

SCOPING REPORT

PROPOSED VISTA PARK EXT 3, BLOEMFONTEIN, FREE STATE PROVINCE

FSDETEA Ref: EMS/9(i).11(i)(vi),18(i),5,15/13/09

NEAS Ref: FSP/EIA/0000282/2013

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PROJECT DETAILS

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		Scoping Report (SR): Proposed Vista Park Ext 3, Bloemfontein, Free State Province
		Vista Park Ext 3
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		CHB
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		Mariteng Management Solutions
Applicant	:	Calgro M3 Developments (Pty) Ltd
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EXECUTIVE SUMMARY

INTRODUCTION

Calgro M3 Developments (Pty) Ltd is proposing the development of an integrated residential township on a Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. (Refer to Figure 1). The Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. is situated between Church street and Ferreira road and south and adjacent to Vereeniging drive (M10) (Refer to Figure 2). The site falls within the jurisdiction area of the Mangaung Metropolitan Municipality. The project is referred to as **Vista Park Ext 3**.

The proposed development site measures approximately 131ha (Refer to Appendix A1). The route alignment proposed for the proposed services installation will extend beyond the development site (Refer to Appendix A2). The upgrade of George Lubbe Street also falls outside the development site (Refer to Appendix A2).

An application for Environmental Authorisation was lodged with the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA). FSDETEA has issued reference number, **EMS/9(i).11(i)(vi),18(i),5,15/13/09**, for the project.

This Scoping Report consists of seven chapters, which include:

CHAPTER 1 - INTRODUCTION

CHAPTER 2 - DESCRIPTION OF THE PROPOSED PROJECT

CHAPTER 3 – THE SCOPING PHASE

CHAPTER 4 – DESCRIPTION OF THE RECEIVING ENVIRONMENT

CHAPTER 5 – DESCRIPTION OF THE ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS

CHAPTER 6 - CONCLUSION

CHAPTER 7 – PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT

THE ENVIRONMENTAL IMPACT ASSESSMENT PRACTITIONER

Prism Environmental Management Services cc has been appointed as the independent environmental consultants to conduct the Scoping Report and Environmental Impact Assessment process for the proposed development of Vista Park Ext 3, in terms of the National Environmental Management Act (Act No. 107 of 1998) as amended and the Environmental Impact Assessment Regulations (2010).

Prism EMS is a specialist environmental consulting firm providing broad environmental management services, including Environmental Impact Assessments (EIA), environmental planning, and environmental compliance monitoring and environmental specialist services.

The Prism EMS team has extensive experience in environmental impact assessment and management. The team has conducted a diverse range of impact assessments for a wide range of projects throughout South-Africa.

The Principle Environmental Assessment Practitioner (EAP), and support team responsible for this project is:

- De Wet Botha (*M.A. Env. Man.)(PHED)*
- Milton Milaras (*BSc. Hon. Env. Man.*)
- Elsje Botha
- Alvar Koning (*B-Tech Nat. Con.*)

Sub-Consultants

- Engineering – Bigen Africa
- Town Planning – CTE Consulting
- Heritage Impact Assessment – G&A Heritage Consultants
- Geotechnical Investigation – CHB
- Aquatic & Ecological Specialist Assessments – Prism EMS cc
- Traffic Impact Assessment – Mariteng Management Solutions

PROJECT ALTERNATIVES

Services Installation and Road Upgrade Alternatives

Services installation and road upgrade alternatives will be evaluated for the project. These alternatives are mainly linked to the linear bulk services to be installed and the upgrade of George Lubbe Street.

Layout Alternatives

Layout alternatives will be evaluated for the project.

The “No-Go” Alternative

The “No-Go” alternative will also be assessed. This option will reflect the impacts on the environment should this project not go-ahead.

APPROACH OF THE SCOPING PHASE

An Environmental Impact Assessment (EIA) process refers to that process (dictated by NEMA in the EIA Regulations) which involves the identification of, and assessment of direct, indirect and cumulative environmental impacts associated with a proposed activity. The EIA process comprises two main phases:

1. Scoping Phase and
2. EIA Phase.

The EIA process concludes in the submission of an EIA Report (including an Environmental Management Programme (EMPr)) to the competent authority (Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) for this application) for decision-making.

CONCLUSION

The Scoping Report for the proposed Vista Park Ext 3 is undertaken in accordance with the EIA Regulations published in Government Notice 33306 of 18 June 2010, in terms of Section 24(5) of the National Environmental Management Act (NEMA; Act No 107 of 1998).

The conclusions and recommendations of this Scoping Report are the results of on-site inspections, desk-top evaluations of impacts identified by specialists, and the parallel process of public participation. The Public Participation Process (PPP) is conducted as per the requirements of the EIA regulations.

Recommendations regarding investigations required to be undertaken within the EIA are provided within the Plan of Study for EIA, contained within Chapter 7 of this report.

WAY FORWARD

- Submit Final Scoping Report (SR) to Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) for approval
- On approval of Scoping Report (SR)
 1. Finalise Specialist studies
 2. Environmental Impact Assessment (EIA) circulated for public review
 3. Incorporation of comments on Environmental Impact Assessment (EIA)
 4. Finalise Environmental Impact Assessment (EIA) Report
 5. Submit Environmental Impact Assessment (EIA) Report to FSDETEA for approval
 6. On approval circulate Environmental Authorisation (EA) to Interested and Affected Parties (I&AP's)

ABBREVIATIONS

BID	Background Information Document
DEA	Department of Environmental Affairs
DETEEA	Department Tourism, Economic an Environmental Affairs
DSR	Draft Scoping Report (DSR)
DWA	Department of Water Affairs (DWA)
EAPASA	Environmental Assessment Practitioners Association of South Africa (EAPASA)
ECO	Environmental Control Officer (ECO)
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme (EMPr)
FSDETEA	Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA)
GDARD	Gauteng Department of Agriculture and Rural Development (GDARD)
GIS	Geographic Information System (GIS)
GP	Gauteng Province
IAIAsa	International Association for Impact Assessment (South Africa)
IDP	Integrated Development Plan (IDP)
I&AP's	Interested and Affected Parties (I&AP's)
Mℓ	Million litre
MMM	Mangaung Metropolitan Municipality
NDA	National Department of Agriculture (NDA)
NEM:WA	National Environmental Management: Waste Act (NEM:WA)
NEMA	National Environmental Management Act (NEMA)
NHRA	National Heritage Resource Act (NHRA)
NWA	National Water Act (NWA)
PoS	Plan of Study (PoS)
PPP	Public Participation Process (PPP)

SAHRA	South African Heritage Resource Agency (SAHRA)
SANRAL	South African National Roads Agency Limited
SDF	Spatial Development Framework (SDF)
SR	Scoping Report
TIA	Traffic Impact Assessment
UJ	University of Johannesburg (UJ)
WTP	Water Treatment Plant/s
WUL	Water Use Licence (WUL)
WULA	Water Use Licence Application (WULA)

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CHAPTER 1 - INTRODUCTION

1 INTRODUCTION

Calgro M3 Developments (Pty) Ltd is proposing the development of an integrated residential township on a Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. (Refer to Figure 1). The Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. is situated between Church street and Ferreira road and south and adjacent to Vereeniging drive (M10) (Refer to Figure 2). The site falls within the jurisdiction area of the Mangaung Metropolitan Municipality (MMM). The project is referred to as **Vista Park Ext 3**.

