HEROLDS BAY

COUNTRY ESTATE

Socio-Economic Impact Assessment

December 2018

URBAN-ECON

Celebrate Development Diversity

Contents

1. Introduction

Urban-Econ Development Economists presents this socio-economic impact analysis of the proposed Herolds Bay Country Estate. The report is commissioned by GFA Holdings to form part of the EIA process and related planning submissions for the establishment of the proposed development.

URBAN-ECON has been in existence for nearly three decades and has developed an excellent reputation of providing quality professional services as one of the most authoritative firms in the field of development economics in South Africa. The firm has coordinated and managed various large projects, inclusive of data-related projects, analyses and, social and socio-economic impact assessments of projects and programs as well as strategic developmental projects. Throughout the years, the company has also managed to form a close team of specialists with extensive experience and expertise in various fields of studies positioning it in the forefront of development economics in the country.

URBAN-ECON is regarded as a leader in the market with respect to providing social and socio-economic impact assessment consulting services, given its expertise in applying, adding value and customising ***regional economic impact models and tools*** to ensure the various levels of development circumstances and market conditions can be isolated from the aggregated economic structure. The firm is known for its ability and skills in contextualising the quantified impact measures in the developmental milieu, thus taking cognisance of the functioning of the economy as an integral part of a broader system.

1.1. Purpose of the study

The purpose of this study is to determine the economic impacts on the regional economy from the construction and operation of the property development on the village of Herolds Bay and the wider George Municipality area. The study will also provide insight into the impacts on the regional property market and the societal impacts of the development.

This study will major risk factors and offer mitigation measures to prevent adverse economic and societal impacts, and ensure positive impacts of the development are maximised.

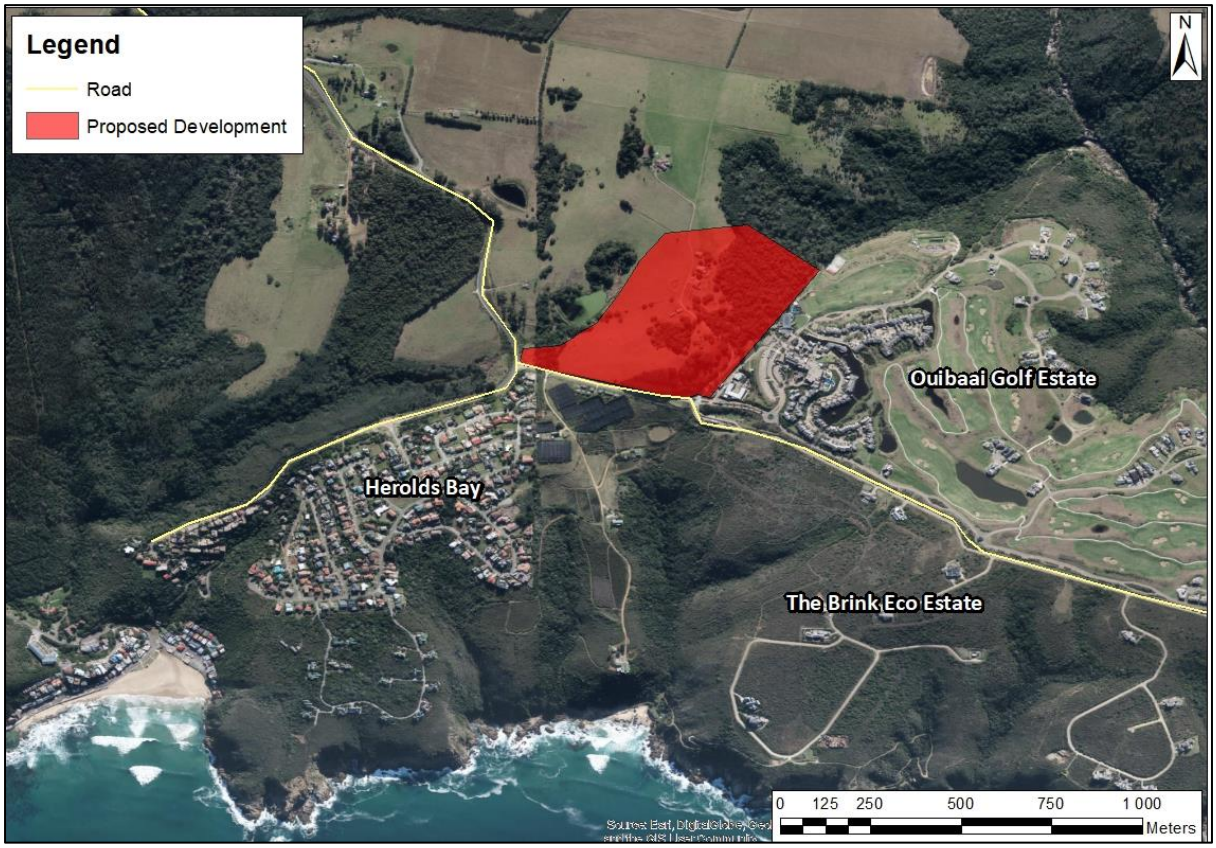
1.2. Locational context

The proposed development is to be constructed on a portion of portion 7 of the farm Buffelsfontein, Herolds Bay. The site is located directly north-east of the coastal village of

Herolds Bay, and west of the Oubaai Golf Estate. The site is bounded to the north and west by farmland.

The nearest major economic centre to the development is the town of George located ± 12.5km to the North-East. Other notable towns nearby include Mossel Bay (± 38km) and Knsyna (± 72km).

Figure 1.1: Site locality



Source: Urban-Econ GIS 2018

1.3. Report methodology

This report starts with a socio-economic assessment of the local municipality and the coastal village of Herolds Bay (including surrounding estates). Following this the report discusses the need for, and desirability of the development in the local and regional property market before conducting the economic impact analysis. The report then concludes with a discussion of impact management including a risk assessment and mitigation measures.

2. Socio-economic assessment

The following chapter provides an overview and discussion of the key demographic and economic statistics for the George Local Municipality to provide context for the economic impact analysis.

