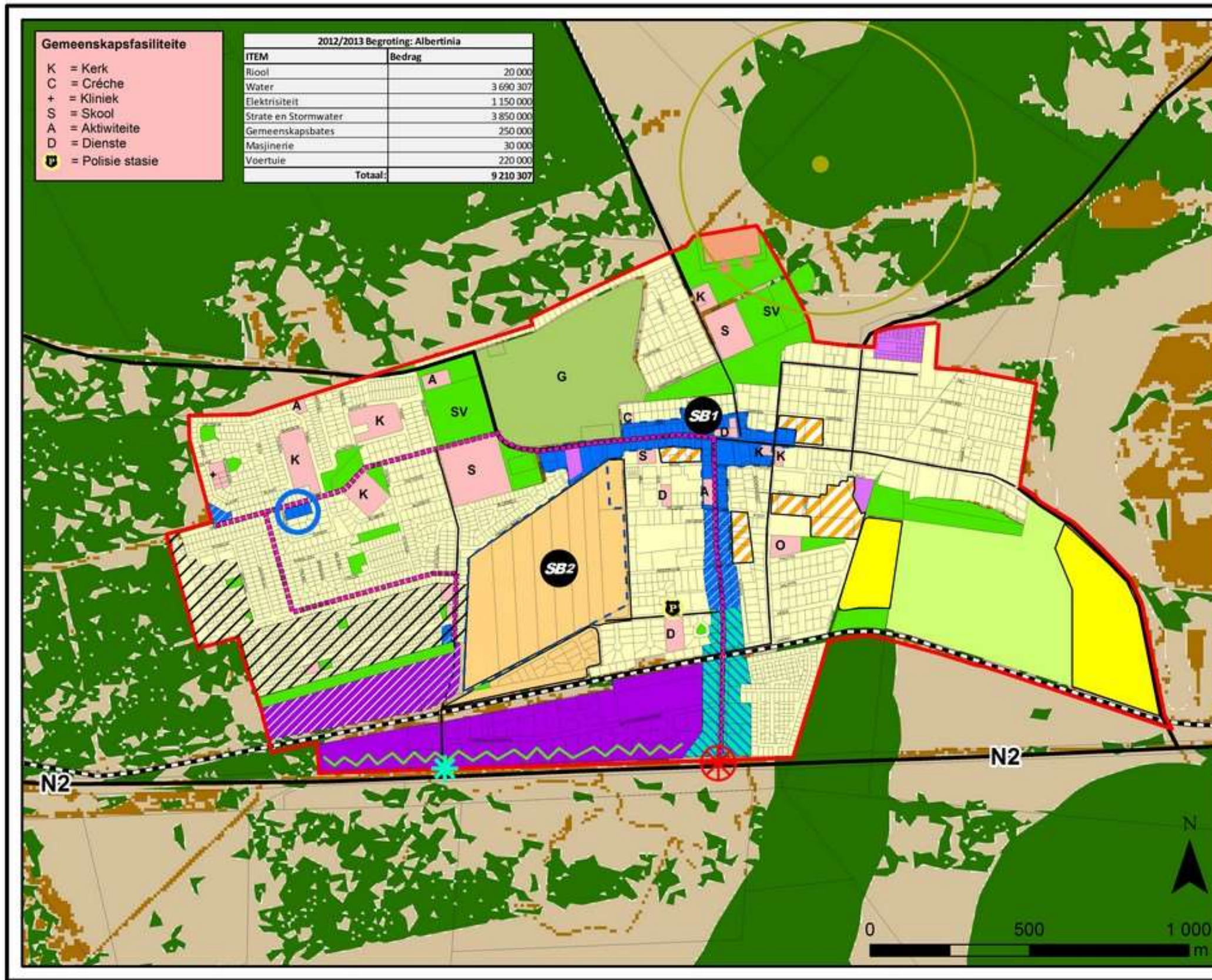
Refuse Removal								
	Albertinia SP		Theronville		Rural		Total	
	2001	2011	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	488	589	880	1547	254	531	9051	12493
Removed by local authority less often	0	0	0	1	24	78	27	94
Communal refuse dump	0	0	0	0	189	122	239	191
Own refuse dump	0	11	15	1	3040	2398	3266	2523
No rubbish disposal	0	1	0	1	36	228	48	252
Other	0	0	0	0	0	289	0	320
Total	488	601	895	1550	3543	3646	12631	15873



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MN (25.6° W)

0 200 400 600 800 1000 1200 ft
Data Zoom 14-6



Gemeenskapsfasiliteite

- K = Kerk
- C = Crèche
- + = Kliniek
- S = Skool
- A = Aktiwiteite
- D = Dienste
- = Polisie stasie

2012/2013 Begroting: Albertinia	
ITEM	Bedrag
Riool	20 000
Water	3 690 307
Elektrisiteit	1 150 000
Strate en Stormwater	3 850 000
Gemeenskapsbates	250 000
Masjinerie	30 000
Voertuie	220 000
Totaal:	9 210 307

HESSEQUA

**RUIMTELIKE ONTWIKKELINGS-
 RAAMWERK**

**RUIMTELIKE VOORSTELLE:
 ALBERTINIA**

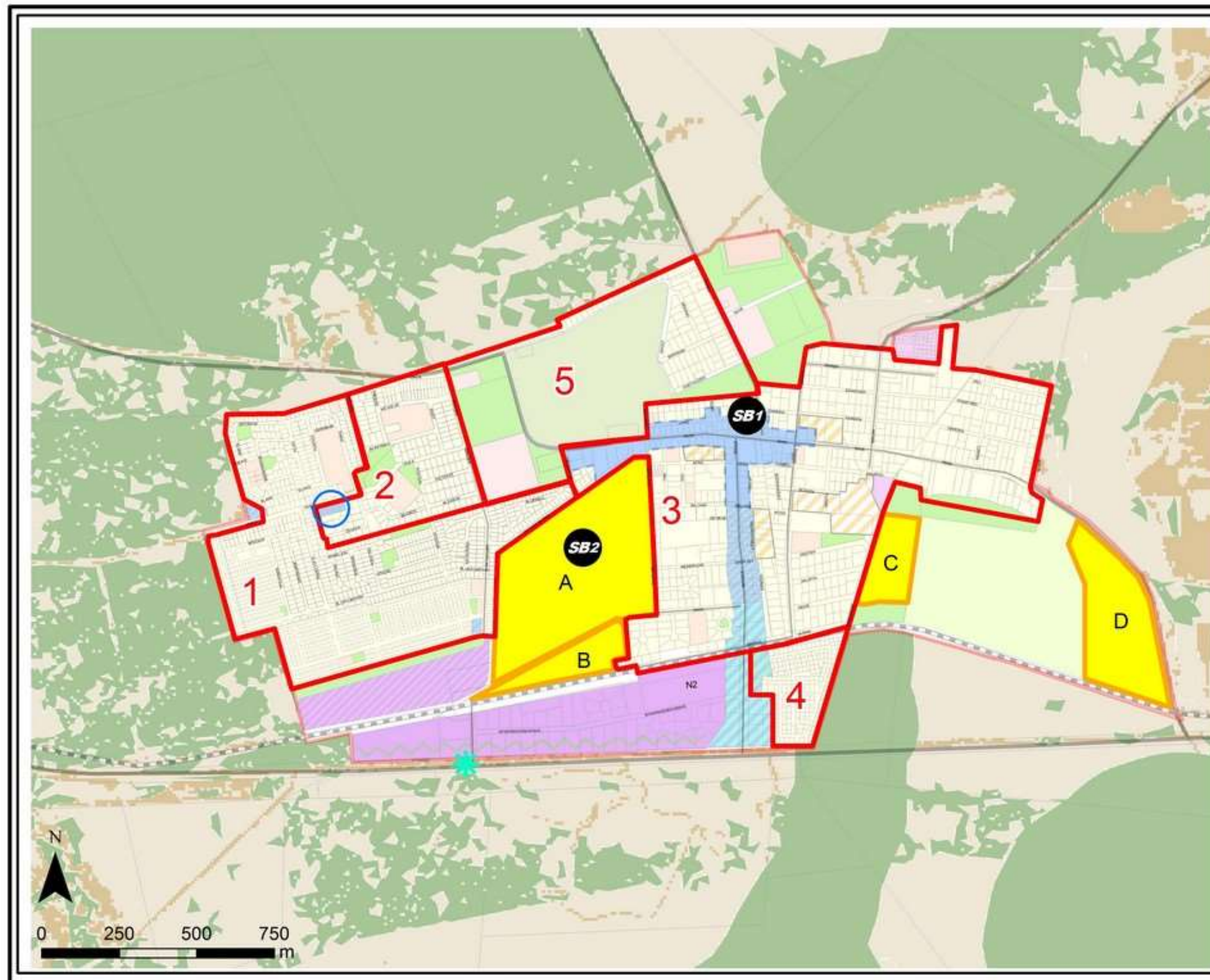
- RUIMTELIKE BEPLANNINGSREKKE**
- NERS 1
 - NERS 2
 - BUTER 1
 - NERS LANGDUUR
- WEDERSKAAP**
- BESTAANDE ONTWIKKELDE AREA
 - KLEINSKAAL
 - VOORSTELLE LAE ONTWIK
 - VOORSTELLE MEDIUM ONTWIK
 - VOORSTELLE HOOG ONTWIK
 - VOORSTELLE VERDIGINGSREKKE
- WEDERSKAAP EN WEDERSKAAP**
- WEDERSKAAP
 - VOORSTELLE WEDERSKAAP
 - VOORSTELLE WEDERSKAAP
 - TOERISME SAALREKKE
 - KUNSTREKKE
 - VOORSTELLE INDUSTRIEL / ONTWIK
- WEDERSKAAPSFASILITEITE**
- WEDERSKAAPSFASILITEITE
 - WEDERSKAAPSFASILITEITE
 - WEDERSKAAPSFASILITEITE
- PLAN**
- WEDERSKAAP
 - VERKLEINDE REKKE
 - VOORSTELLE REKKE
 - AKTIWITEITREKKE
- KONTAKT REKKE**
- HOOG INKONTAKT REKKE
 - WEDERSKAAP
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 - WEDERSKAAP
- INDEMNITY**
- THIS PLAN IS A PRELIMINARY PLAN AND DOES NOT REPRESENT THE FINAL APPROVED PLAN OF THE MUNICIPALITY. THE MUNICIPALITY AND THE CLIENT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON AND FOR THE VALIDITY OF THE PLAN AND SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON AND FOR THE VALIDITY OF THE PLAN AND SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON AND FOR THE VALIDITY OF THE PLAN.

DATE:	MARCH 2012	CLIENT:	HESSEQUA MUNISIPALITEIT
SCALE:	SEE LINESCALE		
PLAN NO.:	15.1		

URBAN DYNAMICS WESTERN CAPE

SEA VIEW BUILDING
 NO. 3 DU WOOD ROAD
 BELLEVILLE - 7800
 BELLEVILLE - 7800
 BELLEVILLE - 7800

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 e-mail: sean@urban-cape.co.za (Project Manager)



HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
ALBERTINIA**

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSZONE	SONE	HUIDIGE DIGTHEID*	VOORGESTELDE VERDIGTINGSSTEKKE*	ADDSIONELE EENHEDE
1	11			
2	5		10	46
3	6		9	251
4	20			
5	2			
TOTAL	9		19	297

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

NUWE ONTWIKKELINGS ZONES	SONE	AREA*	DIGTHEID (u/ha)	EENHEDE
A	23	20	20	575
B	4	20	20	80
C	4	10	10	40
D	10	10	10	100
TOTAL	41	19		795

* Bruto Ontwikkelings Area (ha)

BRON:
INDEMNITY

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.2		

URBAN DYNAMICS WESTERN CAPE
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Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Capital Budget Programme for Albertinia

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.1	- Albertinia (24 786m)	2	A/B		900,000	1,000,000	1,000,000	1,100,000	2
1.1.1.5	Gruispad by Mossgasgebou	2	A/B			40,000			1
1.1.3.1.1	- Albertinia	2	A/B			200,000			2
1.1.3.2.1	- Albertinia	2	A/B		150,000	160,000			2
1.2.2.1	Telemetriestelsel	2	A/B	150,000		150,000			1
1.2.2.2	Besproeiingslyn - Dorpsingang	2	A/B			50,000			1
1.2.2.3	Opgradering van Netwerk	2	A/B	620,000	400,000	620,000			2
1.2.2.4	Vervanging van Waterleiding	2	A/B	720,000		500,000		500,000	2
1.2.3.1	Spaarboorgatpompe	2	A/B		50,000		70,000		1
1.2.3.2	Teel van vloere watersuiweringswerke	2	A/B	20,000					1
1.2.3.3	Rehabilitasie van Fonteine	2	A/B		80,000	100,000			2
1.4.2.1	Opgradeer Substasies - Stasiestr/Theronsville	2	A/B	520,000	300,000	330,000	350,000		2
1.4.4.1	Laagspanningseleiers	2	A/B	300,000	300,000	300,000	350,000	350,000	2
1.4.4.7	Opgradering hoogspanning distribusie netwerk	2	A/B	240,000					2
1.5.1.14	Vergroot Chloorkamer - Roolwerke	2	A/B	16,000					1
1.5.1.15	Mechanical sieve	2	A/B	240,000					2
1.5.1.16	Vloemeter vir riool	2	A/B	80,000					2
1.5.2.1	Vervanging van suigtenkstelsel	2	A/B					2,000,000	2
1.5.2.16	Vloemeter vir riool - Groen druppel	2	A/B	240,000					2
2.2.1	Opgradering Sportfasiliteite-Theronsville- Fase 1	2	A/B	290,654					1
2.2.2	Opgradering Sportfasiliteite-Theronsville- Fase 2	2	A/B			415,810			2
2.6.1	Uitbreiding van begraaftplaas	2	A/B	200,000	200,000				1
3.1.3.1	LAW - Openbare Werke	2	A/B				250,000		2
3.1.3.2	LAW - Parke/Openbare Werke/Elektries	2	A/B			245,000		250,000	2
3.1.3.3	1 X 5m3 Tipper - Openbare Werke	2	A/B			750,000			2
3.1.3.4	Dubbelkajuit Vragmotor - Openbare Werke	2	A/B				450,000		2
3.1.3.5	1 X 2ton Platbak Trok & Hidroliese Lift - O/W	2	A/B			500,000			2
3.2.1.1	Multi-purpuse Loader	2	A/B				900,000		2
3.2.2.1	Fiat Trekker 780 - Openbare Werke	2	A/B		475,000				2
3.2.4.1	Kudu Grassnyer - Parke	2	A/B	30,000					1
3.2.6.1.1	Rioolrods	2	A/B	3,000	3,000	3,200	3,300	3,300	1
3.2.6.4.1	1 X Stool - Albertinia S/saal	2	A/B			6,000			1
3.2.6.4.2	1 X Stool - Theronsvillesaal	2	A/B				6,000		1
3.2.6.4.3	10 X Staatafels - Theronsvillesaal	2	A/B				10,000		1
3.2.6.4.4	Wireless Handheld System - Theronsvillesaal	2	A/B				3,800		1
3.2.6.4.5	Mikrofoon	2	A/B	1,000					1
3.2.6.4.6	1 X Tee Trollie - Theronsvillesaal	2	A/B	1,500					1
3.2.6.4.7	10 X Staatafels - Stadsaal	2	A/B		10,000				1
3.2.6.4.8	1 X Tee Trollie - Stadsaal	2	A/B		1,650				1
3.2.6.10.1	Kettingsaag - Parke	2	A/B	6,500					1
3.2.6.10.2	Randsnyers - Water / Parke / Parke	2	A/B	6,800	7,000	7,000	7,200	7,200	1
3.2.6.10.3	1 X Blower BB666D - Openbare Werke	2	A/B	6,000					1
3.2.6.10.4	1 X Pole pruner - Openbare Werke	2	A/B	9,000					1
3.2.6.10.5	1 X Staamboor 850w - Openbare Werke	2	A/B		3,800				1
3.2.6.10.6	1 X Slofsuier - Kantore	2	A/B	1,500					1
3.2.6.10.7	Hoëdrukspuit - Rool	2	A/B				140,000		2
3.2.6.10.8	1 ton Sleepwa - Parke	2	A/B		65,000				1
3.2.6.10.9	Elektriese Jackhammer - Openbare Werke	2	A/B			25,000			2
3.2.6.10.10	Teerspuit (200L)-self verhitting-Openbare Werke	2	A/B				150,000	150,000	2
3.5.2.1	Bou van Voorraad Stoor	2	A/B			250,000			2
3.5.4.1	Omheining (temmetjies) - Mossgasgebou	2	A/B			40,000			2

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
2.3.1	Opgradering Sportfasiliteite-Theronsville- Fase 1	2	A\B	1,054,500					LOTTO
2.3.2	Opgradering Sportfasiliteite-Theronsville- Fase 2	2	A\B				1,317,794		MIG
3.2.6.6.1	6 X Desk Computers	2	A\B	12,000					BIB
3.2.6.6.2	Book Defection System - Protea	2	A\B					165,000	BIB

GOURITSMOND

Introduction

Gouritsmond is located next to the river mouth of the Gourits River. It is one of the smaller coastal towns in the Hessequa region, but still is very popular holiday destination. The local fishing industry continues to support the economy of the town out of the holiday seasons. Gouritsmond is almost completely surrounded by conservation areas and future expansion of the town is very limited. This contributes to the desirability as a holiday destination and senior citizens looking for a quiet place for spending their days of retirement

Population Group & Gender Totals						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	3	15	402	470	1083	2142
Coloured	87	139	4389	4076	14639	17358
Indian or Asian	0	1	9	31	30	100
White	150	94	1848	1808	5622	5766
Other	0	2	0	38	0	158
Total	240	249	6648	6424	21374	25525
Female						
Black African	0	13	247	282	741	1763
Coloured	58	142	4513	4050	16076	18711
Indian or Asian	0	1	6	36	15	99
White	161	110	1459	1659	5933	6467
Other	0	0	0	20	0	76
Total	219	265	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	3	27	650	752	1824	3906
Coloured	145	280	8903	8126	30715	36069
Indian or Asian	0	2	15	67	45	199
White	311	203	3306	3467	11555	12233
Other	0	2	0	59	0	235
Total	459	515	12874	12471	44139	52642

Language Use						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	426	476	12349	11564	42058	47548
English	30	17	243	416	1153	1851
IsiXhosa	0	1	206	177	742	1066
Other	3	21	75	314	186	2177
Total	459	515	12874	12471	44139	52642

Age Groups						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	48	101	3549	3276	11933	12826
15 - 35	132	137	4501	3859	14136	15483
36 - 65	182	180	4232	4595	14499	18952
66 - 120	96	97	592	741	3571	5381
Total	459	515	12874	12471	44139	52642

Education Levels						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	24	32	1527	773	3683	2181
Grade 1 / Sub A	12	8	517	347	1746	1358
Grade 2 / Sub B	3	15	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	12	23	605	498	1803	1743
Grade 4 / Std 2	15	20	751	609	2192	2122
Grade 5 / Std 3/ABET 2	6	12	841	638	2625	2198
Grade 6 / Std 4	18	32	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	24	33	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	30	29	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	15	23	623	791	2539	3689
Grade 10 / Std 8 / Form 3	63	45	668	893	3295	4545
Grade 11 / Std 9 / Form 4	12	20	287	310	1254	1898
Grade 12 / Std 10 / Form 5	92	85	1325	1710	5645	8539
Tertiary	111	91	608	843	2967	3829
Other	21	46	1235	1527	3863	7082
Total	459	515	12874	12471	44139	52642

Official Employment Status						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	160	183	5399	5290	14103	17052
Unemployed	27	21	258	225	2304	2803
Other	122	102	2997	2860	11870	14132
Total	308	305	8655	8376	28277	33987

Dwelling Type						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	225	205	3393	3540	11982	15009
Informal	3	1	102	74	529	772
Other	0	0	25	32	119	91
Total	228	206	3519	3646	12630	15873

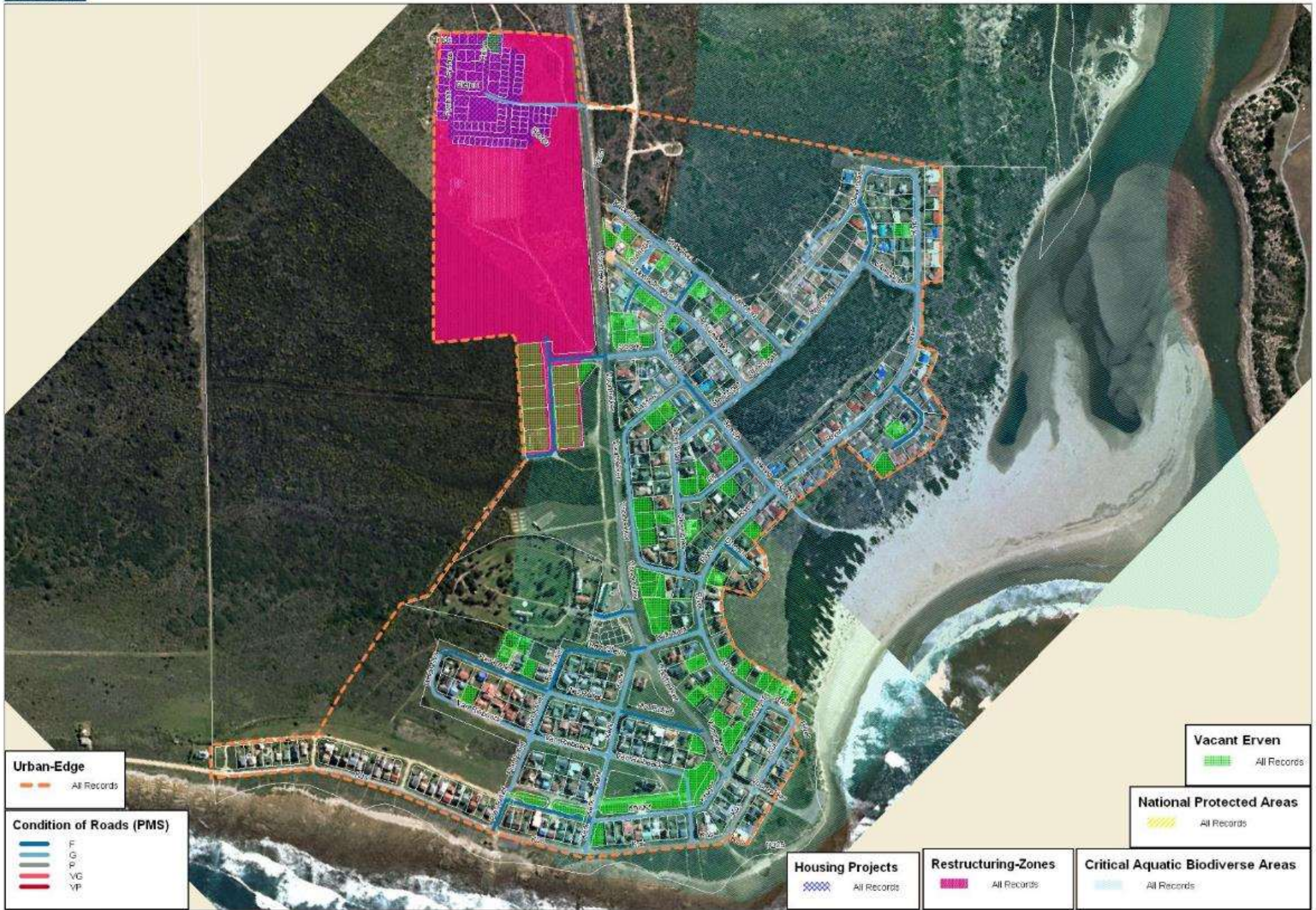
Annual Household Income						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	9	16	116	247	793	1248
R 1 - R 4800	24	3	108	28	450	275
R 4801 - R 9600	27	6	688	78	2026	470
R 9601 - R 19 600	33	27	1073	555	2904	2241
R 19 601 - R 38 200	37	39	777	1011	2965	3579
R 38 201 - R 76 400	44	52	375	755	1848	3570
R 76 401 - R 153 800	35	36	235	461	1086	2274
R 153 801 - R 307 600	9	16	71	280	376	1423
R 307 601 - R 614 400	3	9	25	158	64	567
R 614 001 - R 1 228 800	0	1	24	54	55	137
R 1 228 801 - R 2 457 600	3	1	18	10	40	47
R 2 457 601 or more	3	0	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	228	206	3519	3646	12630	15873

Access to Water Services						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	222	204	3084	3370	12010	15508
Piped (tap) water >200m	0	1	127	27	238	46
No access to piped (tap) water	3	1	279	249	306	319
Other	0	0	52	0	76	0
Total	225	206	3543	3646	12631	15873

Toilet Facilities						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	0	102	878	1755	8509	12807
Flush toilet (with septic tank)	213	100	1180	957	1993	1589
Chemical toilet	0	0	31	20	69	23
Pit toilet with ventilation (VIP)	3	0	377	402	468	494
Pit toilet without ventilation	9	1	415	277	487	336
Bucket toilet	0	1	173	38	317	151
None	0	0	490	133	788	299
Other	0	1	0	63	0	173
Total	225	206	3543	3646	12631	15873

Energy Source for Lighting						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	213	202	2394	3101	10917	15063
Gas	0	1	12	23	21	41
Paraffin	0	0	48	13	78	29
Candles (not a valid option)	9	0	1022	448	1533	617
Solar	0	0	12	52	18	87
Other	3	2	55	9	64	36
Total	225	206	3543	3646	12631	15873

Refuse Removal						
	Gouritsmond SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	225	203	254	531	9051	12493
Removed by local authority less often	0	0	24	78	27	94
Communal refuse dump	0	0	189	122	239	191
Own refuse dump	0	2	3040	2398	3266	2523
No rubbish disposal	0	0	36	228	48	252
Other	0	1	0	289	0	320
Total	225	206	3543	3646	12631	15873



Urban-Edge
 All Records

Condition of Roads (PMS)

- F
- G
- P
- VG
- VP

Housing Projects
 All Records

Restructuring-Zones
 All Records

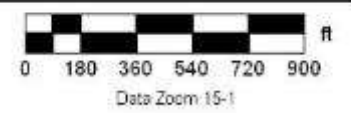
Critical Aquatic Biodiverse Areas
 All Records

