

## CHAPTER FOUR: ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND PUBLIC PARTICIPATION

### 4.1 INTRODUCTION

This Chapter of the report provides the legal context for this Environmental Impact Assessment (EIA), an overview of the approach to the EIA process, with a focus on the Public Participation process, as well as the objectives of the NEMA EIA Regulations, 2014 (as amended), GN R326, Appendix 3. as follows:

- “2.(a) *determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;*
- 3.(1)(h)(ii) *details of the public participation process undertaken in terms of Regulation 41 of the Regulations, including copies of the supporting documents and inputs;*
- 3.(1)(h)(iii) *a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them;*
- 3.(1)(h)(vi) *the methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;”*

The generic Terms of Reference for the assessment of impacts by specialists as contained in the approved Plan of Study for EIA is included as Appendix 4.1 of this chapter. As required by GN R326 section 39 to 44 and Appendix 3, the steps for the EIA Phase of the Assessment are outlined in detail below. The Final Scoping Report (FSR) contains the details for the Scoping Phase of the Assessment Process.

Spatial planning tools, municipal development planning frameworks and instruments which have been considered in the EIA Phase of this assessment are listed below and are discussed in more detail in the various chapters of this report (Chapter One to Ten). Chapter One of this report includes a table, which indicates where the requirements for EIA as contained in GN R326, Appendix 3, are provided for in this report.

### 4.2 LEGAL CONTEXT FOR THIS EIA

Section 24(1) of NEMA (as amended) provides as follows:

*"In order to give effect to the general objectives of integrated environmental management laid down in this Chapter, the potential impact of the environment of listed activities must be considered, investigated, assessed and reported on to the competent authority charged by this Act with granting the relevant environmental authorization."*

The reference to "listed activities" in section 24 of NEMAA relates to the NEMA EIA Regulations, 2014 (as amended), which came into effect on the 8 December 2014 and were amended on the 7 April 2017 by Government Notice R326, 327, 325 and 324 published in Government Gazette 40772. The Government Notices published are collectively referred to as the NEMA EIA Regulations 2014 (as amended) and amongst others, comprise listed activities that require either Basic Assessment (BA), or a Scoping and Environmental Impact Assessment (Scoping and EIA), which is to be undertaken prior to commencement of any activities on site. This proposed project

requires full Scoping and EIA in order to obtain Environmental Authorisation for activities listed in GN R327, 325 and 324, for which the decision-making authority is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Cacadu Region. Based on the specialist assessments and refinements to the project description Table 4.1 below indicates the listed activities as contained in GN R326, 327, 325 and 324.

As noted in Chapter One of this report, and in correspondence dated the 11 April 2017, DEDEAT was notified in writing of the intention to commence a Scoping and EIA process for the proposed project. On the 20 October 2017, an Application Form for Environmental Authorisation, inclusive of listed activities, was submitted to DEDEAT and acknowledgement of receipt thereof was received on the on the 2 November 2017 and reference number ECO6/C/LN2/M/64-2017 has been assigned to this application. On the 2 February 2018 acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT. As per GN R326, Regulation 23:

- (1) *The applicant must within 106 days of the acceptance of the scoping report submit to the competent authority - (a) an environmental impact assessment report inclusive of any specialist reports, and an EMPr, which must have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority;*

The EIA process is a planning, design and decision-making tool which needs to show the competent authority, DEDEAT, and the project applicant, what the consequences of their choices will be in biophysical, social and economic terms. As such, it identifies potential impacts that the project may have on the environment, as well as identifying potential constraints the environment may place on the development. The EIA makes recommendations to mitigate potentially negative impacts and maximize potentially positive impacts associated with the project.

*Table 4.1: Listed activities according to GN R327, 325 and 324 requiring Environmental Authorisation in terms of the NEMA EIA Regulations, 2014 (as amended).*

Activity Number	Project Component
<b>GN R327 (Listing Notice 1 – Basic Assessment)</b>	
19. <i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i>	<p>A watercourse, the Wit River, has been identified on site. It is proposed that an existing low-level crossing be utilised to access the proposed agricultural area along the western boundary of the Farm.</p> <p>The upgrading and maintenance of this existing crossing to a standard necessary to provide suitable access may require the depositing of material, excavation, removal or moving of soil, sand, pebbles or rock of more than 10 cubic metres from the watercourse.</p>
<b>GN R325 (Listing Notice 2 – full Scoping &amp; EIA)</b>	
15. <i>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—</i>	<p>The proposed agricultural development will entail the clearance of up to 65 hectares of vegetation, most of which is anticipated to be indigenous.</p>

<b>GN R324 (Listing Notice 3 – Basic Assessment)</b>	
<p>2. <i>The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres.</i></p> <p>a. <i>In Eastern Cape</i></p> <p>ii. <i>Outside urban areas, in:</i>            (dd) <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i>            (ff) <i>Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or</i></p>	<p>In order to ensure sufficient supply of irrigation water for the proposed agricultural development, it is proposed that a new irrigation dam, with an anticipated capacity of approximately 30 000 cubic metres, be constructed.</p> <p>The area under assessment is located outside of an urban area, in the Eastern Cape and approximately 7.5 kilometres from the nearest boundary of the Addo Elephant National Park. The area under assessment has been identified as a Terrestrial CBA (BLMC2) and an Aquatic CBA (ABLMC 2b) in terms of the Eastern Cape Biodiversity Conservation Plan.</p>
<p>4. <i>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</i></p> <p>a. <i>Eastern Cape</i></p> <p>i. <i>Outside urban areas:</i></p> <p>(ee) <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p>(gg) <i>Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;</i></p>	<p>A number of internal unpaved service roads will be required to provide access within the orchards. The width of these roads will vary between 4m and 10m wide.</p> <p>The area under assessment is located outside of an urban area, in the Eastern Cape and approximately 7.5 kilometres from the nearest boundary of the Addo Elephant National Park. The area under assessment has been identified as a Terrestrial CBA (BLMC2) and an Aquatic CBA (ABLMC 2b) in terms of the Eastern Cape Biodiversity Conservation Plan.</p>
<p>23. <i>The expansion of –</i>            (ii) <i>infrastructure or structures where the physical footprint is expanded by 10 square metres or more;</i>  <i>where such expansion occurs—</i>            (a) <i>within a watercourse;</i>            (c) <i>if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</i></p> <p>a. <i>Eastern Cape</i></p> <p>i. <i>Outside urban areas:</i></p> <p>(ee) <i>Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</i></p> <p>(gg) <i>Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;</i></p>	<p>A watercourse, the Wit River, has been identified on site. It is proposed that an existing low-level crossing be utilised to access the proposed agricultural area along the western boundary of the Farm.</p> <p>The existing crossing is proposed to be upgraded and maintained to a standard necessary to provide suitable access. The footprint of the existing crossing is likely to be increased by 10 cubic metres or more within the watercourse and within 32 metres of a watercourse.</p> <p>The area under assessment is located outside of an urban area, in the Eastern Cape and approximately 7.5 kilometres from the nearest boundary of the Addo Elephant National Park. The area under assessment has been identified as a Terrestrial CBA (BLMC2) and an Aquatic CBA (ABLMC 2b) in terms of the Eastern Cape Biodiversity Conservation Plan.</p>