2.1. Demographic analysis

Table 2.1: Demographic summary

Variables		George LM
Population (2017)		207 625
Population (2011)		183 685
Population Growth Rate		2.17%
Number of Households		56 610
Average Household Size		3.7
Age profile	• < 4 • 5 – 14 • 15 – 34 • 35 – 64 • 64 >	• 9.3% • 17.25% • 34.85% • 32.42% • 6.19%
Gender profile	• Male • Female	• 101 527 (48.9%) • 106 088 (51.1%)
Level of Education	• No schooling • Some primary • Complete primary • Some secondary • Grade 12 • Higher	• 7.34% • 20.63% • 5.86% • 28.97% • 19.01% • 7.35%
Employment	• Employed • Unemployed • Not Economically Active	• 57.91% • 10.88% • 31.21%
Weighted Average Monthly Household Income (2011 inflation adjusted)		R 57 985.73

The population growth of the Eden District has been very consistent from 2001 to 2011. The average population growth rate from 2001 until 2011 is 2.36%. Currently Eden's population is growing slower than the Provincial Population (2.56%) but faster than the national average of

1.45%. George as the regional hub shows a higher growth rate, calculated at 2.63% for the period 2001 to 2011 – mainly due to high levels of in-migration.

In 2011 the population in George constitutes 3.33% of the Provincial total and 33.73% of the Eden District's total population. In 2017 the George LM population is estimated to be 207 625. The population growth rate between 2011 and 2017 is calculated at 2.17%. In terms of number of households the Census 2011 figures show 53 522 households in the George Municipal area, at an average size of 3.6 per household. By 2017 this had increased to 56 610 at an average of 3.7 persons per household.

More extensive Ward based data is available in the George Municipality Integrated Development Plan (2012 – 2017). George (and the Garden Route N2 Corridor including Knysna and Mosselbay) is considered an area of rapid growth within the national context. George has further been categorized as an area with high growth potential in the 2013 revision of the Growth Potential of Towns study by the Western Cape Government. Given the general increasing rates of urbanization across South Africa and the local context, the relatively high growth rates should at the very least be sustained over coming years. An annual growth rate of 2.75% is applied below for projection purposes.

George LM had 51 schools in 2014 which had to accommodate 34 158 learners. The proportion of no fee schools has increased from 66.7 per cent in 2012 to 70.6 per cent in 2014, indicating that, given the challenging economic climate, there may be an upsurge in the number of parents being unable to afford school fees. George LM has 8 Public FET Colleges whose mandate is to ensure that education, training and skills development initiatives respond to the economy, rural development challenges and an informed and critical citizenry.

According to recent statistics, ± 28% adults have matric or higher qualification in the George LM. The most recent available education statistics for the settlement of Herolds Bay are from the 2011 National Census. At this time, 58% of residents in the Herolds Bay area had a matric or higher qualification.

The employment rate in George LM is remarkably high compared to many other major towns within South Africa. At 2017, 57.91% of working age residents of George LM are employed with 10.88% unemployed. The number deemed 'Not Economically Active' stands at 31.21% of the working age population.

The average weighted household income for the George LM stands at R 57 985.73 (calculated based on 2011 Census income distribution data and adjusted for inflation to 2018 values).

2.2. Economic analysis

The George Local Municipality recorded a real average annual output growth of 3.23% over the period 1996 – 2000 and an average annual growth rate of 4.08% from 2000 – 2010. For the most recent period, considered the post-recession recovery period, the George LM recorded an average annual growth rate of 2.90%. Although lower than the preceding periods, this growth rate exceeds those of Provincial and National over the same period.

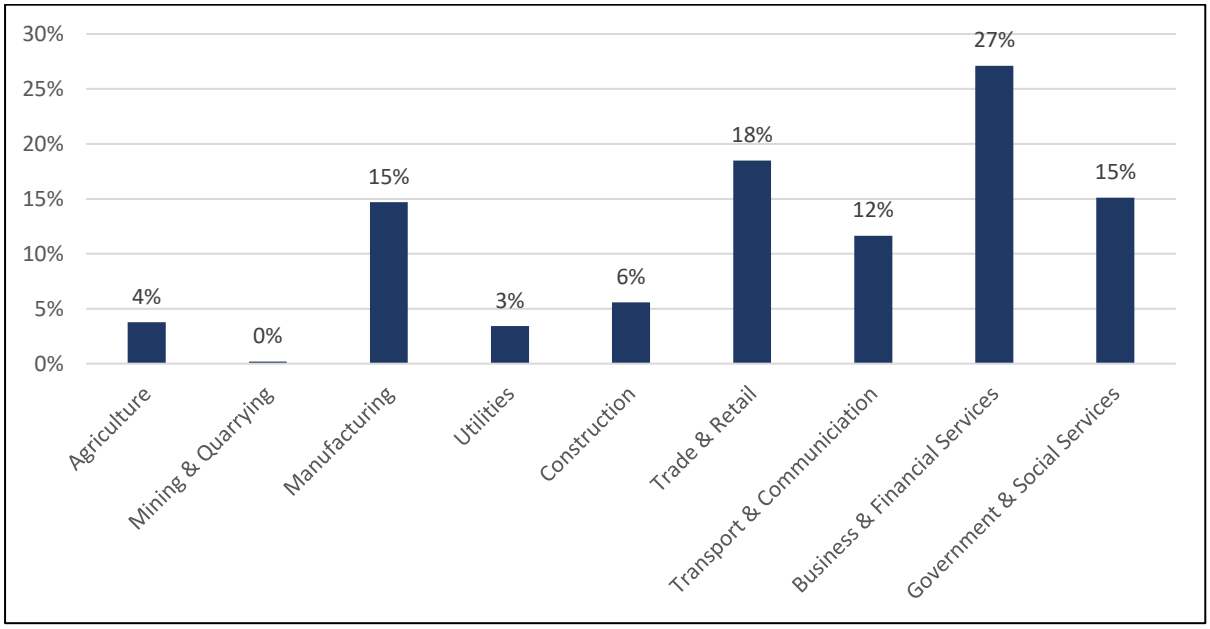
Over the longer term the structure of the economy in George has shifted slightly away from primary and secondary sectors (mainly Agriculture, Forestry and Manufacturing) to a more service driven economy, specifically Finance, Insurance, Real Estate and Business Services. General government's contribution to the economic output has declined slightly since 1996 but at 13.63% is still a large sector and this confirms both the size of local government and George's status as a regional hub providing higher order services.