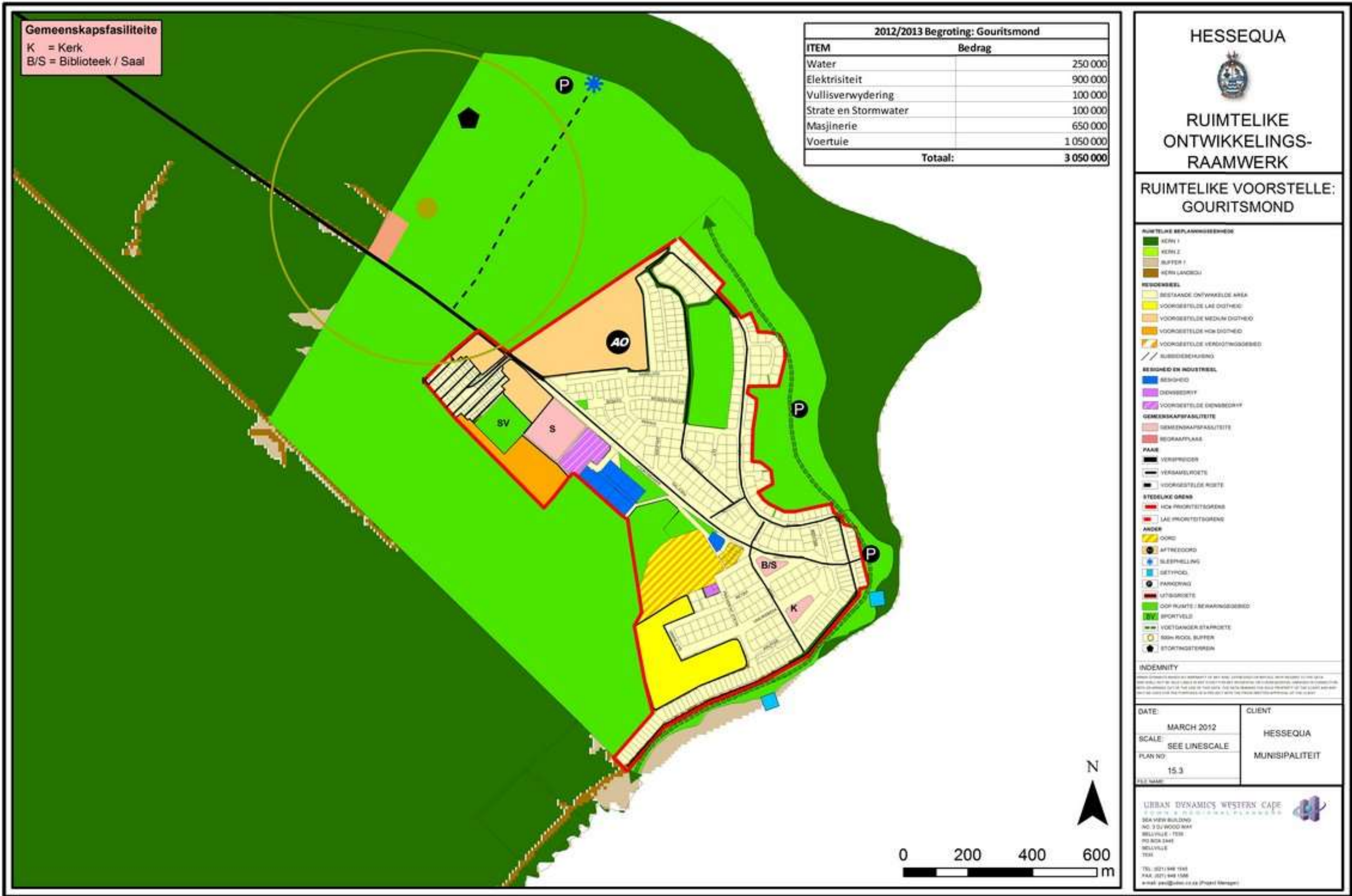
Vacant Erven
 All Records

National Protected Areas
 All Records

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 MN (25.8° W)





Gemeenskapsfasiliteite
 K = Kerk
 B/S = Biblioteek / Saal

2012/2013 Begroting: Gouritsmond		
ITEM	Bedrag	
Water		250 000
Elektrisiteit		900 000
Vullisverwydering		100 000
Strate en Stormwater		100 000
Masjinerie		650 000
Voertuie		1 050 000
Totaal:		3 050 000

HESSEQUA



RUIMTELIKE ONTWIKKELINGS-RAAMWERK

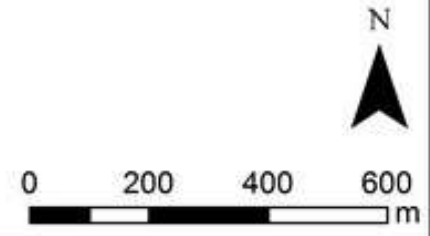
RUIMTELIKE VOORSTELLE: GOURITSMOND

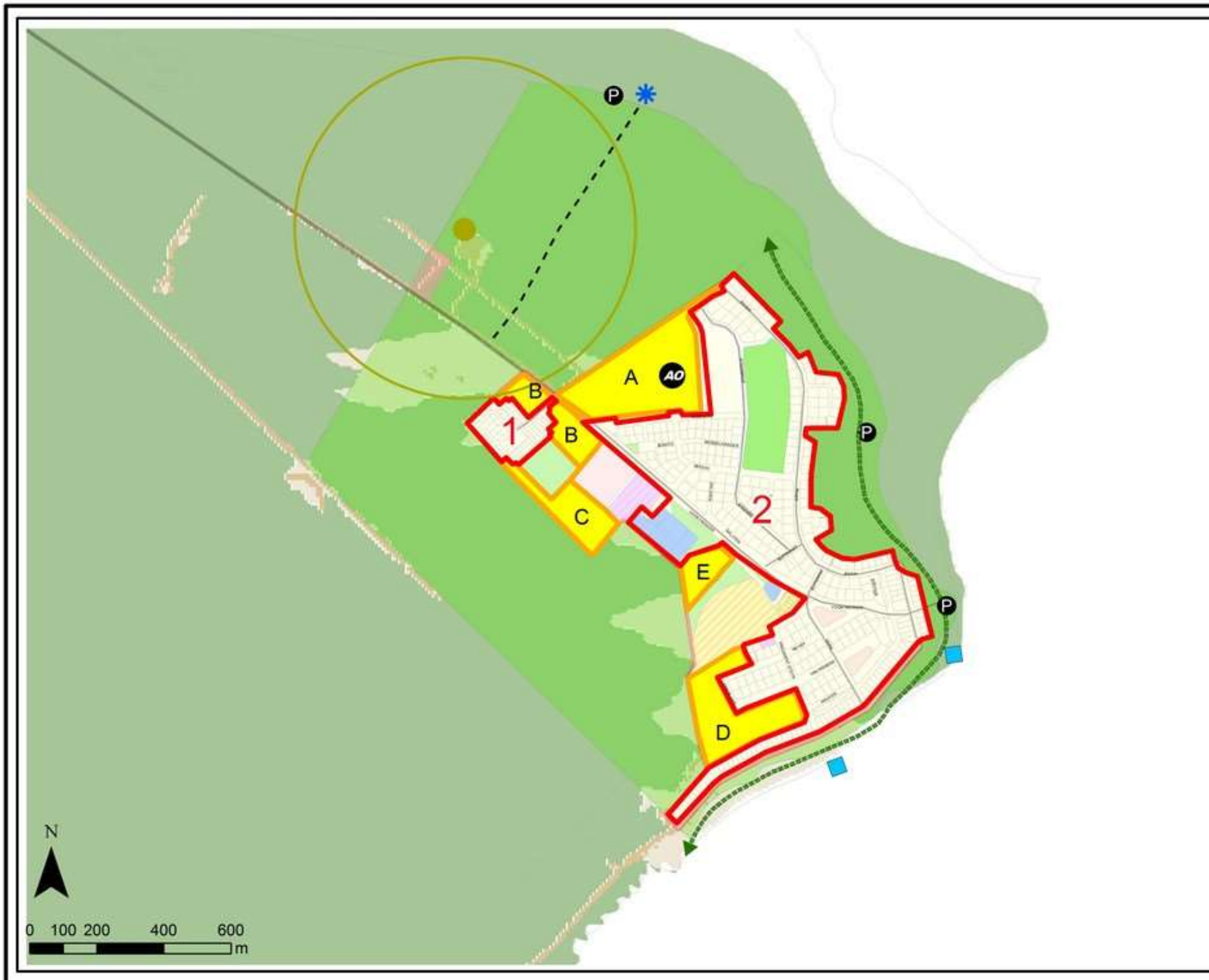
- RUIMTELIKE BEPLANNINGSREKKE**
- KERN 1
 - KERN 2
 - BUFFER 1
 - KERN LAAGS
- REWONDEEL**
- BESTAANDE ONTWIKKELDE AREA
 - VOORGESTELDE LAE DICHTEID
 - VOORGESTELDE MEDIUM DICHTEID
 - VOORGESTELDE HOOG DICHTEID
 - VOORGESTELDE VERDORINGSREKKE
 - RIJSGEBIED
- REKKE EN INDUSTRIEL**
- REKKE
 - DINSGEBIED
 - VOORGESTELDE DINSGEBIED
- GEMEENSKAPSFASILITEITE**
- GEMEENSKAPSFASILITEITE
 - PROGRAMPLAAS
- PAAS**
- VERSPREIDER
 - VERSAAGROETS
 - VOORGESTELDE ROETS
- STEDELIKE GRENS**
- HOG PRIORITYSGRENS
 - LAE PRIORITYSGRENS
- ANDER**
- DOOR
 - AFTREDOORD
 - SLAEPHILLING
 - GETYPOD
 - PARKDRING
 - UTSIGREKKE
 - DOORWAAK- / BEWAKINGSREKKE
 - SPORTVELD
 - VOETGANGERSTAPREKKE
 - RIJSGEBIED
 - STORTINGSGEBIED

INDEMNITY
 I am indemnified against all claims for any and all consequences arising from the use of this plan and the use of the land in any way whatsoever, whether or not such use is in accordance with the provisions of this plan, and whether or not such use is in accordance with the provisions of any other law or regulation, and whether or not such use is in accordance with the provisions of any other law or regulation, and whether or not such use is in accordance with the provisions of any other law or regulation.

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.3		

URBAN DYNAMICS WESTERN CAPE
 2011 10 10
 SEA VIEW BUILDING
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 e-mail: info@urban.co.za (Project Manager)





HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
GOURITSMOND**

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSONES:			
SONE	HUIDIGE DIGTHEID*	VOORGESTELDE VERDIGTINGSTEKEN*	ADDITIONELE EENHED
1	30		0
2	7		0
TOTAL	8		0

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGSGEBIED

NUWE ONTWIKKELINGSONES:			
SONE	AREA*	DIGTHEID (u/ha)	EENHED
A	8	25	200
B	2,5	20	50
C	3	25	75
D	5	15	75
E	1,5	25	30
TOTAL	20	22	430

* Bruto Ontwikkelings Area (ha)

BRON:

INDEMNITY

Urban Dynamics' services are provided to you on the basis of the contract between us. We do not warrant the accuracy or completeness of the information provided. We do not accept any liability for any loss or damage, including consequential loss or damage, arising from the use of the information provided. We do not accept any liability for any loss or damage, including consequential loss or damage, arising from the use of the information provided.

DATE: MARCH 2012	CLIENT: HESSEQUA
SCALE: SEE LINESCALE	MUNICIPALITEIT: MUNICIPALITEIT
PLAN NO: 15.4	

URBAN DYNAMICS WESTERN CAPE 

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 7530

Tel: (021) 948 1588
 Fax: (021) 948 1588
 e-mail: info@urban.co.za (Project Manager)

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Planned Capital Budget Programme for Gouritzmond

Capital Expenditure Schedule 2014-2019

#	Description	Wrđ	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.4	- Gouritsmond (11 517m)	1	G/M		500,000	540,000	550,000	560,000	2
1.1.3.2.6	- Gouritsmond	1	G/M		100,000	100,000			2
1.2.3.9	Ontkalking van huishoudelike water	1	G/M	550,000					1
1.2.4.5	Opgradeer/rehabilitering van Gansfonteindam	1	G/M			50,000			2
1.4.2.6	Opgradeer Substasies	1	G/M		250,000	300,000	300,000		2
1.4.4.6	Opgradering van netwerk	1	G/M	230,000	150,000	175,000	200,000	200,000	2
1.5.1.17	Opgradering van Rioolwerke	1	G/M	100,000	150,000				1
1.7.1.3	Opgradeer en omheing van stortingssterrein	1	G/M		100,000	200,000			2
2.6.5	Omheining van begraafplaas	1	G/M	50,000					1
2.7.11	Opgradering van Getypoel	1	G/M				15,000		1
2.8.7.1	Vervang binne tenks van boilers	1	G/M	40,000	30,000				1
2.8.7.2	2 X Elektriese motor hekke & tag stelsel	1	G/M	36,000					1
2.8.7.3	Opgradering van Kamp	1	G/M		50,000	50,000	50,000		2
2.8.7.4	Vervanging van heining	1	G/M		50,000	50,000	50,000		2
2.8.7.5	Opgradering van Kantoor	1	G/M		20,000	30,000	20,000		2
2.8.7.6	Speelpark	1	G/M			8,000			1
2.8.7.7	2 X 5kl Watertenke	1	G/M			12,000			1
2.8.7.8	Diefwering & beveiliging van kantoor en huis	1	G/M	15,000	15,000				1
3.1.3.19	LAW - Openbare Werke	1	G/M			240,000			2
3.1.3.20	1 X 3m3 Tipper - Openbare Werke	1	G/M				400,000		2
3.2.2.5	Fiat Trekker 780 - Openbare Werke	1	G/M			500,000			2
3.2.4.9	Kudu Grassnyer - Openbare Werke	1	G/M		35,000				1
3.2.6.4.52	30 X Plastiekstoel - Gemeenskap saal	1	G/M				3,000		1
3.2.6.4.53	Blinders - Gemeenskap saal	1	G/M				6,000		1
3.2.6.5.29	Kantoorstoel	1	G/M		1,500				1
3.2.6.5.30	Lugversorger	1	G/M		8,000				1
3.2.6.10.37	Sement Menger - Openbare Werke	1	G/M		35,000				1
3.5.2.5	Voertuigstoor	1	G/M				200,000		2
1.1.3.1.8	- Gouritsmond - Erf 426	1	G/M	240,000	220,000				1
3.2.6.6.13	3 X Carpet & onderfelt	1	G/M	15,000					BIB

HEIDELBERG

Introduction

Heidelberg is the second biggest inland town in the Hessequa region and its economy has been heavily dependent on commercial agriculture. Heidelberg has enjoyed a rich cultural heritage in the performing arts and continues to deliver to national audiences. Heidelberg is currently challenged with a large backlog in housing.

Population Group & Gender Totals						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	135	387	402	470	1083	2142
Coloured	2565	2970	4389	4076	14639	17358
Indian or Asian	6	19	9	31	30	100
White	638	539	1848	1808	5622	5766
Other	0	31	0	38	0	158
Total	3344	3946	6648	6424	21374	25525
Female						
Black African	157	378	247	282	741	1763
Coloured	2872	3252	4513	4050	16076	18711
Indian or Asian	0	17	6	36	15	99
White	753	650	1459	1659	5933	6467
Other	0	17	0	20	0	76
Total	3782	4313	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	292	765	650	752	1824	3906
Coloured	5436	6222	8903	8126	30715	36069
Indian or Asian	6	36	15	67	45	199
White	1391	1189	3306	3467	11555	12233
Other	0	48	0	59	0	235
Total	7125	8259	12874	12471	44139	52642

Language Use						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	6807	7400	12349	11564	42058	47548
English	138	275	243	416	1153	1851
IsiXhosa	156	230	206	177	742	1066
Other	24	354	75	314	186	2177
Total	7125	8259	12874	12471	44139	52642

Age Groups						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	2058	2083	3549	3276	11933	12826
15 - 35	2305	2538	4501	3859	14136	15483
36 - 65	2244	2908	4232	4595	14499	18952
66 - 120	519	729	592	741	3571	5381
Total	7125	8259	12874	12471	44139	52642

Education Levels						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	544	278	1527	773	3683	2181
Grade 1 / Sub A	302	271	517	347	1746	1358
Grade 2 / Sub B	178	216	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	261	263	605	498	1803	1743
Grade 4 / Std 2	361	338	751	609	2192	2122
Grade 5 / Std 3/ABET 2	430	328	841	638	2625	2198
Grade 6 / Std 4	531	488	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	714	648	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	735	868	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	433	632	623	791	2539	3689
Grade 10 / Std 8 / Form 3	549	680	668	893	3295	4545
Grade 11 / Std 9 / Form 4	245	377	287	310	1254	1898
Grade 12 / Std 10 / Form 5	812	1367	1325	1710	5645	8539
Tertiary	394	357	608	843	2967	3829
Other	638	1150	1235	1527	3863	7082
Total	7125	8259	12874	12471	44139	52642

Official Employment Status						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	1689	2214	5399	5290	14103	17052
Unemployed	501	374	258	225	2304	2803
Other	2305	2795	2997	2860	11870	14132
Total	4495	5383	8655	8376	28277	33987

Dwelling Type						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	1697	1954	3393	3540	11982	15009
Informal	119	223	102	74	529	772
Other	20	20	25	32	119	91
Total	1836	2198	3519	3646	12630	15873

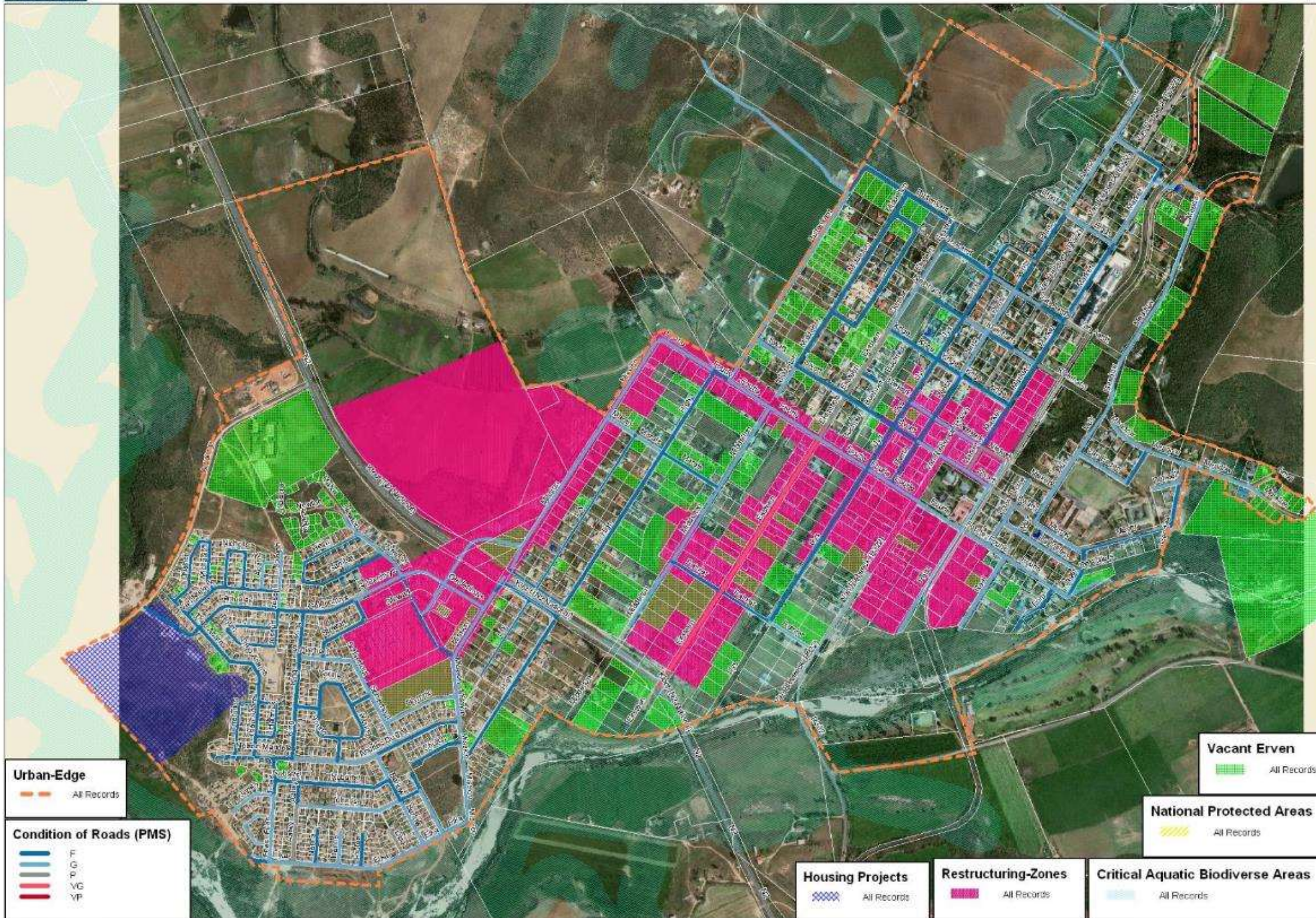
Annual Household Income						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	171	205	116	247	793	1248
R 1 - R 4800	61	59	108	28	450	275
R 4801 - R 9600	339	100	688	78	2026	470
R 9601 - R 19 600	397	338	1073	555	2904	2241
R 19 601 - R 38 200	433	501	777	1011	2965	3579
R 38 201 - R 76 400	237	461	375	755	1848	3570
R 76 401 - R 153 800	144	276	235	461	1086	2274
R 153 801 - R 307 600	41	176	71	280	376	1423
R 307 601 - R 614 400	3	63	25	158	64	567
R 614 001 - R 1 228 800	3	11	24	54	55	137
R 1 228 801 - R 2 457 600	6	7	18	10	40	47
R 2 457 601 or more	0	0	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	1836	2198	3519	3646	12630	15873

Access to Water Services						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	1802	2177	3084	3370	12010	15508
Piped (tap) water >200m	12	6	127	27	238	46
No access to piped (tap) water	12	14	279	249	306	319
Other	3	0	52	0	76	0
Total	1829	2198	3543	3646	12631	15873

Toilet Facilities						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	1242	1988	878	1755	8509	12807
Flush toilet (with septic tank)	368	112	1180	957	1993	1589
Chemical toilet	0	1	31	20	69	23
Pit toilet with ventilation (VIP)	24	19	377	402	468	494
Pit toilet without ventilation	6	7	415	277	487	336
Bucket toilet	121	32	173	38	317	151
None	69	19	490	133	788	299
Other	0	19	0	63	0	173
Total	1829	2198	3543	3646	12631	15873

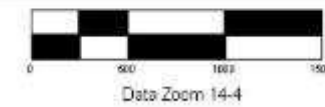
Energy Source for Lighting						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	1606	2137	2394	3101	10917	15063
Gas	6	3	12	23	21	41
Paraffin	18	0	48	13	78	29
Candles (not a valid option)	190	53	1022	448	1533	617
Solar	3	3	12	52	18	87
Other	6	2	55	9	64	36
Total	1829	2198	3543	3646	12631	15873

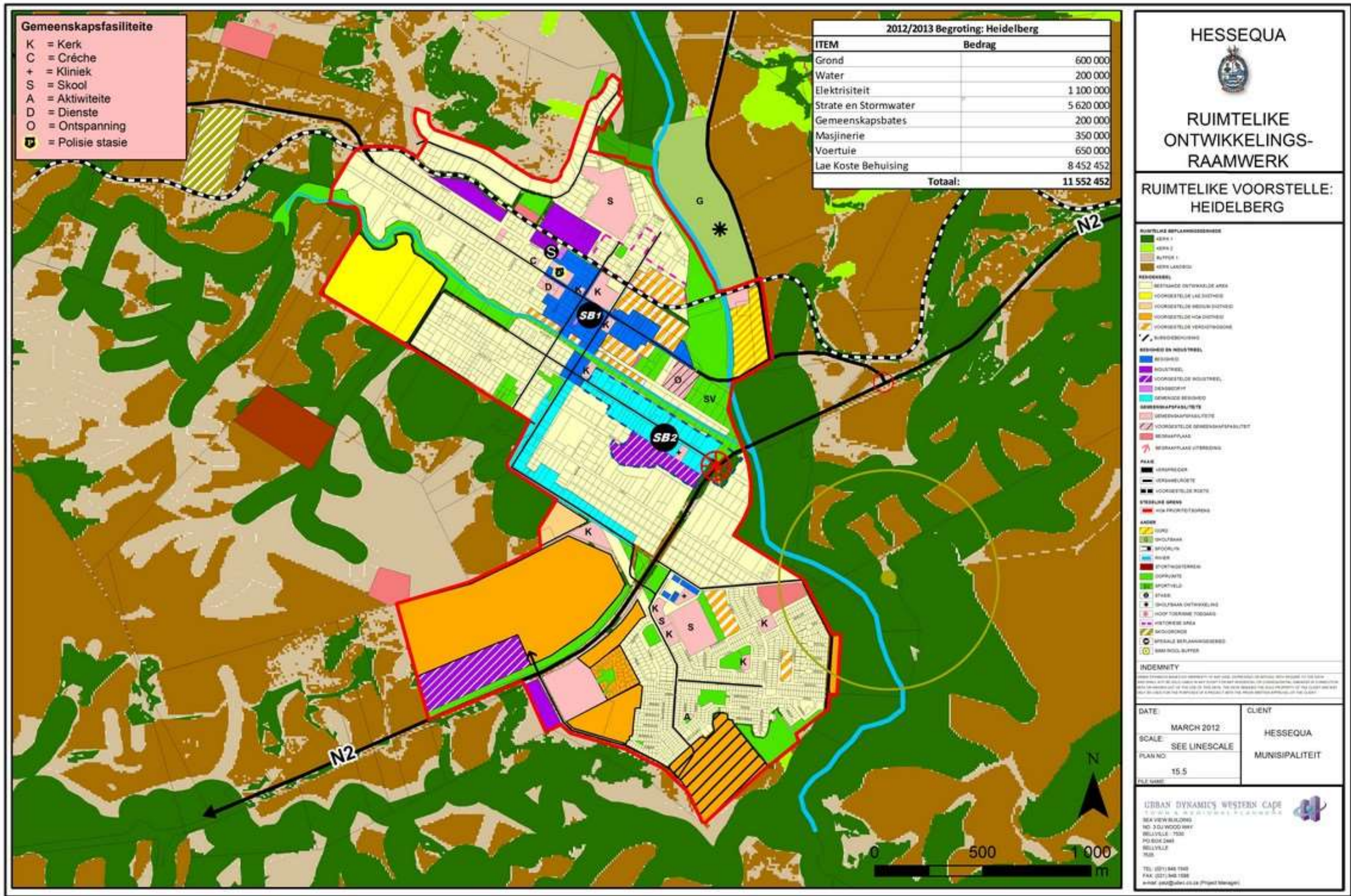
Refuse Removal						
	Heidelberg SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	1727	2065	254	531	9051	12493
Removed by local authority less often	3	6	24	78	27	94
Communal refuse dump	0	63	189	122	239	191
Own refuse dump	99	45	3040	2398	3266	2523
No rubbish disposal	0	2	36	228	48	252
Other	0	16	0	289	0	320
Total	1829	2198	3543	3646	12631	15873

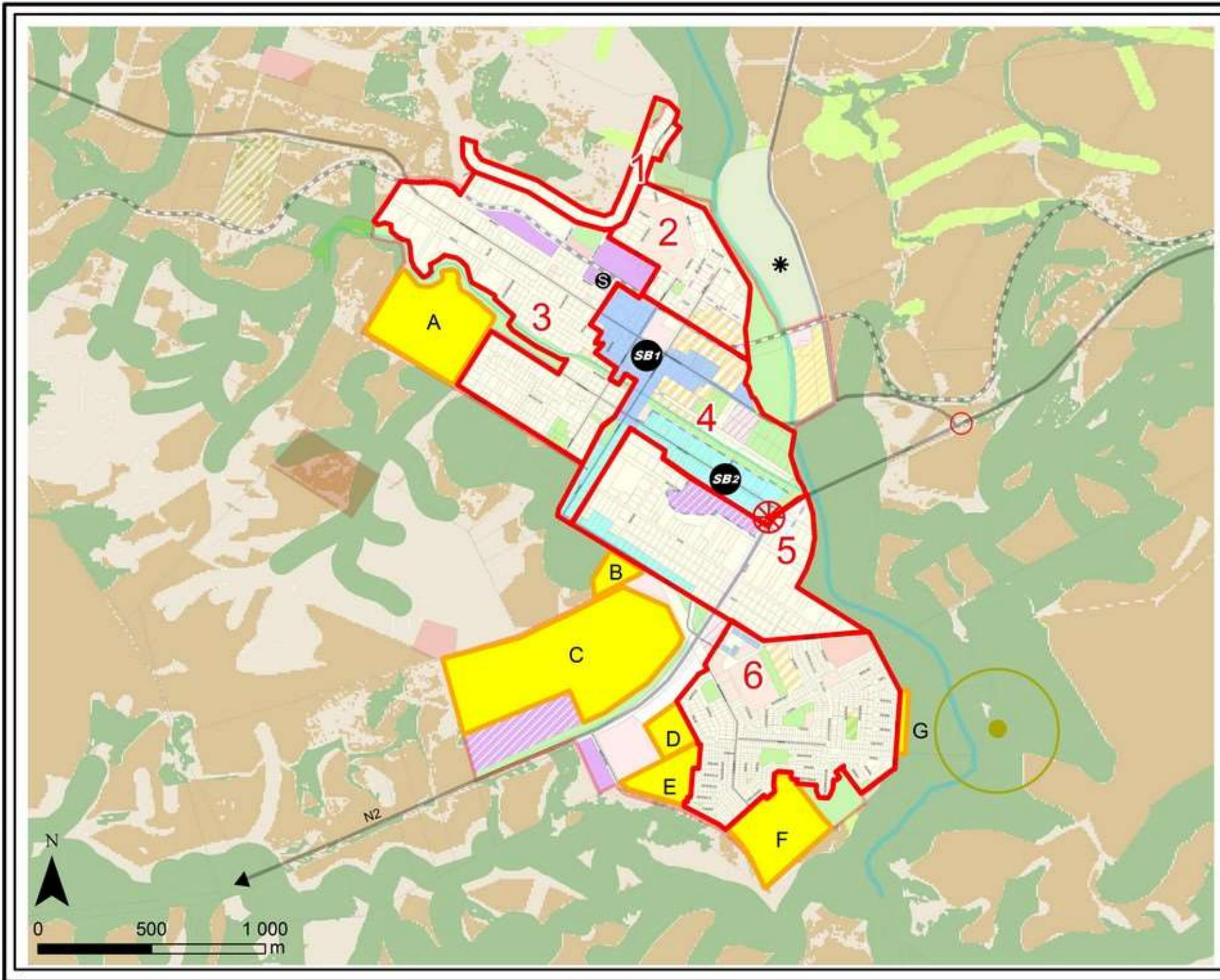


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 MN (25.3° W)







HESSEQUA



RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK

GROEIBESTUURSPLAN:
HEIDELBERG

BESTAANDE STEDELIKE GEBIED

SONE	HUIDIGE DIGTHEID*	VOORGESTELDE VERDIGTINGSTEKEN*	ADDSIONELE EENHEDE
1	3		
2	4		
3	4		128
4	2		83
5	4		62
6	15		
TOTAL	6	8	273

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

SONE	AREA*	DIGTHEID (u/ha)	EENHEDE
A	17	10	170
B	2	25	50
C	37	35	1295
D	3	35	105
E	5	35	175
F	11	35	385
G	1	35	35
TOTAL	76	28	2215

* Bruto Ontwikkelings Area (ha)

BRON:
INDEMNITY:
Urban Dynamics Western Cape is not liable for any errors or omissions in this plan. The data obtained from this plan is for information only and should not be used for any other purpose. The data obtained from this plan is for information only and should not be used for any other purpose.