### 4.3 LEGISLATION AND GUIDELINES APPLICABLE TO THIS EIA

As per Appendix 3 of GN R326 the scope and content of this report has been informed by the following legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, instruments, and information series documents, which are potentially applicable to this project and considered in the assessment process:

#### 4.3.1 National Legislation

##### 4.3.1.1 *The Constitution of the Republic of South Africa (Act 108 of 1996):*

The Constitution, is the supreme law of South Africa and provides the legal framework for legislation regulating environmental management in general, against the backdrop of the Bill of Rights contained in Chapter Two of the constitution and enshrining fundamental human rights. Section 24 of the Constitution states that everyone has the right:

- “a) to an environment that is not harmful to their health or well-being; and*
- b) to have the environment protected, for the benefit of present and future generations through reasonable legislative and other measures that:*
  - (i) prevent pollution and ecological degradation;*
  - (ii) promote conservation; and*
  - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”*

**Applicability to this proposed project:** The proposed development must be implemented in a manner to 1) prevent pollution and ecological degradation; 2) promote conservation; and 3) secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development. The State has a duty to promulgate legislation and take other steps that ensure that these rights are upheld and that, among other things, ecological degradation and pollution are prevented.

##### 4.3.1.2 *National Environmental Management Act (as amended) and the Environmental Impact Assessment Regulations 2014 (as amended), published under Chapter Five of NEMA (GN R326, GN R327, GN R325 and GN R324):*

The NEMA sets out a number of principles (Chapter One, Section 2) to give guidance to developers, private land owners, members of public and authorities. The proclamation of the NEMA gives expression to an overarching environmental law. Various mechanisms, such as cooperative environmental governance, compliance and non-compliance, enforcement, and regulating government and business impacts on the environment, underpin NEMA.

NEMA, as the primary environmental legislation, is complemented by a number of sectoral laws governing marine living resources, mining, forestry, biodiversity, protected areas, pollution, air quality, waste and integrated coastal management. Principle number 3 determines that a development must be socially, environmentally and economically sustainable. Principle Number 4(a) states that all relevant factors must be considered, inter alia i) that the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimized and remedied; ii) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied; vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised; and viii) that negative impacts on the environment and on peoples' environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.

**Applicability to this proposed project:** The activity requires full Scoping and EIA in order to obtain Environmental Authorisation for activities listed in GN R327, 325 and 324, for which the competent authority is the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), Cacadu Region. This report serves to inform the process and governing principles of NEMAA and the requirements of the NEMA EIA Regulations, 2014 (as amended).

In terms of the requirements for good governance prescribed by the Act, there is an obligation to use all available information when making decisions, and to ensure that decisions are informed by the most up to date and relevant information available.

#### 4.3.1.3 *National Environmental Management Biodiversity Act (Act 10 of 2004):*

The NEMBA provides for the protection of listed endangered ecosystems and restricts activities according to the categorization of the area (not just by listed activity as specified in the NEMA EIA Regulations 2014 (as amended)). It promotes the application of appropriate environmental management tools to protect biodiversity. Chapter Three allows for the publication of bioregional plans. Chapter Five of the Act refers to the introduction and control of alien invasive species. The Threatened or Protected Species (TOPS) Regulations, in terms of Section 97 (Chapter Eight), requires an authorization/ permitting process to be followed.

**Applicability to this proposed project:** The site falls within the SRVM and no bioregional plans have been gazetted for this region. However, environmental management tools that are available for this region include, the Eastern Cape Biodiversity Conservation Plan (ECBCP), as well as the Sundays River Valley Municipality Biodiversity Sector Plan (SRVM BSP). These biodiversity planning frameworks must be consulted to inform decision making. Amongst others, these documents identify Aquatic and Terrestrial Critical Biodiversity Areas and Ecologically Sensitive Areas, which are coupled with relevant land use guidelines. However, these planning frameworks only serve as an identification tool and thus, require site verification, the results of which need to be considered by the development proposal.

Any threatened or protected species in terms of the NEMBA Threatened or Protected Species (TOPS) list cannot be removed without an authorization/ permit. Alien species listed in terms of NEMBA identified on a site are required to be controlled and /or eradicated. This report includes the results and recommendations of the Ecological and Aquatic Specialist Assessments (Chapter Six and Seven, respectively).

#### 4.3.1.4 *National Forests Act (Act 84 of 1998):*

The NFA (Act 84 of 1998) allows for the protection of certain tree species. The Minister has the power to declare a particular tree to be a protected tree. According to Section 12 (1) d (read with Sections (5) 1 and 62 (2) (c)) of the National Forest Act (Act 84 of 1998), a license is required to remove, cut, disturb, damage or destroy any of the listed protected trees. The most recent list of protected tree species was published in December 2016. The Department of Agriculture, Forestry and Fisheries (DAFF) is authorised to issue licences for any removal, cutting, disturbance, damage to or destruction of any protected trees.

**Applicability to this proposed project:** The protected trees that commonly occur in this region are *Sideroxylon inerme* (Milkwood). The absence of these trees on site has been confirmed as part of the Ecological Specialist Assessment (Chapter Six of this report).

#### 4.3.1.5 National Heritage Resources Act (Act 25 of 1999):

The NHRA (Act 25 of 1999) introduces an integrated and interactive system for the managements of national heritage resources (which include landscapes and natural features of cultural significance). The protection of archaeological and paleontological resources is the responsibility of a provincial heritage resources authority and all archaeological objects, paleontological material and meteorites are the property of the State.

#### **Archaeology, palaeontology and meteorites:**

*“Section 35 (4) No person may, without a permit issued by the responsible heritage resources authority:*

- a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- c) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.”*

#### **Heritage resources management:**

*“38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as:*

- a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;*
- b) the construction of a bridge or similar structure exceeding 50 m in length;*
- c) any development or other activity which will change the character of the site –*  
*(i) exceeding 5000 m<sup>2</sup> in extent, or”*

**Applicability to this proposed project:** A Heritage Impact Assessment has been undertaken for the proposed development, as part of the EIA phase of the assessment. The East Cape Provincial Heritage Resources Agency (ECPHRA) is required to provide comment on these reports to assist DEDEAT in their decision making. In order to facilitate their input, the respective reports will be loaded onto the SAHRIS website and the ECPHRA will be provided with copies of reports during the various stages of the assessment process.

#### 4.3.1.6 National Water Act (Act 36 of 1998):

The NWA is concerned with the overall management, equitable allocation and conservation of water resources in South Africa. It controls and manages water use in terms of water abstraction, water storage, wastewater discharge, impact on watercourses, altering watercourse flow and the determination of the Reserve. The General Authorizations in terms of Section 39 of the Act identify certain activities that require registration or licensing via the Department of Water Affairs that impact aquatic resources (watercourses and wetlands).