Manufacturing grew at a relatively lower average rate than the economy in general and therefore its contribution to the economic output has declined. In 2009 manufacturing output in fact declined in real terms to numbers similar to that of 2005. The historic industries in terms of manufacturing, namely furniture and related manufacturing, continues to decline (-2.17% per annum for 2010 - 2013). Notable however are the interesting growth rates in very specific emerging niche manufacturing areas such as petroleum products, chemicals, rubber and plastic growing at 5.56% per annum for 2010 - 2013.

Construction, whilst registering slower growth rates since 2008 did not decline in terms of real output. The recovery from 2011 - 2013 in this sector lagged behind the overall economic recovery, which can be interpreted as a positive sign as Construction cannot be deemed the driver of the recovery. This point to a more sustainable recovery with other sectors growing and thus also fuelling construction as secondary sector.

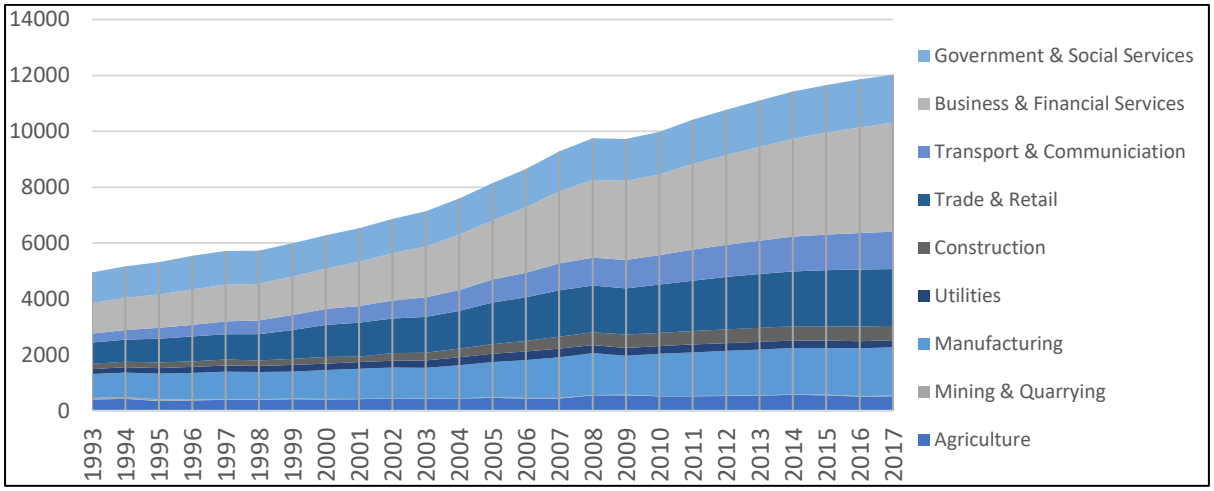
When considering the Tertiary sector, Wholesale, Retail and Trade similarly recorded a drop in total GVA in 2008/2009, also to levels first recorded in 2005. Included here is catering and accommodation (direct tourism spend), which contributes only 1.85% of the economy in 2013. Catering and accommodation has also registered negative annual growth for the period 2010 – 2013. Admittedly Tourism is represented as fragments in various other Industries (e.g. retail and transport), but this negative trend in terms of catering and accommodation is of concern. Transport, Storage and Communication recorded a slight slowdown in growth but remains one of the strongest growing industries in George.

Figure 2.1: GDP per sector



Source: Quantec Standardised Regional 2018

Figure 2.2: GDP per sector 1993 - 2017



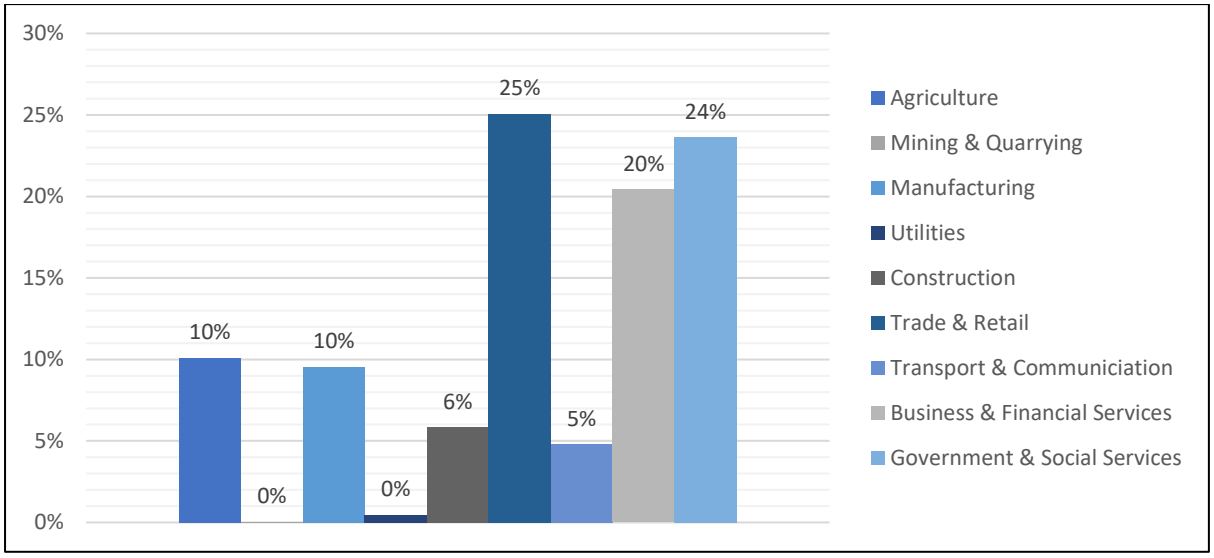
Source: Quantec Standardised Regional 2018

When analysing the contribution to employment per sector over time, Agriculture, forestry and fishing registered a marked decline in employment numbers, from contributing around 13% to total employment in 1995 to only 5.13% in 2013. This can certainly be attributed to automation in these industries, and therefore a drop in actual employment numbers and labour intensity. A further concern is delayed re-planting in the timber industry, already impacting directly in terms of primary job losses, but which could have downstream negative effects on e.g. manufacturing.