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.6		
FILE NAME:			

URBAN DYNAMICS WESTERN CAPE
SEA VIEW BUILDING
NO. 3 SILWOOD WAY
BELLVILLE - 7530
PO BOX 2448
BELLVILLE
7530
TEL: 021 948 1340
FAX: 021 948 1388
EMAIL: info@urban.co.za (Project Manager)

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Planned Capital Budget Programme for Heidelberg

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.3.1.2	- Heidelberg	4	H/B		200,000				1
1.4.3.1	Vervang Meters - Heidelberg	4	H/B		50,000				1
3.2.6.4.12	Wireless Handheld System - Duivenhoks	4	H/B			3,800			1
3.2.6.4.13	Behringer Pmp 980 - Duivenhoks	4	H/B			5,200			1
3.2.6.4.14	Kas vir Klanktoerusting - Duivenhoks	4	H/B			1,700			1
3.2.6.4.15	3 Tier tea trolle - Duivenhoks	4	H/B	1,500					1
1.1.3.2.2	- Heidelberg	5	H/B		110,000	120,000			2
1.2.2.19	Leiwater pomp instilasie	5	H/B	96,000					2
1.4.1.1	Opgradeer 11KV Hoofsubstasie	5	H/B	900,000	500,000	550,000	600,000		2
1.4.2.2	Opgradeer Substasies	5	H/B	520,000	300,000	330,000	350,000		2
1.4.4.2	Opgradering van Netwerk	5	H/B	800,000	500,000	500,000	550,000	550,000	2
1.5.3.1	Bystand rioolpomp	5	H/B					90,000	2
2.5.1	Aanbou van Gallery - Duivenhokssaal	5	H/B			200,000			2
3.1.3.6	LAW's - Openbare Werke/ Water	5	H/B	220,000			250,000		2
3.2.6.3.1	10 X Staaltafels - Sportgronde	5	H/B	4,500					1
3.2.6.3.2	100 X Plastiekstoel - Sportgronde	5	H/B	5,000					1
3.2.6.3.3	Grenstou - Sportgronde	5	H/B		10,000				1
3.2.6.3.4	Vervanging van Krieket mat - Sportgronde	5	H/B		16,000				1
3.2.6.4.9	100 X Plastiekstoel - Stadsaal	5	H/B	6,000					1
3.2.6.4.10	10 X Staaltafels - Stadsaal	5	H/B	9,000					1
3.2.6.4.11	1 X Tee Trolle - Stadsaal	5	H/B	1,500					1
3.2.6.4.16	1 X Stof - Stadsaal	5	H/B				7,000		1
3.5.5.1	Ontwikkeling en diens van ekonomiese erwe	5	H/B			500,000			2
1.1.1.1.2	- Heidelberg (31 679m)	4,5	H/B		500,000	500,000	1,000,000	1,100,000	2
1.2.2.5	Vervanging van Waterleiding	4,5	H/B	720,000					2
2.5.2	Diefwering - Duivenhokssaal	4,5	H/B				30,000		2
2.5.3	Thusongsentrum - langs Duivenhokssaal	4,5	H/B				500,000		2
2.6.2	Uitbreiding van begraafplaas	4,5	H/B	200,000	200,000	200,000	200,000		1
2.7.1	Swembad Filter	4,5	H/B		35,000				1
3.1.3.7	1 X 5m3 Tipper - Openbare Werke / Parke	4,5	H/B				750,000		2
3.2.1.2	Multi-purpuse Loader	4,5	H/B					900,000	2
3.2.1.6	Stootskrapeer - Sanilasie	4,5	H/B				1,200,000		2
3.2.2.2	Fiat Trekker 780 - Openbare Werke	4,5	H/B				450,000		2
3.2.4.2	Kudu Grassnyer - Parke	4,5	H/B			35,000			2
3.2.6.10.11	Randsnyers - Parke	4,5	H/B	6,800	7,000	7,000	7,200	7,200	1
3.2.6.10.12	Mikrogolf oond - Openbare Werke	4,5	H/B	1,200					1
3.2.6.10.13	Hoëdrukspuit - Riool	4,5	H/B			140,000			2
3.2.6.10.14	1 X Plate Compactor - Openbare Werke	4,5	H/B		30,000				1
3.2.6.10.15	Chipper vir Tuinwullis - Stortingsterrein	4,5	H/B		20,000				1
3.5.4.2	Palisade omheiding - Diepkloofgebou	4,5	H/B				40,000		2
3.5.4.3	Teel van Vloer - Diepkloofgebou	4,5	H/B			5,000	5,000		1
3.5.4.4	Aanbou van addisionele klaskamer - Kindersorg	4,5	H/B					200,000	1

JONGENSFONTEIN

Introduction

Jongensfontein is a very popular holiday destination along the coast of Hessequa. The municipal resort is highly in demand during holiday seasons and receives continuous utilisation throughout the year. There are some infrastructure challenges residents experience with the topographical layout of the town and ageing sewer systems. Other issues also include water pressure drops and erosion along the beach front.

Population Group & Gender Totals						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	3	5	402	470	1083	2142
Coloured	12	5	4389	4076	14639	17358
Indian or Asian	0	0	9	31	30	100
White	135	151	1848	1808	5622	5766
Other	0	0	0	38	0	158
Total	150	162	6648	6424	21374	25525
Female						
Black African	3	6	247	282	741	1763
Coloured	0	4	4513	4050	16076	18711
Indian or Asian	0	0	6	36	15	99
White	131	182	1459	1659	5933	6467
Other	0	0	0	20	0	76
Total	134	193	6226	6047	22765	27117
Total						
Black African	6	12	650	752	1824	3906
Coloured	12	10	8903	8126	30715	36069
Indian or Asian	0	0	15	67	45	199
White	267	333	3306	3467	11555	12233
Other	0	0	0	59	0	235
Total	285	355	12874	12471	44139	52642

Language Use						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	258	312	12349	11564	42058	47548
English	21	17	243	416	1153	1851
IsiXhosa	3	0	206	177	742	1066
Other	3	26	75	314	186	2177
Total	285	355	12874	12471	44139	52642

Age Groups						
	Groot-Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	21	17	3549	3276	11933	12826
15 - 35	51	21	4501	3859	14136	15483
36 - 65	158	147	4232	4595	14499	18952
66 - 120	54	169	592	741	3571	5381
Total	285	355	12874	12471	44139	52642

Education Levels						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	3	0	1527	773	3683	2181
Grade 1 / Sub A	3	0	517	347	1746	1358
Grade 2 / Sub B	0	1	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	3	2	605	498	1803	1743
Grade 4 / Std 2	0	2	751	609	2192	2122
Grade 5 / Std 3/ABET 2	3	2	841	638	2625	2198
Grade 6 / Std 4	0	1	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	3	2	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	12	11	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	3	8	623	791	2539	3689
Grade 10 / Std 8 / Form 3	45	20	668	893	3295	4545
Grade 11 / Std 9 / Form 4	9	6	287	310	1254	1898
Grade 12 / Std 10 / Form 5	73	147	1325	1710	5645	8539
Tertiary	119	120	608	843	2967	3829
Other	9	32	1235	1527	3863	7082
Total	285	355	12874	12471	44139	52642

Official Employment Status						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	77	51	5399	5290	14103	17052
Unemployed	12	1	258	225	2304	2803
Other	105	104	2997	2860	11870	14132
Total	194	157	8655	8376	28277	33987

Dwelling Type						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	138	186	3393	3540	11982	15009
Informal	3	0	102	74	529	772
Other	0	1	25	32	119	91
Total	141	187	3519	3646	12630	15873

Annual Household Income						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	6	8	116	247	793	1248
R 1 - R 4800	3	0	108	28	450	275
R 4801 - R 9600	12	0	688	78	2026	470
R 9601 - R 19 600	9	6	1073	555	2904	2241
R 19 601 - R 38 200	27	15	777	1011	2965	3579
R 38 201 - R 76 400	28	27	375	755	1848	3570
R 76 401 - R 153 800	35	57	235	461	1086	2274
R 153 801 - R 307 600	18	53	71	280	376	1423
R 307 601 - R 614 400	3	12	25	158	64	567
R 614 001 - R 1 228 800	0	4	24	54	55	137
R 1 228 801 - R 2 457 600	0	1	18	10	40	47
R 2 457 601 or more	0	4	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	141	187	3519	3646	12630	15873

Access to Water Services						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	124	185	3084	3370	12010	15508
Piped (tap) water >200m	3	1	127	27	238	46
No access to piped (tap) water	0	0	279	249	306	319
Other	0	0	52	0	76	0
Total	127	187	3543	3646	12631	15873

Toilet Facilities						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	127	114	878	1755	8509	12807
Flush toilet (with septic tank)	0	71	1180	957	1993	1589
Chemical toilet	0	0	31	20	69	23
Pit toilet with ventilation (VIP)	0	2	377	402	468	494
Pit toilet without ventilation	0	0	415	277	487	336
Bucket toilet	0	0	173	38	317	151
None	0	0	490	133	788	299
Other	0	0	0	63	0	173
Total	127	187	3543	3646	12631	15873

Energy Source for Lighting						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	127	187	2394	3101	10917	15063
Gas	0	0	12	23	21	41
Paraffin	0	0	48	13	78	29
Candles (not a valid option)	0	0	1022	448	1533	617
Solar	0	0	12	52	18	87
Other	0	0	55	9	64	36
Total	127	187	3543	3646	12631	15873

Refuse Removal						
	Groot Jongensfontein		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	127	184	254	531	9051	12493
Removed by local authority less often	0	0	24	78	27	94
Communal refuse dump	0	0	189	122	239	191
Own refuse dump	0	0	3040	2398	3266	2523
No rubbish disposal	0	2	36	228	48	252
Other	0	0	0	289	0	320
Total	127	187	3543	3646	12631	15873



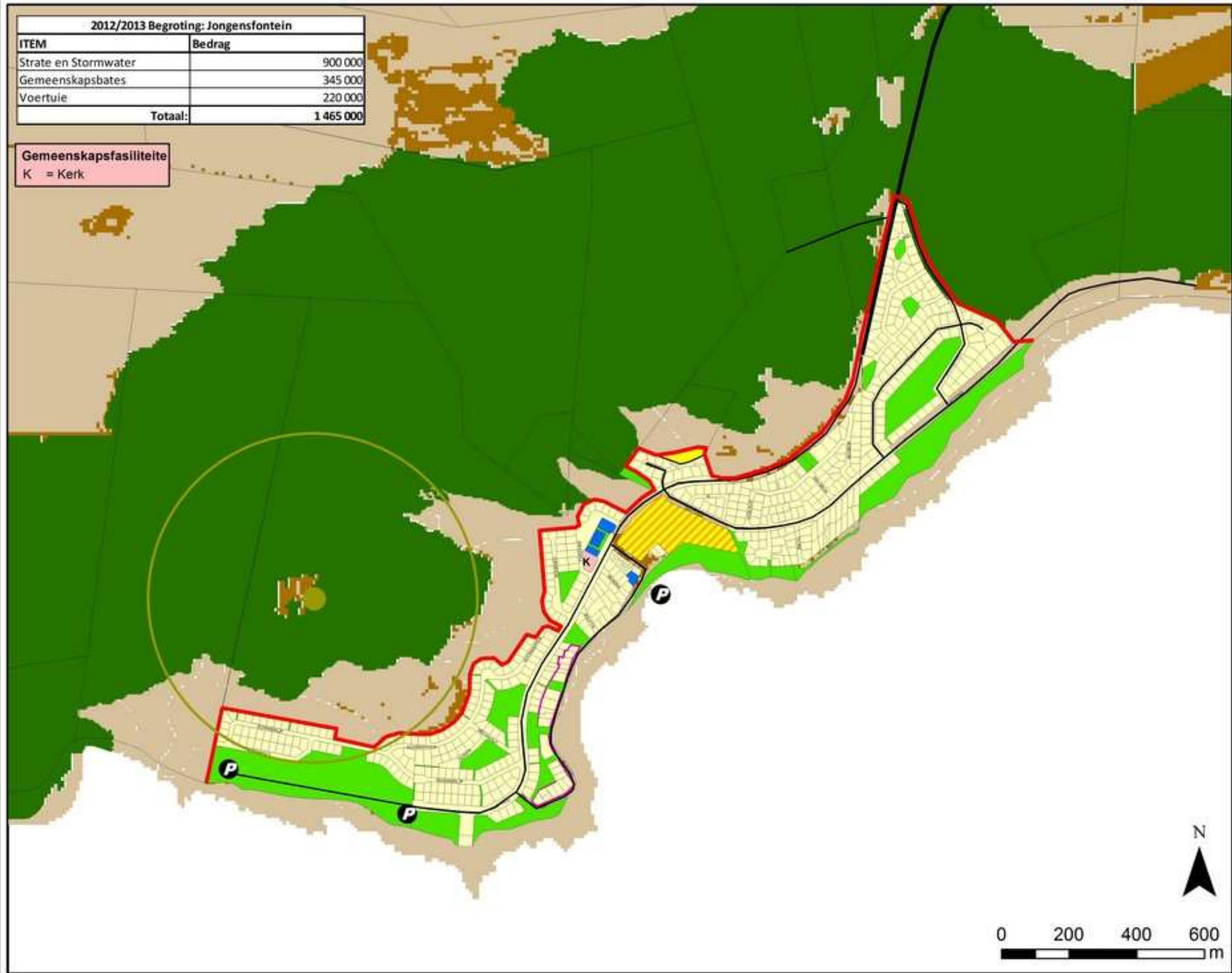
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 www.delorme.com

★
 MN (25.7° W)



2012/2013 Begroting: Jongensfontein		
ITEM	Bedrag	
Strate en Stormwater	900 000	
Gemeenskapsbates	345 000	
Voertuie	220 000	
Totaal:	1 465 000	

Gemeenskapsfasiliteite
K = Kerk



HESSEQUA

 RUIMTELIKE
 ONTWIKKELINGS-
 RAAMWERK

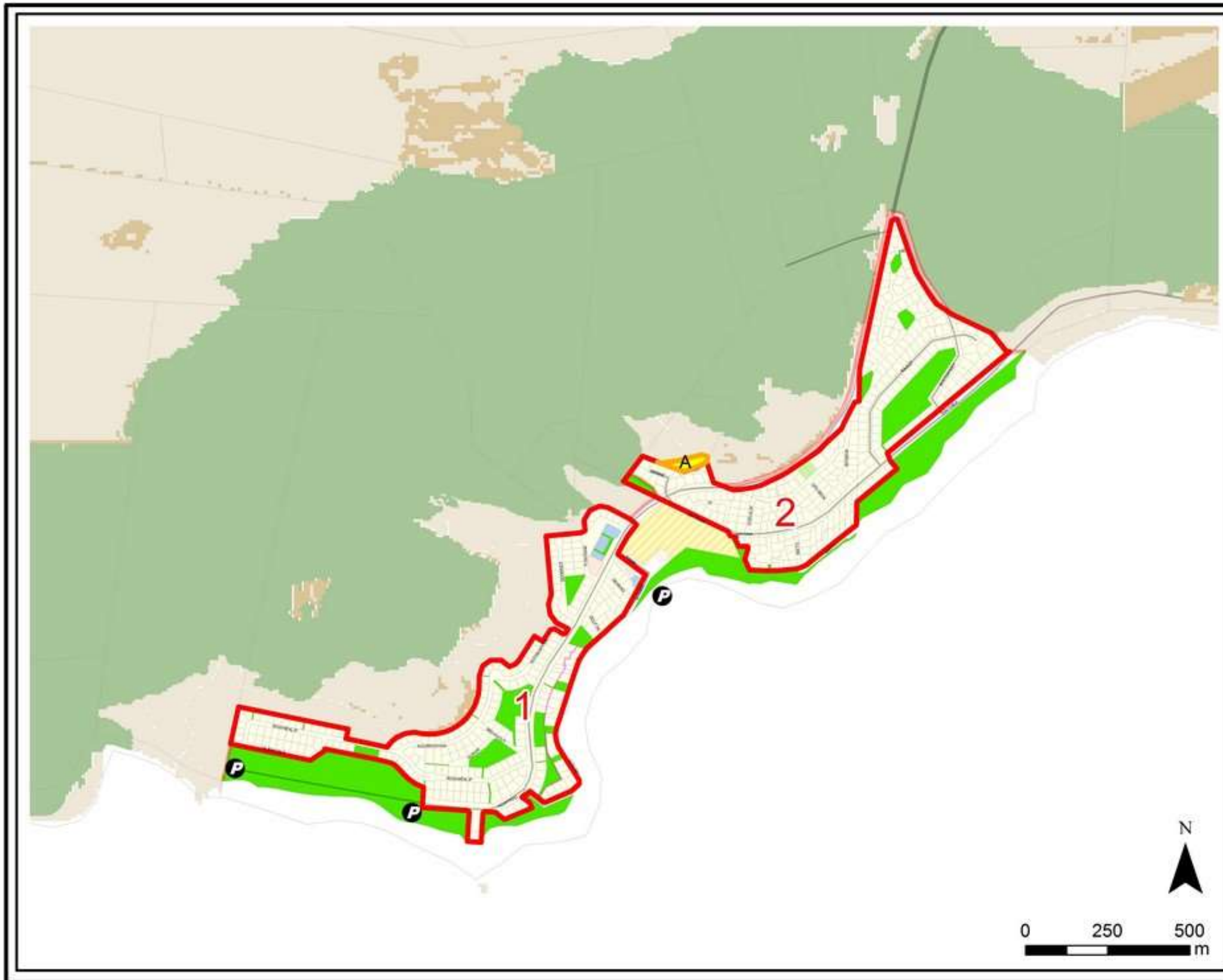
VOORSTELLE:
 JONGENSFONTEIN

- RUIMTELIKE BEPLANNINGSEENHEDE**
- KERN 1
 - KERN 2
 - BUFFER 1
 - KERN LANDBOU
- RESIDENSIEEL**
- BESTAANDE ONTWIKKELDE AREA
 - VOORGESTELDE LAE DIGTHEID
 - VOORGESTELDE LAE EN MEDIUM DIGTHEID
- BESIGHEID EN INDUSTRIEEL**
- BESIGHEID
- GEMEENSKAPSFASILITEITE**
- GEMEENSKAPSFASILITEITE
- PAARIE**
- VERSPREIDER
 - VERSAMELROETE
 - VOORGESTELDE ROETE
- STEDELIKE GRENS**
- HOA PRIORITEITSGRENS
 - LAE PRIORITEITSGRENS
- ANDER**
- OORD
 - HISTORIESE GEBIED
 - OOPRUMTE
 - 500m RIJDOEL BUFFER

BRON:
 INDEMNITY

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.13		

URBAN DYNAMICS WESTERN CAPE
 TOWN & REGIONAL PLANNERS
 15A VIEW BUILDING
 NO. 8 DU WOOD WAY
 BELLVILLE - 7530
 RD 3034 3445
 BELLVILLE
 7530
 TEL: (021) 948 1341
 FAX: (021) 948 1088
 e-mail: udc@urban.co.za (Project Manager)



HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
JONGENSFONTEIN**

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSZONE	SONE	HUIDIGE DIGTHEID*	VOORGESTELDE VERDIGTINGSTEKEN*	ADDITIONELE EENHED
1		8	8	0
2		8	8	0
TOTAL		8	8	0

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

SONE	AREA*	DIGTHEID (u/ha)	EENHED
A	0.4	10	4
TOTAL	0.4	10	4

* Bruto Ontwikkelings Area (ha)

BRON:

INDEMNITY

I hereby certify that the information contained in this plan is true and correct to the best of my knowledge and belief, and that I am not aware of any material misstatements or omissions. I understand that this plan may be used for other purposes than those intended by me, and I accept that I shall be liable for any such use.

DATE:

MARCH 2012

CLIENT

HESSEQUA
MUNISIPALITEIT

SCALE: SEE LINESCALE

PLAN NO:

15.14

FILE NAME:

URBAN DYNAMICS WESTERN CAPE



SEA VIEW BUILDING
NO. 3 DU BOIS DRIVE
BELLVILLE - 7535
PO BOX 5942
BELLVILLE
7535

TEL: 021 945 1945
FAX: 021 945 1986
e-mail: info@urban.co.za / Project Manager

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
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Planned Capital Budget Programme for Jongensfontein

Capital Expenditure Schedule 2014-2019

#	Description	Wrld	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.5	- Jongensfontein (10 704m)	3	J/F		530,000	500,000	550,000	560,000	2
1.1.1.3.2	- Jongensfontein (300m)	3	J/F	480,000					1
1.1.3.1.6	- Jongensfontein	3	J/F			250,000			2
1.2.2.10	Opgradering van waterdruk en werke	3	J/F	150,000		150,000		150,000	1
1.2.3.8	Opgradering van Waterwerke	3	J/F			1,000,000	625,000		2
2.7.9	Opgradering van Gelypoel	3	J/F			20,000			1
2.7.10	Beskerming van Kusgebied	3	J/F					500,000	2
2.8.4.1	Trappe & Grondwerke - plotte	3	J/F			20,000	20,000		2
2.8.4.2	Opgradering van dakke by chalets 18	3	J/F	300,000	200,000	150,000			1
2.8.4.3	Nuwe Stoorkamer	3	J/F	160,000	160,000				1
2.8.4.4	Opgradering van Kamp	3	J/F			280,000	140,000	150,000	2
2.8.4.5	Teel van oorblywende Hutte/stoepe (10)	3	J/F	30,000					1
2.8.4.6	Vervang Kas teen opwasbakke - Charlets	3	J/F		100,000	80,000			2
2.8.4.7	Vervang van Rietdakke	3	J/F			250,000	250,000	250,000	2
2.8.4.8	Opgradering van Kantoor	3	J/F		30,000	20,000			1
3.2.2.4	Fiat Trekker 780 - Parke	3	J/F				500,000		2
3.2.4.8	Kudu Grassnyer - Parke	3	J/F	30,000					1
3.2.6.5.4	2 X Kantoorstoele	3	J/F			3,000			1
3.2.6.5.5	Lugversorger	3	J/F			8,000			1
3.2.6.5.6	8 X Yskaste	3	J/F	14,000	15,000	16,000			1
3.2.6.5.7	Stowe	3	J/F	4,500	5,800	7,000			1
3.2.6.5.8	Mikrogolfoonde	3	J/F	3,000	3,000	5,000			1
3.2.6.5.9	Flat Screen Monitor	3	J/F	3,500					1
3.2.6.5.10	Nuwe Eetgerei	3	J/F			15,000	18,000		1
3.2.6.5.11	Gereedskap vir kamp	3	J/F			10,000	10,000		1
1.5.1.10	Opgradering van Rioolwerke	3	J/F	500,000	1,000,000	1,000,000	1,500,000		2

MELKHOUTFONTEIN

Introduction

Melkhoutfontein celebrates a rich historical heritage as people who have been previously disadvantaged, but also managed to take responsibility for their own development. Currently the community faces challenges of economic decline and permanent job opportunities are growing more and thinner. The fishing industry is also experiencing pressure as households continue to live in difficult circumstances and struggle to make ends meet.