The proposed development site measures approximately 131ha (Refer to Appendix A1). The route alignment proposed for the proposed services installation will extend beyond the development site (Refer to Appendix A2). The upgrade of George Lubbe Street is also outside the development site (Refer to Appendix A2).

An application for Environmental Authorisation is lodged with the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA). FSDETEA has issued reference number, **EMS/9(i).11(i)(vi),18(i),5,15/13/09**, for the project.

This Scoping Report consists of seven chapters, which include:

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CHAPTER 6 - CONCLUSION

CHAPTER 7 – PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT

1.1 PROJECT LOCATION

The Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. is earmarked to be developed as Vista Park Ext 3 (Refer to Figure 1). The route alignment proposed for the proposed bulk services as well as George Lubbe Street upgrade will extend beyond the development site to Bloemfontein Ext 165 (Refer to Appendix A2).

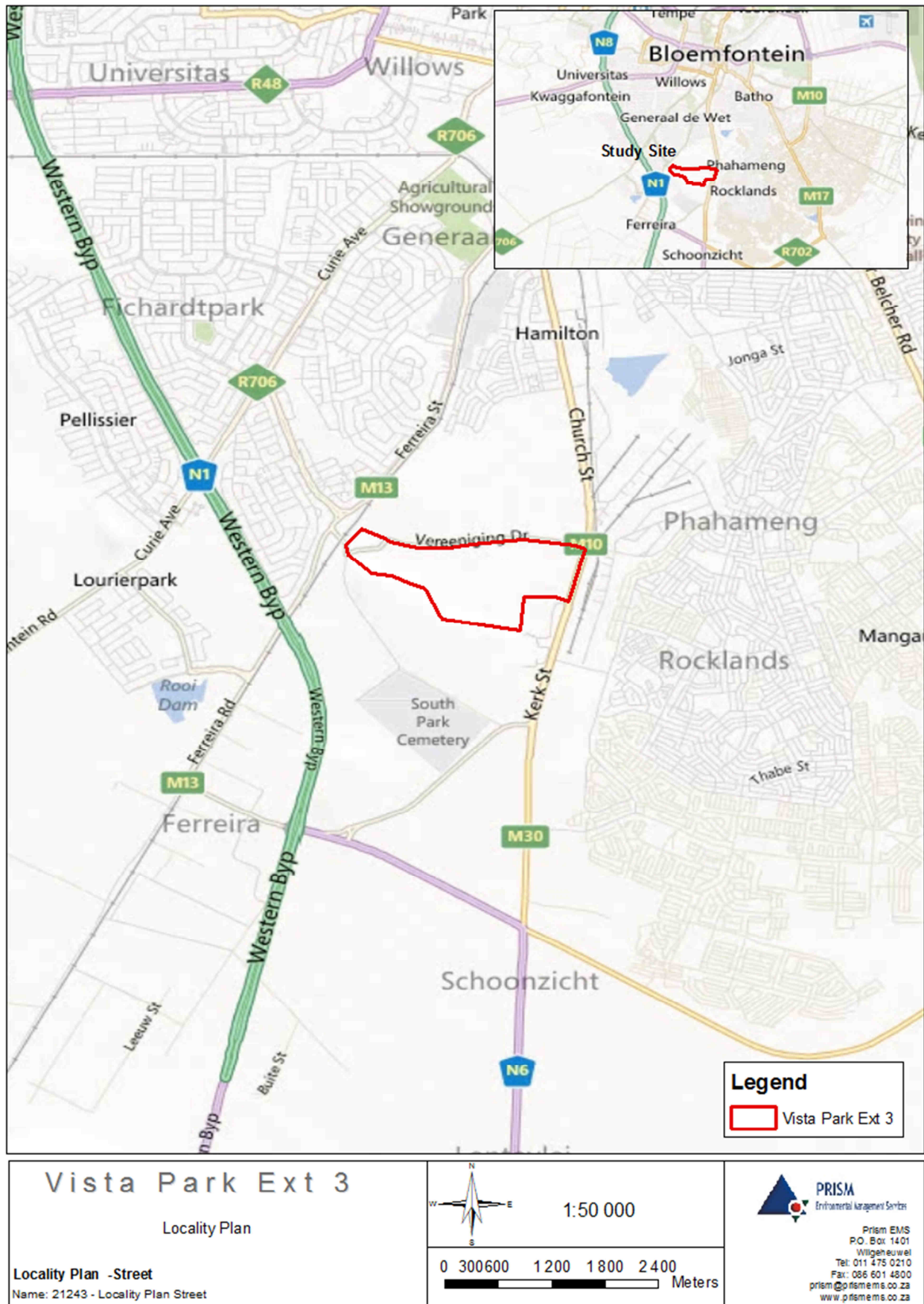


Figure 1: Locality Plan

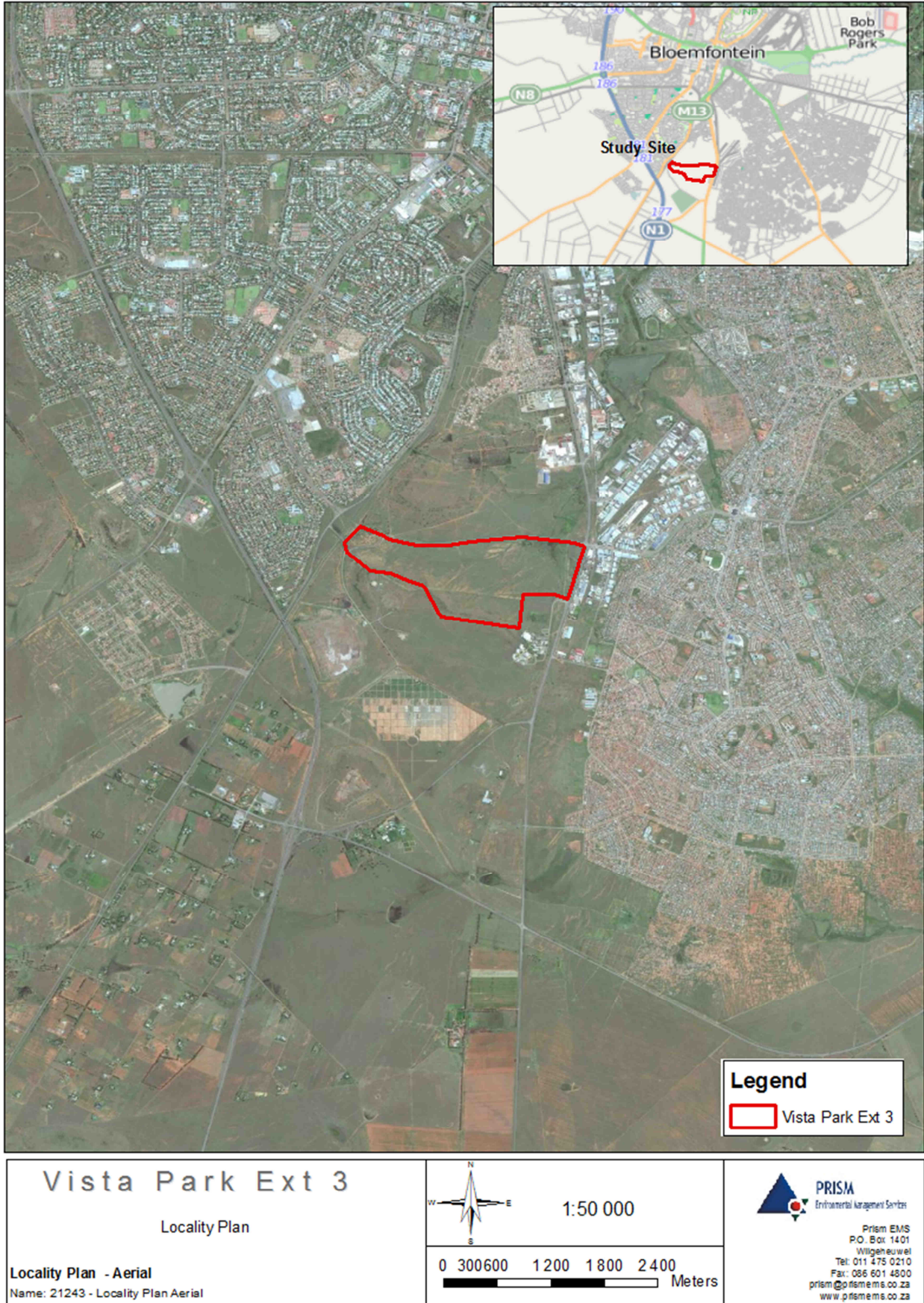


Figure 2: Locality Plan on Aerial Photo

1.2 PURPOSE OF THE PROPOSED PROJECT

The aim of the development is to establish an integrated residential township on the mentioned property. The township, to be developed as an Integrated Residential Housing project, will consist of RDP/BNG housing, GAP Housing, Student Housing and Affordable Housing opportunities (CTE Consulting; 2013).

The Mangaung Metropolitan Municipality (MMM) invited tenders under tender reference number: ED9 2011/2012 from interested parties to undertake the Development to be known as Vista Park Extension 3. The Developer was successful with its bid to undertake the Development (CTE Consulting; 2013).

The Developer was appointed by the MMM to undertake the Development as defined by the tender documentation and stipulated below:

- It is expected of the bidder to plan, survey and develop this area;
- Town planning of the area should have the following components:
 1. Social Housing
 2. Subsidized housing $\pm 300\text{m}^2/\text{erf}$
 3. Bonded Group Housing $\pm 50\text{m}^2$ building;
 4. Bonded single Residential Housing $400\text{m}^2 - 700\text{m}^2$
 5. Neighbourhood Centre(s) $\pm 10\,000\text{m}^2$;
 6. Community facilities; and
 7. Regional Hospital (6ha) to be developed by the Provincial Government.
- Take Note:
 - 30% of single residential sites will be reserved for disposal by the MMM
 - 30% of General Residential sites will be reserved for social housing project to be implemented by MMM.

(CTE Consulting; 2013)

Refer to Appendix E.

1.3 REQUIREMENT FOR AN ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Environmental authorisation is required as the activities are listed under the National Environmental Management Act (NEMA) (1998) and listed in Government Notice No. R. 544 and 545 of 2010 (Activity List 1 and 2) of the Environmental Impact Assessment Regulations (2010), including, but not limited to the following:

List 1:

9. Construction of infrastructure to service the proposed township to include bulk transportation of water, sewage and stormwater (i) with an internal diameter of 0,36 meters or more.
11. Construction of (i) a canal and (vi) bulk stormwater outlets within a watercourse or within 32m of a watercourse, measured from the edge of the watercourse

18. The infilling or depositing of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand etc from (i) a watercourse.

List 2:

5. Construction of facilities and/or infrastructure requiring permitting/licensing for generation or release of emissions, pollutant or effluent.
15. Physical alteration of undeveloped land where area to be transformed is 20 ha or more (approximately 131ha)

1.4 THE ENVIRONMENTAL IMPACT ASSESSMENT PRACTITIONER