Manufacturing also recorded a decline in employment contribution, although not as steeply as in the primary sectors. Construction showed strong employment growth between 2000 and 2010, but interestingly actual employment numbers in 2013 are still well below those of 1995, showing that over the longer term of 16 years, growth was minimal in this sector in terms of employment numbers. This is indicative of the cyclical nature of construction, creating jobs in times of economic boom, but shedding those just as fast when declines set in.

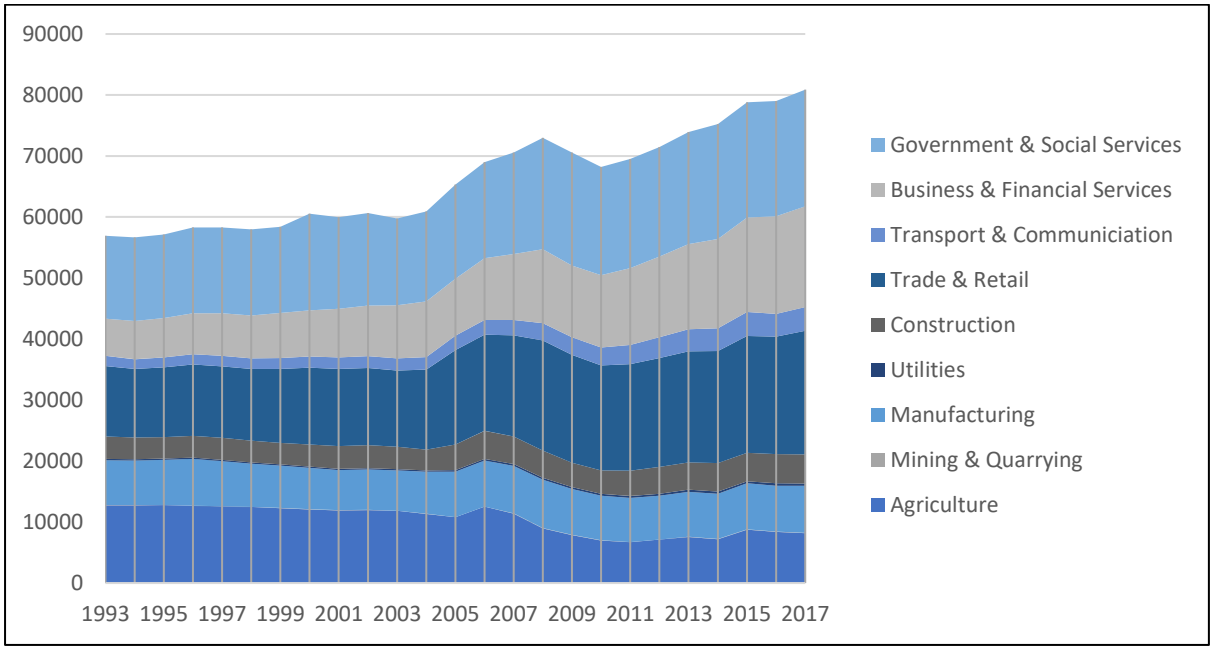
When considering employment per sector in 2013 (total employment, both formal and informal); Community, Social and Personal services have the highest labour intensity (24 jobs per R1 Million GVA), contributing just more than 5% to GVA, but in excess of 16% in terms of number of persons employed. Only catering and accommodation services can even remotely compare in terms of labour intensity, contributing 21 jobs per R1 Million GVA (although only 1.67% to GVA). General government, Agriculture, Forestry and Fishing as well as Construction also contributes a higher percentage to employment numbers than in GVA, indicating a relatively higher labour intensity. In the case of General government however, actual employment numbers has increased significantly over the past 10 years, whereas it has dropped for both the other sectors. As is the case nationally, the Finance, Insurance, Real Estate and Business services have a very low labour intensity, contributing only 14.6%% in terms of employment, but close to 25% in terms of GVA.

Figure 2.3: Employment per sector



Source: Quantec Standardised Regional 2018

Figure 2.4: Employment per sector 1993 - 2017



Source: Quantec Standardised Regional 2018

3. Needs and Desirability

This section speaks to the overall need for, and desirability of the development with respect to the general property market in the Herolds Bay area, as well as the broader regional property market. The following sections highlight specific areas where the development will address issues within the local property market, or offer desirable features which are likely to form the basis of strong demand. While there may be elements of the development which may be less desirable to the local or wider property market, these will be discussed at the end of the report under the risks and mitigations section.

3.1. Housing supply constraints

The Herolds Bay Country Estate looks to address the shortage of developable land around the settlement. The low vacancy of property in and around the town of Herolds Bay coupled with high demand for units at the scenic sea-side town have resulted in sky-rocketing property prices. The development seeks to address this through the development of more affordable units.

There is a history of strong foreign demand for properties along the Garden Route, and the development of new units at Herold Bay could allow for an increase in foreign investment into the area. Foreign buyers have a higher average expenditure per capita than local buyers, and this is likely to benefit the local economy.

The development of more affordable units at Herolds Bay will provide more diversity in the housing mix, and allow the town to appeal to a wider range of buyers. By doing so Herolds Bay can better compete in the regional property market.

Furthermore, the developer is cognizant of many of the missteps made by other developers in the region (such as lack of double garages, or developing on ecologically sensitive land) and has developed an offering which seems well fitted to the needs of the major buying segments in markets such as that in Herolds Bay.

3.2. Commercial property constraints

Herolds Bay has its roots as a sleepy coastal village catering predominantly for retirees and seasonal travellers to vacation homes. As the town has grown, however, and especially after the development of the neighbouring housing estates Herolds Bay has found itself without adequate commercial space to meet the needs of local residents and holiday travellers. High property prices also limit the potential to repurpose suburban properties, or develop vacant land for retail or office needs.

The Herolds Bay Country Estate seeks to address this through the provision of space for a various commercial elements such as:

- **Retail centre / supermarket**

There is only one small retail establishment in Lower Herolds Bay which does not adequately serve the towns population, being not ideally located for residents in the upper portion of the town (where the majority of residents are located) or the neighbouring estates. The Herolds Bay Country Estate seeks to address this through the provision of space for the development of a new supermarket. The site is strategically located to allow for easy access for most of the towns residents and will allow for ample parking.