Population Group & Gender Totals						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	39	43	402	470	1083	2142
Coloured	694	1183	4389	4076	14639	17358
Indian or Asian	0	4	9	31	30	100
White	0	9	1848	1808	5622	5766
Other	0	3	0	38	0	158
Total	733	1242	6648	6424	21374	25525
Female						
Black African	12	25	247	282	741	1763
Coloured	731	1251	4513	4050	16076	18711
Indian or Asian	0	4	6	36	15	99
White	3	11	1459	1659	5933	6467
Other	0	0	0	20	0	76
Total	746	1291	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	51	68	650	752	1824	3906
Coloured	1425	2434	8903	8126	30715	36069
Indian or Asian	0	7	15	67	45	199
White	3	20	3306	3467	11555	12233
Other	0	3	0	59	0	235
Total	1479	2533	12874	12471	44139	52642

Language Use						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	1458	2377	12349	11564	42058	47548
English	6	38	243	416	1153	1851
IsiXhosa	9	16	206	177	742	1066
Other	6	102	75	314	186	2177
Total	1479	2533	12874	12471	44139	52642

Age Groups						
	Melkhoufontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	486	719	3549	3276	11933	12826
15 - 35	566	924	4501	3859	14136	15483
36 - 65	391	797	4232	4595	14499	18952
66 - 120	36	93	592	741	3571	5381
Total	1479	2533	12874	12471	44139	52642

Education Levels						
	Melkhoufontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	87	86	1527	773	3683	2181
Grade 1 / Sub A	59	71	517	347	1746	1358
Grade 2 / Sub B	63	79	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	51	85	605	498	1803	1743
Grade 4 / Std 2	91	103	751	609	2192	2122
Grade 5 / Std 3/ABET 2	117	118	841	638	2625	2198
Grade 6 / Std 4	157	177	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	236	280	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	118	283	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	122	241	623	791	2539	3689
Grade 10 / Std 8 / Form 3	76	278	668	893	3295	4545
Grade 11 / Std 9 / Form 4	44	98	287	310	1254	1898
Grade 12 / Std 10 / Form 5	83	269	1325	1710	5645	8539
Tertiary	0	11	608	843	2967	3829
Other	175	356	1235	1527	3863	7082
Total	1479	2533	12874	12471	44139	52642

Official Employment Status						
	Melkhoufontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	603	978	5399	5290	14103	17052
Unemployed	53	35	258	225	2304	2803
Other	291	697	2997	2860	11870	14132
Total	947	1711	8655	8376	28277	33987

Dwelling Type						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	320	500	3393	3540	11982	15009
Informal	3	110	102	74	529	772
Other	0	5	25	32	119	91
Total	323	614	3519	3646	12630	15873

Annual Household Income						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	6	21	116	247	793	1248
R 1 - R 4800	18	9	108	28	450	275
R 4801 - R 9600	38	18	688	78	2026	470
R 9601 - R 19 600	71	84	1073	555	2904	2241
R 19 601 - R 38 200	126	162	777	1011	2965	3579
R 38 201 - R 76 400	52	206	375	755	1848	3570
R 76 401 - R 153 800	9	83	235	461	1086	2274
R 153 801 - R 307 600	3	21	71	280	376	1423
R 307 601 - R 614 400	0	9	25	158	64	567
R 614 001 - R 1 228 800	0	0	24	54	55	137
R 1 228 801 - R 2 457 600	0	0	18	10	40	47
R 2 457 601 or more	0	1	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	323	614	3519	3646	12630	15873

Access to Water Services						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	317	610	3084	3370	12010	15508
Piped (tap) water >200m	3	1	127	27	238	46
No access to piped (tap) water	0	3	279	249	306	319
Other	0	0	52	0	76	0
Total	320	614	3543	3646	12631	15873

Toilet Facilities						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	311	526	878	1755	8509	12807
Flush toilet (with septic tank)	0	21	1180	957	1993	1589
Chemical toilet	0	0	31	20	69	23
Pit toilet with ventilation (VIP)	0	1	377	402	468	494
Pit toilet without ventilation	0	1	415	277	487	336
Bucket toilet	0	13	173	38	317	151
None	9	26	490	133	788	299
Other	0	26	0	63	0	173
Total	320	614	3543	3646	12631	15873

Energy Source for Lighting						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	305	563	2394	3101	10917	15063
Gas	0	1	12	23	21	41
Paraffin	0	4	48	13	78	29
Candles (not a valid option)	15	33	1022	448	1533	617
Solar	0	8	12	52	18	87
Other	0	5	55	9	64	36
Total	320	614	3543	3646	12631	15873

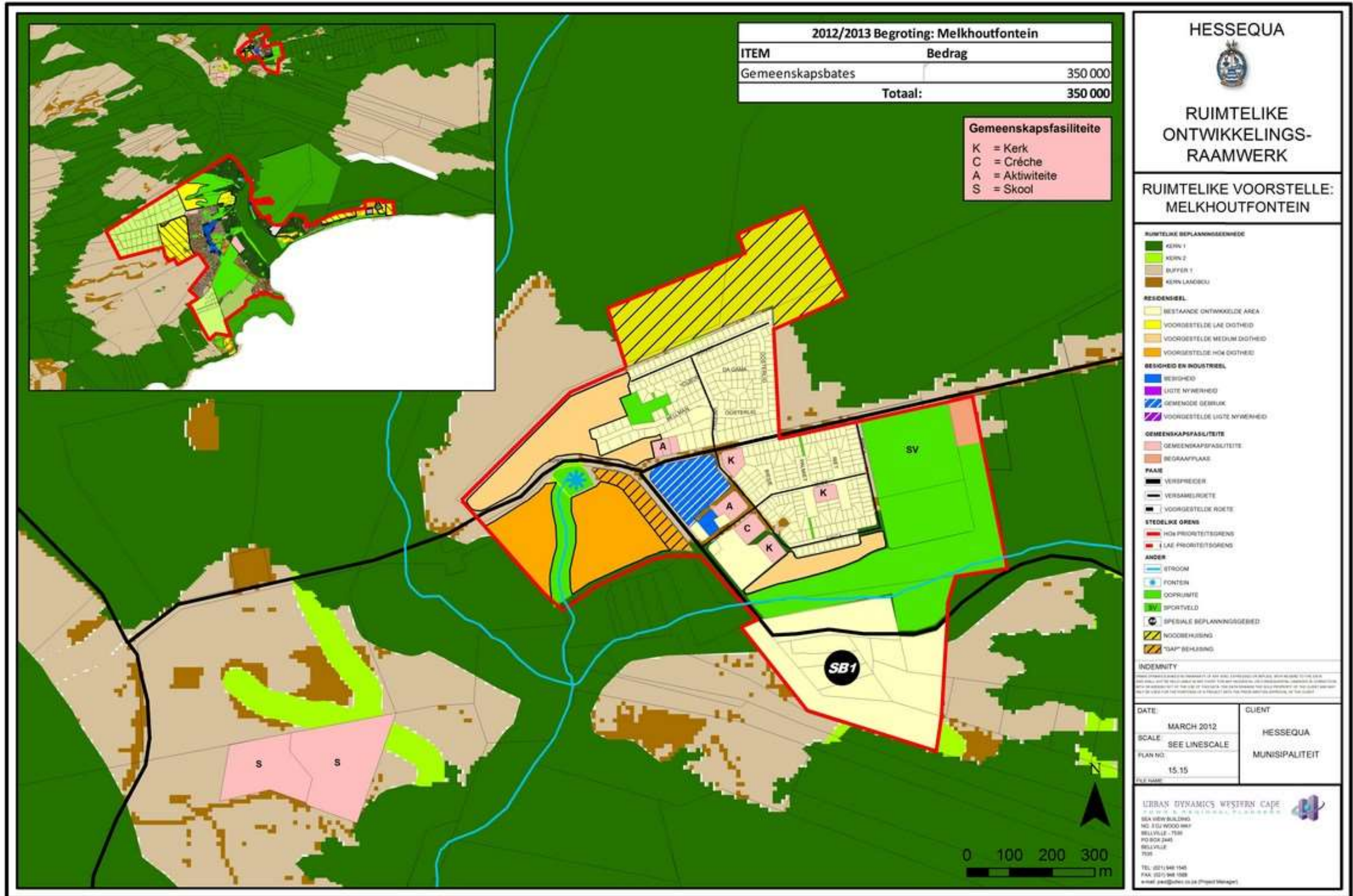
Refuse Removal						
	Melkhoutfontein SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	320	608	254	531	9051	12493
Removed by local authority less often	0	1	24	78	27	94
Communal refuse dump	0	0	189	122	239	191
Own refuse dump	0	4	3040	2398	3266	2523
No rubbish disposal	0	1	36	228	48	252
Other	0	0	0	289	0	320
Total	320	614	3543	3646	12631	15873

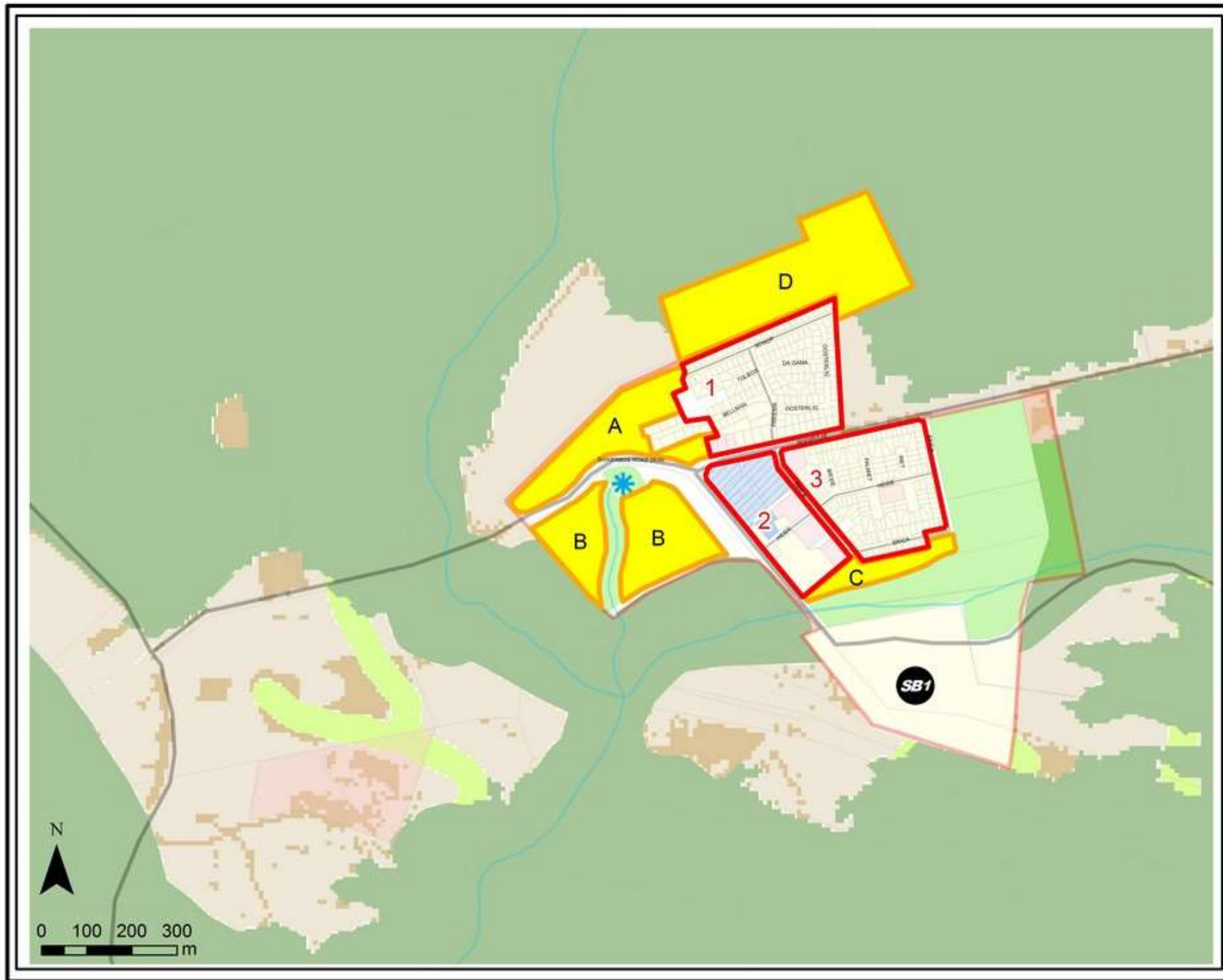


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 MN (25.6° W)

0 160 320 480 640 800 ft
 Data Zoom: 15-3





HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
MELKHOUTFONTEIN**

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSZONE	HUIDIGE DICHTEID*	VOORGESTELDE VERDIGTINGSTEKENS	ADDSIONELE EENHEDE
1	20		0
2	5		0
3	22		0
TOTAL	16		0

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

NUWE ONTWIKKELING ZONES	SONE	AREA*	DICHTEID (u/ha)	EENHEDE
A	4		35	140
B	6		25	150
C	1		25	25
D	6		35	315
TOTAL	20			630

* Bruto Ontwikkelings Area (ha)

BRON:
INDEMNITY

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNICIPALITEIT
PLAN NO:	15.16		

URBAN DYNAMICS WESTERN CAPE
 101 WOODWAY
 BELLEVILLE - 7800
 PO BOX 2445
 BELLEVILLE
 7818
 TEL: (021) 544 1541
 FAX: (021) 544 1088
 E-MAIL: paul@urban.co.za (Project Manager)

Integrated Spatial Planning

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Planned Capital Budget Programme for Melkhoufontein

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.8	- Melkhoufontein	1	S/B			200,000	200,000	230,000	2
1.1.3.1.7	- Melkhoufontein	1	S/B		200,000				2
1.2.2.7	Spaar Waterpompe - MHFT	1	S/B	40,000					1
1.2.2.8	Vervanging van ou Watermetwerk	1	S/B	570,000	250,000	250,000	250,000	250,000	2
1.2.3.7	Opgradering van Olive Grove watersuiwering	1	S/B			1,000,000			2
1.2.4.1	Omheining van Reservoirs-oosdam/Olienhoufontein	1	S/B		100,000	100,000			2
1.4.1.4	Installeer 66/11KV - Hoofstasie	1	S/B	19,000,000	7,400,000				3
1.4.2.7	Opgradeer Substasies - Stilbaai Oos	1	S/B	220,000					2
1.5.2.8	Opgradering van pompstasie - MHFT	1	S/B	120,000	120,000				1
2.5.11	Teel van saal vloer - MHFT	1	S/B	50,000					1
2.5.12	Kombuiswaste - MHFT	1	S/B		15,000				1
2.7.7	Ontwikkeling van Tuin op die Brak	1	S/B	50,000	30,000	20,000			1
2.8.5.1	Opgradering van Kamp-Vervang van Dakke	1	S/B	100,000	100,000	150,000			1
2.8.5.2	Randstone om staanplekke af te baken	1	S/B		50,000	50,000	50,000		1
2.8.5.3	Plavei van ingang na chalets	1	S/B		60,000	60,000			2
2.8.5.4	Omheining van kamp - Hoofweg-Oos	1	S/B	96,000	20,000				1
2.8.5.5	Herstel & Seel van paais	1	S/B		100,000	150,000	150,000		2
2.8.5.6	Vervanging van heining	1	S/B			122,000			2
2.8.5.7	Teel van Charlets se vloere	1	S/B		60,000	35,000	40,000		1
2.8.5.8	Opgradering van Kantoor	1	S/B			30,000	30,000		2
2.8.5.9	Speelpark	1	S/B			8,000			1
2.8.5.10	Paving rondom Charlets en ablusieblokke	1	S/B		80,000	70,000	60,000		2
2.8.6.1	Herbou van Strate & Voorsien Stormwater	1	S/B	120,000	140,000	150,000			1
2.8.6.2	Vervang plaveisel by A-tipe chalets	1	S/B		60,000	70,000			2
2.8.6.3	Toiletfasiliteite in B tipe Charlets	1	S/B		150,000	150,000	150,000		2
2.8.6.4	Teel van B blok	1	S/B				42,000		2
2.8.6.5	Opgradering van Kantoor	1	S/B		20,000	30,000	30,000		2
2.8.6.6	Speelpark	1	S/B			8,000	8,000		1
2.8.6.7	Opgradering van Kamp	1	S/B		80,000	80,000	80,000		2
3.2.4.6	Kudu Grassnyer - Parke - Preekstoel	1	S/B			35,000			2
3.2.4.7	Kudu Grassnyer - Parke - Ellensrust	1	S/B		35,000				1
3.2.6.3.7	Vervanging van mat by Krieketklub - MHFT	1	S/B			16,000			1
3.2.6.3.8	Grenstou - MHFT	1	S/B			10,000			1
3.2.6.3.9	10 X tafels - Seagulls - MHFT	1	S/B			10,000			1
3.2.6.3.10	60 X Stoele - Seagulls - MHFT	1	S/B			12,000			1
3.2.6.3.11	1 X Yskas - Seagulls - MHFT	1	S/B			5,000			1
3.2.6.3.12	1 X Stoof - Seagulls - MHFT	1	S/B			6,000			1
3.2.6.3.13	1 X Urn - Seagulls - MHFT	1	S/B			800			1
3.2.6.4.22	1 X Mikrogolfoond - MHFT	1	S/B	1,000					1
3.2.6.4.23	1 X Stoof - MHFT	1	S/B				6,000		1
3.2.6.4.24	50 X Plastiekstoele - MHFT	1	S/B				5,500		1
3.2.6.4.25	5 X Staaltafels - MHFT	1	S/B				4,000		1
3.2.6.4.26	1 X Yskas - MHFT	1	S/B				5,000		1
3.2.6.4.27	Wireless Handheld System - MHFT	1	S/B				3,200		1
3.2.6.4.28	Behringer Pmp 980 - MHFT	1	S/B				5,200		1
3.2.6.4.29	Kas vir Klanktoerusting - MHFT	1	S/B				1,700		1
3.2.6.4.30	Speakers - MHFT	1	S/B				2,800		1
3.2.6.5.12	2 X Kantoorstoele	1	S/B			3,000			1
3.2.6.5.13	Lugversorger	1	S/B			8,000			1
3.2.6.5.14	Gereedskap vir kamp	1	S/B			7,000	10,000		1
3.2.6.5.15	Yskaste	1	S/B	4,200	5,000	6,000	13,000		1
3.2.6.5.16	Stowe	1	S/B	4,600	6,000	7,000			1
3.2.6.5.17	Mikrogolfoonde	1	S/B	3,000	3,000	5,000			1

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.2.6.5.18	Ketels	1	S/B	1,000	500	500			1
3.2.6.5.19	Matrasse	1	S/B			15,000			1
3.2.6.5.20	Breekgoed & Eetgerei	1	S/B			8,000			1
3.2.6.5.21	Kantoorstoel	1	S/B			1,500			1
3.2.6.5.22	Lugversorger	1	S/B			8,000			1
3.2.6.5.23	Gereedskap vir kamp	1	S/B			10,000	6,000		1
3.2.6.5.24	10 X Yskaste	1	S/B	20,000		15,000	10,000		1
3.2.6.5.25	Tafels & Stoele	1	S/B	20,000	20,000	10,000	6,000		1
3.2.6.5.26	Matrasse	1	S/B	40,000	30,000		35,000		1
3.2.6.5.27	3 X Ums	1	S/B	3,000					1
3.2.6.5.28	Wasmasjien	1	S/B			5,000			1
3.2.6.10.31	Randsnyers - Preekstoel / MHFT	1	S/B		7,000				1
3.2.6.10.32	Randsnyer - Ellensrust	1	S/B	6,800			7,200		1
3.2.6.10.36	Kanonspuit - Sport - MHFT	1	S/B			25,000			2
1.2.2.18	Opgradering van netwerk te Palinggat	3	S/B	200,000					2
1.4.2.5	Opgrader Substasies - Wes / Jongensfontein	3	S/B		300,000				2
1.5.2.4	Opgradering van Clarifier	3	S/B			130,000			1
1.5.2.5	Opgradering van pompstasie - Bosbokduin	3	S/B			50,000			2
1.5.2.6	Opgradering van pompstasie no. 6	3	S/B	200,000					1
1.5.2.7	Stainless steel ketting vir pompstasie	3	S/B			30,000			1
1.5.2.9	Opgradering van pompstasie no. 7 - Green Drop	3	S/B		50,000				1
1.5.2.10	Opgradering van pompstasie no. 8 - Green Drop	3	S/B	50,000					1
1.5.2.14	Emergency Generator - Pump station nr. 3	3	S/B	280,000					2
1.5.2.15	Opgradering pompstasie nr 1 - Groen druppel	3	S/B	320,000					2
3.2.4.5	Kudu Grassnyer - Parke	3	S/B				35,000		2
3.2.6.4.31	Wireless Handheld System - Stadsaal	3	S/B				3,200		1
3.2.6.4.32	Behringer Pmp 980 - Stadsaal	3	S/B				5,200		1
3.2.6.4.33	Kas vir Klanktoerusting - Stadsaal	3	S/B				1,700		1
3.2.6.4.34	Speakers & Amplifier - Stadsaal	3	S/B				7,700		1
3.2.6.4.35	1 X Mikrogolfoond - Stadsaal	3	S/B				800		1
3.2.6.4.36	Trolley Mop - Stadsaal	3	S/B				1,800		1
3.2.6.4.37	1 X Stofsuier - Stadsaal	3	S/B				1,000		1
3.2.6.10.33	Hoëdrukspuit - Riol	3	S/B		120,000				1
1.1.1.1.7	- Stilbaai (66 007m) - Steadfray Ln	1,3	S/B		800,000	1,100,000	1,180,000	1,220,000	2
1.1.3.1.5	- Stilbaai - Steadfray Ln	1,3	S/B			320,000			2
1.1.3.2.5	- Stilbaai/MHF/JFT	1,3	S/B		300,000	300,000			2
1.2.2.9	Opgradering van Watertoevoer	1,3	S/B	1,450,000	1,000,000	2,200,000			2
1.2.4.4	New Bulk Water supply - S/B & MHFT	1,3	S/B				408,174		1
1.4.4.5	Opgradering van Netwerk - Stilbaai Wes/Oos	1,3	S/B	1,200,000	750,000	750,000	800,000	800,000	2
1.5.1.8	New Bulk Sewer Supply - S/B & MHFT	1,3	S/B				315,178		1
1.5.1.9	Opgradering van Riolwerke	1,3	S/B	1,500,000	1,500,000				2
1.7.1.2	Hooppad 322 - Landelike vullis	1,3	S/B	50,000					1
2.7.8	Opgradering van Amfi teater - Lapskuit	1,3	S/B	60,000	40,000				1
3.1.2.1	Vuka motorfiets - Water	1,3	S/B			12,000			1
3.1.3.13	1 X 5m3 Tipper - Openbare Werke	1,3	S/B	700,000			750,000		2
3.1.3.14	1 X 3ton Vragmotor - Parke	1,3	S/B		350,000				1
3.1.3.15	LAW - Water	1,3	S/B					250,000	2
3.1.3.16	LAW - OW / Elektries	1,3	S/B		240,000		250,000		2
3.1.3.17	Cherry Picker - Elektries	1,3	S/B			900,000			2
3.1.3.18	Dubbelkajuit Vragmotor - Openbare Werke	1,3	S/B					450,000	2
3.2.1.7	Roller 2.7 ton - Openbare Werke	1,3	S/B	350,000					1
3.2.6.1.3	Rioolrods	1,3	S/B	5,500	5,500	5,700	5,800	5,800	1
3.2.6.10.29	Randsnyers - Parke	1,3	S/B	13,600	14,000	14,000	14,400	14,400	1
3.2.6.10.30	1 X BG66D Blower - Parke	1,3	S/B	6,000					1
3.2.6.10.34	Betonmenger - Openbare Werke	1,3	S/B		50,000				1

#	Description	Wrđ	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.2.6.10.35	Teemasjien - Openbare Werke	1,3	S\B			30,000			2
3.5.4.7	Veiligheidsheining Skietbaan - Stilbaai	1,3	S\B			15,000			1
3.5.4.8	Opgradering van Tennisbaan	1,3	S\B		30,000			35,000	1
1.4.6.2	180 Sub Ekonomiese Huise - MHFT	1	S\B	2,000,000	1,000,000				DME
1.4.6.3	250 Sub Ekonomiese Huise - MHFT	1	S\B	1,000,000	1,000,000				DME
1.4.6.4	300 Sub Ekonomiese Huise - Mhft/Heidelb.	1	S\B		2,000,000				DME
3.2.6.6.12	Book Detection System - MHFT	1	S\B				165,000		BIB
5.1.1	Lae Koste Behuising Beplanning - MHFT	1	S\B						BEH
5.1.3	Lae Koste Behuising - Dienste - MHFT	1	S\B						BEH
5.1.4	Lae Koste Behuising - Tops - MHFT	1	S\B						BEH
1.2.7.1	New Bulk Water supply - S/B & MHFT	1,3	S\B		1,832,697	1,840,870			MIG
1.5.4.4	New Bulk Sewer Supply - S/B & MHFT	1,3	S\B		1,575,894	1,260,716			MIG
3.2.6.6.11	4 X Desk Computers - S/B	1,3	S\B	8,000					BIB

RIVERSDALE

Introduction

Riversdale serves as the administrative capitol for the Hessequa region after the amalgamation of the different smaller municipalities in the year 2000. It is also the largest populated town in Hessequa and is located on the N2. The economy of Riversdale was developed through the support of commercial agriculture, but have experienced changes in the economic structure with trade and construction having played large rolls in the development of Riversdale in the last few years. This have already changed again as the construction sector is struggling to retain jobs and major losses in job opportunities have been experienced.

