



The Proposed John Dube
Extension 3 Township Situated on
Portions of Remaining Extent 1
and 83 of the Farm Grootfontein
165 IR, Gauteng Province

# **Desktop Social Assessment**

### **Project Number:**

ENV5870

# Prepared for:

Envirolution Consulting (Pty) Ltd

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### 1 Introduction

Alley Roads Mega Projects (hereinafter Alley Roads) is proposing to develop the John Dube Extension 3 Township ("John Dube Extension"), a residential development and associated infrastructure, in the Ekurhuleni Metropolitan Municipality (EMM) ("the Project").

Alley Roads appointed Envirolution Consulting (Pty) Ltd (hereinafter Envirolution) as the independent Environmental Assessment Practitioner (EAP) to conduct the Environmental Impact Assessment (EIA) process necessary to obtain the required Environmental Authorisation (EA) in compliance with the South African national legislative framework with specific reference to:

- The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- The NEMA EIA Regulations, 2017 (Government Notice Regulation [GN R] 982 as amended by GN R 326); and
- The National Water Act, 1998 (Act No. 36 of 1998) (NWA).

Envirolution subsequently appointed Digby Wells Environmental (hereinafter Digby Wells) to undertake a desktop social assessment in support of the EIA process and to inform the EIA report. This document constitutes the desktop social assessment report.

#### 1.1 Terms of Reference

Envirolution appointed Digby Wells to compile a desktop social assessment for inclusion in the EIA report. It was agreed with Envirolution (and stated in Digby Wells' proposal) that no stakeholder engagement would be undertaken as part of the SIA.

## 1.2 Scope of Work

The Scope of Work (SoW) for the specialist social assessment included the compilation of the desktop social assessment for incorporation into the EIA report. Digby Wells completed the following activities as part of the SoW:

- Description of the most relevant aspects of the current socio-economic baseline conditions supported through secondary data collection;
- Identification of potential impacts to the present socio-economic baseline conditions based on Project-related activities and sources of risk;
- Preliminary, high-level assessment of the identified impacts. The limited budget allocated for this SIA did not allow for a comprehensive impact assessment to be undertaken; and

High-level description of potential mitigation measures to avoid or reduce negative impacts and enhance potential benefits.

Exclusions and limitations relevant to this SIA are described in more detail in Section 1.3 below.



# 1.3 Assumptions, Exclusions and Limitations

Table 1-1 presents an overview of the limitations and exclusions applicable to this report and the assumptions which Digby Wells made in the compilation of this report.

Table 1-1: Assumptions, Exclusions and Limitations of the Study

Assumption, Exclusion or Limitation	Consequence
Digby Wells conducted no site inspection, Focus Group Discussions (FGDs) or Key Informant Interviews (KIIs) for the Project and collected no primary data for this assessment.	Digby Wells compiled the baseline description and provided a high-level assessment of predicted impacts at a desktop level only. Digby Wells assumes the secondary data collected was accurate at the time of this assessment and is adequate for the purposes of this report.  Such descriptions and assessments are subject to change following the collection of primary data through fieldwork and/or other social engagement.
Addressing any comments, questions and responses received through the stakeholder engagement with Interested and Affected Parties (I&APs) or updating the Comments and Response Register (CRR) is outside the scope of this assessment.	Digby Wells did not update the CRR and no correspondence has been entered into with stakeholders or I&APs regarding comments received.  Envirolution, or a Public Participation Process (PPP) / Stakeholder Engagement Process (SEP) specialist that may have been contracted for this work, is responsible for these actions.
A specialist economic assessment was not included in this report.	This report includes only a high-level assessment of the predicted economic impacts on the baseline context.
This report constitutes a desktop social assessment, as described in Section 1.1.	This document should not be viewed as a standalone Social Impact Assessment (SIA) report.
The socio-economic baseline description is focused on the primary study area only. The primary study area comprises Ward 111 of EMM (refer to Section 3.1), whereas the secondary study area is EMM as a whole.	The ward-level data may not reflect trends seen within the secondary study area. The primary study area data is considered more relevant to this study.