- **Petrol station**

The town does not feature a petrol station. The closest petrol station to the development is located 11.5km away to the East in the town of George or travelling West, 21.6km away in the village of Great Brak. The inclusion of a petrol station in Herolds Bay will provide significant benefit to the local community.

- **Restaurant**

There is only one notable restaurant in the town of Herolds Bay, with three more establishments located inside of the Oubaai estate. The provision of space to develop a new restaurant will offer greater variety to local residents and travellers alike. A new restaurant will be of high value in the tourism high seasons when there is significantly higher demand than in the low season. In this time travellers are forced to travel to other towns such as George, Wilderness, and Great Brak if the local restaurants are full. There is also no fast food or convenience food outlet in the area. This presents a clear gap in the market, especially when considering the preferences of the holiday market.

- **Office development**

There is at present now commercial office space available in the town. As such there is no adequate space for numerous key services within the town. The development of an office development (as is proposed for the Herolds Bay Country Estate) will allow for estate agents, doctors & medical practitioners, financial & legal advisors, tourism product operators, and others to take up residence in the town.

3.3. Safety and security

One key aspect of the development is the provision of a safe and secure environment. This is a feature popular among all walks of life in South Africa, and particularly important to families with young children, retirees, as well as holiday makers. The development will provide for the needs of the market by ensuring controlled access and adequate security infrastructure.

Furthermore, by designing the development as a single estate instead of separate stands, the development can provide one security solution to all residents of the estate instead of each homeowner acquiring the services of differing security providers, or installing different security systems. This provides greater efficiency and overall lower cost to the consumer.

3.4. Natural environment

The scenic natural environment of the town of Herolds Bay, and the world renowned beauty of the Garden Route region are a large reason for the continual strong demand for properties in Herolds Bay. This is sure to continue to be a leading reason for people to move to the area as the region is home to numerous nature reserves. There is also a strong focus on sustainable development and limiting the environmental impact of development. Thus the impact of the natural environment on property demand is set to continue in the long-term.

3.5. Mild climate

The mild climate of the region is another draw-card for prospective home buyers. Herolds Bay provides a milder winter climate than settlements in the extreme West of the province, with warm summers. The climate is a large reason for the tourism appeal of the region and a main drawcard of the sizeable retirement market.

3.6. Accessibility

The Herolds Bay Country Estate provides excellent accessibility for residents both to the beach at Herolds Bay, but also to the myriad attractions in the Garden Route via the R404 to the N2 National Highway.

At an extreme local level, accessibility to the site is to be logically split with residents entering the secured estate at the circle of Oubaai road, while visitors to the retail centre, restaurant, petrol station, and office complex will access the site closer to the R404.

The development is also set to improve accessibility to the main attraction of Herolds Bay, which is the scenic beach. The development is planned to include a park-and-ride facility, allowing both residents of the development and the general public the ability to park their cars and be transported by shuttle down to the beach. This will greatly ease congestion along the beachfront which faces a constant traffic and parking problem in the high season.

3.7. Good governance & service delivery

One of the key factors in favour of the development is its location within a ably governed area. This is of particular importance to buyers from outside of the region in areas where local governments have poorer service records. The efficient governance of the area (relative to many other parts of South Africa) produces a stable investment environment.

4. Impact analysis

4.1. Introduction

The purpose of this section is to define economic impacts, so as to assist the reader in interpreting the results presented in the subsequent chapters. In short, economic impacts refer to the effect on the level of economic activity in a given area as a result of some form of external intervention in the economy, in this instance the development of a new office precinct.

This chapter will proceed according to the following sections:

- Defining economic impacts
- Types of economic impacts
- The Temporal nature of economic impacts
- Economic impacts considered
- Calculation of economic impacts
- Consolidating project elements &resulting impacts

4.2. Impact analysis methodology

Economic impacts can be defined as the effects (positive or negative) on the level of economic activity in a given area(s). The net economic impact is usually measured as the expansion or contraction of an area's economy, resulting from the changes in (i.e. opening, closing, expansion or contraction of) a facility, project or program.

4.2.1. Types of Economic Impacts

The net economic impact of an exogenous change in the economy will be translated according to various direct and indirect economic effects, as are defined below:

- **Direct economic impacts:** are the changes in local business activity occurring as a direct consequence of public or private activities in the economy, or public programmes and policies. Furthermore, increased user benefits lead to monetary benefits for some users and non-users (individuals and businesses) within the geographical area:

  For affected businesses, there may be economic efficiency benefits in terms of product cost, product quality or product availability, stemming from changes in labour market access, cost of obtaining production inputs and/or cost of supplying finished products to customers. For affected residents, benefits may include reduced costs for obtaining goods

and services, increased income from selling goods and services to outsiders, and/or increased variety of work and recreational opportunities associated with greater location accessibility.

- **Indirect and induced impacts:** Ultimately, the direct benefits to business and the residents of communities and regions may also have broader impacts, including:

  Indirect business impacts – business growth for suppliers to the directly affected businesses and Induced business impacts – business growth as the additional workers (created by direct and indirect economic impacts/effects) spend their income on food, clothing, shelter and other local goods and services. This business growth will also have implications for potential municipal income due to raised taxes and service levies.

4.2.2. The Temporal Nature of Economic Impacts

It is important to understand that for most new investments there are two types of investments; there is an initial capital injection/expenditure (CAPEX) which takes the form of either a new construction on vacant land or a modification of an existing structure and there is an annual investment made to maintain/operate the investment.

The economic impacts created by a capital injection (CAPEX) are once-off impacts that will occur for the duration of construction. Thus economic impacts associated with the construction phase are not sustainable in nature but only occur for the duration of the once-off construction phase. Operational economic impacts, unlike capital expenditure economic impacts are sustainable and thus are calculated as an annual impact based on operational expenditure (OPEX) for a given year.

It is important to note that CAPEX and OPEX impacts cannot be added together to determine the 'total' economic impact because of their temporal nature.

4.2.3. Economic Impacts considered

The direct and indirect economic impacts presented in this report are measured according to the following broad economic variable categories:

- **Production/Business Sales:** refers to the value of all inter- and intra-sectoral business sales generated in the economy as a consequence of the introduction of an exogenous change in the economy. Explained more simply, new business sales equates to additional business turnover as a result of the introduction of an exogenous change in the economy.