Population Group & Gender Totals						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	326	784	402	470	1083	2142
Coloured	4058	5366	4389	4076	14639	17358
Indian or Asian	12	20	9	31	30	100
White	986	987	1848	1808	5622	5766
Other	0	31	0	38	0	158
Total	5382	7188	6648	6424	21374	25525
Female						
Black African	215	602	247	282	741	1763
Coloured	4784	6253	4513	4050	16076	18711
Indian or Asian	6	22	6	36	15	99
White	1273	1210	1459	1659	5933	6467
Other	0	17	0	20	0	76
Total	6278	8104	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	541	1386	650	752	1824	3906
Coloured	8842	11619	8903	8126	30715	36069
Indian or Asian	18	42	15	67	45	199
White	2259	2197	3306	3467	11555	12233
Other	0	48	0	59	0	235
Total	11660	15292	12874	12471	44139	52642

Language Use						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	11101	13647	12349	11564	42058	47548
English	255	316	243	416	1153	1851
IsiXhosa	265	572	206	177	742	1066
Other	39	756	75	314	186	2177
Total	11660	15292	12874	12471	44139	52642

Age Groups						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	3268	3931	3549	3276	11933	12826
15 - 35	3813	4719	4501	3859	14136	15483
36 - 65	3660	5441	4232	4595	14499	18952
66 - 120	919	1200	592	741	3571	5381
Total	11660	15292	12874	12471	44139	52642

Education Levels						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	834	587	1527	773	3683	2181
Grade 1 / Sub A	499	369	517	347	1746	1358
Grade 2 / Sub B	299	412	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	463	472	605	498	1803	1743
Grade 4 / Std 2	525	626	751	609	2192	2122
Grade 5 / Std 3/ABET 2	589	567	841	638	2625	2198
Grade 6 / Std 4	734	709	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	1115	1093	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	1164	1515	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	917	1246	623	791	2539	3689
Grade 10 / Std 8 / Form 3	925	1484	668	893	3295	4545
Grade 11 / Std 9 / Form 4	396	664	287	310	1254	1898
Grade 12 / Std 10 / Form 5	1405	2325	1325	1710	5645	8539
Tertiary	776	918	608	843	2967	3829
Other	1018	2304	1235	1527	3863	7082
Total	11660	15292	12874	12471	44139	52642

Official Employment Status						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	3484	4925	5399	5290	14103	17052
Unemployed	955	1316	258	225	2304	2803
Other	2969	3833	2997	2860	11870	14132
Total	7408	10074	8655	8376	28277	33987

Dwelling Type						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	2899	3983	3393	3540	11982	15009
Informal	260	279	102	74	529	772
Other	28	11	25	32	119	91
Total	3187	4272	3519	3646	12630	15873

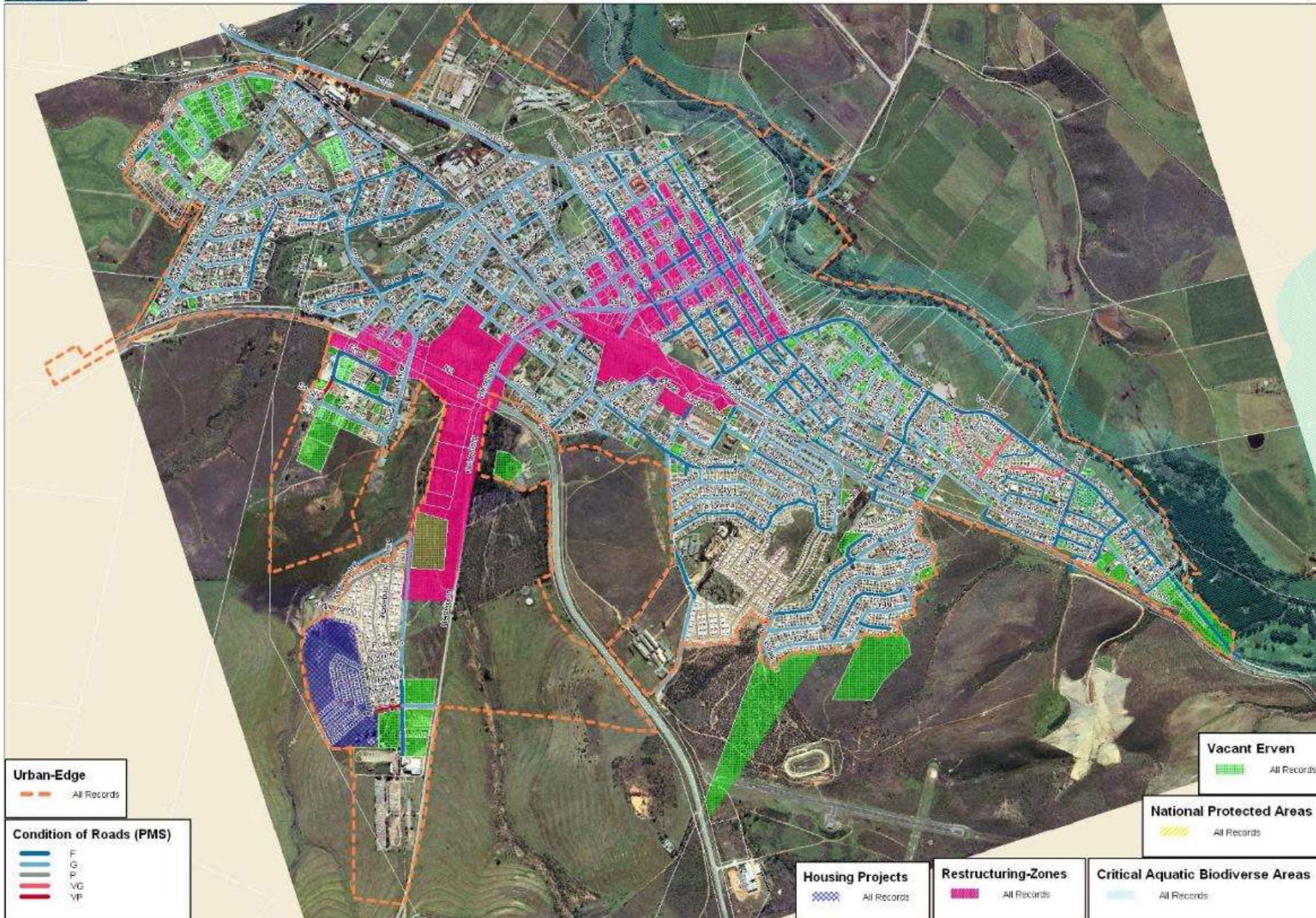
Annual Household Income						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	209	302	116	247	793	1248
R 1 - R 4800	99	85	108	28	450	275
R 4801 - R 9600	488	109	688	78	2026	470
R 9601 - R 19 600	663	587	1073	555	2904	2241
R 19 601 - R 38 200	823	962	777	1011	2965	3579
R 38 201 - R 76 400	510	1053	375	755	1848	3570
R 76 401 - R 153 800	270	623	235	461	1086	2274
R 153 801 - R 307 600	102	365	71	280	376	1423
R 307 601 - R 614 400	9	146	25	158	64	567
R 614 001 - R 1 228 800	9	22	24	54	55	137
R 1 228 801 - R 2 457 600	6	7	18	10	40	47
R 2 457 601 or more	0	10	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	3187	4272	3519	3646	12630	15873

Access to Water Services						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	3121	4249	3084	3370	12010	15508
Piped (tap) water >200m	51	5	127	27	238	46
No access to piped (tap) water	3	18	279	249	306	319
Other	6	0	52	0	76	0
Total	3181	4272	3543	3646	12631	15873

Toilet Facilities						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	2982	3988	878	1755	8509	12807
Flush toilet (with septic tank)	15	90	1180	957	1993	1589
Chemical toilet	3	1	31	20	69	23
Pit toilet with ventilation (VIP)	9	6	377	402	468	494
Pit toilet without ventilation	9	19	415	277	487	336
Bucket toilet	9	61	173	38	317	151
None	154	71	490	133	788	299
Other	0	35	0	63	0	173
Total	3181	4272	3543	3646	12631	15873

Energy Source for Lighting						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	3042	4196	2394	3101	10917	15063
Gas	3	2	12	23	21	41
Paraffin	3	12	48	13	78	29
Candles (not a valid option)	130	48	1022	448	1533	617
Solar	3	9	12	52	18	87
Other	0	5	55	9	64	36
Total	3181	4272	3543	3646	12631	15873

Refuse Removal						
	Riversdale SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	3157	4223	254	531	9051	12493
Removed by local authority less often	0	4	24	78	27	94
Communal refuse dump	3	0	189	122	239	191
Own refuse dump	15	34	3040	2398	3266	2523
No rubbish disposal	6	6	36	228	48	252
Other	0	7	0	289	0	320
Total	3181	4272	3543	3646	12631	15873



Urban-Edge
 - - - All Records

Condition of Roads (PMS)

- F
- G
- P
- VG
- VP

Vacant Erven
 All Records

National Protected Areas
 All Records

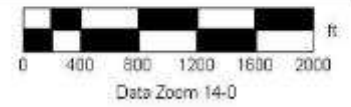
Housing Projects
 All Records

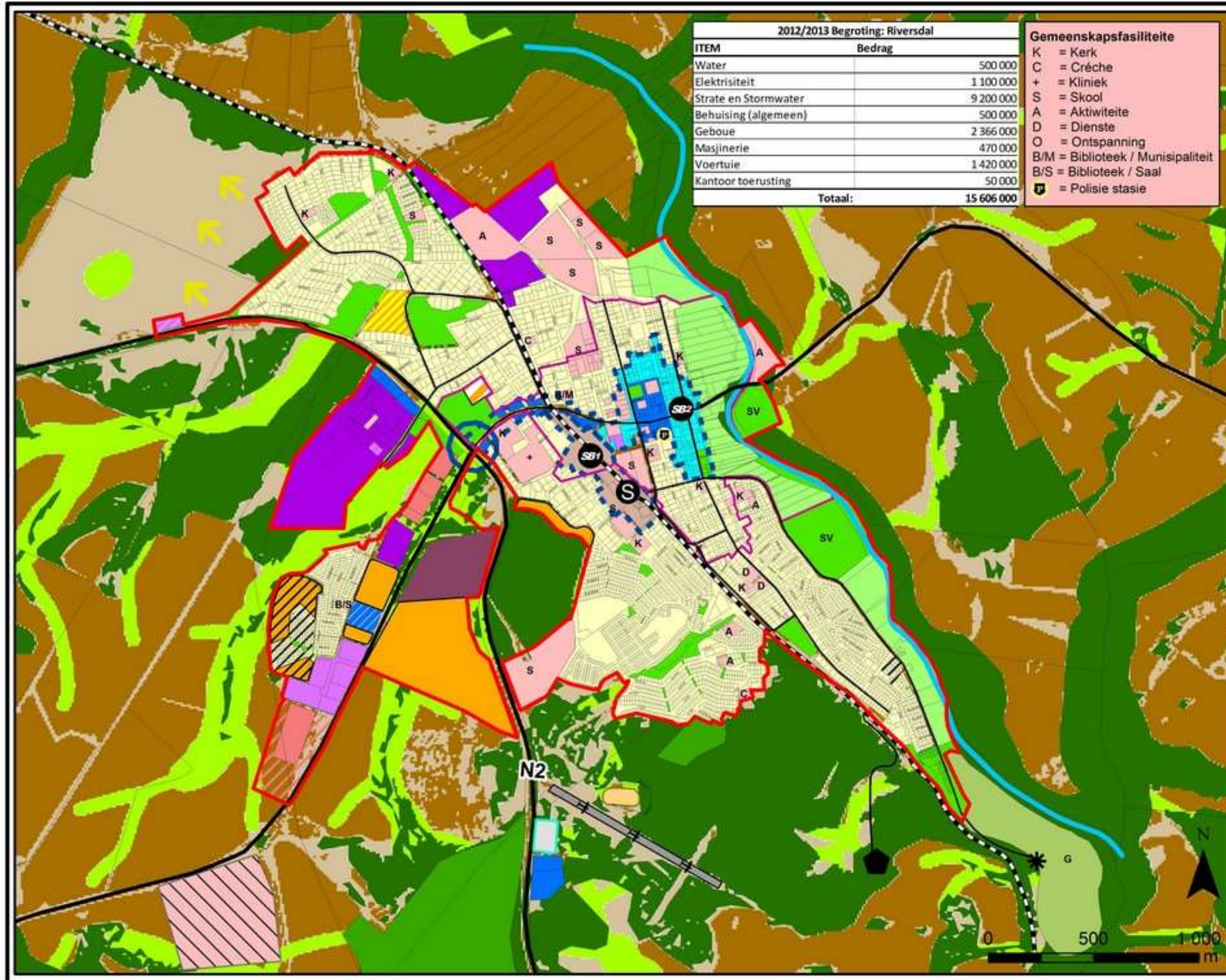
Restructuring-Zones
 All Records

Critical Aquatic Biodiverse Areas
 All Records

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 MN (25.4° W)





2012/2013 Begroting: Riversdal		
ITEM	Bedrag	
Water	500 000	
Elektrisiteit	1 100 000	
Strate en Stormwater	9 200 000	
Behuising (algemeen)	500 000	
Geboue	2 366 000	
Masjinerie	470 000	
Voertuie	1 420 000	
Kantoor toerusting	50 000	
Totaal:	15 606 000	

- Gemeenskapsfasiliteite**
- K = Kerk
 - C = Créche
 - + = Kliniek
 - S = Skool
 - A = Aktiwiteite
 - D = Dienste
 - O = Ontspanning
 - B/M = Biblioteek / Munisipaliteit
 - B/S = Biblioteek / Saal
 - PS = Polisie stasie

HESSEQUA



RUIMTELIKE ONTWIKKELINGS-RAAMWERK

RUIMTELIKE VOORSTELLE: RIVERSDAL

- RUIMTELIKE ONTWIKKELINGS-RAAMWERK**
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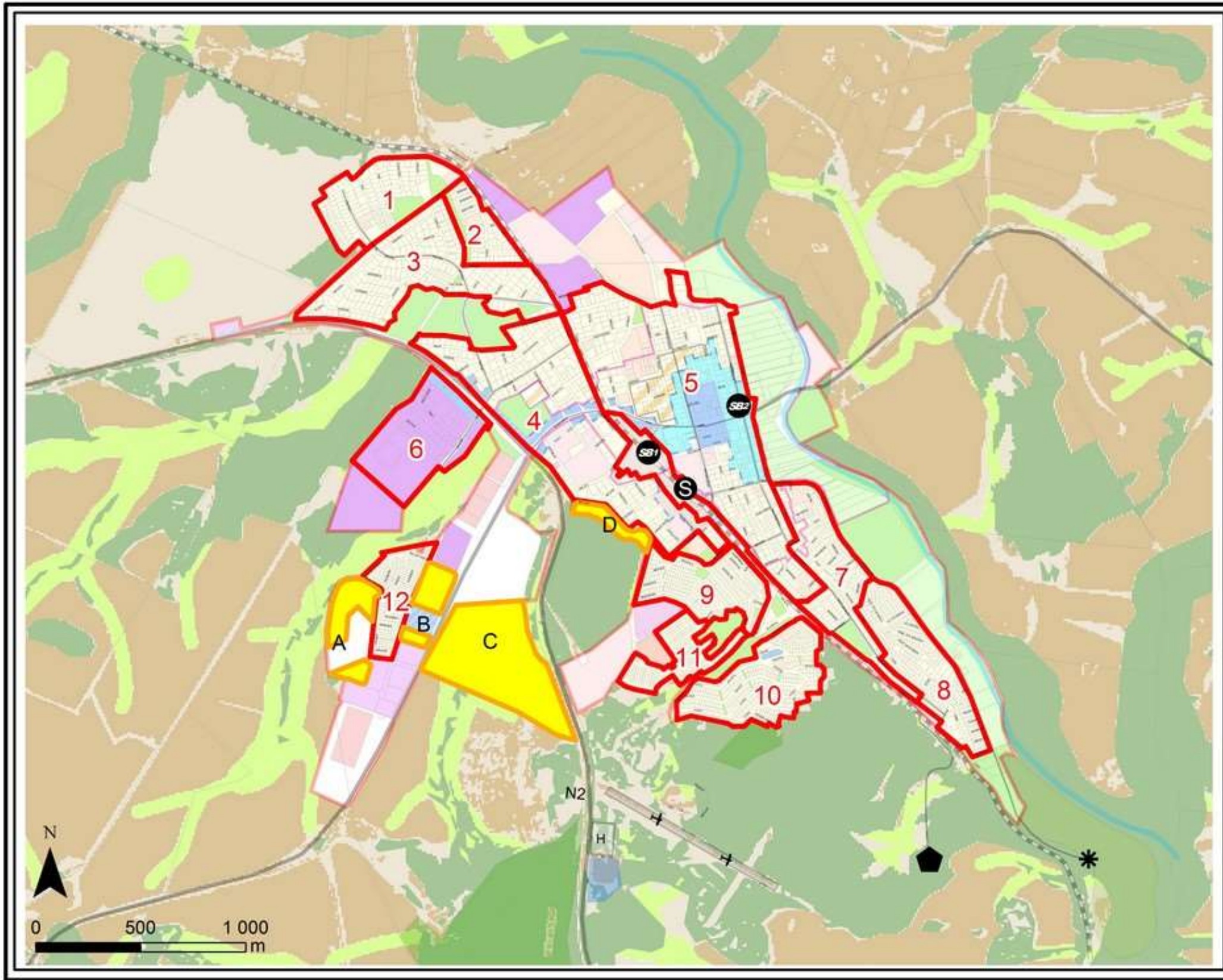
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DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.7		

URBAN DYNAMICS WESTERN CAPE
 PLANNING & DESIGN
 101A VIEW BUILDING
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 7030

TEL: (021) 946 1345
 FAX: (021) 946 1388
 e-mail: paul@urban.co.za (Project Manager)



HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
RIVERSDAL**

BESTAANDE STEDELIKE GEBIED

VERDICTINGSSONE	HEDIGE DIGTHEID	VOORGESTELDE VERDICTINGSSTREKKE*	ADDEISIONELE EENHED
1	0		
2	15		
3	7		
4	4	6	80
5	0	7	121
6	0		
7	14	18	36
8	24		
9	24		
10	20		
11	30		
12	30		
TOTAL	111	111	237

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

NAUWE ONTWIKKELINGS SONE	ARSA*	DIGTHEID (U/M)	EENHED
A	5	35	175
B	4	35	140
C	24	35	840
D	2	35	70
TOTAL	35	35	1225

* Bruto Ontwikkelings Area (ha)

BRON:

INDEMNITY

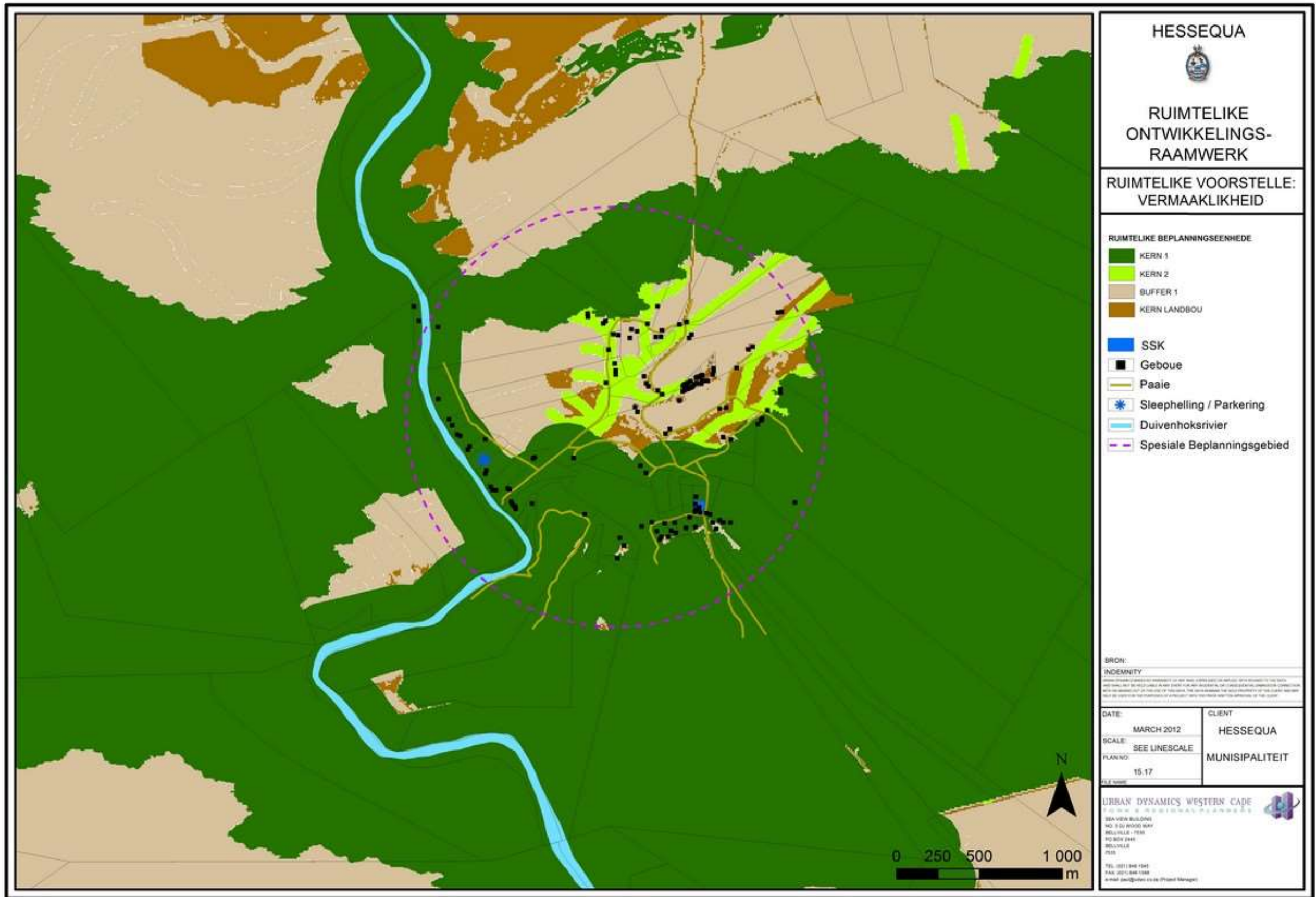
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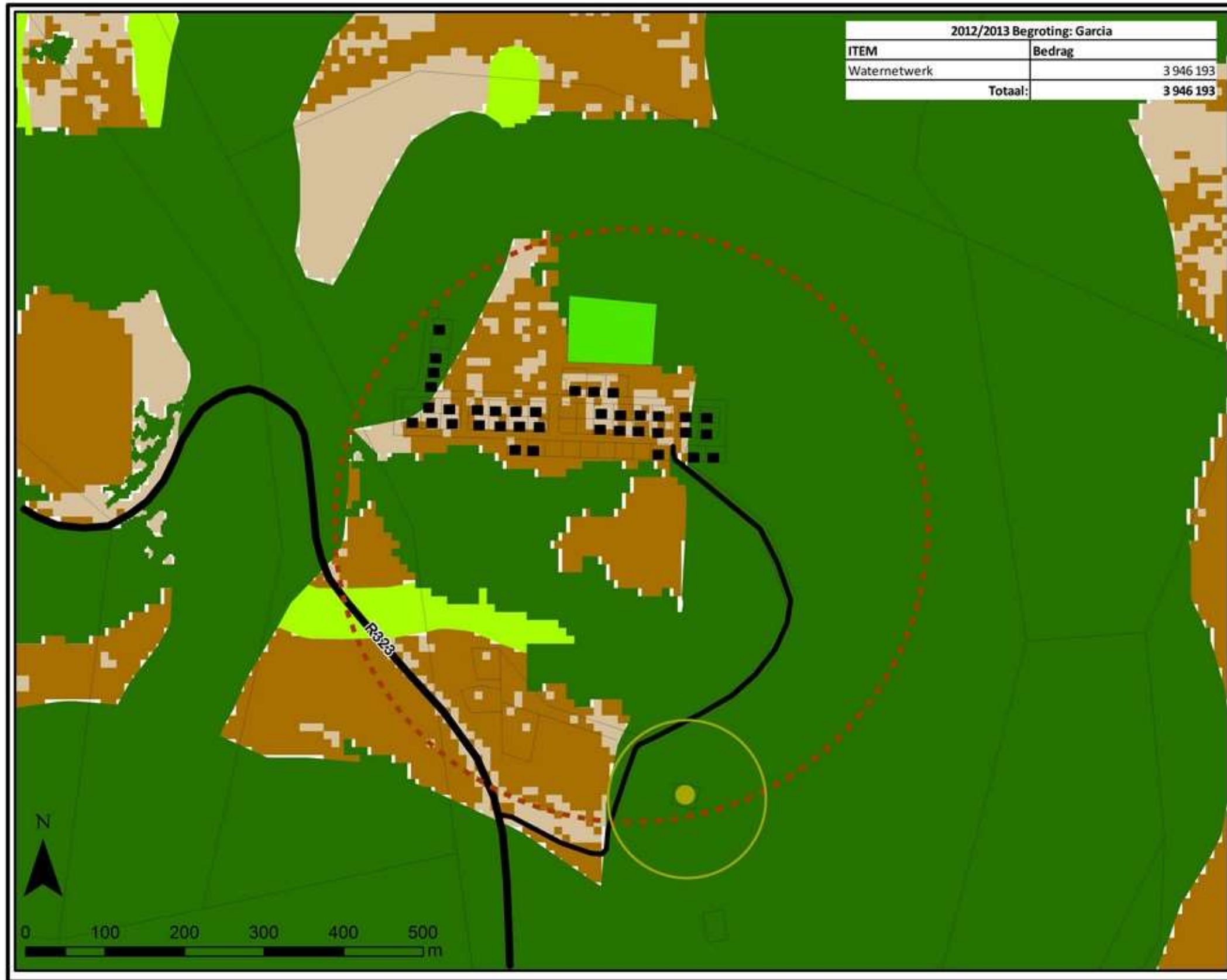
DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINE SCALE	MUNICIPALITEIT:	HESSEQUA
PLAN NO:	15.8		

URBAN DYNAMICS WESTERN CAPE

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7130

TEL: (021) 948 1540
FAX: (021) 948 1288
e-mail: info@urban-dc.co.za (Urban Manager)





2012/2013 Begroting: Garcia		
ITEM	Bedrag	
Waternetwerk		3 946 193
Totaal:		3 946 193

HESSEQUA



RUIMTELIKE ONTWIKKELINGS-RAAMWERK

RUIMTELIKE VOORSTELLE: GARCIA

RUIMTELIKE BEPLANNINGSEENHEDE

- KERN 1
- KERN 2
- BUFFER 1
- KERN LANDBOU

- PAAIE**
- VERSPREIDER

- GEBOU**
- GEBOU STRUKTURE
 - 100m RIDOOL BUFFER
 - OOP RUIMTE

INDEMNITY
 I am/We are not responsible for any errors or omissions in this plan, and I/we accept no liability for any loss or damage, whether direct or indirect, arising from any use of the information contained herein. I/We warrant that this plan is a true and correct copy of the original plan as approved by the Council.