Assumption, Exclusion or Limitation	Consequence
Traffic, dust (air quality), noise, health, cultural heritage, stakeholder engagement and bulk services are dealt with separately by individual specialists as required and will be appended to the Draft EIA report.	Traffic, dust, noise, health and cultural heritage studies detail environmental impacts that may have indirect social repercussions. Moreover, stakeholder engagement may identify additional issues that need to be addressed in an SIA. However, given the limited scope of this SIA, it was not possible to review the outcomes of these other specialist studies and processes.
It was assumed that the average household size in the proposed housing development will be the same as in the rest of Ward 111 (3.02 persons per household; refer to Section 3.2.1)	Impacts have been assessed assuming 19 542 people will reside in the units in the operation / habitation phase of the Project.

# 2 Project Details

# 2.1 Project Location

The Project is located on Portions 1 and 83 of the farm Grootfontein 165 IR in Dunnottar. This is located in Ward 111 of EMM in the Gauteng Province. Plan 1 presents the geographical setting for the Project.

The Project forms part of the greater John Dube Mega Project. The Department of Human Settlement (DHS) initiated the John Dube Mega Project.

# 2.2 Project Background

The properties were acquired from Nedbank through an auction in 2017 and are presently zoned for agriculture. The site has, in the past, been used for mining activities and includes the historic gold mine, Vlakfontein. Gold Fields Limited (South Africa) undertook activities at this mine between 1942 and 1977. The properties were mined extensively in the past and include a rehabilitated shaft and a waste rock dump (WRD).

The environmental and legal liabilities regarding the previous mining operations have not been detailed by Envirolution. A soil analysis suggests that the soil and the WRD are not contaminated; nevertheless, the WRD area is excluded from the township application and therefore the EIA process. A 100 m no-go buffer zone has been established around the WRD. Illegal miners (known colloquially as *zama-zamas*) are currently undertaking mining operations on the site.

Alley Roads submitted a township application to the EMM Town Planning Department in February 2018; however the property is not yet zoned as residential. Despite this, the Municipal Spatial Development Framework (SDF) indicates that the land upon which the

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development will be constructed is residential, as it forms part of the John Dube Mega Project.

It is understood that AfriSam (South-Africa) (Pty) Ltd (hereinafter AfriSam) hold a Mining Right (MR), Mull Creek, adjacent to the Project area. AfriSam will crush and screen aggregate material from the WRD, which will cause an increase in dust and noise during these activities.

# 2.3 Project Description

Alley Roads has completed a Feasibility Study ahead of the design of the Project and have completed the Scoping Phase of the EIA process. As part of the EIA process, Envirolution conducted stakeholder consultation on 22 May 2019.

Alley Roads intend to develop the Project in several phases over 15 to 20 years. The Project will include approximately 6 471 housing units, which will include both low-cost and affordable housing, and will cover a maximum of 141.53 ha. Alley Roads envisages that these units will be rented and Alley Roads will hold stock for rental as is their usual practice. If the units were to be sold, Alley Roads envisages that the average selling price for the units, when completed, will range between R 600 000 and R 700 000.

Table 2-1 presents an overview of the proposed residential and commercial land uses within the development. The development also includes 6.7 ha the use of which had not yet been determined at the time of this assessment.