Prism Environmental Management Services cc has been appointed as the independent environmental consultants to conduct the Scoping Report and Environmental Impact Assessment process for the proposed development, in terms of the National Environmental Management Act (Act No. 107 of 1998) as amended and the Environmental Impact Assessment Regulations (2010).

Prism EMS is a specialist environmental consulting firm providing broad environmental management services, including Environmental Impact Assessments (EIA), environmental planning, and environmental compliance monitoring and environmental specialist services.

The Prism EMS team has extensive experience in environmental impact assessment and management. The team has conducted a diverse range of impact assessments for a wide range of projects throughout South-Africa.

The Principle Environmental Assessment Practitioner (EAP), and support team responsible for this project include:

De Wet Botha holds a Master's Degree in Environmental Management from the University of Johannesburg (UJ) (former RAU). He has 10 years' experience consulting in the environmental field. De Wet is a founder member of EAPASA and member of IAIAAsa and Gauteng Wetland Forum. His key focus is on strategic environmental assessment and advice, management and coordination of environmental impacts assessments and projects. The integration of environmental specialist studies into Environmental Impact Assessment (EIA)'s and management plans also forms part of his role. He has extensive knowledge and experience in the aquatic field, in specific wetland assessments as well as associated water use licensing. He is currently working on several Environmental Impact Assessment (EIA)'s and acts in an advisory role on major projects. He also forms part of the specialist aquatic team.

Milton Milaras holds an Honours Degree in Environmental Management from the University of Johannesburg (UJ) (former RAU). He has 7 years' experience consulting in the environmental field. His key focus is on environmental assessment and monitoring, management and coordination of environmental management objectives. He has extensive knowledge and experience in the mining industry, as well as water use licensing. He is currently working on several Environmental Impact Assessment (EIA)'s and acts as environmental auditor on construction projects. He also forms part of the public participation team.

Elsje Botha has 4 years' experience as town planning assistant and 5 years' experience as environmental project manager in assist to the EAP. She has a legal academic background. Her key role on this project is project administration. She also forms part of the public participation team.

Alvar Koning has 9 years' experience as aquatic scientist. He holds a B-Tech. degree in Nature Conservation and is currently completing his M-Tech. degree in Nature Conservation as well as his M.Sc. degree in Aquatic Health (UJ). He is also SASS 5 accredited. His key role on this project is aquatic specialist and advisor to the EAP.

The curriculum vitae for the Prism EMS project team is attached under Appendix B.

1.4.1 Sub-Consultants

- Engineering – Bigen Africa
- Town Planning – CTE Consulting
- Heritage Impact Assessment – G&A Heritage Consultants
- Geotechnical Investigation– CHB
- Aquatic & Ecological Specialist Assessments – Prism EMS cc
- Traffic Impact Assessment – Mariteng Management Solutions

**Curriculum Vitae available on request.*

CHAPTER 2 - DESCRIPTION OF THE PROPOSED PROJECT

2 THE PROPOSED PROJECT

Calgro M3 Developments (Pty) Ltd is proposing the development of an integrated residential township on a Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. (Refer to Figure 1) to be known as the Vista Park Ext 3. This application is for the authorisation of the listed activities pertaining to the development of the Vista Park Ext 3. The application will be evaluated by the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA).