Section 144 states the Departments view on development surrounding water resources: 144) For the purposes of ensuring that all persons who might be affected have access to information regarding potential flood hazards, no person may establish a township unless the layout plan shows, in a form acceptable to the local authority concerned, lines indicating the maximum level likely to be reached by floodwaters on average once in every 100 years. In other words, the township developer must delineate the 1:100-year flood line on a map when developing a township. Measures must be implemented that prevent pollution and ecological degradation of aquatic resources i.e. rivers and wetlands.

A water use licensing application or registration is generally processed in the event that a proposed development lies within 500m of wetland habitat, in close proximity to aquatic features (wetlands, dams, rivers) or where a development crosses a watercourse; in terms of Section 21(c): impeding or diverting flow in a watercourse and 21(i): altering the beds and banks etc. of a watercourse. Application is made in terms of the Dam Safety Regulations for dams exceeding 50 000 m<sup>3</sup> and with a berm wall height exceeding 5 m in height.

**Applicability to this proposed project:** Due to the occurrence of a number of water resources (wetlands, irrigation/ storage dams and watercourses) on and in close proximity to Sylvania, as well as the proposal to upgrade the existing low-level crossing across the Wit River, an Aquatic Specialist Assessment has been undertaken. The results of the full Aquatic Report are included in Chapter Six of this report.

Confirmation is required from the Department of Water and Sanitation (DWS) whether the upgrading of the low-level crossing across the Wit River, as well as the undertaking of activities within 500m of the wetlands that have been identified on the Farm and within 500m radius of the Farm, will require a General Authorisation (GA) or the submission of a Water Use Licence Application (WULA) in terms of Section 21 (c) and (i) of the Water Act.

It is proposed that a new dam with a capacity of ~30 000m<sup>3</sup> (~2.1ha footprint) be constructed to supply the required irrigation water for the proposed agricultural development. A GA or WULA is not usually required in terms of Section 21 (a) (water abstraction) when water is supplied from the existing Lower Sundays River Water Users Association (LSRWUA) canal system. Similarly, it is also unlikely that Section 21 (b) (water storage) should apply. Water from the LSRWUA canal system is not readily available during the day and is only released during prescribed times. The proposed balancing dam is thus needed to access and temporarily store the water from the LSRWUA canal system during the prescribed time periods. The DWS has been included on the database for this project.

#### *4.3.1.7 National Environmental Management: Protected Areas Act (Act 57 of 2003):*

The NEMPAA provides for the declaration of Protected Areas (PAs) in three forms (Chapter Three), namely Special Nature Reserves (Part 2), Nature Reserves (Part 3) and Protected Environments (Part 4). National Parks are the equivalent of National Protected Areas. Section 10 states that a Protected Area, declared in terms of provincial legislation, is either a nature reserve or protected environment.

**Applicability to this proposed project:** The nearest boundary of the Addo Elephant National Park is located ~7.5km north of Sylvania, therefore SANParks, as well as representatives of Addo Elephant National Park have been included on the project database and will be notified in writing of the various stages to comment on the assessment process. To date, no comment has been received from representatives of SANParks or AENP on the proposed development.

#### *4.3.1.8 Conservation of Agricultural Resources Act (Act 43 of 1983):*

The objectives of the CARA (Act 43 of 1983) are to provide for the conservation of the natural agricultural resources of South Africa by the:

- Maintenance of the production potential of land;
- Combating and prevention of erosion and weakening or destruction of the water sources; and
- Protection of the vegetation and the combating of weeds and invader plants.

The CARA states that no land user shall utilise the vegetation of wetlands (a watercourse or pans) in a manner that will cause its deterioration or damage. This includes cultivation, overgrazing, diverting water run-off and other developments that damage the water resource. The CARA includes regulations on alien invasive plants. According to the amended regulations (GN R280 of March 2001), declared weeds and invader plants are divided into three categories:

- Category 1 may not be grown and must be eradicated and controlled,
- Category 2 may only be grown in an area demarcated for commercial cultivation purposes and for which a permit has been issued, and must be controlled, and
- Category 3 plants may no longer be planted and existing plants may remain as long as their spread is prevented, except within the flood line of watercourses and wetlands. It is the legal duty of the land user or land owner to control invasive alien plants occurring on the land under their control.

The provisions of Regulation 2 of CARA relate to the cultivation of virgin or new land. The landowner or applicant must obtain permission or authorisation in terms of Regulation 2 of the CARA Act, before virgin soil may be disturbed mechanically.

**Applicability to this proposed project:** The Vegetation Specialist Assessment has identified CARA listed species on site, which must be managed in line with the EMP. The Land Use and Soil Management Directorate of the Department of Agriculture, Forestry and Fisheries, as well as the Provincial Department of Rural Development and Agrarian Reform, Resource Planning Section, have been included on the project database and will be notified in writing of the various stages to comment on the assessment process. The applicant has been advised of the requirement to obtain permission from these departments to cultivate virgin land.

#### 4.3.1.9 *Other Applicable National Legislation:*

- Occupational Health and Safety Act (Act 85 of 1993), as amended by Occupational Health and Safety Amendment (Act 181 of 1993);
- Hazardous Substances Act (Act 15 of 1973)

### 4.3.2 **Provincial and Local Legislation**

#### 4.3.2.1 *Cape Nature and Environmental Conservation Ordinance (Act 19 of 1974):*

The Ordinance allows for conservation of the natural environment; and the protection of wildlife. Certain biota are scheduled and, therefore, protected. A permit must be obtained from the Provincial DEDEAT, Biodiversity Section, to remove or destroy any plants listed in the Ordinance.

**Applicability to this proposed project:** A Vegetation Specialist Assessment has been undertaken during the EIA phase of the assessment. DEDEAT's Biodiversity Division have been included on the project database and will be notified in writing of the various stages to comment on the assessment process.

#### 4.3.2.2 *Eastern Cape Provincial Heritage Resources Act (Act 9 of 2003):*

This Act provides for the establishment of a statutory body to identify, manage, conserve and promote heritage resources in the Province and matter related thereto.

**Applicability to this proposed project:** As noted under 4.3.1.5, a Heritage Impact Assessment has been undertaken for this project. The ECPHRA is registered on the project database and all reports as a result of this assessment process will be uploaded onto the SAHRIS website to



facilitate their input. In addition, the ECPHRA is emailed an electronic copy of reports during the comment period for the various stages of this assessment process.

#### 4.3.2.3 Other Applicable Provincial and Local Legislation:

- SRVM Integrated Development Plan (IDP), 2015/2016
- SRVM Spatial Development Plan (SDP), 2013
- Section 8 Zoning Scheme Regulations

#### 4.3.3 Policies and Guidelines

The policies and plans listed below have been considered in the compilation of this report. The applicability of the relevant conservation and other planning frameworks is discussed in more detail in Chapter Three of this report and will be considered by the relevant specialists in their respective assessments.