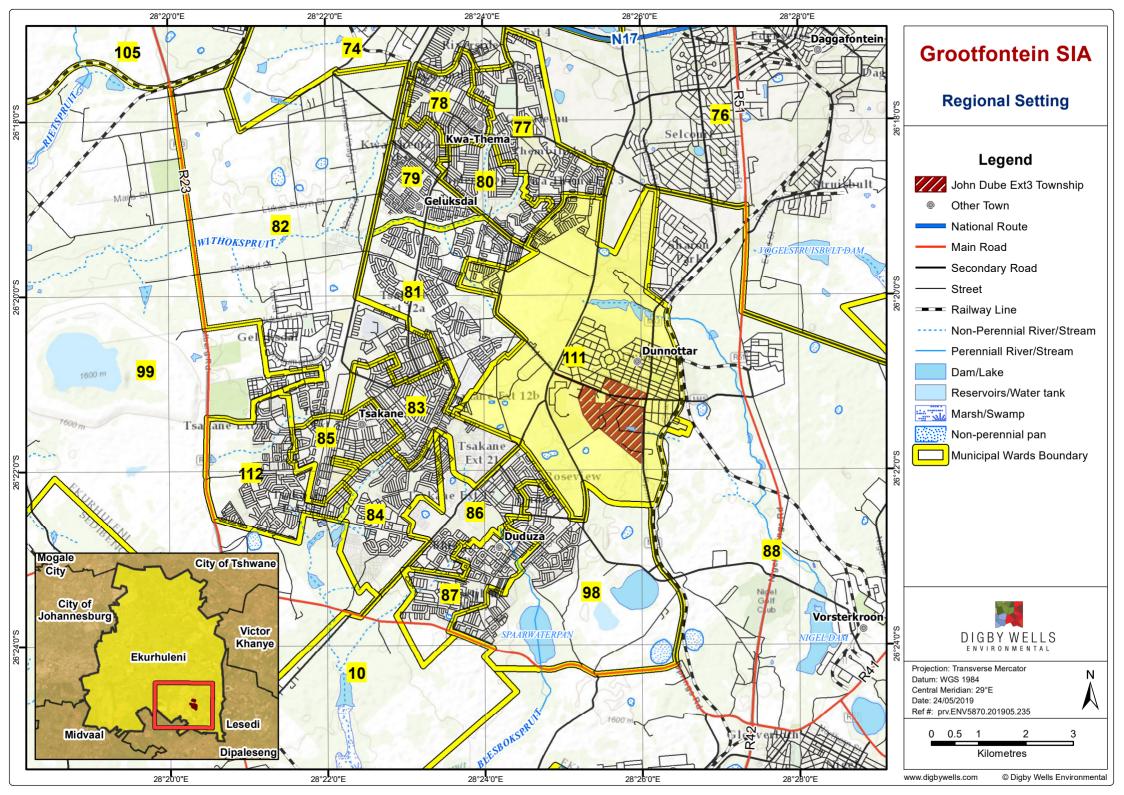
EMM will provide all bulk services, including waste management, water and electricity.



**Table 2-1: Proposed Land Uses for the Project** 

Land Use	Land Use Description	Area	Proposed Quantity
Residential 1	A density of one dwelling per stand or erf.	12.81 ha	597 erven
Residential 3	Residential units including 21 to 40 dwellings per hectare, e.g. townhouses.	9.91 ha	595 erven
Residential 4	Residential units including 41 to 120 dwellings per hectare, e.g. apartment blocks.	52.79 ha	5 279 Units
Business 2	Shopping centre with business restrictions.	1.55 ha	Taxi rank and multiple shops
Public infrastructure	A public filling station	0.25 ha	1
Public infrastructure	Public open space	To be determined	1
Public infrastructure	Community facility	To be determined	1
Public infrastructure	Supporting infrastructure including public roads, two-way internal access roads and stormwater infrastructure.	To be determined. Internal access roads will be 4 m in width	Various

Definitions adapted from Greyvensteins (2017), Project design information received from Envirolution





# 3 Socio-economic Baseline

# 3.1 Defining the Study Area

The social context comprises the primary and the secondary study areas. The primary study area consists of the municipal ward within which the Project will be located. In this instance, this refers to Ward 111.

The secondary study area refers to the local and district municipalities, where relevant, and may include the province to highlight trends or outliers within the baseline data. In this instance, there is no local or district municipality as EMM is a metropolitan municipality. The Project is located in the Gauteng Province.

This notwithstanding, the baseline presented below focuses on the primary study area only.

# 3.2 Baseline Description

Data for this baseline was sourced primarily from Wazimap (2017). This data was used because it realigns the 2011 Census data captured and presented by Statistics South Africa (2011) with new municipal boundaries used in the 2016 Municipal Elections (Open Up, 2017). As the 2016 Community Survey data was not available at the time of this assessment, the baseline is informed by the realigned 2011 Census Data. Statistics SA does not currently present data at ward level.

#### 3.2.1 Population dynamics

Table 3-1 presents an overview of the key population statistics within Ward 111, as of the 2011 Census. The ward includes 17 419 inhabitants and 5 776 households in an area of approximately 20.8 km<sup>2</sup>. The majority of the population are Black African and the most common home language is isiZulu (Wazimap, 2017).