Alternatives, including route alternatives and layout alternatives are being considered for the proposal. It is the intention of Calgro M3 Developments (Pty) Ltd to develop integrated residential township on the mentioned property. The township is to be developed as an Integrated Residential Housing project will consisting of RDP/BNG housing, GAP Housing, Student Housing and Affordable Housing opportunities (CTE Consulting; 2013).

Furthermore, the application is made in respect of the bulk services installations and connections that will extend beyond the development site boundaries as well as the upgrade of George Lubbe Road (Refer to Appendix A2).

2.1 ERVEN AND ZONING

The township consists of 1273 erven in total and is to be developed in phases (CTE Consulting; 2013).

Erven 1 to 1179	:	Single Residential 1 (1179 erven)
Erven 1180 to 1193	:	Access Purposes (14 erven)
Erven 1194 to 1231	:	General Residential 1 (38 erven)
Erven 1232 to 1234	:	Educational (3 erven)
Erven 1235 to 1239	:	Business (5 erven)
Erven 1240 to 1243	:	Worship (4 erven)
Erven 1244 to 1247	:	Crèche (4 erven)
Erven 1248 to 1265	:	Public Open Space (18 erven)
Erven 1266 to 1272	:	Municipal Purposes (7 erven)
Erf 1273	:	Medical Use Zone (1 erf)

(CTE Consulting; 2013)

Refer to Appendix E.

2.2 THE PREFERRED OPTION

The preferred option for Calgro M3 Developments (Pty) Ltd is the development of the Vista Park Ext 3 as per the layout- and services plan attached in Appendix A1 and Appendix A2.

2.3 PROJECT ALTERNATIVES

2.3.1 Layout Alternative

A layout alternative will also be evaluated for the project. This alternative is mainly linked to the positioning of the Provincial Hospital and other developments within the township.

2.3.2 Route and design Alternative

Alternatives in respect of bulk services and the upgrade of George Lubbe Steet will also be evaluated for the project. This alternative is mainly linked to the alignment and routes planned for services installation.

2.3.3 The “No-Go” Alternative

The “No-Go” alternative will also be assessed. This option will reflect the impacts on the environment should this project not go-ahead.

CHAPTER 3 – THE SCOPING PHASE

3 APPROACH OF THE SCOPING PHASE

An Environmental Impact Assessment (EIA) process refers to that process (dictated by NEMA in the EIA Regulations) which involves the identification of and assessment of direct, indirect, and cumulative environmental impacts associated with a proposed activity. The EIA process comprises two main phases:

1. Scoping Phase and
2. EIA Phase.

The EIA process concludes in the submission of an EIA Report (including an Environmental Management Programme (EMPr)) to the competent authority (Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) for this application) for decision-making. The EIA process is illustrated below:

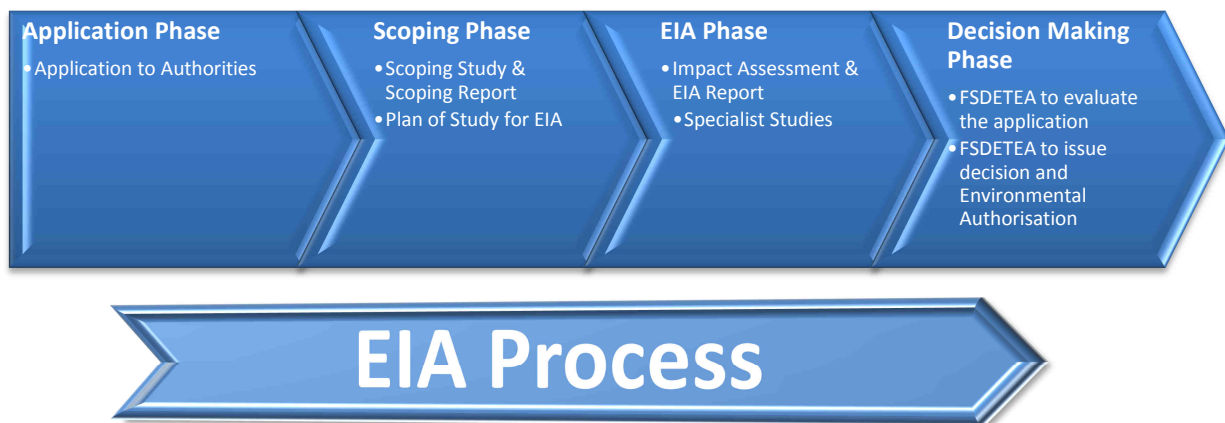


Figure 3: Phases of the Environmental Impact Assessment (EIA) process

The Scoping Phase for the proposed Vista Park Ext 3 is undertaken in accordance with the EIA Regulations published in Government Notice 33306 of 18 June 2010 (as amended), in terms of Section 24(5) of the National Environmental Management Act (National Environmental Management Act (NEMA)) (Act No 107 of 1998). In accordance with these Regulations, this scoping process is aimed at identifying potential issues associated with the proposed activity, and defining the extent of studies required within the EIA.

It was achieved through an assessment of the proposed activities involving desktop studies, specialist scans, as well as a consultation process with key stakeholders (including relevant government authorities) and interested and affected parties (I&APs). This chapter serves as a *précis* of the process that was followed during the Scoping Phase of the EIA process.

3.1 OBJECTIVES OF THE SCOPING PHASE

This Scoping Phase aims to:

- Identify and evaluate potential environmental (biophysical and social) impacts and benefits of all phases of the proposed construction (including design, construction, operation and decommissioning phases) within the broader study area through a desktop review and assessment of existing baseline data and specialist assessments.
- Classify potentially sensitive environmental features and areas on the site to inform the initial planning phase.
- Define the scope of studies to be undertaken within the EIA process.
- Provide the authorities with adequate information in order to make a decision regarding the scope of issues to be addressed in the EIA process, as well as the scope and extent of specialist studies that will be undertaken as part of the EIA Phase of the process.

The objectives of this Scoping Phase aligned with the above, are to:

- Verify the scope and nature of the proposed activities.
- Clarify the reasonable and feasible project specific alternatives to be considered through the EIA process.
 - Including the “No Go” option.
- Identify and evaluate key environmental issues/impacts associated with the proposed activities, and through a process of broad-based consultation with stakeholders and desktop specialist studies, identify those issues to be addressed in more detail in the Impact Assessment Phase of the EIA process.
- Identify and evaluate potentially sensitive environmental features and areas which should be considered in the planning phase.
- Conduct a transparent Public Participation Process (PPP) and facilitate the inclusion of stakeholders’ concerns regarding the proposed project into the decision making process.