- South African National Development Plan, 2011.
- Integrated Environmental Management Information Series (Booklets 0 to 23) published by DEA over the period 2002 to 2005.
- Integrated Environmental Management Series Guidelines:
  - Guideline 7: Public Participation in the EIA process, (DEA, 10 October 2012, No 35769).
  - Guideline on Need and Desirability (DEA 2017).
- Conservation and Other Planning Frameworks:
  - National Biodiversity Assessment (NBA).
  - National Freshwater Ecosystem Priority Areas (NFEPA).
  - National Protected Areas Expansion Strategy (NPAES).
  - South African Heritage Resources Agency (SAHRA).
  - Agricultural Geo-Referenced Information System (AGIS).
  - Eastern Cape Biodiversity Conservation Plan (ECBCP).
  - Subtropical Thicket Ecosystem Programme (STEP).
  - Sundays River Valley Municipality Biodiversity Sector Plan (SRVM BSP).

#### 4.4 OVERVIEW OF THE SCOPING AND EIA PROCESS

The Scoping and EIA process for this assessment has been divided into the following phases:

##### **Pre-Application Scoping Phase**

- Project Announcement and Registration of I&APs (30 days)
- Draft Consultation Scoping Report review (30 days)

##### **Application and Scoping Phase**

- Submit Application form for Environmental Authorisation to DEDEAT
- Review of the Consultation Scoping Report (30 days)
- Submit Final Scoping Report to DEDEAT

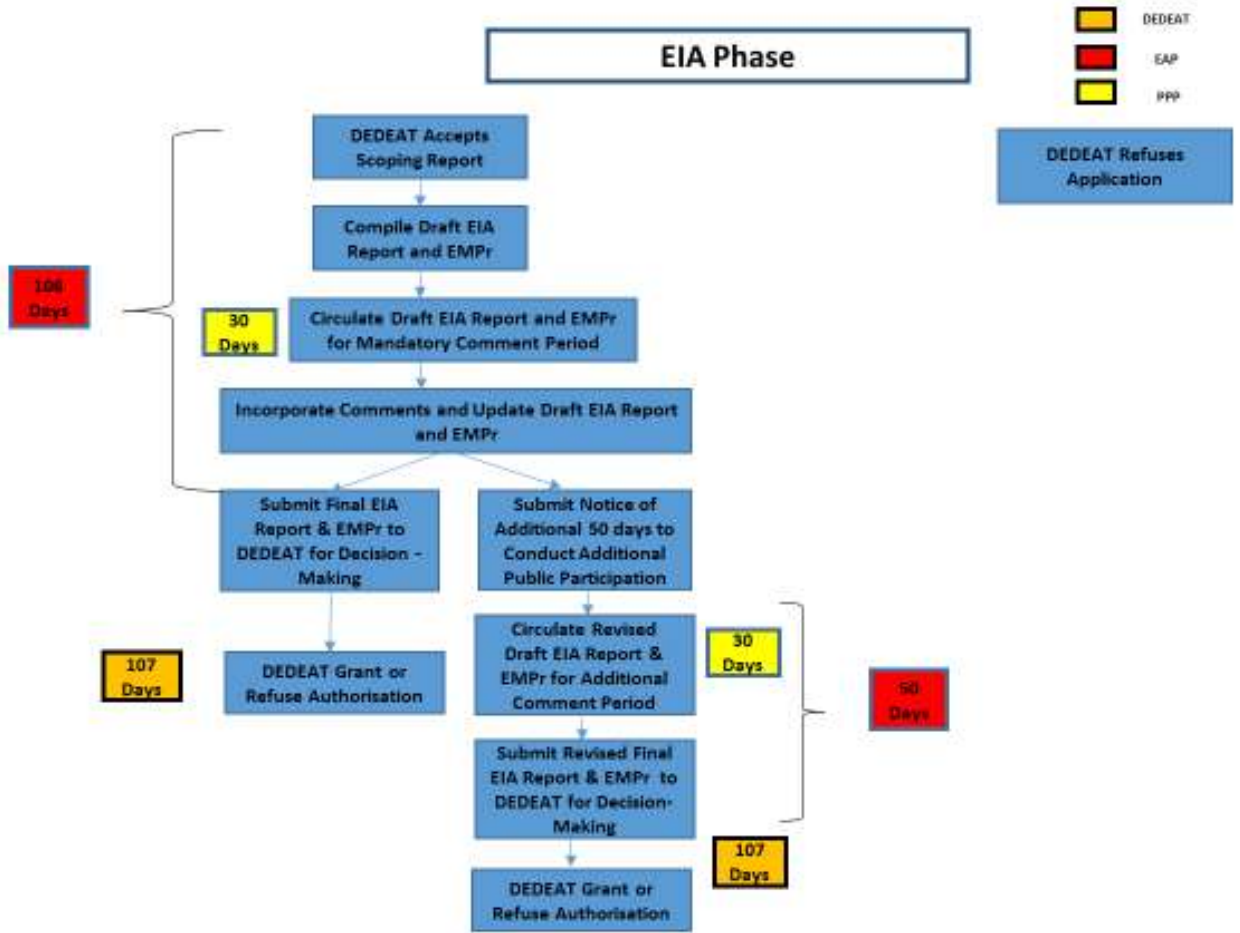
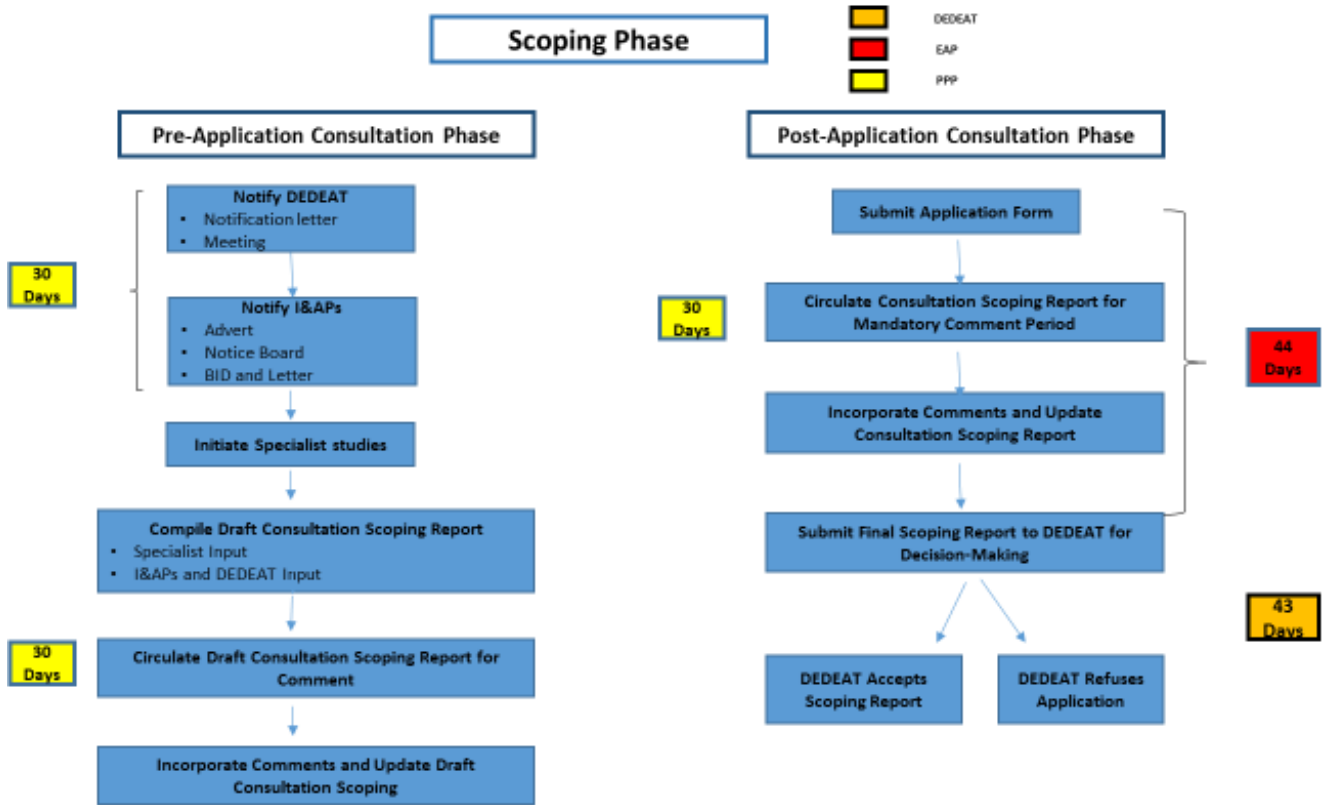
##### **Environmental Impact Assessment Phase (discussed in detail below)**