Table 3-1: Population dynamics within the primary study area in 2011

Population	Ward 111
Total population	17 419
Population density (people/km²)	836.4
Total households	5 776
People per household	3.02

Adapted from Wazimap (2017) and Statistics South Africa (2011)

There is some level of influx into Ward 111, as only 54% of the residents were born in the Gauteng province. Residents originated from all eight other provinces. Limpopo is the most common province of birth for residents in Ward 111 not born in Gauteng. Approximately 5.6% of the Ward 111 population were born outside South Africa. The South African



Developing Countries (SADC) states are the most common regions of birth for those not born in South Africa (Wazimap, 2017).

### 3.2.2 Employment

Table 3-2 presents the component of the population which is of economically-active age. This component accounts for almost two-thirds of the population. Table 3-3 below presents a breakdown of the population in terms of their employment status. In this table, the category 'not applicable' refers to those members of the population who are younger than 18 or older than 65.

Table 3-2: Population within the study area by age groups in 2011

Percentage population	Ward 111	
Age under 18	5 557	31.9%
Age between 18 and 64	11 270	64.7%
Age 65 and above	590	3.4%

Adapted from Wazimap (2017)

Table 3-3: Employment status within Ward 111 in 2011

Economic Status	Ward	1111
Employed	5 806	33.3%
Unemployed	2 677	15.4%
Discouraged Work Seeker	480	2.8%
Other not economically active	3 161	18.1%
Not applicable	5 293	30.4%

Adapted from Wazimap (2017)

Removing 'not applicable' component, 47.9% of the economically-active population are employed. In this scenario, 22.1% of the economically-active population is unemployed, 4% are discouraged work seekers and 26% is not economically active for other reasons. The average annual income for an individual employee in Ward 111 in 2011 was R30 000 (not adjusted for inflation) which equates to approximately R 2 500 per month (Wazimap, 2017).

### 3.2.3 Housing

Table 3-4 and Table 3-5 below present an overview of the housing situation in Ward 111 as of 2011. A house or brick / concrete structure on a separate stand, yard or farm was the most common dwelling type in the ward. This corresponds to the Residential 1 type units proposed within the Project. Townhouses, as the Residential 3 units in the Project, constitute 0.4% of all housing in the ward and apartments (Residential 4) comprise 3.4%.



Within the ward, renting is the most common tenure type for housing, although a large proportion owns and has fully paid off their homes.

The EMM has made a commitment to provide 100 000 housing opportunities for residents by 2021 (City of Ekurhuleni, 2018). This commitment includes the development of associated infrastructure, and will be undertaken in collaboration with the Gauteng provincial government. The housing gap in the municipality is indicated by the decline of the percentage of households living in formal settlements. As of the 2018 Integrated Development Plan (IDP) review, 18% of all households in EMM resided in 119 informal settlements across the metropolitan municipality. It must be noted, however, that the percentage of residents living in informal housing has shown an overall decrease between 2011 and 2018.

Table 3-4: Dwelling Type within Ward 111 in 2011

Dwelling Type	Ward	1111
Caravan / Tent	4	0.1%
Cluster house in a complex	33	0.6%
Flat or apartment (block of flats)	197	3.4%
House, flat or room in a backyard	82	1.4%
Separate house or brick / concrete structure <sup>1</sup>	3 338	57.8%
Informal dwelling / shack in backyard	576	10%
Informal dwelling / shack not in backyard <sup>2</sup>	1 335	23.1%
Room, flatlet on a property, larger dwelling, servant's quarters, granny flat	17	0.3%
Semi-detached house	39	0.7%
Townhouse (semi-detached house in a complex)	23	0.4%
Traditional dwelling, hut or other structure made of traditional materials	3	0.5%
Other	19	0.3%
Unspecified	19	0.3%
Not applicable	64	1.1%

Adapted from Wazimap (2017)

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<sup>&</sup>lt;sup>1</sup> House or brick or concrete structure on a separate stand, yard or farm

<sup>&</sup>lt;sup>2</sup> This category includes informal dwelling or shack in an informal settlement, squatter settlement or on a farm



Table 3-5: Dwelling Tenure within Ward 111 in 2011

Dwelling Tenure	Ward	1111
Owned and fully paid off	1 471	25.5%
Owned but not yet fully paid off	973	16.8%
Rented	1 629	28.2%
Occupied rent-free	1 456	25.3%
Other	160	2.8%
Unspecified	19	0.3%
Not applicable	64	1.1%

Adapted from Wazimap (2017)

## 3.2.4 Service delivery

This section provides a very broad overview of select baseline conditions pertaining to service delivery in Ward 111. Service delivery and traffic / transportation will be dealt with in more detail in the specialist bulk services report and traffic impact assessment reports.