- **Contribution to GDP:** 'Gross Domestic Product' (GDP) is a broader measure of the full income effect. This measure essentially reflects the sum of wage income and corporate profit generated in the study area as a result of an exogenous change in the economy. Where GDP is mentioned in this report, it refers to the GDP of the broader South African Economy.
- **Employment:** Refers to the employment resulting from the construction or operation of the project under investigation. One job opportunity reflected herein, represents or is equivalent to one year of full-time employment by one individual.
- **Income:** Refers to the additional income resulting from the construction or operation of the project under investigation. CAPEX income figures refer to the increased income to employees during the period of construction. OPEX income figures refer to the lasting increase in income to employees resulting from the operation of the development.

Using the I/O model methodology, various anticipated direct and indirect economic impacts of the projects identified have been quantified. These economic impacts have been derived using an understanding of economic cause-effect relationships. The principle of cause-effect is that for any economic action, there can be a multitude of different economic reactions (effects).

For the purpose of this report, the main cause/action is the implementation/operations of the various public and private investments and operations.

4.2.4. Calculation of Economic Impacts

A socio-economic impact assessment examines the effects of an external intervention on the level of economic activity and the welfare of households in a given study area. The assessment considers not only the direct impact of the intervention but also the indirect and induced impacts relating to wider economic growth and development.

The relationship between the capital and operational expenditure of a particularly intervention and the direct, indirect and induced impacts of this expenditure.

The modelling exercise for the Herolds Bay development was completed in light of the following assumptions:

- The capital and operational expenditure figures reflect the real situation accurately enough for the purpose of the socio-economic impact assessment

- Production activities in the economy are grouped into homogeneous sectors
- The mutual interdependence of sectors is expressed in meaningful input factors
- Each sector's inputs are a function of the specific sector's production, comparative advantage, and location
- The production by different sectors is equal to the sum of the production of separate sectors
- No structural changes in the economy are experienced during the projection period
- One employment opportunity is the equivalent of one person employed for one year

4.2.5. Consolidating Project Elements & Resulting Impacts

Figure 4.1 displays graphically the relationship between the Construction and Operational phases of a project and how Direct, Indirect and Induced impacts are formed and how they together work to create structural change in the economy.

The economic cause-effect relationships resulting from the projects to be discussed are described according to points 1 through 5 below:

1] The Investment related to the project results in the stimulation of:

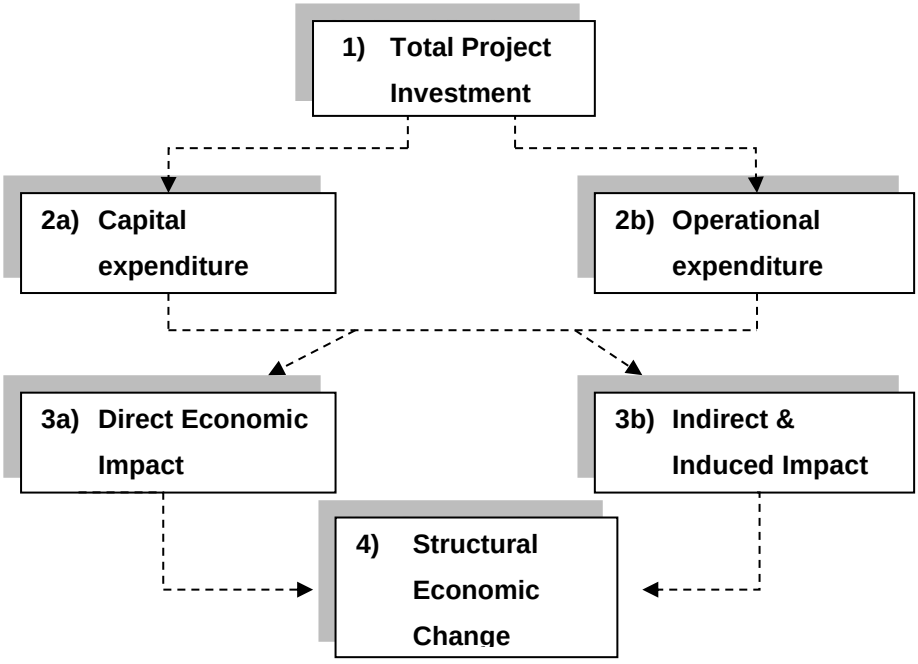
2a] Construction spending involved in the investment.

2b] The generation of economic activity through expenditure incurred in operation of project.

3a-b] The stimulation of these economic activities will result in various direct and indirect economic impacts.

4] These direct and indirect economic impacts will result in economic structural changes in the Buffalo City Metropolitan Municipality economy.

Figure 4.1: Cause-Effect Relationship



4.3. CAPEX

The following sections describe and quantify the impact derived from the construction phase of the planned development on the local and national economy in terms of new business sales, GDP, employment, and income.

Thus, the short-term economic impacts presented in this section are confined to a period of construction and will conclude when the facility becomes fully operational. The impact model uses an assumption that construction will start in the fourth quarter of 2019, civil engineering will conclude in the fourth quarter of 2020. It is also assumed that phase 1 of construction of residential units will start in the third quarter of 2020, and that 100% of units will be constructed within three years ending third quarter 2023. When reading the CAPEX impact results, please note that the results cover this entire period.

The following construction costs are used to inform the model. Formal costings are used where possible, as supplied by the engineering team, but assumptions are made where there are gaps in information. Bulk engineering services costs are based on input from project civil and electrical engineers, top structure costs are assumed based on information about the development, average stand size, expected unit size, value and nature of surrounding developments, and average local construction costs (per m²). Professional and management fees are assumed using industry standard fee structures on cost.

Table 4.1: CAPEX Assumptions

Item	Cost
Bulk Engineering Services	R 64 843 366
Top Structure Costs	R 342 567 802
Professional Fees	R 101 565 235
Development Management Costs (marketing, legal and other)	R 38 086 963
Total project costs excl. interest	**R 547 063 366**

4.3.1. Production

Construction of the development is expected to directly generate R 547 million in the local economy. This reflects the expected construction cost of the development. This is expected to generate a further R 549 million indirectly in the local and wider regional economy. This is generated through expenditure to regional suppliers and service providers by firms directly involved in construction. The combined new business generated by the direct and indirect are expected to generate a further induced impact on local production of R 263 million. This is generated by the increased wages and salaries to employees working at firms involved (whether directly or indirectly) that are spent in the South African economy. It is expected that the majority of this will be spent in the George area. The total expected boost to business resulting form the construction of the development is valued at R 1 332 million. This is a temporary benefit and will only last during the period of construction.