3.2 OVERVIEW OF THE SCOPING PHASE

The Scoping Phase was undertaken in accordance with the EIA Regulations in terms of National Environmental Management Act (NEMA) (1998). Key tasks undertaken within the scoping phase included:

- Consultation with relevant decision making and regulating authorities (National-, Provincial- and Local authorities).
- Submission of a completed application form for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), the Environmental Impact Assessment (“EIA”) Regulations, 2010, to the competent authority (FSDTEA).
- Undertaking a Public Participation Process (PPP) throughout the Scoping process in accordance with Chapter 6 of Government Notice No R543 of 2010 in order to identify issues and concerns associated with the proposed project.

- Preparation of a Comments and Response Report detailing key issues raised by I&APs as part of the EIA Process (in accordance with Regulation 57 of Government Notice No R543 of 2010).
- Undertaking of initial independent specialist studies in accordance with Regulation 32 of Government Notice No R543 of 2010.
- Preparation of a Draft Scoping Report and Plan of Study for EIA in accordance with the requirements of the Regulation 28 Government Notice No R543 of 2010.

The said key tasks are discussed in detail below.

3.2.1 Application and Authority Consultation

The application is made for the development of Vista Park Ext 3 and associated infrastructure. This development will *inter alia* trigger listed activities as per the National Environmental Management Act, 1998 and the Environmental Impact Regulations, 2010 due to the proposed development of a township and the construction and installation of services affecting aquatic resources.

An application was lodged with the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) and same was accepted by FSDETEA (Refer to Appendix C). The following reference number was allocated to the application:

- **EMS/9(i).11(i)(vi),18(i),5,15/13/09**
- **NEAS Ref: FSP/EIA/0000282/2013**

3.2.2 Public Participation Process

A Public Participation Process (PPP) was conducted throughout the Scoping process in accordance with Chapter 6 of Government Notice No R543 of 2010 in order to identify issues and concerns associated with the proposed project.

3.2.2.1 I&AP Identification, Registration and Database Generation

The first step in the PPP was to identify relevant stakeholders and interested and affected parties (I&AP's) (Refer to Appendix D). This process was undertaken through existing contacts and databases, recording responses to site notices and newspaper advertisements, as well as through the process of networking (Refer to Appendix D). Stakeholder groups identified include:

- Provincial and local government departments (including FSDETEA, DWA, etc.)
- Government Structures (SAHRA, etc.)
- Mangaung Metropolitan Municipality (MMM)
- Potentially affected and neighbouring landowners and tenants
- Industry and business
- CBOs and other NGOs.

All relevant stakeholder and I&AP information have been recorded within a database of affected parties (Refer to Appendix D1). While I&APs have been encouraged to register their interest in the project from the start of the process, the identification and registration of I&APs will be on-going for the duration of the EIA process. The project database will be updated periodically, and will act as a record of the parties involved in the PPP.

3.2.2.2 Notification of Environmental Impact Assessment Process

In order to notify and inform the public of the proposed activities and invite members of the public to register as interested and affected parties (I&APs), the project and EIA process was advertised in the following newspapers:

- Volksblad (9 May 2013) (Appendix D2)

Site advertisements were placed on site (Refer to Appendix D3).

In addition to the above advertisements and notices, key stakeholders and registered I&APs were notified in writing of the commencement of the EIA process (Refer to Appendix D4 and Appendix D5).

3.2.2.3 Public Consultation

The aim of the PPP was primarily to ensure that:

- All potential stakeholders and I&APs are identified and consulted with;
- Information containing all relevant details in respect of the application is made available to potential stakeholders and I&APs;
- Conduct a transparent PPP and facilitate the inclusion of stakeholders' concerns regarding the proposed activities into the decision making process; and
- Comment received from stakeholders and I&APs is recorded.

In order to provide information regarding the proposed activities and the EIA process, a Background Information Document (BID) for the project was compiled at the outset of the process (Refer to Appendix D4). The BID was distributed to identified stakeholders and I&APs, and additional copies were made available at public venues within the broader study area.

Through consultation with key stakeholders and I&APs, issues for inclusion within the scoping study were identified and confirmed. In order to accommodate the varying needs of stakeholders and I&APs within the study area, as well as capture their views, issues and concerns regarding the project, various opportunities have been and will continue to be provided for I&APs to have their issues noted, following their review of the draft Scoping Report and submission of their comments on same.

3.2.2.3.1 Identification and Recording of Issues and Concerns

All comments received from stakeholders and I&APs on the proposed project have been included in the Final Scoping Report. A Comments and Response Report has been compiled to include all comments received during the scoping phase of the process, including those received in the public review period of the draft Scoping Report (Refer to Appendix D6).

3.2.2.4 Public Review of Scoping Report

This stage of the Scoping Phase was completed by making the Scoping Report available for public review from 29 July 2013 to 29 August 2013 at the following locations:

- The offices of Prism Environmental Management Services cc
 - Hard copy
 - Digital copy on request via FTP server

- Special arrangements on request

3.2.2.5 Final Scoping Report

The final stage in the Scoping Phase entailed the capturing of responses from stakeholders and I&APs on the Scoping Report in order to refine this report. FSDTEA will provide comment, recommendations, and acceptance to undertake the EIA Phase of the process on the basis of the Final Scoping Report.

CHAPTER 4 – DESCRIPTION OF THE RECEIVING ENVIRONMENT

4 DESCRIPTION OF THE RECEIVING ENVIRONMENT

This section of the Scoping Report provides a description of the environment that may be affected by the Proposed Vista Park Ext 3. The information provided will assist the reader in understanding the receiving environment within which the proposed activity will be installed. Features of the biophysical, social and economic environment that could directly or indirectly be affected by, or could affect, the proposed development have been described. This information has been sourced from both existing information available for the area as well as collected field data, and aims to provide the context within which this EIA is being conducted.

4.1 DEVELOPMENT SITE

4.1.1 Proposed Vista Park Ext 3

The Vista Park Ext 3 is proposed to be developed on a Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. The facility will include *inter alia*:

The township consists of 1273 erven in total and is to be developed in phases (CTE Consulting; 2013).

Erven 1 to 1179	:	Single Residential 1 (1179 erven)
Erven 1180 to 1193	:	Access Purposes (14 erven)
Erven 1194 to 1231	:	General Residential 1 (38 erven)
Erven 1232 to 1234	:	Educational (3 erven)
Erven 1235 to 1239	:	Business (5 erven)
Erven 1240 to 1243	:	Worship (4 erven)
Erven 1244 to 1247	:	Creche (4 erven)
Erven 1248 to 1265	:	Public Open Space (18 erven)
Erven 1266 to 1272	:	Municipal Purposes (7 erven)
Erf 1273	:	Medical Use Zone (1 erf)

(CTE Consulting; 2013)

Refer to Appendix E.

4.1.2 Services Installation and Road Upgrades

Services installation and road upgrades will be evaluated for the project.

These installations and upgrades will possibly affect wetland areas. These areas will be assessed by a specialist.