Wazimap does not have ward-level data for the supply of electricity from the 2011 Census or the 2016 Community Survey. Data regarding electricity supply is not presented here.

As of the 2011 Census, the majority of households received water from a regional or local water scheme which was operated by the municipality or other water provider. Some households did, however, depend on natural resources such as springs, rivers or streams and dams, pools or stagnant water for their supply (Wazimap, 2017).

At the same time, 78.5% of households had access to flush toilets with either a septic tank or which were connected to the sewerage system. Pit latrines, bucket latrines and chemical toilets were less common but still provided several households with toilet access. This notwithstanding, 6.8% of households had no access to any toilet facilities. This is more than double the rate in the Gauteng province as a whole (Wazimap, 2017).

Within Ward 111, 77.6% of the households have their rubbish removed regularly by a local authority or private company either weekly or less often. Other households made use of a communal or personal rubbish dump. As of the 2011 Census, 9.1% of households did not have refuse disposal strategies (Wazimap, 2017).

#### 3.2.5 Education

As of the 2011 Census, 92.6% of school-aged children (children between the ages of five and 17) attended school. At the time of the census, children made up 32% of the population, totalling 5 557 children. The majority of 17-year olds had completed some school education (89%), with an additional 5% completing their matric. At that age, 5% had only completed

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their primary education, with an additional 2% having completed only some primary-level education (Wazimap, 2017).

In terms of the population of adults older than 20 years, 75.1% had completed Grade 9 or higher and 43.8% had completed matric or higher. Of this adult population, 5% had completed their undergraduate programme and 1% had completed a post-graduate programme. As noted in the Census, 4% of the adult population older than 20 years had no schooling at all (Wazimap, 2017).

The Dunnottar Library is less than 1 km from the Project area and the Duduza and Tsakane Libraries are situated outside the ward but in proximity to the Project area. There are no primary or secondary schools indicated within Ward 111; however, there are several schools in proximity to the Project.

#### 3.2.6 Crime

The Dunnottar Police Station is the police station nearest the Project area and is less than 1 km away from the Project. The Tsakane and Duduza Police Stations are outside Ward 111 but are also in proximity to the Project, located less than 5 km and 2 km away respectively.

In 2018, 1 010 crimes were reported to the Dunnottar Police Station. The most common category of crime was 'other serious crime' which totalled 525 reports, of which 436 were reported by the community (Crime Stats SA, 2018). Crimes in this category include theft not mentioned elsewhere, commercial crimes, shoplifting and community-reported crimes.

# 4 Potential Social Impacts

Table 4-1 below provides a high-level assessment of predicted impacts of the proposed Project, as well as an indication of the predicted severity of the impact and the project phase within which the impact is expected to occur. A high-level description of recommended mitigation measures is also included in the table.

Digby Wells assumes that the average household size in residential units to be developed as part of the Project will be similar to that in the rest of Ward 111 (3.02 persons per household; refer to Section 3.2.1). Where relevant, impacts have been assessed assuming that approximately 19 542 people will reside in the units in the operation / habitation phase of the Project.