Table 4.2: CAPEX Impact on Production

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Production (R MIL)	R 547.06	R 548.79	R 236.19	R 1 332.05
Production/New Business Sales per R1.00 investment	R 1.00	R 1.00	R 0.43	R 2.43

4.3.2. GDP

The R 547 million construction cost is expected to directly generate R 215 million to the George local municipal economy. Note that GDP measures total new wealth generation, and thus eliminates any double counting that takes place in production level calculations (which value the total level of new business). Construction is expected to lead to further indirect and induced impacts of R 174 million and R 89 million respectively. The total addition to regional GDP is valued at R 477.56 million.

Table 4.3: CAPEX Impact on GDP

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
GDP (R MIL)	R 214.53	R 173.81	R 89.21	R 477.56
Gross Geographic Product per R1.00 investment	R 0.39	R 0.32	R 0.16	R 0.87

4.3.3. Employment

Direct employment figures for the project are generated by the economic impact model, as no projected employment figures are provided for the project. It is expected that 543 man-years of labour will be generated directly on site during the construction of the project. The indirect impact on local business will see a further 1 027 man-years of labour being generated in the regional economy. Note that man-years employment refers to full-time equivalent employment. It does not equate to number of jobs created. Also note that the job impacts are spread over the period of construction.

The total impact on employment, when including direct, indirect, and induced impacts, is expected to be 2 029 man-years of labour. That is, 2 029 man-years of labour will be generated in the regional economy during the period of construction.

Table 4.4: CAPEX Impact on Employment

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Job Creation (NO.)	543	1 027	459	2 029
Full time employment per R1 million investment	0.99	1.88	0.84	3.71

4.3.4. Income generation

The impact on employment will generate additional income for workers. The direct impact on employment income is calculated at R 98.47 million. Indirect and induced impacts on employment income are R 104 million. The combined increase in employment income over the period of construction is valued at R 202 million.

Table 4.5: CAPEX Impact on Income

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Income Generation (R MIL)	R 98.47	R 69.98	R 33.88	R 202.34
Worker income per R1.00 investment	R 0.18	R 0.13	R 0.06	R 0.37

4.4. OPEX

Operational impacts differ from CAPEX economic impacts as these continue into the future. CAPEX impacts are only felt during the period of construction.

Operational impacts for the development are based on various expenditure assumptions for the ongoing maintenance and operations of the development. Assumptions are required for OPEX expenditure as no operational maintenance and management costs are provided. These assumptions are based on data from other similar developments across South Africa.

It is calculated that the development, as costed above, will see total expenditure of R 35.7 million per year to operate and maintain. R 22.8 million of this will go towards wages and salaries for the expected 317 staff that will be employed across all positions at the development.

Table 4.6: OPEX Assumptions

Land use	Total Expenditure	Jobs	Salaries and wages allocation
Residential	R 14 076 000	± 272	R 9 853 200
Office	R 2 730 000	± 7	R 1 638 000
Retail	R 14 000 000	± 22	R 8 400 000
Filling Station	R 2 160 000	± 4	R 1 296 000
Parking facility	R 2 764 800	± 13	R 1 658 880
Total Expenditure	**R 35 730 800**	**± 317**	**R 22 846 080**

4.4.1. Production

It is expected that the development will generate R 73.85 million in new business in the regional economy. This is driven by the R35.73 million direct expenditure at the development itself, but also by a large induced impact of R 28.91 million resulting from the spending of wages in the regional economy. Note that unlike CAPEX impacts, these impacts are for one year of operation, and continue year-to-year.

Table 4.7: OPEX Impact on Production

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Production (R MIL)	R 35.73	R 9.21	R 28.91	R 73.85
Production/New Business Sales per R1.00 investment	R 1.00	R 0.26	R 0.81	R 2.07

4.4.2. GDP

The R 35.73 million in new business shown above is expected to generate a direct impact on GDP of R 22.91 million. When considering the indirect and induced impacts on GDP, the total impact on GDP from the operation of the development is calculated at R 37.51 million per year.

Table 4.8: OPEX Impact on GDP

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
GDP (R MIL)	R 22.91	R 3.69	R 10.91	R 37.51
Gross Geographic Product per R1.00 investment	R 0.64	R 0.10	R 0.31	R 1.05

4.4.3. Employment

Based on the model assumptions, it is calculated that the development will generate 317 full-time equivalent jobs directly at the development. The majority of these jobs will be generated by the residential component of the development in maintenance, domestic services, gardening & landscaping, and other property management roles. When considering the jobs created from expenditure to the wider economy, it is calculated that the development will generate a total of 394 jobs across the regional economy. OPEX impacts continue indefinitely, hence the majority of these positions are expected to be permanent employment positions.

Table 4.7: OPEX Impact on Employment

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Job Creation (NO.)	317	21	56	394
Full time employment per R1 million investment	8.87	0.58	1.57	11.02

4.4.4. Income generation

The impact of this new employment on income levels is displayed below. Employment at the development is expected to increase income to workers by R 22.87 million per year. The indirect and induced impacts add an additional R 5.46 million per year resulting in a total increase of employment income of R 28.33 million.

Table 4.7: OPEX Impact on Income

CAPEX MULTIPLIERS	Direct	Indirect	Induced	Total
Income Generation (R MIL)	R 22.87	R 1.31	R 4.14	R 28.33
Worker income per R1.00 investment	R 0.64	R 0.04	R 0.12	R 0.79

4.5. Social Impacts

The following section provides a brief discussion on expected social impacts arising form the development of the Herolds Bay Country Estate that can not be fully represented in the formal impact analysis above.

Tourism

The development is likely to increase tourism to the town as well as the general area through the provision of increased accommodation at Herolds Bay. The development will also improve the capacity for tourism at Herolds Bay through the park-and-ride facility, allowing more people access to the beach without increasing the traffic along the beachfront. The inclusion of retail and restaurant space is another aspect which will help support tourism growth to the area.