- Draft Environmental Impact Assessment (30 days) (**WE ARE HERE NOW**)
- Submit Final Environmental Impact Assessment to DEDEAT

##### **Decision Making and Appeal Period**

- Notice to I&APs of decision and appeal period

The diagram below depicts the S and EIA process being implemented for the proposed project.



#### 4.4.1 Principles for Public Participation

The Scoping and EIA process is being driven by a stakeholder engagement process that will include inputs from the competent authority, affected Organs of State, Interested and Affected Parties (I&APs), specialists and the project applicant.

Guideline 7 on “Public Participation in the EIA Process”, published by DEA in October 2012, states that public participation is one of the most important aspects of the Environmental Authorisation process. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the competent authority to make informed decisions and results in improved decision-making as the view of all parties are considered (DEA, 2012: pg. 5). An effective public participation process could therefore result in stakeholders working together to produce better decisions than if they had worked independently. The Guideline (DEA, 2012) further notes that the benefits of public participation include the following:

- *“it provides an opportunity for I&APs, EAPs and the competent authority (CA) to obtain clear, accurate and understandable information about the environmental impacts of the proposed activity or implications of a decision;*
- *it provides I&APs with an opportunity to voice their support, concerns and questions regarding the project, application or decision;*
- *it provides I&APs with the opportunity of suggesting ways for reducing or mitigating any negative impacts of the project and for enhancing its positive impacts;*
- *it enables an applicant to incorporate the needs, preferences and values of affected parties into its application;*
- *it provides opportunities for clearing up misunderstandings about technical issues, resolving disputes and reconciling conflicting interests;*
- *it is an important aspect of securing transparency and accountability in decision-making; and*
- *it contributes toward maintaining a healthy, vibrant democracy.”*

Public Participation is a process and vehicle to provide sufficient and accessible information to I&APs in an objective manner to assist I&APs to identify issues of concern, to identify alternatives, to suggest opportunities to reduce potentially negative or enhance potentially positive impacts, and to verify that issues and/or inputs have been captured and addressed during the assessment process.

The primary objective of the EIA phase of the assessment is to, through a consultative process, present to I&APs and affected organs of state an overview of the predicted impacts, proposed mitigation measures (both positive and negative), closure outcomes, residual impacts of the activity and management actions required to avoid or mitigate the negative impacts; or enhance the positive impacts of the project. The requirements of the EIA phase of the assessment, as per the EIA Regulations, 2014 (as amended), are outlined in Chapter One of this report (section 1.6).

The EIA is required to be undertaken through a consultative process and thus the EIA must, amongst others, satisfy the requirements of Chapter Six (Regulations 39 - 44) of GN R326 of the NEMA EIA Regulations, 2014 (as amended), which relates to the public participation process and the registration of I&APs, as well as the acknowledgment and recording of their comments on the proposed project. Issues raised during the Scoping Process have been included in an Issues and Responses Trail as part of Chapter Four of the FSR. The sections below outline the public participation process for the EIA phase of the assessment.

#### 4.4.2 Authority Consultation

All public participation documentation (Draft and Final Reports) will be sent to the competent authority (DEDEAT), as well as other Organs of State, which may have jurisdiction over an aspect of the project and are included on the I&AP database. Authorities are required to provide their input into the assessment process, within the timeframes stipulated. Input from authorities will be included in the Comments and Responses Trail for the Scoping and EIA process.

In order to initiate the Scoping and EIA process, notification of the intention to commence with a Scoping & EIA process, was submitted to the DEDEAT and Organs of State on 11 April 2017. Included with this correspondence was a Background Information Document (BID), locality map and comment form.

On the 20 October 2017, an Application Form for Environmental Authorisation in order to commence the legislated portion of the Scoping and EIA process in terms of the NEMA EIA Regulations 2014 (as amended), was submitted to the competent authority, prior to the release of the Consultation Scoping Report (CSR) for a legislated 30-day consultation period. Acknowledgement of receipt of the submission of the Application Form, as well as the Consultation Scoping Report was received from DEDEAT on the 2 November 2017 and reference number EC06/C/LN2/M/64-2017 has been assigned to this application. In line with the NEMA EIA Regulations, 2014 (as amended), DEDEAT have been notified in writing regarding the relevant listed activities applicable to this project. Refer to the FSR for further information regarding communication with DEDEAT during the Scoping phase of the assessment process.

The FSR, including the Plan of Study for EIA was submitted to DEDEAT on the 29 November 2017, and acknowledgement of receipt thereof was received from DEDEAT on the 12 January 2018. On the 2 February 2018, acceptance of the FSR and approval of the Plan of Study for EIA was received from DEDEAT. Copies of correspondence received from DEDEAT are included in Appendix B of this report. In line with the NEMA EIA regulations 2014 (as amended), the Final EIA, which has been subjected to a 30 day I&AP review period, must be submitted to DEDEAT within **106 days** of the correspondence, dated **2 February 2018**.