DATE	MARCH 2012	CLIENT	HESSEQUA
SCALE	SEE LINESCALE		MUNISIPALITEIT
PLAN NO	15.20		

URBAN DYNAMICS WESTERN CAPE
 YOUR A. SPATIAL PLANNERS

SEA VIEW BUILDING
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Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Planned Capital Budget Programme for Riversdale

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.2.2.13	Waterkleppe vir Berglyn	6	R/D	15,000	50,000	50,000	50,000	50,000	1
2.7.3	Diefwering de Missstraat Swembad	6	R/D	15,000					1
3.2.4.3	Grassnyers - Garcia	6	R/D	6,000					1
3.2.6.3.5	60 X Plastiekstoel - Sportgronde	6	R/D			12,000			1
3.2.6.3.6	5 X Staaltafels - Sportgronde	6	R/D				5,000		1
3.3.2.39	1 X Lessenaar - Riool	6	R/D	3,500					1
3.3.2.40	2 X Kantoorstoele - Riool	6	R/D		3,000				1
3.3.2.41	1 X Liaseerkabinet - Riool	6	R/D	1,700					1
1.1.1.6	Hergruis van Strate in Garcia	7	R/D		150,000		150,000		1
1.2.2.14	Vervanging van Leiwatersloot - Langstraat	7	R/D		20,000	50,000			1
1.5.2.11	Vervanging van rioollyn - Langstraat	7	R/D	280,000					2
1.5.2.12	Opgradering van rioollyn - Barakudastraat	7	R/D	64,000					2
2.7.5	Ontwikkeling van Uitwijkdam	7	R/D	150,000	50,000				1
2.7.6	Chloorkamer - Takkieskloof swembad	7	R/D	350,000	100,000				1
2.8.1.1	Watermeters	7	R/D	20,000	30,000				1
2.8.1.2	Opgradering van kantoor	7	R/D		20,000				1
3.2.6.4.38	20 liter Urn - Kwanokuthula saal	7	R/D				2,000		1
3.2.6.4.39	Mikrogolfoond - Kwanokuthula saal	7	R/D			700			1
3.2.6.4.40	Gordyne - Kwanokuthula saal	7	R/D			5,000			1
3.2.6.5.1	2 X Kantoorstoele	7	R/D			3,000			1
3.5.4.5	Omhein van Jukskeibane -Riversdal	7	R/D			25,000			2
3.5.4.6	Opgradering van Tennisbaan	7	R/D	30,000					1
1.2.3.6	Vervanging van Waterkleppe - Morestond	8	R/D		20,000				1
1.5.2.13	Re Alignment sewerage main - Douglas Josepha	8	R/D	32,000					2
3.3.2.42	1 x Lessenaar - Water	8	R/D		3,500				1
3.3.2.43	2 X Kantoorstoele - Water	8	R/D	3,000					1
1.1.1.1.3	- Riversdal (55 904m) - Dahlia St Interseksie	6,7,8	R/D		500,000	500,000	1,200,000	1,300,000	2
1.1.1.3.1	- Riversdal (3 700m)	6,7,8	R/D		1,000,000	1,000,000			2
1.1.1.4	Herseël Geproklameerde Hoofpaale (20%)	6,7,8	R/D	985,014					1
1.1.3.1.4	- Riversdal	6,7,8	R/D			200,000			2
1.1.3.2.4	- Riversdal	6,7,8	R/D		200,000	200,000			2
1.2.2.11	Vervang laedruk waterleiding	6,7,8	R/D	720,000	450,000	485,000			2
1.2.2.12	Spaar Waterpompe	6,7,8	R/D		60,000		65,000		1
1.2.2.17	Telemetriestelsel	6,7,8	R/D	400,000					2
1.2.4.2	Opgradering van sandfilter - Waterwerke	6,7,8	R/D			200,000			2
1.2.4.3	wwtw Sekuriteit	6,7,8	R/D		120,000				1
1.4.1.3	Opgradeer 11KV Hoofsubstasie	6,7,8	R/D	900,000	500,000	550,000	600,000		2
1.4.2.4	Opgradeer Substasies	6,7,8	R/D	370,000	250,000	280,000	300,000		2
1.4.4.4	Opgradering van Netwerk	6,7,8	R/D	1,150,000	700,000	500,000	550,000	550,000	2
1.5.1.2	Aankoop van Rioolpompe	6,7,8	R/D					150,000	2
1.5.1.3	Noodkragopwekker 50 KVA	6,7,8	R/D		250,000	200,000			2
1.5.1.4	Rioolwerke Sekuriteit	6,7,8	R/D			500,000	500,000		2
1.5.1.5	Refurbishment Rioolwerke	6,7,8	R/D	276,985					2
1.5.1.6	Opgradering van Bulk Sewer	6,7,8	R/D		3,815,488				2
1.5.1.7	Opgradering van Rioolwerke - Fase 1	6,7,8	R/D				1,940,157	1,940,157	2
1.5.1.13	Ruskamer vir personeel - Groen druppel	6,7,8	R/D	14,000					1
1.5.3.2	Bystand rioolpomp	6,7,8	R/D		85,000			90,000	2
1.5.3.3	Dompelpomp	6,7,8	R/D	40,000	40,000			45,000	1
2.5.4	Aldak Thusong Sentrum	6,7,8	R/D			60,000			2

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
2.5.5	Toeboou van Vullishok - Burgesentrum	6,7,8	R/D	20,000					1
2.5.6	Opgradering voorportaal - Burgesentrum	6,7,8	R/D			20,000			2
2.5.7	Glaspaneel ontvangslokaal - Burgemeester	6,7,8	R/D	25,000					1
2.5.8	Aanbou van Toilet by Burgesentrum	6,7,8	R/D			60,000			2
2.5.9	Diefwering - Burgesentrum Grondvloer	6,7,8	R/D			38,000			2
2.5.10	Stoorkamer - Burgesentrum	6,7,8	R/D			6,500			1
2.6.3	Omheining van begraafplaas	6,7,8	R/D	70,000	50,000	50,000			1
2.6.4	Uitbreiding van begraafplaas	6,7,8	R/D	200,000	200,000				1
2.7.4	Ingeboude sluitbare glaspaneel - Julius Gordon	6,7,8	R/D		20,000				1
3.1.3.9	1 X 5m3 Tipper - Openbare Werke	6,7,8	R/D					750,000	2
3.1.3.10	LAW - Riool	6,7,8	R/D	220,000					1
3.1.3.11	LAW - Openbare Werke / Parke	6,7,8	R/D		240,000	240,000			2
3.1.3.12	Dubbelkajuit Vragmotor - Openbare Werke	6,7,8	R/D	450,000				450,000	1
3.2.1.3	Multi-purpuse Loader	6,7,8	R/D				900,000		2
3.2.1.4	Roller 2.7 ton - Openbare Werke	6,7,8	R/D					350,000	2
3.2.1.5	Stooskraper - Sanitasie	6,7,8	R/D		1,000,000				2
3.2.4.4	Kudu Grassnyer - Parke	6,7,8	R/D			35,000			2
3.2.5.1	Mobile Kompressor - Elek	6,7,8	R/D					600,000	2
3.2.6.1.2	Rioolrods	6,7,8	R/D	5,500	5,500	5,700	5,800	5,800	1
3.2.6.1.5	Noodkragopwekker 200 KVA - Riool	6,7,8	R/D		450,000				2
3.2.6.2.1	1 X Clamp on Earth Tester	6,7,8	R/D	19,500					1
3.2.6.2.2	Meet Toerusting	6,7,8	R/D		6,500				1
3.2.6.2.3	Noodkragopwekker 50 KVA - Elektrisiteit	6,7,8	R/D			250,000			2
3.2.6.4.41	100 X Plastiekstoel - Burgesentrum	6,7,8	R/D				11,500		1
3.2.6.4.42	10 X Staaltafels - Burgesentrum	6,7,8	R/D				8,800		1
3.2.6.4.43	Wireless Handheld System - Thusong Sentrum	6,7,8	R/D				3,800		1
3.2.6.4.44	Blindings - Thusong Sentrum	6,7,8	R/D			20,000			2
3.2.6.4.45	Lugreëlaars - Thusong Sentrum	6,7,8	R/D				30,000		2
3.2.6.4.46	Kombuiswast - Thusong Sentrum	6,7,8	R/D				20,000		2
3.2.6.10.16	Randsnyers - Parke	6,7,8	R/D	6,800	7,000	7,000	7,200	7,200	1
3.2.6.10.17	1 X Tilt Bar & Wintch - Openbare Werke	6,7,8	R/D		15,000				1
3.2.6.10.18	2 X Pole pruner - Elektries	6,7,8	R/D		9,000				1
3.2.6.10.20	Randsnyers - Bepanning / Riool	6,7,8	R/D	6,800	7,000				1
3.2.6.10.22	Rollertipe Veebesem - Openbare Werke	6,7,8	R/D				140,000		2
3.2.6.10.23	Wacker - Elektries	6,7,8	R/D				25,000		2
3.2.6.10.24	Jackhammer - Elektries	6,7,8	R/D		23,000				1
3.2.6.10.25	Jackhammers - Openbare Werke / Elektries	6,7,8	R/D				25,000		2
3.2.6.10.26	Dubbelas Tractor met reelings - Openbare Werke	6,7,8	R/D				150,000		2
3.2.6.10.27	1 X Plate Compactor - Openbare Werke	6,7,8	R/D		30,000				1
3.2.6.10.28	Gereedskap & kas - Openbare Werke	6,7,8	R/D	6,000					1
3.5.2.3	Omheining van Elektriese Werkwinkel	6,7,8	R/D	100,000					1
3.5.2.4	Opgradeer van Meganiese Werkwinkel - Toilet	6,7,8	R/D	5,000		25,000			1
1.1.2.1	Herseël Geproklameerde Hoofpaaie (80%) (**)	6,7,8	R/D	3,940,057					VERV
1.1.4.1.1	- Riversdal - Rehabilitasie van Pype	6,7,8	R/D	500,000					MIG
1.5.4.1	Refurbishment Rioolwerke	6,7,8	R/D	2,050,254					MIG
1.5.4.2	Opgradering van Rioolwerke - Fase 1	6,7,8	R/D		6,241,918	10,031,214	10,939,361		MIG
1.5.4.3	Opgradering van Bulk Sewer	6,7,8	R/D	6,855,918					MIG
3.2.6.6.10	Carpet & onderfelt	6,7,8	R/D				35,000		BIB
5.1.2	Gap Behusing - Dienste - R/D	6,7,8	R/D						BEH
3.2.6.10.21	Kanonspreier Sportsveld Riverville	6,8	R/D				22,000		2
2.7.2	Trappe - Alooridge, Morestond	7,8	R/D	200,000	200,000	200,000	200,000	200,000	1
3.1.1.1	Sedan motor - Gemeenskapsdienste	H/Q	R/D			280,000			2
3.1.1.2	Sedan motor - Gemeenskapveiligheid	H/Q	R/D				235,000		2
3.1.1.3	Sedan motor - Boubeheer	H/Q	R/D			220,000			2

#	Description	Wrđ	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.1.1.4	Sedan motor - Burgesenentrum & Poskantoor	H/Q	R/D	140,000					1
3.2.6.7.1	1 X Vloerpoelerder - Verkeer	H/Q	R/D	10,000					1
3.2.6.7.2	1 X Um - Verkeer	H/Q	R/D		1,500				1
3.2.6.7.3	Digitale Kameras - Verkeer	H/Q	R/D		5,000		5,500		1
3.2.6.7.5	1 X Yskas - Wetsloepassing	H/Q	R/D	2,500					1
3.2.6.10.19	Hoëdrukspuit - Skut	H/Q	R/D	12,000					1
3.3.1.1	1 X Laptops - MMC - MM	H/Q	R/D	8,000					1
3.3.1.2	3 X Laptops - Council	H/Q	R/D	30,000					1
3.3.1.3	1 X Laptop - Regsdienste	H/Q	R/D	8,000					1
3.3.1.4	2 X Rekenaarskerm 23" - Bates/Begr - HFD	H/Q	R/D		2,400		1,200		1
3.3.1.5	1 X Scanner - Bates - HFD	H/Q	R/D		1,700				1
3.3.1.6	1 X Laptop - Ink - HFD	H/Q	R/D			8,500			1
3.3.1.7	1 X Rekenaar - Ink - HFD	H/Q	R/D		7,200				1
3.3.1.8	1 X Laptop - Ink - HFD	H/Q	R/D		8,000				1
3.3.1.9	4 X Desktop online vending - Ink - HFD	H/Q	R/D	18,000					1
3.3.1.10	3 X Receipt printers - Ink - HFD	H/Q	R/D	6,000					1
3.3.1.11	3 X Prepaid Token printers - Ink - HFD	H/Q	R/D	8,000					1
3.3.1.12	1 X Scanner - Uitg - HFD	H/Q	R/D			1,700			1
3.3.1.13	2 X Laptops - MHB (Intern & Labour)	H/Q	R/D	16,800					1
3.3.1.14	6 X Laptops -MHB (Training Centre)	H/Q	R/D		48,000				1
3.3.1.15	1 X Projektor - MHB (Training Centre)	H/Q	R/D		4,000				1
3.3.1.16	2 X Laptops - MHB	H/Q	R/D		16,000				1
3.3.1.17	1 X 21" Monitor - MHB	H/Q	R/D		3,000				1
3.3.1.18	Time & Attendance scanners - MHB	H/Q	R/D						1
3.3.1.19	1 X Laptop - Interne Oudit	H/Q	R/D	8,000					1
3.3.1.20	1 X Rekenaarskerm 23" - Interne Oudit	H/Q	R/D	1,900					1
3.3.1.21	1 X Projektor & Skerm - MHB	H/Q	R/D			8,000			1
3.3.1.25	4 X Laptops - MPCC	H/Q	R/D			16,000	16,000		1
3.3.1.26	1 X Colour Laser Printer - MPCC	H/Q	R/D				6,000		1
3.3.1.27	2 X Laptops - MMC - ICT	H/Q	R/D	16,000		16,000			1
3.3.1.28	Expansion of Wireless Network - ICT	H/Q	R/D				50,000		1
3.3.1.29	Storage Area Network - ICT	H/Q	R/D	60,000					1
3.3.1.30	Fibre recabbling Hessequa Main - ICT	H/Q	R/D	50,000					1
3.3.1.31	5 X LCD Desktop screens - ICT	H/Q	R/D	10,000					1
3.3.1.32	1 X Label Maker - ICT	H/Q	R/D	1,500					1
3.3.1.33	2 X Managed Network Switches - ICT	H/Q	R/D	40,000					1
3.3.1.34	1 X KVM controle switch - ICT	H/Q	R/D		15,000				1
3.3.1.35	1 X DR Solution off-site capability - ICT	H/Q	R/D	50,000					1
3.3.1.36	1 X Lync server Implimentation Phase 1-2 - ICT	H/Q	R/D	40,000					1
3.3.1.37	1 X HyperV migration - ICT	H/Q	R/D	50,000					1
3.3.1.38	1 X Bulk E-mail exchange solution - ICT	H/Q	R/D	30,000					1
3.3.1.39	1 X Desktop & Drukker - Museum	H/Q	R/D			14,000			1
3.3.1.40	1 X Shredder Rexel LES 32 - Admin	H/Q	R/D		19,800				1
3.3.1.41	1 X Laptop - Archive - Admin	H/Q	R/D	8,000					1
3.3.1.42	3 X Laptops - Admin (Sec/Media/Telefooniste)	H/Q	R/D	8,000	8,000	9,000			1
3.3.1.46	Rekening Drukkers (Groot) - ICT	H/Q	R/D		30,000		35,000		1
3.3.2.1	1 X Kas met Rakke - MM	H/Q	R/D		2,500				1
3.3.2.2	1 X Bindings - Admin kombuis	H/Q	R/D		2,200				1
3.3.2.3	Side Extension for desk - Admin (Media)	H/Q	R/D			5,000			1
3.3.2.4	1 X Tipst Chair - Admin (Sek)	H/Q	R/D			2,000			1
3.3.2.5	1 X Desk with side extention - Admin (Sek)	H/Q	R/D			5,700			1
3.3.2.6	1 X Desk - Admin	H/Q	R/D			1,500			1
3.3.2.7	1 X Chair - Admin	H/Q	R/D				1,000		1
3.3.2.8	2 X Ingeboude Kaste - MHB (Intern & Labour)	H/Q	R/D	5,100					1

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.3.2.9	2 X Lessenaars - MHB (Intern & Labour)	H/Q	R/D	1,510					1
3.3.2.10	2 X Sliding door Credenza - MHB(Intern & Labour)	H/Q	R/D	3,220					1
3.3.2.11	2 X Office Chairs - MHB (Intern & Labour)	H/Q	R/D	3,430					1
3.3.2.12	15 X Typist Chair - MHB (Training Centre)	H/Q	R/D		17,000				1
3.3.2.13	2 X Kaste - MHB (Training Centre)	H/Q	R/D		5,200				1
3.3.2.14	5 X Training Tables - MHB (Training Centre)	H/Q	R/D		7,500				1
3.3.2.15	2 X Filling Cabinet - MHB	H/Q	R/D		5,200				1
3.3.2.16	1 X Kennisgewingborde - MHB (Training Centre)	H/Q	R/D		1,220				1
3.3.2.17	2 X Stationary cupboards - MHB	H/Q	R/D		5,200				1
3.3.2.18	2 X Filling Cupboards - MHB	H/Q	R/D		4,140				1
3.3.2.19	1 X Hingerd door cupboard - MHB	H/Q	R/D		2,480				1
3.3.2.20	1 X Sliding Door Credenza - MHB	H/Q	R/D		1,610				1
3.3.2.21	1 X Laminator A3 - MHB	H/Q	R/D		2,200				1
3.3.2.22	1 X Binder - MHB	H/Q	R/D		2,900				1
3.3.2.23	Filling System (Fire Protected) - MHB	H/Q	R/D		40,000				1
3.3.2.24	1 X Lessenaar - ICT	H/Q	R/D		4,000				1
3.3.2.25	1 X Lessenaar - Regsdienste	H/Q	R/D	2,500					1
3.3.2.26	4 X Kantoorstoel - Beplanning	H/Q	R/D		2,500				1
3.3.2.27	1 X Lessenaar - Beplanning	H/Q	R/D		3,500				1
3.3.2.28	2 X Director's Chairs - Beplanning	H/Q	R/D		3,000				1
3.3.2.29	1 X Optelmasjiene - Beg - HFD	H/Q	R/D	1,600					1
3.3.2.30	1 X Typist Chair - Uit - HFD	H/Q	R/D	1,100					1
3.3.2.31	Sluitkas vir Blanko Tjeks - Uit - HFD	H/Q	R/D	2,000					1
3.3.2.32	2 X Boekrakke - Uit - HFD	H/Q	R/D	3,770					1
3.3.2.33	1 X 4 laai liaseer kabinet - Sal - HFD	H/Q	R/D	2,800					1
3.3.2.34	2 X Besoekerstoel - Uit - HFD	H/Q	R/D	2,000					1
3.3.2.35	1 X Optelmasjiene - Ink - HFD	H/Q	R/D	1,600					1
3.3.2.36	2 X Besoekerstoel - Ink - HFD	H/Q	R/D	5,000					1
3.3.2.37	1 X Mobile Pedestal - Ink - HFD	H/Q	R/D	1,500					1
3.3.2.38	1 X Vacuum / Blower - ICT	H/Q	R/D		1,500				1
3.5.1.1	2 X Lugversorgers - ICT	H/Q	R/D	10,000	10,000				1
3.5.1.2	Burglar Bars & Smoke Detectors - Server R- ICT	H/Q	R/D	25,000					1
3.5.1.3	Upgrade Server Room & UPS - ICT	H/Q	R/D			70,000	30,000		2
3.5.1.4	Raised Floors in Server Room - ICT	H/Q	R/D			15,000			2
3.5.1.5	Stoor vir Bodes - Burgesentrum	H/Q	R/D		15,000				1
3.5.1.6	Opgradering van van Rookkamer in eetplek	H/Q	R/D	20,000					1
3.5.1.7	1 X Lugversorger - Oogtoets	H/Q	R/D		8,000				1
3.5.1.8	2 X Lugversorgers - MHB	H/Q	R/D	20,000					1
3.5.1.9	2 X Lugversorgers - Gemeen - Dist.	H/Q	R/D			20,000			2
3.5.1.10	1 X Lugreëlaar - Regsdienste	H/Q	R/D	8,000					1
3.2.6.6.9	1 X Camera	H/Q	R/D	1,585					BIB

SLANGRIVIER

Introduction

Slangrivier is a rural community that developed as an Act 9 land transfer. It is located close to the N2 about 11km west of Heidelberg. The economic activity in Slangrivier differs from a few small convenience stores to subsistence farming by the upcoming farmers. Slangrivier also experiences a large need for housing.

Population Group & Gender Totals						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	6	28	402	470	1083	2142
Coloured	1134	1443	4389	4076	14639	17358
Indian or Asian	0	11	9	31	30	100
White	3	14	1848	1808	5622	5766
Other	0	11	0	38	0	158
Total	1143	1507	6648	6424	21374	25525
Female						
Black African	9	36	247	282	741	1763
Coloured	1200	1448	4513	4050	16076	18711
Indian or Asian	0	11	6	36	15	99
White	0	6	1459	1659	5933	6467
Other	0	3	0	20	0	76
Total	1209	1504	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	15	64	650	752	1824	3906
Coloured	2334	2891	8903	8126	30715	36069
Indian or Asian	0	22	15	67	45	199
White	3	20	3306	3467	11555	12233
Other	0	14	0	59	0	235
Total	2352	3011	12874	12471	44139	52642

Language Use						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	2325	2874	12349	11564	42058	47548
English	21	62	243	416	1153	1851
IsiXhosa	3	7	206	177	742	1066
Other	3	68	75	314	186	2177
Total	2352	3011	12874	12471	44139	52642

Age Groups						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	807	858	3549	3276	11933	12826
15 - 35	763	943	4501	3859	14136	15483
36 - 65	656	1056	4232	4595	14499	18952
66 - 120	125	154	592	741	3571	5381
Total	2352	3011	12874	12471	44139	52642

Education Levels						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	189	131	1527	773	3683	2181
Grade 1 / Sub A	127	101	517	347	1746	1358
Grade 2 / Sub B	92	129	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	160	169	605	498	1803	1743
Grade 4 / Std 2	171	176	751	609	2192	2122
Grade 5 / Std 3/ABET 2	248	213	841	638	2625	2198
Grade 6 / Std 4	252	241	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	291	289	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	200	408	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	123	221	623	791	2539	3689
Grade 10 / Std 8 / Form 3	72	203	668	893	3295	4545
Grade 11 / Std 9 / Form 4	33	96	287	310	1254	1898
Grade 12 / Std 10 / Form 5	105	244	1325	1710	5645	8539
Tertiary	15	12	608	843	2967	3829
Other	275	379	1235	1527	3863	7082
Total	2352	3011	12874	12471	44139	52642

Official Employment Status						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	367	679	5399	5290	14103	17052
Unemployed	238	149	258	225	2304	2803
Other	804	1143	2997	2860	11870	14132
Total	1408	1971	8655	8376	28277	33987

Dwelling Type						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	531	619	3393	3540	11982	15009
Informal	18	62	102	74	529	772
Other	0	6	25	32	119	91
Total	549	688	3519	3646	12630	15873

Annual Household Income						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	67	56	116	247	793	1248
R 1 - R 4800	68	36	108	28	450	275
R 4801 - R 9600	153	47	688	78	2026	470
R 9601 - R 19 600	149	151	1073	555	2904	2241
R 19 601 - R 38 200	93	188	777	1011	2965	3579
R 38 201 - R 76 400	10	157	375	755	1848	3570
R 76 401 - R 153 800	9	37	235	461	1086	2274
R 153 801 - R 307 600	0	9	71	280	376	1423
R 307 601 - R 614 400	0	3	25	158	64	567
R 614 001 - R 1 228 800	0	1	24	54	55	137
R 1 228 801 - R 2 457 600	0	2	18	10	40	47
R 2 457 601 or more	0	0	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	549	688	3519	3646	12630	15873

Access to Water Services						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	536	671	3084	3370	12010	15508
Piped (tap) water >200m	0	2	127	27	238	46
No access to piped (tap) water	0	15	279	249	306	319
Other	0	0	52	0	76	0
Total	536	688	3543	3646	12631	15873

Toilet Facilities						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	374	522	878	1755	8509	12807
Flush toilet (with septic tank)	3	17	1180	957	1993	1589
Chemical toilet	32	0	31	20	69	23
Pit toilet with ventilation (VIP)	55	62	377	402	468	494
Pit toilet without ventilation	45	29	415	277	487	336
Bucket toilet	0	3	173	38	317	151
None	27	33	490	133	788	299
Other	0	22	0	63	0	173
Total	536	688	3543	3646	12631	15873

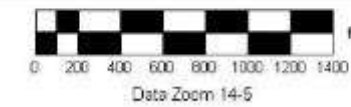
Energy Source for Lighting						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	444	670	2394	3101	10917	15063
Gas	0	1	12	23	21	41
Paraffin	0	0	48	13	78	29
Candles (not a valid option)	92	10	1022	448	1533	617
Solar	0	2	12	52	18	87
Other	0	5	55	9	64	36
Total	536	688	3543	3646	12631	15873

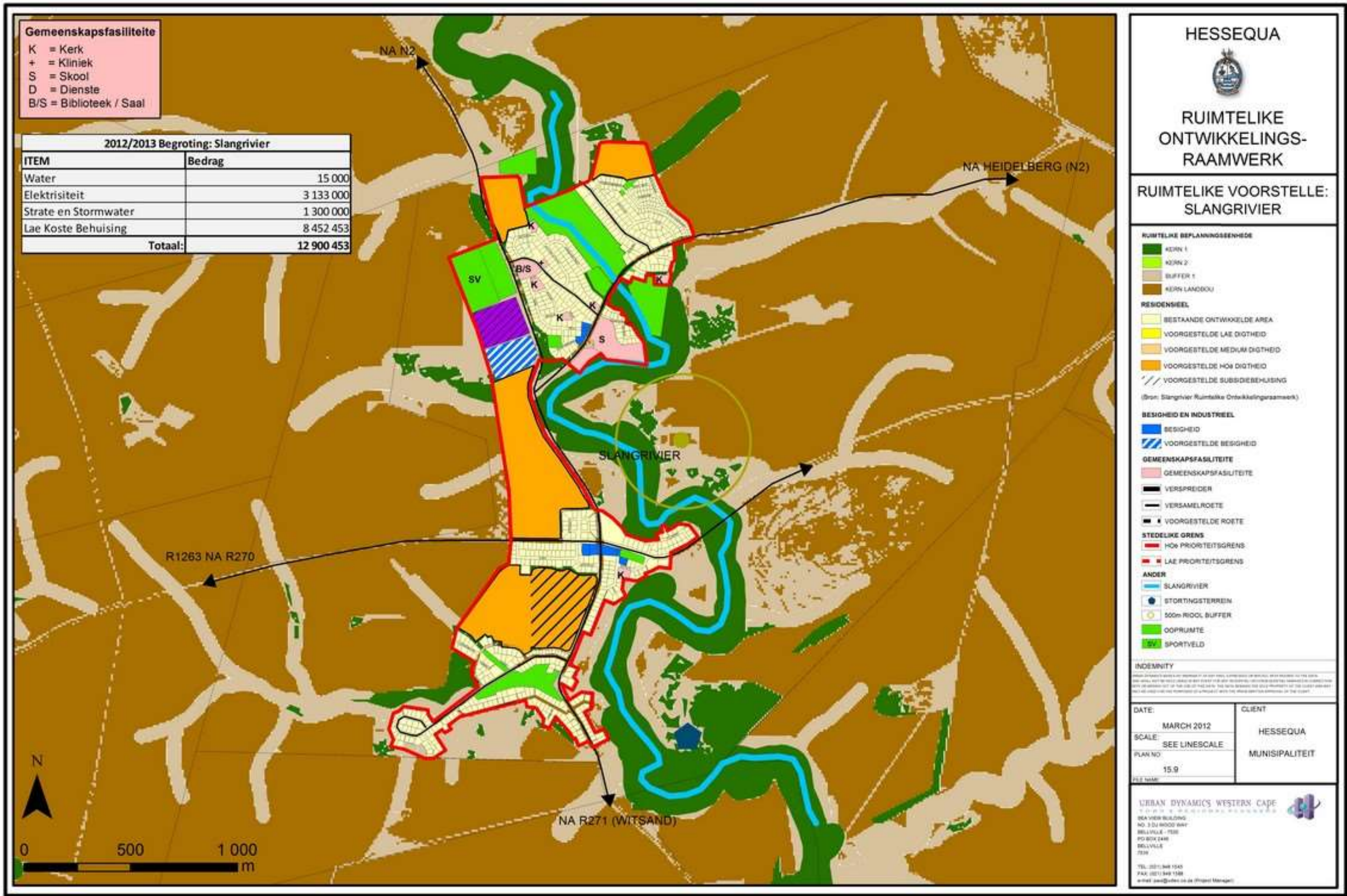
Refuse Removal						
	Slangrivier SP		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	490	666	254	531	9051	12493
Removed by local authority less often	0	2	24	78	27	94
Communal refuse dump	44	1	189	122	239	191
Own refuse dump	3	5	3040	2398	3266	2523
No rubbish disposal	0	11	36	228	48	252
Other	0	3	0	289	0	320
Total	536	688	3543	3646	12631	15873