# **Table 4-1: Predicted Social Impacts**

Theme	Baseline conditions	Predicted impact	Recommended Mitigation Measure	Predicted Severity	Predicted Phase
Creation of employment opportunities	Present unemployment rate of 47.9%	Creation of longer-term opportunities through the various construction phases (extending over 15 to 20 years). The predicted number is not known.  Digby Wells assumes most of this employment will be sourced locally.	Maximise local employment creation by including quotas for locals in construction contactors' contacts.	Medium positive	Construction
Community health, safety and security	Refer to traffic, noise and dust specialist reports.	Nuisance through the increase in heavy-vehicle and pedestrian traffic, noise and dust during construction phase. Foreseen road closure at Prinsep Avenue will lead to changes in traffic patterns.  Potential increase in crime through the presence of construction sites.  Potential safety hazard posed by the illegal mining operations and <i>zama-zamas</i> .	Including of good-practice health, safety, secority and environment requirements in construction contractors' contracts, and consistent enforcement of these through monitoring by Environmental Control Officer.  Liaison by Alley Roads with local police to monitor crime levels and implement appropriate crime prevention measures (related to construction workforce and presence of <i>zama-zamas</i> in the vicinity).  Alley Roads to liaise with relevant government departments to work towards eviction of <i>zama-zamas</i> from WRD.	High negative	Construction and Habitation / Operation
Increased pressure on local services <sup>3</sup>	Majority of residents in Ward 111 have access to refuse removal, toilets and water. However, not all residents have access to these services at present.  No data available regarding electricity supply.  The CRR includes comments raised by multiple residents and I&APs regarding inadequate service provision at present, specifically policing, clinics and schools.	Refer to the Bulk Services and Traffic reports (to be appended to Draft EIA Report).  The Project will include 6 471 housing units and approximately 19 542 people. This will approximately double the ward's population (which was 17 419 in 2011), thus placing intense pressure on the existing municipal service provision.	Implementation of mitigation measures specified in Bulk Services and Traffic reports.  Liaison by Alley Roads with municipality to ensure adequate planning of infrastructure to take into account population increase.	High negative	Habitation / Operation
Change in socio-economic profile of the area	Majority of households rent their dwellings. Separate house or brick / concrete structures are the most common dwellings but apartments and townhouses do occur within the ward.	Should the Project cater for a different socio-economic stratum than the existing conditions, this may lead to changes in property values, and increase in crime. This potential impact has been assessed, but available data indicates that is unlikely to be significant. The development appears to fit into the baseline socio-economic context, access-controlled security measures (which are included in Project plans) are likely to prevent the Project from contributing significantly to local crime rates.	None, as this impact is unlikely to be significant.	Low negative	Habitation / Operation

<sup>&</sup>lt;sup>3</sup> The larger John Dube Project includes planning for more schools and a satellite university. However, this is not included in this component of the Project and has not been assessed here.

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Theme	Baseline conditions	Predicted impact	Recommended Mitigation Measure	Predicted Severity	Predicted Phase
Contribution to addressing the housing shortage	Majority of households rent their dwellings. Separate house or brick / concrete structures are the most common dwellings but apartments and townhouses do occur within the ward. The fact that 18% of households in in EMM live in 119 informal settlements indicates a significant housing shortage in the area.	The Project will include 6 471 housing units and will contribute to the housing of approximately 19 542 people. Alley Roads intends to retain ownership of the units and allow residents to rent.	None, as this is a positive impact and the rationale for the Project.	Medium positive	Habitation / Operation



#### 5 Recommendations and Conclusions

As indicated in Section 4, the proposed Project is expected to have a positive impact in terms of helping to alleviate the housing shortage in EMM, as well as in terms of creating some construction-related employment opportunities. However, the Project also has the potential to give rise to significant negative impacts – notable in relation to:

- Increased pressure on services and infrastructure (roads, water, sewerage, etc.); and
- Crime and security risks, related both to the recurrent presence of a construction workforce in the area and the presence of *zama-zamas* in the vicinity.

Given the fact that concerns regarding such negative impacts have already been raised by stakeholders, there is a significant risk that opposition to the proposed Project could lead to social mobilisation and unrest.

This SIA meets the requirements specified in the SoW provided to Digby Wells by Envirolution. However, Digby Wells are of the opinion that this SIA is in adequate to identify and assess all socio-economic impacts associated with the proposed Project, nor to formulate viable mitigation measures to effectively address negative impacts. The limitations of this SIA have been highlighted in Section 1.3 above; the most pertinent of these being:

- The fact that no site work of stakeholder consultation was undertaken to inform this SIA;
- The fact that budget limitations have prevented Digby Wells from addressing any SIA-related stakeholder comments in the CRR;
- The absence of any economic assessment (based on econometric modelling) to inform this SIA with regard to the expected macro-economic impacts of the Project; and
- The fact that it has not been possible to take into account the findings of the Bulk Services and Traffic specialist studies in this SIA.

In light of the above, and given the potentially-significant impacts of the Project, Digby Wells strongly recommends that Envirolution commission a more comprehensive SIA to build on the findings of this report and to address the identified gaps. Failure to do so runs the risk of engendering significant social opposition to the Project, as well as of preventing adequate mitigation measures being established to ameliorate the Project's likely negative side-effects.

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