4.1.3 Medical Use Zone (1 erf)

In respect of this proposed erf. A hospital is planned for this erf. The construction part of the development of this facility is covered under this application. Additional application will be made in terms of the National Environmental Management Waste Act (NEM:WA) and the National Environmental Management Air Quality Act (NEM:AQA). These applications will be lodged with National Department of Environmental Affairs (DEA) and Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) respectively. It must be noted that the Air Emissions License (AEL) will not be lodged with Mangaung due to their involvement. Same is thus referred to FSDETEA.

4.2 PHYSICAL ENVIRONMENT

4.2.1 Existing Landuse and Landcover

The property is currently vacant with the exception of an electrical sub-station on the south eastern side of the property (CTE Consulting; 2013).

4.2.1.1 Surrounding Land Use

The surrounding land use structure is as follows:

- North : Vacant land, further north dwelling units
- East : Industrial, Hamilton DC, dwelling units;
- South : University of the Free State South Campus and South Park landfill site,
- West : Railway line and further west Uitsig, Fauna and Fleurdal extensions

(CTE Consulting; 2013).

4.2.1.2 Existing Zoning

In terms of the Bloemfontein Town Planning Scheme No.1 of 1954 is the current zoning of the property is Undetermined (CTE Consulting; 2013).

4.2.1.3 Surrounding Zoning

In terms of the Bloemfontein Town Planning Scheme No.1 of 1954 are the surrounding property zonings as follows:

- North : Undetermined
- East : Industrial
- South : Municipal Purposes
- West : Railway and Residential

(CTE Consulting; 2013).

4.2.2 Climatic Conditions

Bloemfontein normally receives about 407mm of rain per year, with most rainfall occurring mainly during summer. The chart below (lower left) shows the average rainfall values for Bloemfontein per month. It receives the lowest rainfall (2mm) in June and the highest (68mm) in January. The monthly distribution of average daily maximum temperatures (centre chart below) shows that the average midday temperatures for Bloemfontein range from 16°C in June to 29.2°C in January. The region is the coldest during July when the mercury drops to 0°C on average during the night. Consult the chart

below (lower right) for an indication of the monthly variation of average minimum daily temperatures (SA-Explore; 2013).

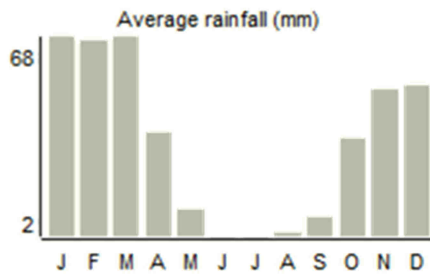


Figure 4: Average Rainfall (mm)

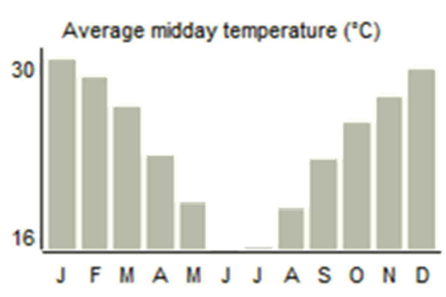


Figure 5: Average Midday Temperature (°C)

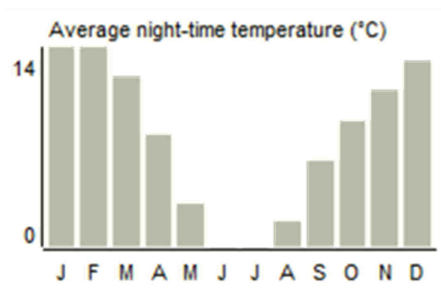


Figure 6: Average Night-time Temperature (°C)

4.2.3 Infrastructure

The development will require the installation of infrastructure. The majority of these are the essential services as discussed in point 4.1.2 above. Stormwater infrastructure will also be facilitated.

4.2.4 Bio-Physical Characteristics

4.2.4.1 Topography

The property has an average gradient of approximately 1:40 sloping from east to west.

No area has a gradient greater than 1:35 and therefore no problems are foreseen from a design and planning point of view.

4.2.4.2 Geology and Soils

The geological map (provided by the Council of Geosciences) indicated that the site is underlain by mudrock and subordinate sandstone of the Adelaide group (CHB; 2012).

4.2.4.3 Ecology

As most of the development site is affected by historical activities and is also highly traversed, the site does not hold significant ecological value. The site is semi-degraded and suffers from erosion and gully formation in certain areas. A wetland system is found on site.

The ecology will be further assessed by ecological specialists.

4.2.4.3.1 Aquatic Resources

One wetland type was classified within the study area namely: Un-channelled valley bottom wetland (Prism EMS - Wetland Assessment Report; 2013).

The aquatic resources will be further assessed by aquatic specialists.

4.3 SOCIAL ENVIRONMENT

4.3.1 Cultural and Heritage Characteristics

The proposed development site is currently vacant. No cultural sensitive landscape types could be identified within the study area on initial observations. No sites with significant heritage value could be identified on the site on initial observations. No site specific recommendations are necessary at present (G&A Heritage; 2013). The site will be further investigated and ground truthed by specialists.

4.3.2 Demographic and Socio-Economic Information

4.3.2.1 Impact on the character of the surrounding area

The aim of the application is to establish an integrated residential township on the mentioned property. The township is to be developed as an Integrated Residential Housing project consisting of RDP/BNG housing, GAP Housing, Student Housing and Affordable Housing opportunities. It is foreseen that the proposed activity will uplift the character of the area and provide much needed relief in respect of housing and job opportunities.

4.3.2.2 Strategic Development Framework

Like other municipalities across the country, Mangaung is faced with the challenges of service delivery backlog such as housing, water, sanitation and unemployment. Mangaung's SDF has identified several interventions, like identifying pockets of land in **Vistapark**, Ceciliapark, at the airport and Hillside View to accommodate the rising demand for housing (<http://www.localgovernment.co.za/features/view/8>; 2013).

Mangaung has developed an extensive Spatial Development Framework which is aimed at improving the lives of Mangaung residents, whilst also attracting investors and those seeking better opportunities – from business and school, to pleasure and leisure pursuits (<http://www.localgovernment.co.za/features/view/8>; 2013).

4.3.3 Traffic Impacts

Vista Park is located south of the Bloemfontein central business district. The site is well accessible by means of two primary distributors: Church Street and George Lubbe Street.

A traffic overview has been completed by Mariteng Management Solutions and they are in the process of compiling a completed traffic impact assessment (TIA) at the time of this writing. The full TIA will provide decisive information on what improvements to the external road network will be necessary.

CHAPTER 5 – DESCRIPTION OF THE ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS

5 ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS

The potential impacts of the proposed development (i.e. construction phase) are identified, shortly described and evaluated in this chapter. The majority of the environmental impacts are expected to occur during the construction phase.

Environmental issues associated with construction activities of the Vista Park Ext 3 include, among others:

Impact on:

- Bio-Physical Environment
 - Ecology
 - ♣ Aquatic Resources
 - Wetlands
 - Geology and soils
- Social Environment
 - Traffic Impact

Table 1, Table 2 and Table 3 provide a summary of the findings of the scoping study undertaken for the construction phase of the proposed project. Impacts of the proposed development of the Vista Park Ext 3 are evaluated, and recommendations are made regarding further studies required within the EIA phase of the process.