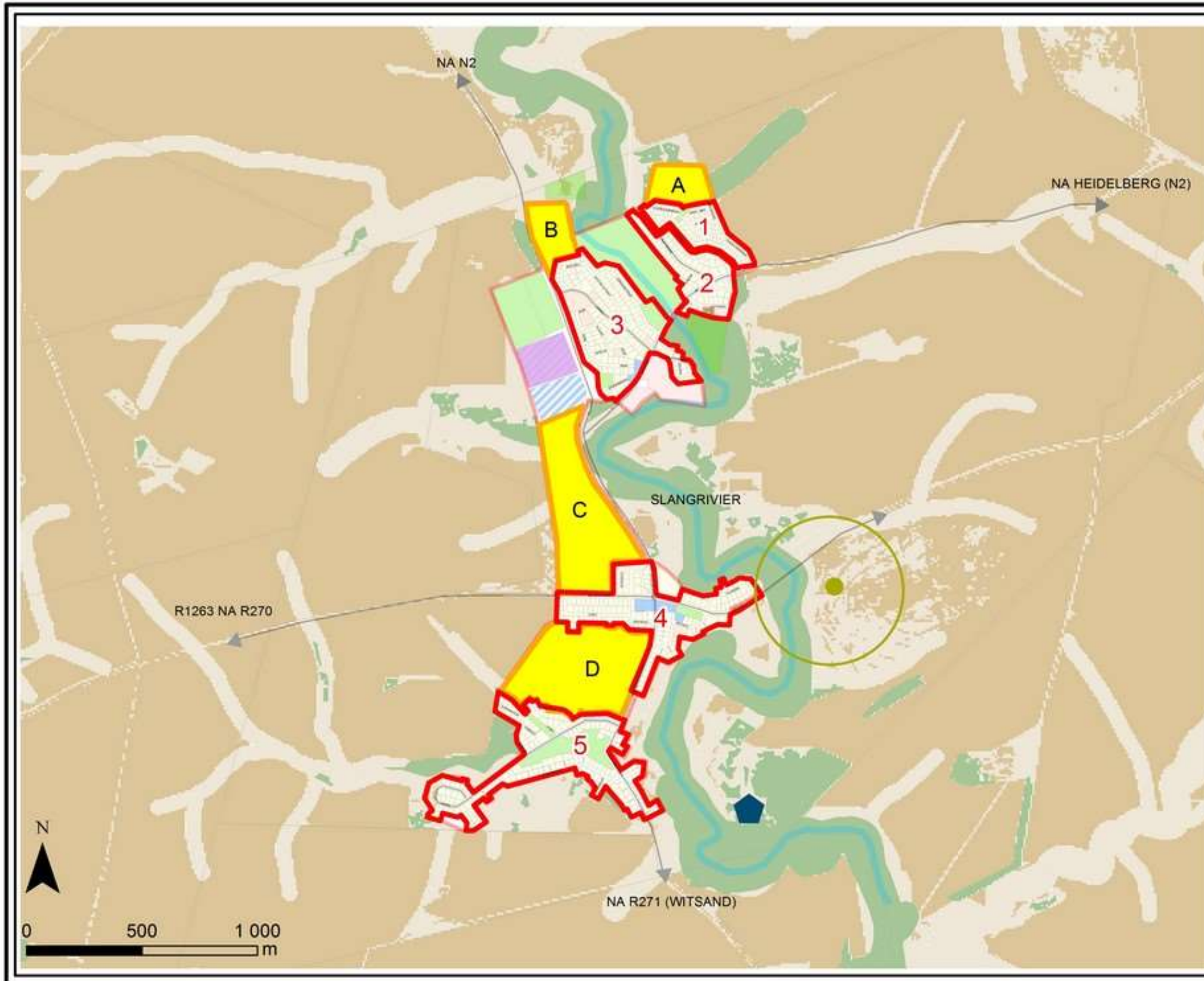


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★
 MN (25.3° W)







HESSEQUA



**RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK**

**GROEIBESTUURSPLAN:
SLANGRIVIER**

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSONES:

SONE	HUIDIGE DIGTHEID*	VOORGESTELDE VERDIGTINGS'EIKEN*	ADDISONIELE EENHEDE
1	19		
2	8	8	11
3	8	10	14
4	8	8	21
5	8	10	31
TOTAL	8	10	77

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

NUWE ONTWIKKELINGS ONES:

SONE	AREA*	DIGTHEID (u/ha)	EENHEDE
A	4	35	140
B	4	35	140
C	18	35	630
D	18	35	630
TOTAL	44	35	1540

* Bruto Ontwikkelings Area (ha)

BRON:

INDEMNITY

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DATE:

MARCH 2012

CLIENT:

HESSEQUA

SCALE:

SEE LINESCALE

PLAN NO:

15.10

MUNICIPALITEIT:

MUNICIPALITEIT

FILE NAME:

URBAN DYNAMICS WESTERN CAPE

100 BLOEMFONTEIN STREET
SEA VIEW BUILDING
100 BLOEMFONTEIN STREET
BELLVILLE - 7520
PO BOX 2449
BELLVILLE
7520



TEL: (021) 948 1540
FAX: (021) 948 1540
EMAIL: info@urban-dc.co.za (Project Manager)

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Planned Capital Budget Programme for Slangrivier

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.2.2.15	Sludge Pomp	4	S/R	20,000		25,000			1
1.5.1.11	Nuwe Oksidasiedamme - Fase 2	4	S/R				100,166		2
1.5.1.12	Vloeiometer vir riool	4	S/R	100,000					1
3.1.3.21	LAW - Openbare Werke	4	S/R			240,000			2
3.2.2.6	Fiat Trekker 780 - Openbare Werke	4	S/R					450,000	2
3.2.4.10	Kudu Grassnyer - Openbare Werke	4	S/R	30,000					1
3.2.6.1.4	Rioolrods	4	S/R	3,800		4,000		4,000	1
3.2.6.4.47	20 liter Urn - Gemeenskap saal	4	S/R				2,000		1
3.2.6.4.48	3 Tier tea trolie - Gemeenskap saal	4	S/R				1,450		1
3.2.6.4.49	1 X Stool - Gemeenskap saal	4	S/R				5,500		1
3.2.6.4.50	10 X Staatafels - Gemeenskap saal	4	S/R	9,000					1
3.2.6.4.51	1 X Kateder - Gemeenskapsaal	4	S/R	2,000					1
3.2.6.10.38	Randsnyers - Openbare Werke	4	S/R		7,000			7,200	1
3.3.2.44	2 X 4 Drawer filing cabinet - HFD	4	S/R	1,700					1
3.5.1.11	Diefwering & Veiligheidshek - Kassiere	4	S/R	20,000					1
3.5.4.10	Teel van Vloer - Groenie die Drake	4	S/R			8,000			1
1.1.2.3	Opgradering van Strate	4	S/R	2,940,978	3,096,591			7,331,250	MIG
1.4.6.1	250 Sub Ekonomiese Huise - S/R	4	S/R	1,000,000					DME
1.5.4.5	Nuwe Oksidasiedamme - Fase 2	4	S/R				715,468		MIG
3.2.6.6.14	Book Detection System - S/R	4	S/R				150,000		BIB

STILBAAI

Introduction

Stilbaai is located on the river mouth of the Goukou River. It is also the largest coastal town in Hessequa. Even though it is a holiday retreat for a large amount of people, economic activity continues during the year due to the large amount of permanent residents in Stillbay. Stilbaai also serves as primary job creating economy for the community of Melkhoutfontein. Stilbaai is characterised by the river running through the town and dividing it in two areas known as Stilbaai East and Stilbaai West.

Population Group & Gender Totals						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	51	53	402	470	1083	2142
Coloured	138	54	4389	4076	14639	17358
Indian or Asian	0	2	9	31	30	100
White	1215	1424	1848	1808	5622	5766
Other	0	15	0	38	0	158
Total	1404	1549	6648	6424	21374	25525
Female						
Black African	12	70	247	282	741	1763
Coloured	173	60	4513	4050	16076	18711
Indian or Asian	3	2	6	36	15	99
White	1420	1821	1459	1659	5933	6467
Other	0	12	0	20	0	76
Total	1607	1965	6226	6047	22765	27117
Total	2001	2011	2001	2011	2001	2011
Black African	63	123	650	752	1824	3906
Coloured	311	114	8903	8126	30715	36069
Indian or Asian	3	5	15	67	45	199
White	2634	3245	3306	3467	11555	12233
Other	0	28	0	59	0	235
Total	3012	3514	12874	12471	44139	52642

Language Use						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	2702	2792	12349	11564	42058	47548
English	271	451	243	416	1153	1851
IsiXhosa	15	5	206	177	742	1066
Other	24	267	75	314	186	2177
Total	3012	3514	12874	12471	44139	52642

Age Groups						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	349	262	3549	3276	11933	12826
15 - 35	518	420	4501	3859	14136	15483
36 - 65	1358	1360	4232	4595	14499	18952
66 - 120	786	1471	592	741	3571	5381
Total	3012	3514	12874	12471	44139	52642

Education Levels						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	95	10	1527	773	3683	2181
Grade 1 / Sub A	48	20	517	347	1746	1358
Grade 2 / Sub B	35	29	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	49	19	605	498	1803	1743
Grade 4 / Std 2	42	22	751	609	2192	2122
Grade 5 / Std 3/ABET 2	53	23	841	638	2625	2198
Grade 6 / Std 4	72	43	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	62	28	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	152	146	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	74	61	623	791	2539	3689
Grade 10 / Std 8 / Form 3	404	268	668	893	3295	4545
Grade 11 / Std 9 / Form 4	94	82	287	310	1254	1898
Grade 12 / Std 10 / Form 5	1036	1267	1325	1710	5645	8539
Tertiary	696	1131	608	843	2967	3829
Other	100	364	1235	1527	3863	7082
Total	3012	3514	12874	12471	44139	52642

Official Employment Status						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	818	729	5399	5290	14103	17052
Unemployed	36	33	258	225	2304	2803
Other	939	927	2997	2860	11870	14132
Total	1793	1689	8655	8376	28277	33987

Dwelling Type						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	1309	1720	3393	3540	11982	15009
Informal	9	8	102	74	529	772
Other	33	7	25	32	119	91
Total	1351	1735	3519	3646	12630	15873

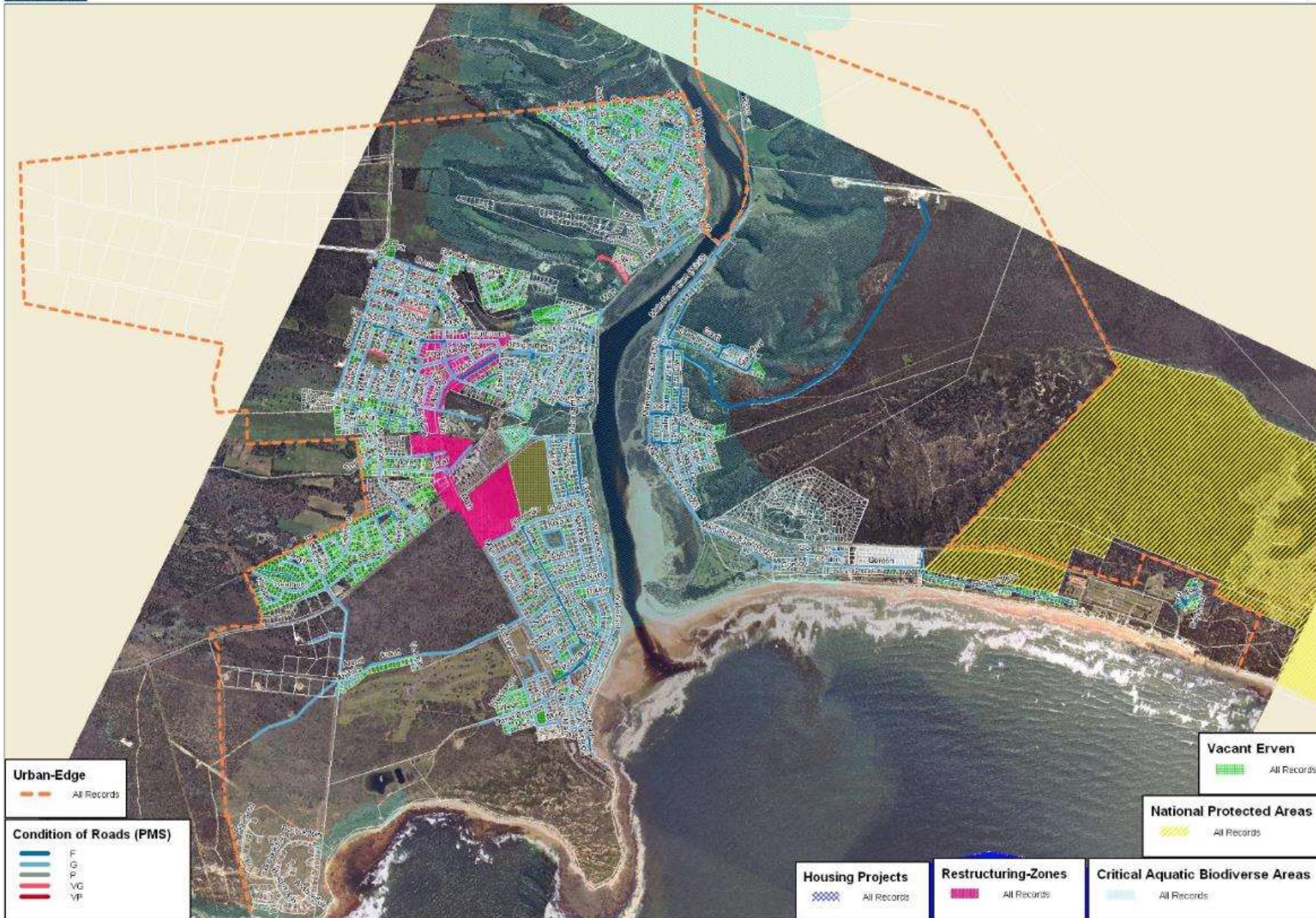
Annual Household Income						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	138	177	116	247	793	1248
R 1 - R 4800	15	11	108	28	450	275
R 4801 - R 9600	73	11	688	78	2026	470
R 9601 - R 19 600	126	85	1073	555	2904	2241
R 19 601 - R 38 200	247	130	777	1011	2965	3579
R 38 201 - R 76 400	362	356	375	755	1848	3570
R 76 401 - R 153 800	253	415	235	461	1086	2274
R 153 801 - R 307 600	95	366	71	280	376	1423
R 307 601 - R 614 400	12	126	25	158	64	567
R 614 001 - R 1 228 800	13	31	24	54	55	137
R 1 228 801 - R 2 457 600	7	13	18	10	40	47
R 2 457 601 or more	9	12	9	11	24	41
Unspecified	0	1	0	0	0	1
Total	1351	1735	3519	3646	12630	15873

Access to Water Services						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	1327	1726	3084	3370	12010	15508
Piped (tap) water >200m	24	0	127	27	238	46
No access to piped (tap) water	9	9	279	249	306	319
Other	0	0	52	0	76	0
Total	1360	1735	3543	3646	12631	15873

Toilet Facilities						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	1306	1719	878	1755	8509	12807
Flush toilet (with septic tank)	6	6	1180	957	1993	1589
Chemical toilet	0	0	31	20	69	23
Pit toilet with ventilation (VIP)	0	0	377	402	468	494
Pit toilet without ventilation	3	0	415	277	487	336
Bucket toilet	15	0	173	38	317	151
None	30	5	490	133	788	299
Other	0	5	0	63	0	173
Total	1360	1735	3543	3646	12631	15873

Energy Source for Lighting						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	1309	1721	2394	3101	10917	15063
Gas	0	2	12	23	21	41
Paraffin	0	0	48	13	78	29
Candles (not a valid option)	51	4	1022	448	1533	617
Solar	0	9	12	52	18	87
Other	0	0	55	9	64	36
Total	1360	1735	3543	3646	12631	15873

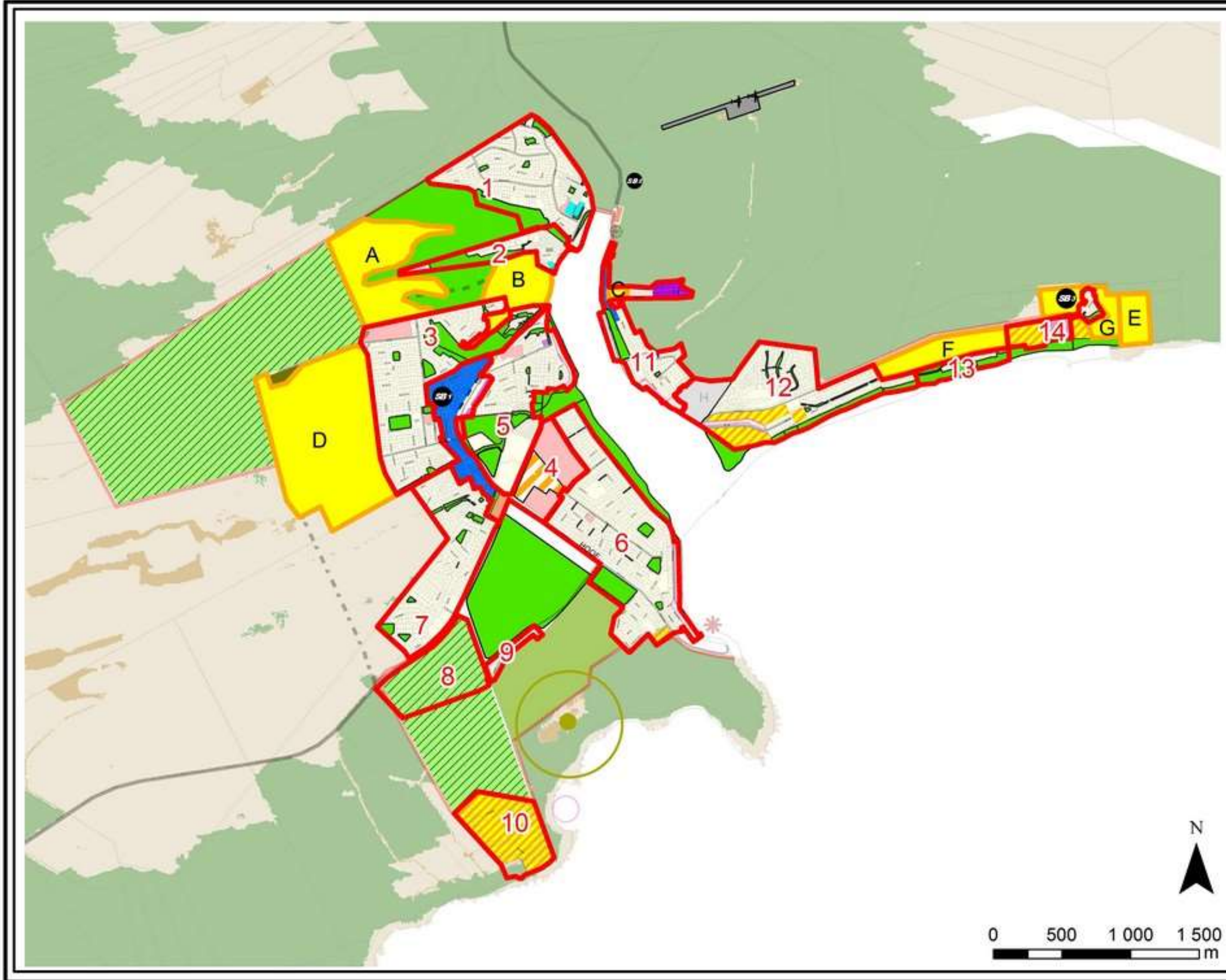
Refuse Removal						
	Stilbaai		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	1258	1702	254	531	9051	12493
Removed by local authority less often	0	1	24	78	27	94
Communal refuse dump	3	4	189	122	239	191
Own refuse dump	93	24	3040	2398	3266	2523
No rubbish disposal	6	0	36	228	48	252
Other	0	4	0	289	0	320
Total	1360	1735	3543	3646	12631	15873



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↑
 MN (25.7° W)

0 600 1200 1800 2400 3000 ft
 Data Zoom: 13-3



HESSEQUA



RUIMTELIKE
ONTWIKKELINGS-
RAAMWERK

GROEIBESTUURSPLAN:
STILBAAI

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSSONE	HUIDIGE DICHTEID*	VOORGESTELDE VERDIGTINGSTEKENS*	ADDSIELE EENHED
1	6	6	81
2	8	9	22
3	7	8	89
4	2	2	83
5	9	10.5	128
6	8	8.5	104
7	10	11.5	88
8	1		
9	12		
10	3		
11	7	8	88
12	7		
13	4		
14	2		
TOTAL	6	7.5	576

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

NUWE ONTWIKKELINGS SONES	AREA*	DICHTEID (u/ha)	EENHED
A	38	10	380
B	18	10	180
C	1	15	15
D	87	15	1305
E	8	15	120
F	15	10	150
G	12	10	120
TOTAL	179	13	2270

* Bruto Ontwikkelings Area (ha)

BRON:
INDENNITY

DATE:	MARCH 2012	CLIENT:	HESSEQUA
SCALE:	SEE LINESCALE		MUNISIPALITEIT
PLAN NO:	15.12		
FILE NAME:			

URBAN DYNAMICS WESTERN CAPE
 100% CONSULTANTS
 SEA VIEW BUILDING
 NO. 2 DUWOOD ROAD
 BELLVILLE - TOWN
 PO BOX 2445
 BELLVILLE
 7535
 TEL: 021 949 1949
 FAX: 021 949 1988
 e-mail: urd@urdc.co.za (Project Manager)

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

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Planned Capital Budget Programme for Stilbaai

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.8	- Melkhoufontein	1	S/B			200,000	200,000	230,000	2
1.1.3.1.7	- Melkhoufontein	1	S/B		200,000				2
1.2.2.7	Spaar Waterpompe - MHFT	1	S/B	40,000					1
1.2.2.8	Vervanging van ou Waternetwerk	1	S/B	570,000	250,000	250,000	250,000	250,000	2
1.2.3.7	Opgradering van Olive Grove watersuiwering	1	S/B			1,000,000			2
1.2.4.1	Omheining van Reservoirs-oosdam/Olienhoufontein	1	S/B		100,000	100,000			2
1.4.1.4	Installeer 66/11KV - Hoofstasie	1	S/B	19,000,000	7,400,000				3
1.4.2.7	Opgradeer Substasies - Stilbaai Oos	1	S/B	220,000					2
1.5.2.8	Opgradering van pompstasie - MHFT	1	S/B	120,000	120,000				1
2.5.11	Teel van saal vloer - MHFT	1	S/B	50,000					1
2.5.12	Kombuiskaste - MHFT	1	S/B		15,000				1
2.7.7	Ontwikkeling van Tuin op die Brak	1	S/B	50,000	30,000	20,000			1
2.8.5.1	Opgradering van Kamp-Vervang van Dakke	1	S/B	100,000	100,000	150,000			1
2.8.5.2	Randstene om staanplekke af te baken	1	S/B		50,000	50,000	50,000		1
2.8.5.3	Plavei van ingang na chalets	1	S/B		60,000	60,000			2
2.8.5.4	Omheining van kamp - Hoofweg-Oos	1	S/B	96,000	20,000				1
2.8.5.5	Herstel & Seel van paale	1	S/B		100,000	150,000	150,000		2
2.8.5.6	Vervanging van heining	1	S/B			172,000			2
2.8.5.7	Teel van Charlets se vloere	1	S/B		60,000	35,000	40,000		1
2.8.5.8	Opgradering van Kantoor	1	S/B			30,000	30,000		2
2.8.5.9	Speelpark	1	S/B			8,000			1
2.8.5.10	Paving rondom Charlets en ablusieblokke	1	S/B		80,000	70,000	60,000		2
2.8.6.1	Herbou van Strate & Voorsien Stormwater	1	S/B	120,000	140,000	150,000			1
2.8.6.2	Vervang plaveisel by A-tipe chalets	1	S/B		60,000	70,000			2
2.8.6.3	Toiletfasiliteite in B tipe Charlets	1	S/B		150,000	150,000	150,000		2
2.8.6.4	Teel van B blok	1	S/B				42,000		2
2.8.6.5	Opgradering van Kantoor	1	S/B		20,000	30,000	30,000		2
2.8.6.6	Speelpark	1	S/B			8,000	8,000		1
2.8.6.7	Opgradering van Kamp	1	S/B		80,000	80,000	80,000		2
3.2.4.6	Kudu Grassnyer - Parke - Preekstoel	1	S/B			35,000			2
3.2.4.7	Kudu Grassnyer - Parke - Ellensrust	1	S/B		35,000				1
3.2.6.3.7	Vervanging van mat by Krieketklub - MHFT	1	S/B			16,000			1
3.2.6.3.8	Grenstou - MHFT	1	S/B			10,000			1
3.2.6.3.9	10 X tafels - Seagulls - MHFT	1	S/B			10,000			1
3.2.6.3.10	60 X Stoele - Seagulls - MHFT	1	S/B			12,000			1
3.2.6.3.11	1 X Yskas - Seagulls - MHFT	1	S/B			5,000			1
3.2.6.3.12	1 X Stool - Seagulls - MHFT	1	S/B			6,000			1
3.2.6.3.13	1 X Um - Seagulls - MHFT	1	S/B			800			1
3.2.6.4.22	1 X Mikrogoelvoond - MHFT	1	S/B	1,000					1
3.2.6.4.23	1 X Stool - MHFT	1	S/B				6,000		1
3.2.6.4.24	50 X Plastiekstoele - MHFT	1	S/B				5,500		1
3.2.6.4.25	5 X Staalafels - MHFT	1	S/B				4,000		1
3.2.6.4.26	1 X Yskas - MHFT	1	S/B				5,000		1
3.2.6.4.27	Wireless Handheld System - MHFT	1	S/B				3,200		1
3.2.6.4.28	Behringer Pmp 980 - MHFT	1	S/B				5,200		1
3.2.6.4.29	Kas vir Klanktoerusting - MHFT	1	S/B				1,700		1
3.2.6.4.30	Speakers - MHFT	1	S/B				2,800		1
3.2.6.5.12	2 X Kantoorstoele	1	S/B			3,000			1
3.2.6.5.13	Lugversorger	1	S/B			8,000			1
3.2.6.5.14	Gereedskap vir kamp	1	S/B			7,000	10,000		1
3.2.6.5.15	Yskaste	1	S/B	4,200	5,000	6,000	13,000		1
3.2.6.5.16	Stowe	1	S/B	4,600	6,000	7,000			1
3.2.6.5.17	Mikrogoelvoonde	1	S/B	3,000	3,000	5,000			1