Organs of State and/ or State Departments, which may be required to issue a licence or permit prior to commencement of the project, have been consulted and are included on the project database. Appendix D.2 includes the database of Organs of State and/ or State Departments, which may have jurisdiction over an aspect of the project, with their contact details. The following National, Provincial and Local Government Departments, as well as other Organs of State, were proactively identified and included on the database for this project prior to advertising the Scoping Process (Pre-Application Phase) and have been notified of the various stages to comment on the Scoping process:

- National and Provincial Government Departments (Potential Juristic Organs of State)
  - National Department of Agriculture, Forestry and Fisheries (DAFF)
  - Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT: EIM - Competent Authority)
  - Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT: Biodiversity Section)
  - Provincial Department of Rural Development and Agrarian Reform
  - Provincial Department of Water and Sanitation (DWS)
  - East Cape Department of Roads and Public Works (EC DR&PW)
  - East Cape Provincial Heritage Resources Agency (ECPHRA)
- Local Government Departments

- Sundays River Valley Municipality: Local Authority
- South African National Parks (Addo Elephant National Park)
- Lower Sundays River Water Users Association (LSRWUA)
- Sundays River Valley Municipal Ward Councillor, Ward 8

These Organs of State/ State Departments will remain on the database for the duration of the Scoping and EIA process for this project and receive information in the format as agreed to with the relative departments (hard copy, CD or email). Information available for I&AP review will be placed on the website [www.publicprocess.co.za](http://www.publicprocess.co.za) for the duration of the Scoping and EIA process.

#### **4.4.3 Database Development, Maintenance and Ongoing Information Sharing**

The following provides an outline of the approach to the development of the Project Announcement Phase database for this project, as well as the maintenance of the database and ongoing information sharing throughout the Scoping and EIA process.

Prior to advertising the Scoping and EIA process, the EAP, drawing on experience in the local SRV municipal area and by means of a deed search, developed an initial database of potential I&APs for the initiation of the Scoping process. Adjacent landowners/ tenants were identified through a deeds search (Windeed) and, where required, contact information was confirmed by telephonic communication. This database included, amongst others, adjacent landowners/ tenants, affected/ juristic Organs of State and the competent authority (as outlined in Section 4.4.2 above), the Councillor for Ward 8 and other potential I&APs (e.g. WESSA EP Region and CREW). A copy of the database for the project is included as Appendix D.1 of this report and **prior to advertising the Scoping and EIA process, included 24 registered IA&Ps.**

I&APs were notified of the requirement to register their interest on the database for this project from the outset of the Scoping process, via Letter 1 to I&APs. However, the identification and registration of I&APs will be ongoing for the duration of the Scoping and EIA process. While not required by the regulations, those I&APs identified at the outset of the Scoping process will remain on the project database and will be kept informed of all opportunities to comment and will only be removed from the database by request.

At the time of the release of the FSR, the database included **26 registered I&APs**. The comments received during the Scoping process were included in the FSR. Comments submitted after the submission of the FSR and prior to the review period for the Draft EIA would have been included in the Comments and Responses Trail below and copies of the comments included in Appendix F of this report. However, **no comments have been received during this period.**

The I&AP details on the database will be regularly captured and automatically updated as and when information is distributed to or received from I&APs, throughout the assessment process. This ongoing and up-to-date record of communication will be an important public participation component which accurately reflects the interaction with I&APs throughout the assessment process. Appendix D.1 includes a copy of the I&AP database for the project.

The sections below provide an overview of the tasks being undertaken for the EIA phase of the assessment, with an emphasis on providing a clear record of the Public Participation process to be followed, to ensure that the objectives for Public Participation for the EIA phase of the assessment are achieved.

## 4.5 PUBLIC PARTICIPATION PROCESS

The following section outlines the various steps to be followed in the public participation process for the EIA phase of the assessment. The participation process for the Scoping process is outlined in detail in the FSR. While not required by the regulations, all I&APs on the project database were notified in writing of the submission of the FSR to DEDEAT for their decision making. See copy of correspondence attached as Appendix E.

### 4.5.1 Compile Draft EIA Report and EMPr

After acceptance of the FSR and approval of the Plan of Study (PoS) for EIA, the assessment moves into the EIA phase. This entails the compilation of the Draft EIA and EMPr for a 30-day I&AP and authority review period. The Draft EIA and EMPr has been compiled based on the specialist studies conducted for the project as outlined in the accepted FSR and approval of the PoS for EIA, received from the competent authority, DEDEAT.

### 4.5.2 Review of the Draft EIA (and EMPr) and Ongoing Communication

The Draft EIA and EMPr will be made available to all I&APs on the project database for a 30-day review period. The following indicates the public participation process that will be implemented for the review of the Draft EIA and EMPr in order to provide I&APs with an opportunity to submit comments on the Draft EIA and to facilitate access to information:

- Letter 5 to I&APs - All I&APs on the project database will be notified in writing of the release of the Draft EIA and EMPr for public review. Included with this notification will be an Executive Summary of the Draft EIA and a comment form.
- Key I&APs - (Competent Authority, Councilor, and Juristic Organs of State) will be provided with either a hard copy or electronic version of the report, as agreed to with the respective Departments.
- Report to be placed on the project website [www.publicprocess.co.za](http://www.publicprocess.co.za)
- Focus Group Meetings – one on one meetings with key I&APs are not planned to form part of this process, however, such will be held upon request. Notes from meetings held will be included as an appendix to the Final EIA Report, as well as be included in the Comments and Responses trail.
- Authority Consultation – organs of state having jurisdiction in respect of any aspect of the activity will be consulted and their input will be included in the Final EIA as agreed to with the relevant Department.

A copy of the I&AP database is included as Appendix D.1 of this report, and at the time of release of the Draft EIA included **26 registered I&APs**. The database for organs of state, with contact details, is included as Appendix D.2 of this report.

### 4.5.3 Compilation of the Final EIA and EMPr for Submission to Authorities

In line with Regulation 23 (1) (a) of the 2014 EIA Regulations (as amended), the Final EIA, including the Comments and Responses Trail as well as the EMPr will be compiled for submission to the DEDEAT for their decision making, within 106 days from acceptance of the FSR. The following process will be followed regarding the notification to I&APs and authorities for the submission of the Final EIA.

- Letter 6 to I&APs: Notification of submission of the Final EIA
- Report Distribution
  - Relevant organs of state and key I&APs will be provided with a hard copy or electronic version of the report, as agreed to with the respective Departments
  - Report to be placed on the project website [www.publicprocess.co.za](http://www.publicprocess.co.za)

The Final EIA will also include proof of the public participation process that was undertaken to inform all registered I&APs, including organs of state, of the availability of the Draft EIA for the mandatory 30-day comment and review period.

#### **4.5.4 Decision on Application and Appeal Period**

The competent authority must, within 107 days of receipt of the Final EIA, reach a decision with regards to the application (Environmental Authorisation Granted or Refused), in line with Regulation 24 (1) (a) and (b) of the 2014 EIA Regulations (as amended). All I&APs on the project database will be notified once the competent authority has reached a decision on the application.

In terms of Regulation 4 (2) the applicant must, within 14 days of the date of the decision, notify all registered I&APs of the decision and provide them with access to the decision and reasons for the decision, as well as draw their attention to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations (Letter 7 to I&APs). The following process will be followed for the notification of the decision:

- A copy of the Environmental Authorisation Granted or Refused to be placed on the project website [www.publicprocess.co.za](http://www.publicprocess.co.za)
- Letter 7 to I&APs: Notification of the Decision and Appeal Period

All I&APs on the project database will be notified of the outcome of the appeal period if an appeal is lodged. This notification will be included in Letter 8 to I&APs.