5.1 METHODOLOGY

The following methodology was used to determine the main issues and potential impacts of the proposed project during the scoping phase at a desktop level based on existing information:

- Identify potential sensitive environments and receptors that may be impacted on by the proposed development construction and the types of impacts (i.e. direct, indirect and cumulative) that are most likely to occur.
- Determine the nature and extent of potential impacts during the construction and operational phases.
- Identify 'No-Go' areas, if applicable.
- Summarise the potential impacts that will be considered in detail in the EIA Phase through specialist assessments. Table 1, Table 2 and Table 3 summarises the findings of the Scoping Phase undertaken for the construction phases of the development (the pre-construction, operational and decommissioning phases will be discussed in further detail in the EIA Phase).

5.2 ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS

Table 1: Evaluation of potential impacts associated with the Construction Phase

Evaluation of potential impacts associated with the Construction Phase
<p><u>Impacts on Bio-Physical Environment</u></p> <p><i>Construction related activities which could impact on the Bio-Physical Environment of the study site include:</i></p> <ul style="list-style-type: none"> Land clearing Construction of access roads Establishment of stockpiling and spoil areas Chemical contamination of the soil by construction vehicles and machinery Operation of temporary construction camps and storage of materials required for construction Storage of pipe sections <p><i>The identified potential impacts include:</i></p> <ul style="list-style-type: none"> Loss or fragmentation of natural habitat for flora and fauna Loss of individuals of threatened or protected flora and fauna Loss or damage to aquatic resources Loss or damage to cultural and historical resources
<p><u>Impacts on Social Environment</u></p> <p><i>Construction related activities which could impact on the Social Environment of the study site include:</i></p> <ul style="list-style-type: none"> Land clearing Construction of access roads Vehicular movement Establishment of stockpiling and spoil areas Operation of temporary construction camps and storage of materials required for construction Storage of materials etc. Noise, Visual Etc. <p><i>The identified potential impacts include:</i></p> <ul style="list-style-type: none"> General disturbance (Noise, visual etc.) Traffic disturbance Loss of operation time and linked financial impacts

Table 2: Summary of potential impacts (Bio-Physical Environment)

Impacts on Bio-Physical Environment			
Issue	Nature of Impact	Extent of Impact	Study to be undertaken for EIA.
Loss or fragmentation of natural habitat for flora and fauna	Negative change in conservation status of habitat; Increased vulnerability of remaining portions to future disturbance; General loss of habitat for sensitive species; Loss in variation within sensitive habitats due to loss of portions thereof; General reduction in biodiversity; Increased fragmentation (depending on location of impact); Disturbance to processes maintaining biodiversity and ecosystem goods and services; Loss of ecosystem goods and services.	Local	Ecological Assessment Required
Loss or damage to aquatic resources	The construction and installation of services in close proximity to wetlands. Release of stormwater into the aquatic resource.	Local	Aquatic Assessment Required Water Use Licence (WUL) Required
Loss or damage to cultural and historical resources	Possible cultural or heritage items will be encountered. Buildings or other structures older than 60 years might also be affected.	Local	Heritage Impact Assessment Required

Table 3: Summary of potential impacts (Social Environment)

Impacts on Social Environment			
Issue	Nature of Impact	Extent of Impact	Study to be undertaken for EIA.
General disturbance (Noise, visual etc.)	The general disturbance and disruption of everyday social activities could be affected.	Local	No specialist input required. Focus must be placed on incorporation in EMPr.
Traffic disturbance	Likely impacts on traffic flow. Traffic disruption due to heavy construction vehicle movement.	Local	Traffic Impact Assessment

CHAPTER 6 - CONCLUSION

6 CONCLUSION

Calgro M3 Developments (Pty) Ltd is proposing the development of an integrated residential township on a Portion of the Remainder of the farm Bloemfontein no. 654 – I.Q. (Refer to Figure 1) to be known as Vista Park Ext 3. This application is for the authorisation of the listed activities pertaining to the development of the Vista Park Ext 3. The application will be evaluated by the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA).

Alternatives, including services installation and road upgrade and layout alternatives are being considered for the proposal. It is the intention of Calgro M3 Developments (Pty) Ltd to establish an integrated residential township on the mentioned property. The township is to be developed as an Integrated Residential Housing project consisting of RDP/BNG housing, GAP Housing, Student Housing and Affordable Housing opportunities (CTE Consulting; 2013).

The Scoping Report for the proposed Vista Park Ext 3 is undertaken in accordance with the EIA Regulations published in Government Notice 33306 of 18 June 2010, in terms of Section 24(5) of the National Environmental Management Act (NEMA; Act No 107 of 1998).

This Scoping Report is aimed at detailing the nature and extent of this facility, identifying potential issues associated with the proposed activities, and defining the extent of studies required within the EIA. This was achieved through an evaluation of the proposed activities, involving the applicant (Calgro M3 Developments (Pty) Ltd), specialist consultants and a consultation process with key stakeholders and interested and affected parties (I&APs). In accordance with the requirements of the EIA Regulations, feasible project specific alternatives (including the “No-Go” option) have been identified for consideration within the EIA process.

The conclusions and recommendations of this Scoping Report are the result of on-site inspections, desktop evaluations of impacts identified by specialists, and the parallel process of public participation.

Recommendations regarding investigations required during the EIA phase are provided within the Plan of Study for EIA, contained within Chapter 7 of this report.

6.1 WAY FORWARD

- Submit Final Scoping Report (SR) to Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) for approval
- On approval of Scoping Report (SR)
 1. Finalise Specialist studies
 2. Draft Environmental Impact Assessment (EIA) circulated for public review
 3. Incorporation of comments on Environmental Impact Assessment (EIA)
 4. Finalise Environmental Impact Assessment (EIA) Report
 5. Submit Environmental Impact Assessment (EIA) Report to Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) for approval

6. On approval circulate Environmental Authorisation (EA) to Interested and Affected Parties (I&AP's)

CHAPTER 7 – PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT

7 PLAN OF STUDY FOR EIA

This Scoping Report includes a detailed description of the nature and extent of the proposed Vista Park Ext 3 with details regarding the Scoping Phase, as well as the issues identified and evaluated through the Scoping Phase (to date). This chapter provides the context for a Plan of Study for the Environmental Impact Assessment (EIA).

The Plan of Study (PoS) describes how the EIA Phase will be executed and includes details of the specialist studies required to be undertaken for those potential impacts recorded to be of significance. The key findings of the Scoping Phase include inputs from authorities, the public, the proponent and the EIA specialist team. Same is used to inform the Plan of Study for EIA together with the requirements of the NEMA EIA Regulations of June 2010 and applicable guidelines.

7.1 AIMS OF THE EIA PHASE

The EIA Phase will aim to achieve the following:

- Provide an overall impact assessment of the biophysical and social environment affected by the proposed activities.
- Assess potentially significant impacts (direct, indirect and cumulative, where required) associated with the proposed Vista Park Ext 3.
- Identify and recommend appropriate mitigation measures for potentially significant environmental impacts.
- Undertake a comprehensive Public Participation Process (PPP) to ensure that interested and affected parties (I&AP's) are afforded the opportunity to participate, and that their issues and concerns are recorded.