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.2.6.5.18	Ketels	1	S/B	1,000	500	500			1
3.2.6.5.19	Matrasse	1	S/B			15,000			1
3.2.6.5.20	Breekgoed & Eetgerei	1	S/B			8,000			1
3.2.6.5.21	Kantoorstoel	1	S/B			1,500			1
3.2.6.5.22	Lugversorger	1	S/B			8,000			1
3.2.6.5.23	Gereedskap vir kamp	1	S/B			10,000	6,000		1
3.2.6.5.24	10 X Yskaste	1	S/B	20,000		15,000	10,000		1
3.2.6.5.25	Tafels & Stoele	1	S/B	20,000	20,000	10,000	6,000		1
3.2.6.5.26	Matrasse	1	S/B	40,000	30,000		35,000		1
3.2.6.5.27	3 X Ums	1	S/B	3,000					1
3.2.6.5.28	Wasmasjien	1	S/B			5,000			1
3.2.6.10.31	Randsnyers - Preekstoel / MHFT	1	S/B		7,000				1
3.2.6.10.32	Randsnyer - Ellensrust	1	S/B	6,800			7,200		1
3.2.6.10.36	Kanonspuit - Sport - MHFT	1	S/B			25,000			2
1.2.2.18	Opgradering van netwerk te Palinggat	3	S/B	200,000					2
1.4.2.5	Opgrader Substasies - Wes / Jongensfontein	3	S/B		300,000				2
1.5.2.4	Opgradering van Clarifier	3	S/B		130,000				1
1.5.2.5	Opgradering van pompstasie - Bosbokduin	3	S/B			50,000			2
1.5.2.6	Opgradering van pompstasie no. 6	3	S/B	200,000					1
1.5.2.7	Stainless steel ketting vir pompstasie	3	S/B			30,000			1
1.5.2.9	Opgradering van pompstasie no. 7 - Green Drop	3	S/B		50,000				1
1.5.2.10	Opgradering van pompstasie no. 8 - Green Drop	3	S/B	50,000					1
1.5.2.14	Emergency Generator - Pump station nr. 3	3	S/B	280,000					2
1.5.2.15	Opgradering pompstasie nr 1 - Groen druppel	3	S/B	320,000					2
3.2.4.5	Kudu Grassnyer - Parke	3	S/B				35,000		2
3.2.6.4.31	Wireless Handheld System - Stadsaal	3	S/B				3,200		1
3.2.6.4.32	Behringer Pmp 980 - Stadsaal	3	S/B				5,200		1
3.2.6.4.33	Kas vir Klanktoerusting - Stadsaal	3	S/B				1,700		1
3.2.6.4.34	Speakers & Amplifier - Stadsaal	3	S/B				7,700		1
3.2.6.4.35	1 X Mikrogolfoond - Stadsaal	3	S/B				800		1
3.2.6.4.36	Trolley Mop - Stadsaal	3	S/B				1,800		1
3.2.6.4.37	1 X Stofsuier - Stadsaal	3	S/B				1,000		1
3.2.6.10.33	Hoëdrukspuit - Riool	3	S/B		120,000				1
1.1.1.1.7	- Stilbaai (66 007m) - Steadfray Ln	1,3	S/B		800,000	1,100,000	1,180,000	1,220,000	2
1.1.3.1.5	- Stilbaai - Steadfray Ln	1,3	S/B			320,000			2
1.1.3.2.5	- Stilbaai/MHF/JFT	1,3	S/B		300,000	300,000			2
1.2.2.9	Opgradering van Watertoevoer	1,3	S/B	1,450,000	1,000,000	2,200,000			2
1.2.4.4	New Bulk Water supply - S/B & MHFT	1,3	S/B				408,174		1
1.4.4.5	Opgradering van Netwerk - Stilbaai Wes/Oos	1,3	S/B	1,200,000	750,000	750,000	800,000	800,000	2
1.5.1.8	New Bulk Sewer Supply - S/B & MHFT	1,3	S/B				315,178		1
1.5.1.9	Opgradering van Rioolwerke	1,3	S/B	1,500,000	1,500,000				2
1.7.1.2	Hooppad 322 - Landelike vullis	1,3	S/B	50,000					1
2.7.8	Opgradering van Amti teater - Lapskuit	1,3	S/B	60,000	40,000				1
3.1.2.1	Vuka motorfiets - Water	1,3	S/B			12,000			1
3.1.3.13	1 X 5m3 Tipper - Openbare Werke	1,3	S/B	700,000			750,000		2
3.1.3.14	1 X 3ton Vragmotor - Parke	1,3	S/B		350,000				1
3.1.3.15	LAW - Water	1,3	S/B					250,000	2
3.1.3.16	LAW - OW / Elektries	1,3	S/B		240,000		250,000		2
3.1.3.17	Cherry Picker - Elektries	1,3	S/B			900,000			2
3.1.3.18	Dubbelkajuit Vragmotor - Openbare Werke	1,3	S/B					450,000	2
3.2.1.7	Roller 2.7 ton - Openbare Werke	1,3	S/B	350,000					1
3.2.6.1.3	Rioolrods	1,3	S/B	5,500	5,500	5,700	5,800	5,800	1
3.2.6.10.29	Randsnyers - Parke	1,3	S/B	13,600	14,000	14,000	14,400	14,400	1
3.2.6.10.30	1 X BG66D Blower - Parke	1,3	S/B	6,000					1
3.2.6.10.34	Betonmenger - Openbare Werke	1,3	S/B		50,000				1

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
3.2.6.10.35	Teemasjien - Openbare Werke	1,3	S\B			30,000			2
3.5.4.7	Veiligheidsheining Skietbaan - Stilbaai	1,3	S\B			15,000			1
3.5.4.8	Opgradering van Tennisbaan	1,3	S\B		30,000			35,000	1
1.4.6.2	180 Sub Ekonomiese Huise - MHFT	1	S\B	2,000,000	1,000,000				DME
1.4.6.3	250 Sub Ekonomiese Huise - MHFT	1	S\B	1,000,000	1,000,000				DME
1.4.6.4	300 Sub Ekonomiese Huise - Mhft/Heidelb.	1	S\B		2,000,000				DME
3.2.6.6.12	Book Detection System - MHFT	1	S\B				165,000		BIB
5.1.1	Lae Koste Behuising Beplanning - MHFT	1	S\B						BEH
5.1.3	Lae Koste Behuising - Dienste - MHFT	1	S\B						BEH
5.1.4	Lae Koste Behuising - Tops - MHFT	1	S\B						BEH
1.2.7.1	New Bulk Water supply - S/B & MHFT	1,3	S\B		1,832,697	1,840,870			MIG
1.5.4.4	New Bulk Sewer Supply - S/B & MHFT	1,3	S\B		1,575,894	1,260,716			MIG
3.2.6.6.11	4 X Desk Computers - S/B	1,3	S\B	8,000					BIB

WITSAND

Introduction

Witsand is a coastal town located next to the river mouth of the Breederiver. It is a popular holiday destination during holiday seasons. Witsand also enjoys a rich heritage of being a “whale nursery” and serves as an ideal whale spotting destination for whale watchers. The economy of Witsand is heavily dependent on seasonal visitors and the tourism industry.

Population Group & Gender Totals						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Male						
Black African	0	16	402	470	1083	2142
Coloured	6	4	4389	4076	14639	17358
Indian or Asian	0	0	9	31	30	100
White	94	145	1848	1808	5622	5766
Other	0	3	0	38	0	158
Total	100	168	6648	6424	21374	25525
Female						
Black African	3	15	247	282	741	1763
Coloured	12	4	4513	4050	16076	18711
Indian or Asian	0	0	6	36	15	99
White	87	135	1459	1659	5933	6467
Other	0	0	0	20	0	76
Total	102	153	6226	6047	22765	27117
Total	202	321	12874	12471	44139	52642

Language Use						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Afrikaans	139	225	12349	11564	42058	47548
English	60	81	243	416	1153	1851
IsiXhosa	3	0	206	177	742	1066
Other	0	15	75	314	186	2177
Total	202	321	12874	12471	44139	52642

Age Groups						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
0 - 14	9	15	3549	3276	11933	12826
15 - 35	15	27	4501	3859	14136	15483
36 - 65	115	176	4232	4595	14499	18952
66 - 120	63	104	592	741	3571	5381
Total	202	321	12874	12471	44139	52642

Education Levels						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
No schooling	6	1	1527	773	3683	2181
Grade 1 / Sub A	3	0	517	347	1746	1358
Grade 2 / Sub B	0	1	398	444	1219	1524
Grade 3 / Std 1/ABET 1Kha Ri Gude;SANLI	0	2	605	498	1803	1743
Grade 4 / Std 2	0	1	751	609	2192	2122
Grade 5 / Std 3/ABET 2	0	1	841	638	2625	2198
Grade 6 / Std 4	6	4	1248	872	3397	2984
Grade 7 / Std 5/ ABET 3	0	4	1210	1060	4023	3872
Grade 8 / Std 6 / Form 1	6	12	1032	1155	3888	5078
Grade 9 / Std 7 / Form 2/ ABET 4	3	5	623	791	2539	3689
Grade 10 / Std 8 / Form 3	21	25	668	893	3295	4545
Grade 11 / Std 9 / Form 4	0	2	287	310	1254	1898
Grade 12 / Std 10 / Form 5	91	113	1325	1710	5645	8539
Tertiary	63	129	608	843	2967	3829
Other	3	22	1235	1527	3863	7082
Total	202	321	12874	12471	44139	52642

Official Employment Status						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Employed	60	104	5399	5290	14103	17052
Unemployed	0	10	258	225	2304	2803
Other	65	80	2997	2860	11870	14132
Total	125	194	8655	8376	28277	33987

Dwelling Type						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Formal	121	173	3393	3540	11982	15009
Informal	0	0	102	74	529	772
Other	0	3	25	32	119	91
Total	121	175	3519	3646	12630	15873

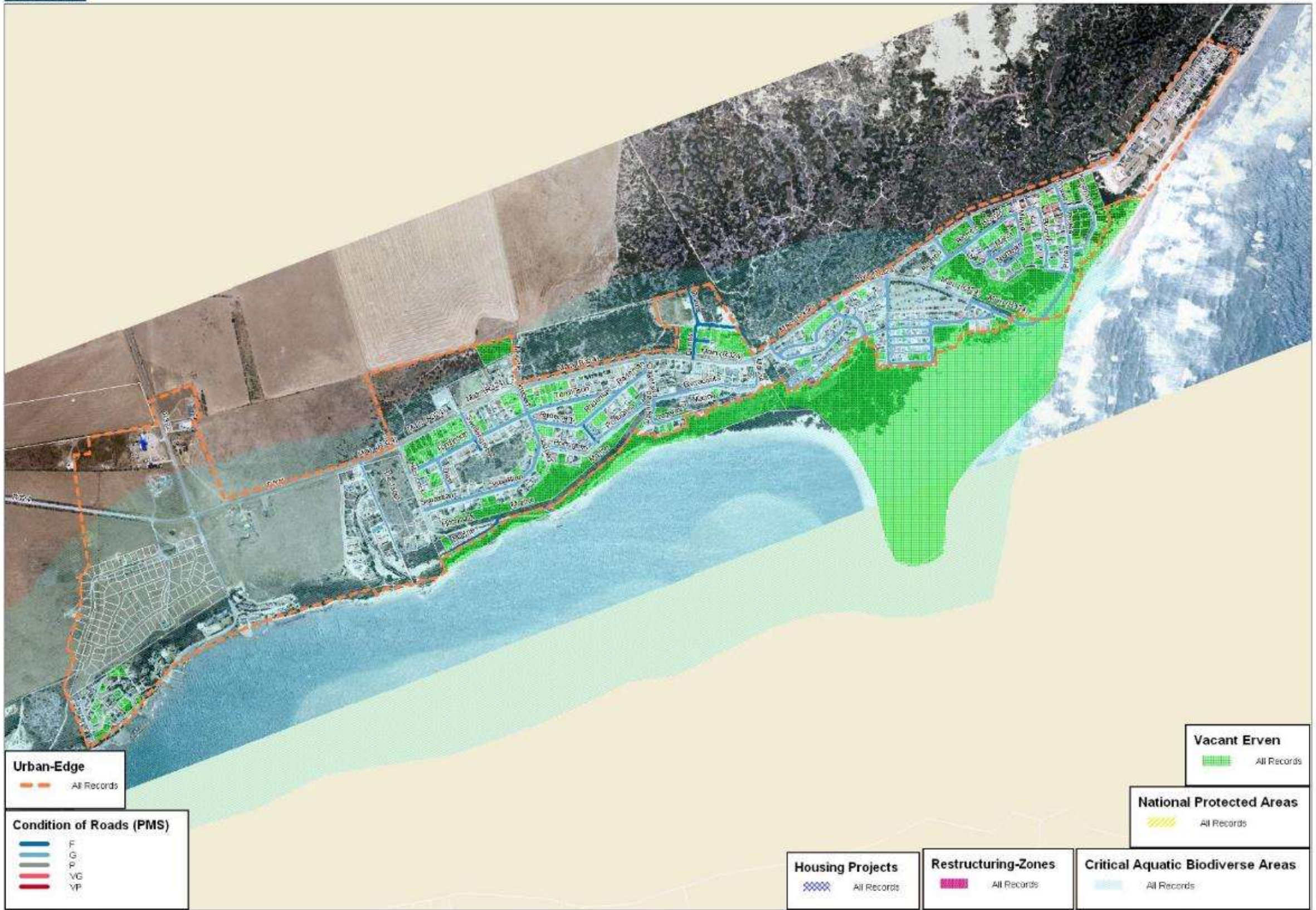
Annual Household Income						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
No income	10	12	116	247	793	1248
R 1 - R 4800	0	0	108	28	450	275
R 4801 - R 9600	24	3	688	78	2026	470
R 9601 - R 19 600	37	10	1073	555	2904	2241
R 19 601 - R 38 200	20	12	777	1011	2965	3579
R 38 201 - R 76 400	13	23	375	755	1848	3570
R 76 401 - R 153 800	9	47	235	461	1086	2274
R 153 801 - R 307 600	3	38	71	280	376	1423
R 307 601 - R 614 400	6	19	25	158	64	567
R 614 001 - R 1 228 800	0	7	24	54	55	137
R 1 228 801 - R 2 457 600	0	1	18	10	40	47
R 2 457 601 or more	0	4	9	11	24	41
Unspecified	0	0	0	0	0	1
Total	121	175	3519	3646	12630	15873

Access to Water Services						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Piped (tap) water <200m	122	175	3084	3370	12010	15508
Piped (tap) water >200m	3	0	127	27	238	46
No access to piped (tap) water	0	0	279	249	306	319
Other	0	0	52	0	76	0
Total	125	175	3543	3646	12631	15873

Toilet Facilities						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Flush toilet (connected to sewerage system)	75	40	878	1755	8509	12807
Flush toilet (with septic tank)	50	135	1180	957	1993	1589
Chemical toilet	0	0	31	20	69	23
Pit toilet with ventilation (VIP)	0	0	377	402	468	494
Pit toilet without ventilation	0	0	415	277	487	336
Bucket toilet	0	0	173	38	317	151
None	0	0	490	133	788	299
Other	0	1	0	63	0	173
Total	125	175	3543	3646	12631	15873

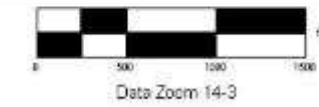
Energy Source for Lighting						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Electricity	125	174	2394	3101	10917	15063
Gas	0	0	12	23	21	41
Paraffin	0	0	48	13	78	29
Candles (not a valid option)	0	2	1022	448	1533	617
Solar	0	0	12	52	18	87
Other	0	0	55	9	64	36
Total	125	175	3543	3646	12631	15873

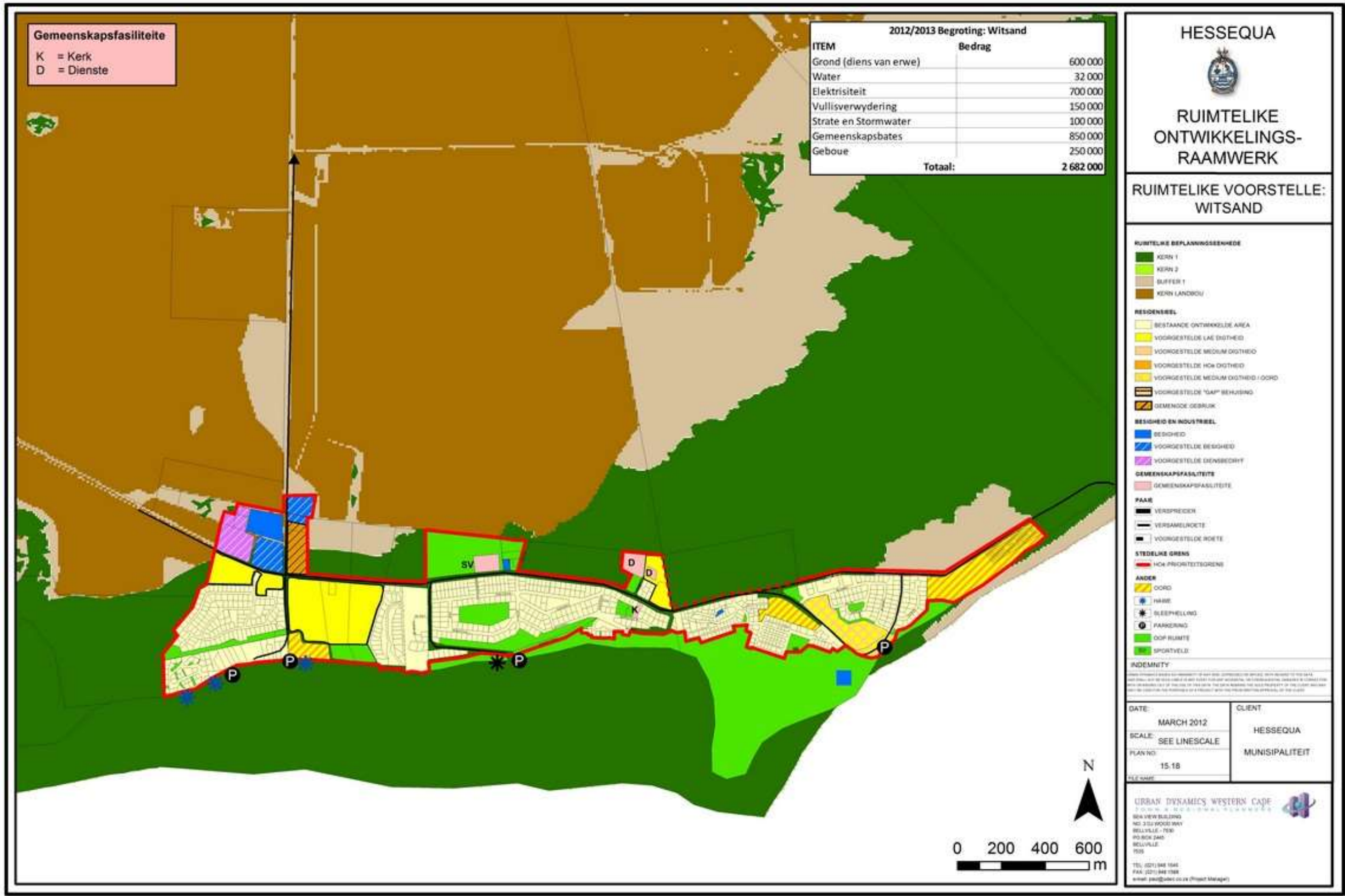
Refuse Removal						
	Witsand		Rural		Total	
	2001	2011	2001	2011	2001	2011
Removed by local authority at least once a week	125	174	254	531	9051	12493
Removed by local authority less often	0	0	24	78	27	94
Communal refuse dump	0	1	189	122	239	191
Own refuse dump	0	0	3040	2398	3266	2523
No rubbish disposal	0	0	36	228	48	252
Other	0	0	0	289	0	320
Total	125	175	3543	3646	12631	15873

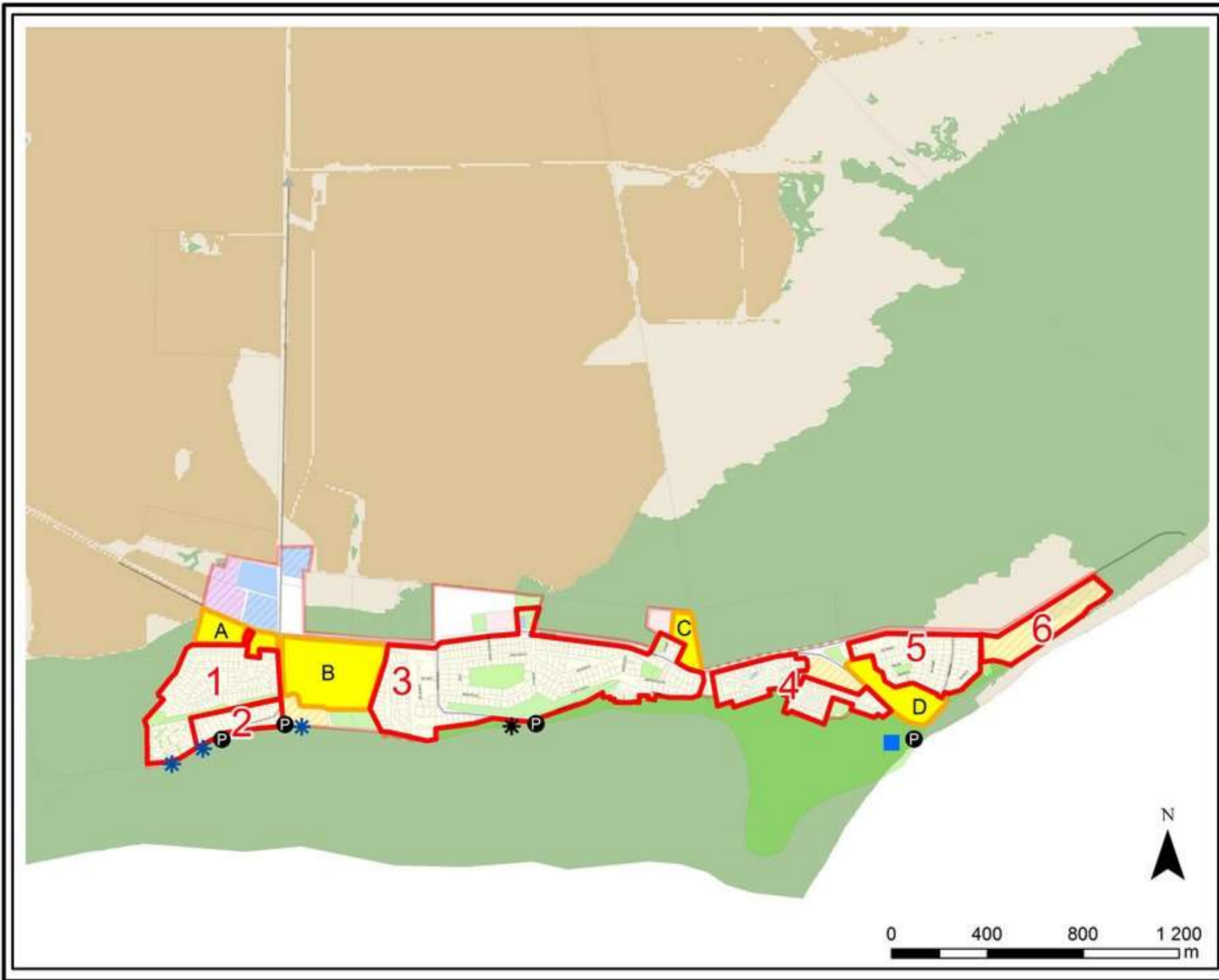


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 MN (25.5° W)







HESSEQUA


RUIMTELIKE ONTWIKKELINGS-RAAMWERK

GROEIBESTUURS PLAN: WITSAND

BESTAANDE STEDELIKE GEBIED

VERDIGTINGSZONE	SONE	RIJSGE DICHTEID	VOORGESTELDE VERDIGTINGSTEKEN	ADDSIONELE EENHEDE
1	1	10		
2	2	5		
3	3	7		
4	4	14		
5	5	10		
6	6	14		
TOTAL	10			0

* per Bruto Area (ha)

STEDELIKE ONTWIKKELINGS GEBIED

SONE	AREA*	DICHTEID (u/ha)	EENHEDE
A	3	10	30
B	11	10	110
C	2	20	40
D	5	20	100
TOTAL	21	13	280

* Bruto Ontwikkelings Area (ha)

BRON:
INDEMNITY

DATE:	CLIENT:
MARCH 2012	HESSEQUA
SCALE: SEE LINESCALE	MUNISIPALITEIT
PLAN NO: 15.19	

URBAN DYNAMICS WESTERN CAPE
SEA VIEW BUILDING
NO. 3 OXWOOD ROAD
BELLVILLE - 7520
PO BOX 3445
BELLVILLE
7520

TEL: 021 948 1240
FAX: 021 948 1288
www.urbandynamics.co.za (Project Manager)

Integrated Spatial Planning

The map on the foldout page before this section was developed to show the progress that was made in terms of integrated planning. The following information can be found on the maps:

- The complete road network with names have been layered with colour coding of the quality of the road surface according to the municipal pavement management system. All budget priorities in terms of roads are prepared, with consideration to public inputs, from this system. The categories for the quality of the roads are marked VG (Very Good), G (Good), F (Fair), P (Poor) and VP (Very Poor)
- Another layer that is of high importance to all municipal planning is the Fine scale Biodiversity layer that displays aquatic areas that are sensitive and either needs protection or management
- For more information on the Spatial Development Framework Maps, please contact the local municipal office, or peruse the document at the local library.

This overlaid information is of utmost importance to any ward councillor, developer, investor or interested resident who wants to know what is going to be done the mapped area and how the Council sees development to take place in the future.

Planned Capital Budget Programme for Witsand

Capital Expenditure Schedule 2014-2019

#	Description	Wrd	Town	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	F
1.1.1.1.6	- Witsand (13 848m)	4	W/S		500,000	500,000	550,000	560,000	2
1.1.1.3.3	- Witsand (200m)	4	W/S	320,000					1
1.1.3.1.3	- Witsand	4	W/S		220,000				1
1.1.3.2.3	- Witsand	4	W/S		100,000	150,000			2
1.2.2.6	Opgradering van Hooftoevoer	4	W/S				1,000,000	500,000	2
1.2.3.4	Spaarboorgatpompe	4	W/S		40,000		40,000		1
1.2.3.5	Kleurverwyderingsaanleg	4	W/S			950,000			2
1.4.1.2	Opgradeer 11KV Hoofsubstasie	4	W/S	450,000	250,000	260,000	300,000		2
1.4.2.3	Opgradeer Substasies	4	W/S	520,000	300,000	330,000	350,000		2
1.4.4.3	Opgradering van Netwerk	4	W/S	360,000					2
1.5.1.1	Vloeiometer vir riool	4	W/S		100,000				1
1.7.1.1	Vullisoorlaaistasio & Add Selle Bourommel	4	W/S	150,000	100,000	150,000			1
2.4.1	Opgradering van Jetty's	4	W/S	250,000					1
2.8.2.1	Opgradering van kamp	4	W/S		50,000	50,000	50,000	50,000	2
2.8.2.2	Elektroniese hek by ingang	4	W/S	26,000	10,000				1
2.8.2.3	Omheining van kamp	4	W/S	35,000	25,000	25,000			1
2.8.2.4	Opgradering van kantoor	4	W/S		10,000	20,000			2
2.8.3.1	Opgradering van kamp	4	W/S			50,000	50,000	50,000	2
2.8.3.2	Nuwe kaste in huise	4	W/S	30,000	25,000	25,000			1
2.8.3.3	Teel van mure - ablusiefasiteite	4	W/S	30,000					1
2.8.3.4	Vervanging van heining	4	W/S			20,000	20,000		2
3.1.3.8	1 X 5m3 Tipper - Openbare Werke	4	W/S					750,000	2
3.2.2.3	Fiat Trekker 780 - Openbare Werke	4	W/S			500,000			2
3.2.6.4.17	80 X Plastiekstoele - De Duine saal	4	W/S				8,000		1
3.2.6.4.18	10 X Staaltafels - De Duine saal	4	W/S			8,000			1
3.2.6.4.19	1 X Yskas - De Duine saal	4	W/S				4,500		1
3.2.6.4.20	1 X Stoof - De Duine saal	4	W/S			5,000			1
3.2.6.4.21	Mikrogolfoond - De Duine saal	4	W/S				800		1
3.2.6.5.2	2 X Kantoorstoele	4	W/S			3,000			1
3.2.6.5.3	Lugversorger	4	W/S			8,000			1
3.5.2.2	Voertuigstoor	4	W/S		200,000				2
4.1	Suigtank - Riool	4	W/S				800,000		2