#### **4.6 IDENTIFICATION OF ISSUES**

An important requirement of the EIA Process is that it should be undertaken in a consultative manner. To, inter alia, capture and respond to comments made by I&APs and authorities; to respond to comments made and indicate where this has been addressed in the assessment process; and where the comments fall beyond the assessment process to provide reasoning therefore.

In accordance with the philosophy of Integrated Environmental Management, it is necessary to focus the EIA on the key issues raised. Comments received during the Scoping Phase of the assessment were captured and compiled into a Comments and Responses trail included in the Final Scoping Report. No comments have been received since the submission of the Final Scoping Report to DEDEAT. Comments received during the Draft EIA comment period will be included in the Final EIA Report. The comments and responses trail will indicate the nature of the comment, as well as when and who raised the comment. The comments received will be considered by the EIA team and appropriate responses will be provided by the relevant member of the team and/ or specialist. The response provided will indicate how the comment received has been considered in the Final EIA, in the project design, or in the EMPr for the project. Where the comment received falls outside of the scope of the EIA this will, as far as possible, be clearly indicated and reasons provided. Input from the project technical team may be required in responding to some of the comments received.

Comments on the Draft EIA and EMPr will be received and documented as follows:

- Written and email comments (letters, emails and completed comment forms)
- Telephonic communication
- One on one meetings with key authorities and/ or I&APs (as requested)

At this stage of the assessment process no comments were received from IA&Ps following the submission of the FSR and prior to the review of the Draft EIA.

#### **4.7 CONCLUDING REMARKS**

No comments have been received which has required amendments to the scope of the specialist assessments as contained in the accepted FSR and Plan of Study for EIA. In addition, no input has been received with regards to the assessment of alternatives as contained in Chapter Five of this report.



## APPENDIX 4.1: GENERIC TERMS OF REFERENCE FOR THE ASSESSMENT OF IMPACTS

The following section outlines the assessment methodology and legal context for specialist studies. The identification of potential impacts should include impacts that may occur during the construction and operational phases of the activity. The assessment of impacts is to include direct, indirect, as well as cumulative impacts.

In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed activity is well understood so that the impacts and risks associated with the activity, can be well understood. The process of identification and assessment of impacts and risks will include:

- The determination of the current environmental conditions in sufficient detail so that there is a baseline against which impacts can be identified and measured;
- The determination of future changes to the environment that will occur if the activity does not proceed;
- An understanding of the activity in sufficient detail to understand its consequences; and
- The identification of significant impacts and risks which are likely to occur if the activity is undertaken.

As per GN R 326 Appendix 2, 2. (1) (h) (i), the assessment of impacts must include the alternatives to be assessed within the preferred site, including the option of not proceeding with the activity. Alternatives that will be assessed in the EIA phase of the assessment are outlined in Chapter Five of this report. The impact assessment methodology has been aligned with the requirements for EIA Reports as stipulated in GN R 326 Appendix 3, 3. (1) of the 2014 EIA Regulations (as amended), which states the following:

*“An EIA Report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include - ...*

- (j) an assessment of each identified potentially significant impact and risk, including –*
- (i) cumulative impacts;*
  - (ii) the nature, significance and consequences of the impact and risk;*
  - (iii) the extent and duration of the impact and risk;*
  - (iv) the probability of the impact and risk occurring;*
  - (v) the degree to which the impact and risk can be reversed;*
  - (vi) the degree to which the impact and risk may cause irreplaceable loss of resources; and*
  - (vii) the degree to which the impact and risk can be mitigated.”*

As per Guideline Document 5: Assessment of Alternatives and Impacts, the following methodology is to be applied to the prediction and assessment of impacts and risks. Potential impacts should be rated in terms of the direct, indirect and cumulative.

- **Direct** impacts are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.
- **Indirect** impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.
- **Cumulative** impacts are impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.

- **Spatial extent** – The size of the area that will be affected by the impact/risk
  - Site specific
  - Local (<2 km from site)
  - Regional (within 30 km of site)
  - National
- **Consequence/Intensity** –The anticipated severity of the impact/risk
  - Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease)
  - High (severe alteration of natural systems, patterns or processes i.e. where environmental functions and processes are altered such that they temporarily or permanently cease)
  - Medium (notable alteration of natural systems, patterns or processes i.e. where the environment continues to function but in a modified manner)
  - Low (negligible alteration of natural systems, patterns or processes i.e. where no natural systems/environmental functions, patterns, or processes are affected)
- **Duration** –The timeframe during which the impact/risk will be experienced
  - Temporary (less than 1 year)
  - Short term (1 to 6 years)
  - Medium term (6 to 15 years)
  - Long term (the impact will cease after the operational life of the activity)
  - Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient)
- **Reversibility** – The degree to which the potential impacts/risks can be reversed
  - Reversible
  - Partially Reversible
  - Irreversible
- **Irreplaceable loss of Resources** - The degree to which the impact/risk may cause irreplaceable loss of resources
  - Replaceable
  - Partially Replaceable
  - Irreplaceable

Using the criteria above, the impacts will further be assessed in terms of the following:

- **Probability** –The probability of the impact/risk occurring
  - Improbable (little or no chance of occurring)
  - Probable (<50% chance of occurring)
  - Highly probable (50 – 90% chance of occurring)
  - Definite (>90% chance of occurring)
- **Significance** – Will the impact/ risk cause a notable alteration of the environment?
  - Low to very low (the impact/risk may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making)
  - Medium (the impact /risk will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated).
  - High (the impact/risk will result in major alteration to the environment even with the implementation of the appropriate mitigation measures and will have an influence on decision-making)
  - Very high (the impact/impact will result in very major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision-making i.e. the project cannot be authorised unless major changes to the engineering design are carried out to reduce the significance rating).

- **Status** - Whether the impact/risk on the overall environment will be positive, negative or neutral
  - “+” (positive - environment overall will benefit from the impact/risk).
  - “-“ (negative - environment overall will be adversely affected by the impact/risk).
  - “o” (neutral - environment overall will not be affected).
- **Confidence** – The degree of confidence in predictions based on available information and specialist knowledge
  - Low
  - Medium
  - High

Impacts, mitigatory measures and the monitoring of impacts will then be collated into the EMPr and these will include the following:

- Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.
- Identifying negative impacts and prescribing mitigation measures to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Positive impacts and mitigation measures will be identified to potentially enhance positive impacts where possible.

Management Actions and Monitoring of the Impacts:

- Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Where positive impacts are identified, mitigatory measures will be identified to potentially enhance positive impacts.