The Environmental Impact Assessment (EIA) will address potential environmental impacts and benefits (direct, indirect and cumulative impacts) associated with all phases of the project including pre-construction, construction, operation and decommissioning phases, and will aim to provide the environmental authorities with sufficient information to make an informed decision regarding the proposed project.

7.2 AUTHORITY CONSULTATION

An application has been lodged with the Free State Department of Economic Development, Tourism and Environmental Affairs (FSDETEA) and same was accepted by FSDETEA (Refer to Appendix C). The following reference number was allocated to the application: **EMS/9(i).11(i)(vi),18(i),5,15/13/09**.

Consultation with the regulating authorities (FSDWA, FSDETEA etc.) was undertaken and will continue throughout the EIA process. On-going consultation and input from FSDETEA will include the following:

- Submission of a Final EIA Report following a 40-day public review period of the EIA Report.
- A consultation meeting and site visit with FSDETEA in order to discuss the findings and conclusions of the EIA Report (if required by the authorities).

7.3 IMPACT ASSESSMENT PROCESS

7.3.1 Description of the task that will be undertaken as part of the Environmental Impact Assessment process

Issues that require further investigation / assessment in the EIA:

- Traffic impacts
- All Heritage and Cultural aspects of the site and the area
- An assessment of the Aquatic Resources
- An Ecological Habitat Assessment

Notwithstanding the perceived high or low sensitivity of the overall development, certain sensitive landscapes will be impacted on. The possible environmental impact the projects' activities will have on the physical, biological, cultural and social characteristics of the site and its surroundings will be assessed in terms of the under-mentioned criteria.

7.3.2 Estimated Schedule of Tasks

Table 4 portrays the proposed timetable for the tasks.

Table 4: Estimated timetable for the tasks

Key Milestone Activities	Proposed timeframe
Public review period for Draft Scoping Report	29 July 2013 to 29 August 2013
Finalisation of Scoping Report & submission to FSDETEA	25 July 2013 to 29 July 2013 <i>*should no substantial amendments be required</i>
Authority acceptance of the Final Scoping Report and Plan of Study to undertake the EIA	29 July 2013 to 29 August 2013
Finalise specialist studies	In progress to be completed by 4 September 2013
Make EIA Report and Draft EMP available to the public, stakeholders and authorities	4 September 2013 to 15 October 2012
Finalisation of EIA Report	15 October 2012 to 18 October 2012
Submit Final EIA Report to FSDETEA for review and decision-making	21 October 2012 to 20 December 2012
FSDETEA to issue Environmental Authorisation (EA)	20 December 2012 to 20 January 2013

**dates subject to change*

Times for the different activities are an estimated guide and are influenced by the following:

- Availability of information
- Nature and adequacy of the data collected
- The approval process timeframes

7.3.3 Alternatives to be assessed

In terms of the development:

- A preferred development layout and route options to be referred to as the **Proposal** will be assessed in detail.
- Services installation and alignment alternatives will also be investigated, Alternative Services Installation 1
 - Specialist studies will cover the extent of this route as well.
- One additional layout alternative will also be investigated, Alternative layout 1
 - Specialist studies will cover the extent of this layout as well.
- The “No-Go” alternative will also be assessed.
 - Vista Park Ext 3 will not be developed.

7.3.4 Methodology

An assessment of the potential impacts of the proposed construction of Vista Park Ext 3 will be based on existing information and specialist assessments of various aspects.

The potential impacts will be assessed based on:

7.3.4.1 Nature

This is an appraisal of the type of effect the activity would have on the affected environment. This description includes what is being affected and how (Refer to Table 5).

7.3.4.2 Extent

This indicates the spatial area that may be affected by the impact, and further describes the possibility that adjoining areas may be impacted upon (Refer to Table 5).

7.3.4.3 Duration

This refers to the period of time that the impact may be operative for (i.e. the lifetime of the impact) (Refer to Table 5).

7.3.4.4 Intensity

This indicates whether the impact is likely to be destructive or have a lesser effect (Refer to Table 5).

7.3.4.5 Probability

This refers to the likelihood of the impact actually occurring (Refer to Table 5).

7.3.4.6 Significance

The overall significance of the impact can be determined based on a synthesis of information from the parameters tabulated above. The significance of an impact can be described as:

- NONE: No impact foreseen.
- LOW: A negligible impact, minimal mitigatory measures required.

- LOW to MEDIUM: Negligible to moderate impact. Mitigatory measures required. It will not have an influence on the decision.
- MEDIUM: Moderate impact. Mitigation required. Possible influence on decision without mitigation.
- MEDIUM to HIGH: Moderate to severe impact. Specific and comprehensive mitigatory measures required and may influence the decision to go ahead with the project.
- HIGH: Severe impact. It will influence the decision to go ahead with the project and alternative activities should be identified for Proposal.

Table 5: Impact assessment described

DEFINITIONS					
Nature	What is the impact and is it positive or negative?				
PARAMETER					
QUANTIFICATION					
RANKING					
Extent	None	Site	Local	Regional	National
		Site footprint	Within the adjacent suburbs of the proposed pipeline alignment	Within the Municipality Borders	Beyond the Provincial Boundary
Duration	None	Short-term	Medium-term	Long-term	Permanent
		0-12 months	1-5 years	5-20 years	20+ years
Severity	None	Very Low	Low	Medium	High
		0-25%	25-50%	50-75%	75-100%
Probability	None	Unlikely	Possible	Probable/ Likely	Definite
		0-10% chance	10-50% chance	50-90% chance	>90% chance

7.3.4.7 Cumulative effect

It is important to assess the natural environment using a systems approach that will consider the cumulative impact of various actions. Cumulative impact refers to the impact on the environment, which results from the incremental impact of the actions when added to other past, present and reasonably foreseeable future actions regardless of what agencies or persons undertake such actions. Cumulative impacts can result from individually minor but collectively significant actions or activities taking place over a period of time. Cumulative effects can take place so frequently in time that the effects cannot be assimilated by the environment.

7.3.4.8 Mitigation

An Environmental Management Programme (EMPr) will be developed based on the findings of the Environmental Impact Assessment (EIA). The EMPr will be developed as site specific mitigation measure for significant impacts.

7.4 PUBLIC PARTICIPATION PROCESS (PPP)

A Public Participation Process (PPP) will be undertaken by Prism EMS Environmental Consultants. Consultation with key stakeholders and I&APs will be on-going throughout the EIA Phase. Through this consultation process, stakeholders and I&APs will be encouraged to identify additional issues of concern or highlight positive aspects of the project, and to comment on the findings of the EIA Phase.

In order to accommodate the varying needs of stakeholders and I&APs within the study area, as well as capture their inputs regarding the project, various opportunities will be provided for stakeholders and I&APs to be involved in the EIA Phase of the process and can include as follows:

- Focus group meetings.
- One-on-one consultation meetings.
- Telephonic consultation sessions.
- Written, faxed or e-mail correspondence.

The EIA Report will be made available for public review for a 40-day period prior to finalisation and submission to the FSDTEA for review and decision-making.