Accessibility

The development is expected to increase the amount of vehicular traffic in the general area around Herolds Bay, and will likely increase traffic to the beach marginally during the low season, however the provision of the park-and-ride facility will greatly improve accessibility to the beach during the high season and weekends.

Property values

Property values are likely to be affected in two ways. Firstly, the provision of new housing will alleviate the supply constraints at Herolds Bay, easing price pressure. This may be seen as detrimental to some existing property owners. This effect is likely to only persist in the short-term. The older properties in Lower Herolds Bay, properties with a view in Upper Herolds Bay, as well as properties in the up-market estates neighbouring the town, are unlikely to be affected in the medium to long-term.

In the long-term, the development of the estate is likely to strengthen the local property market providing more options and improving the functioning of the town through the provision of new services which are presently lacking (such as retail and office space).

Local government revenue

One key consideration is the impact on local government revenue through the collection of local property rates, and fees for basic services. Properties at the development look set be valued in the R 2 million – R 4.5 million price range. It is estimated that with the present rates structure, the development will generate between R 3 – 4.5 million in rates per year for the George Local Municipality.

Retail & commercial services

As discussed above, the development of retail and commercial office space will provide opportunities for new businesses, and address critical gaps in the Herolds Bay property market. The provision of retail, restaurants, and office space will lead to the provision of new services which will improve the functioning of the town for permanent residents and holiday travellers alike.

4.6. Summary

This section has shown that the Herolds Bay Country Estate is expected to have a significant impact on the local economy, and greatly improve the functioning of the town. The construction of the development is likely to provide a significant boost to the local construction sector, and the operation of the development is set to become a significant source of employment in the local area, and generate significant revenue for the local municipality.

5. Impact management

This chapter sets out various risks to the local economy, local property market, and social dynamics within the Herolds Bay community. This chapter provides mitigation measures to these identified risks and suggests measures to ensure that the impacts determined above are maximised.

5.1. Risk assessment and mitigation

The following risks are identified and presented along with potential mitigation measures:

Impacts	Mitigation measures
Increased traffic There is a risk that the development will increase traffic in the village, adversely affecting the lifestyles of residents and reducing access to the beach for holiday makers. **Impact Likelihood:** Low - Medium	This risk is already mitigated partially through the development of the park-and-ride facility, allowing residents and visitors to safely park their vehicles and proceed via shuttle to the beachfront. This risk can be further mitigated through the provision of adequate signage to notify users of the service, electronic monitoring of parking availability at the beachfront to reduce needless traffic at busy times, and restricting traffic to the beachfront through the use of parking meters, or other forms of traffic management to encourage the use of the park-and-ride facility. Great care must be used in designing the transit programme to the service is priced adequately and to ensure that the programme has the maximal impact on traffic in the town.
Impact on infrastructure The risk is that the development will put a strain on existing infrastructure and present a financial burden on the municipality. **Impact Likelihood:** None - Low	The reports from the electrical and civil engineers show that the development will not place an excessive burden on the municipality. Furthermore, the development stands to generate significant revenue for the local municipality that will offset any increase in expenditure on the part of the municipality.

Impact on property values The risk is that the development will negatively impact property values in the Herolds Bay area. **Impact Likelihood:** Low - Medium	While the development is likely to reduce supply constraints in the local market, and thus reduce price pressure, this is likely to only persist in the short term. No long term adverse implications are expected. There may be a short term impact on property prices close to the development during the construction phase, but this is likely to be mitigated by the long-term nature of investment in the local property market (buyers will look primarily at the long term value of property). This risk can be further mitigated through due care and planning of transport and construction activities to provide minimum disruption to residents and tourism activities.
Impact on tourism The risk is that the construction of the development will negatively impact tourism to the region. Once constructed the risk is that the increased size of the resident population will negatively impact tourism through increased traffic to the major attraction (the beach). **Impact Likelihood:** Short term: Moderate Long term: None - Low	The risk to the tourism market is rated as moderate during construction. The disruption to the tourism market can be mitigated through due care and planning of transport and construction activities to provide minimum disruption to residents and tourism activities. This risk can be further mitigated through a slow down of construction activities during the highest points of the tourism season. Once operational, the development is expected to assist the tourism market through the provision of new services and the development of the park-and-ride facility and is not expected to provide any adverse impacts to tourism.

5.2. Enhancing positive impacts

The positive economic impacts identified in this report can be enhanced through the following actions:

Impact	Enhancement
Economic impact on Production & GDP from construction	This impact can be enhanced through the sourcing of local companies to provide construction related services. Local businesses are more likely to employ residents of the local area and more likely to use suppliers from the local economy.
Impact on employment during construction	This impact can be enhanced through the sourcing of local companies to undertake construction of the development. Local businesses are more likely to employ persons from the local area.
Economic impact on Production & GDP from operations	The operational impacts on the economy can be enhanced through the hiring of local persons, and the contracting of local businesses to provide property management services.
Impact on employment during operation	The impact on employment is enhanced through the focus on employment of residents of the local area.
Impact on residents and tourism	The impact on tourism is enhanced through the provision of adequate signage to notify users of the service, electronic monitoring of parking availability at the beachfront to reduce needless traffic at busy times, and restricting traffic to the beachfront through the use of parking meters, or other forms of traffic management to encourage the use of the park-and-ride facility. Great care must be used in designing the transit programme to the service is priced adequately and to ensure that the programme has the maximal impact on traffic in the town. The impact on tourism and residents can be further enhanced through adequate research to identify the best candidates for businesses to take up retail and office space at the development to ensure the maximal impact on tourism.

6. Synthesis

This report has discussed the expected economic and social impacts arising from the construction and operation of the proposed Herolds Bay Country Estate on the local Herolds Bay area and regional economy.

The report shows significant benefits are expected to accrue to the local economy, and that the development (as designed) will provide numerous benefits to the local community mitigating any potential risks and enhancing the functioning of the town for both permanent residents and holiday makers.

Furthermore, the development is likely to generate significant income from the George Local Municipality which is expected to far outweigh any potential increase in expenditure on services and infrastructure resulting from the construction of the development.