The table below is to be used by specialists for the rating of impacts:

*Table 1: Rating of impacts.*

Nature of the Impact	This should include a description of the proposed impact to indicate if the impact is a direct, indirect or a cumulative impact.
Extent	Site specific, local, regional or national
Duration	Temporary, short term, medium term, long term or permanent
Consequence /Intensity	Extreme, High, medium or low
Probability	Improbable, probable, highly probable, definite
Degree of Confidence	Low, medium or High
Reversibility	Reversible, Partially Reversible, Irreversible
Irreplaceable Loss of Resources	Replaceable, Partially Replaceable, Irreplaceable
Status and Significance (without mitigation)	Low, medium or High indicating whether Positive (+), Negative (-) or Neutral (o)
Mitigation	Overview of mitigatory measures to mitigate potentially negative impacts or enhance potential positive impacts indicating how this mitigatory measure impacts on the significance of the impact
Status and Significance (after mitigation)	Low, medium or High indicating whether the status of the impact is Positive (+), Negative (-) or Neutral (o)

Other aspects to be taken into consideration in the assessment of impact significance are:

- Impacts will be evaluated for the construction and operational phases of the project:
  - **NOTE:** No assessment of impacts during the decommissioning phase of the project is proposed. The relevant guidelines and rehabilitation requirements applicable at that time will need to be applied.

- Impacts will be evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact; and
- The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other facilities/ projects which are either developed or in the process of being developed in the local area.
- The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, national standards are to be used as a measure of the level of impact.

## 1. Specific Aspects to be Addressed in Specialist Studies

The following specialist studies (as indicated in Table 1.1 in Chapter One) have been undertaken.

- Biophysical (fauna and flora) specialist assessment, as well as an aquatic assessment to inform the proposed layout for the project together with the soil suitability assessment. Recommendations regarding stormwater and surface water runoff management.
- A Heritage Impact Assessment to identify heritage features on site, if any.
- Soil Suitability Assessment in the form of a Reconnaissance Soil Survey to be conducted to determine the suitability of the soil for the establishment of citrus orchards, and to inform the proposed layout.
- Traffic Impact Statement to assess safe access and egress from the site, as well the impact on the road of the additional trips to be generated.

Based on the outcome of the various specialist assessments and consultation with the irrigation specialist, the most suitable planting plan and irrigation layout for the site has been determined.

The following provides the Terms of Reference (ToR) for each of the specialist studies. Issues included in the specialist ToR have been identified through the specialist site visit, technical team meeting and I&AP and authority consultation. Additional issues, identified through public and authority consultation during the Scoping Phase, as well as specialist inputs, will be included in the final Terms of Reference for specialists as contained in Chapters Six to Ten of this report.

### 1.1 *Biophysical Assessment*

The following aspects will be included in the biophysical specialist assessment:

#### **Vegetation**

- Conduct a desktop assessment of available literature in order to identify and describe the status of the vegetation in terms of applicable local and regional conservation planning frameworks (e.g. Vegetation Map of South Africa, National Biodiversity Assessment 2011, Eastern Cape Biodiversity Conservation Plan, Subtropical Thicket Ecosystem Project, Sundays River Valley Municipality Biodiversity Sector Plan)
  - Include the identification and evaluation of Critical Biodiversity Areas, Ecologically Sensitive Areas and Biodiversity Corridors.
- Conduct field research in order to identify, map and describe the current state of the vegetation on site, supported by relevant photographs.
- Determine buffer zones for sensitive areas as well as no-go areas on the site
  - Identify and determine the relative abundance of species of special concern within the study area (Vulnerable, Endangered or Critically Endangered and Protected).
  - Identify and determine alien species present and their distribution within the study area.
  - Determine the density of the alien vegetation and the potential for post-removal recovery of indigenous vegetation.
  - Provide a detailed vegetation sensitivity map of the site.
  - Detailed mapping of disturbance and transformation on site.
  - Identify and map sensitive or specialized habitats.

- Identify and assess impacts on conservation areas (Addo Elephant National Park)
- Identify and assess potential project related impacts (both positive and negative) for the construction and operational phases of the project using the prescribed methodology. Where feasible include the assessment of cumulative impacts.
- Outline mitigatory measures for the future management of potential project related impacts and include, where feasible, the individuals/organizations responsible for implementation.
- Outline management recommendations for the construction and operational phases of the project.

Identify and assess impacts on sensitive areas and no-go areas on the site and where necessary establish buffer areas appropriate to the feature.

## **Fauna**

- Conduct a site visit and desktop review of available literature to determine whether the study area falls wholly or partially within the distribution range of species listed as Vulnerable, Endangered or Critically Endangered and Protected.
- Identify potentially important or unique faunal habitat on site.
- Identify and assess potential project related impacts (both positive and negative) for the construction and operational phases of the project using the prescribed methodology. Where feasible include the assessment of cumulative impacts.
- Outline mitigatory measures for the future management of potential project related impacts and include, where feasible, the individuals/organizations responsible for implementation.
- Outline management recommendations for the construction and operational phases of the project.

## **Aquatic Assessment**

- Conduct a desktop assessment of available literature including local and regional conservation planning frameworks (e.g. National Freshwater Ecosystem Priority Areas, Eastern Cape Biodiversity Conservation Plan, Sundays River Valley Municipality Biodiversity Sector Plan) in order to identify and describe the number and extent of wetlands, drainage lines and watercourses on the site, if any.
- Conduct a site visit to confirm the presence of aquatic features and delineate wetlands and drainage lines if any are present on site.
- Provide comment on the potential impact on Aquatic CBAs as identified in the ECBCP and the SRVM Biodiversity Sector Plan.
- Make appropriate management recommendations for the EMPr.
- Make appropriate recommendations for areas or features which may require a buffer zone.

### *1.2 Heritage Impact Assessment*

- Desktop study to identify any potential paleontologically or archaeologically significant features or material on site.
- Conduct a survey of archaeological resources likely to be impacted by the proposed development.
- Map and photograph any identified resources and evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Compile a report and recommendations which include an assessment of the potential impacts as a result of the development on the sites, and proposals for mitigation and/or protection - towards a Phase 2 and possible Phase 3 investigation.
- Make recommendations as to how the developer should conserve, or mitigate damage to, these resources.

### 1.3 *Soil Suitability Assessment*

- Undertake soil analysis to establish the suitability of the soil for the proposed establishment of citrus orchards and cultivated crops.
- Identify potential constraints imposed on the proposed farming activity by the soil / landscape characteristics of the site.
- Provide suitable mapping for the development taking into account the soil suitability of the area and the biophysical site constraints.
- Provide amelioration measures for soils that are not suitable for commercial citrus production in their current state.

### 1.4 *Traffic Impact Statement*

- The suitability and safety of proposals for access to and egress from the site.
- The capacity of the existing and future road network within the influence radius.
- The impact of traffic generated by the proposed development in terms of traffic safety, operations and road condition, and
- The road upgrading/management measures required to mitigate the identified impacts.

## **2 Technical Input**

The following technical input will be provided and considered in the EIA phase of the assessment:

### 2.1 *Irrigation Water Demand*

- An estimate of the increase in irrigation water usage and how this will be accommodated in the existing water entitlements.
- Provide details regarding dam and irrigation infrastructure requirements including a layout of the proposed irrigation infrastructure.
- Details required include pipe diameters and length, as well as dam dimensions and design.