



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

Ref no.3/4/1/5

2017-02-17

## NOTICE OF THE 6<sup>TH</sup> MEETING OF THE COUNCIL OF STELLENBOSCH MUNICIPALITY WEDNESDAY, 2017-02-22 AT 15:00

**TO** The Speaker, Cllr DD Joubert [Chairperson]  
The Executive Mayor, Ald G Van Deventer (Ms)  
The Deputy Executive Mayor, Cllr N Jindela

<b>COUNCILLORS</b>	F Adams	MC Johnson
	DS Arends	NS Louw
	FJ Badenhorst	N Mananga-Gugushe (Ms)
	GN Bakubaku-Vos (Ms)	C Manuel
	FT Bangani-Menziwa (Ms)	LM Maqeba
	PW Biscombe	NE McOmbring (Ms)
	PR Crawley (Ms)	XL Mdemka (Ms)
	A Crombie (Ms)	RS Nalumango (Ms)
	JN De Villiers	N Olayi
	MB De Wet	MD Oliphant
	R Du Toit (Ms)	SA Peters
	A Florence	WC Petersen (Ms)
	AR Frazenburg	MM Pietersen
	E Fredericks (Ms)	WF Pietersen
	E Groenewald (Ms)	SR Schäfer
	JG Hamilton	Ald JP Serdyn (Ms)
	AJ Hanekom	N Sinkinya (Ms)
	DA Hendrickse	P Sitshoti (Ms)
	JK Hendriks	Q Smit
	LK Horsband (Ms)	E Vermeulen (Ms)

Notice is hereby given in terms of Section 29, read with Section 18(2) of the *Local Government: Municipal Structures Act, 117 of 1998*, as amended, that the **6<sup>TH</sup> MEETING** of the **COUNCIL** of **STELLENBOSCH MUNICIPALITY** will be held in the **COUNCIL CHAMBER, TOWN HOUSE, PLEIN STREET, STELLENBOSCH** on **WEDNESDAY, 2017-02-22** at **10:00** to consider the items on the Agenda.

**SPEAKER**  
**DD JOUBERT**

**A G E N D A**  
**6<sup>TH</sup> MEETING OF THE COUNCIL**  
**OF STELLENBOSCH MUNICIPALITY**  
**2017-02-22**  
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	NONE	

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6.	REPORT/S BY THE MUNICIPAL MANAGER RE OUTSTANDING RESOLUTIONS TAKEN AT PREVIOUS COUNCIL MEETINGS
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The report by the Acting Municipal Manager re outstanding resolutions taken at previous meetings of Council is attached as **APPENDIX 1**.

**FOR INFORMATION**

OUTSTANDING COUNCIL RESOLUTIONS 9 FEB 2017

Council Meeting		Resolution	Resolution Date	Date Closed	Task Status	Allocated To	% Feedback	Feedback Comment
352092	ELECTRICITY SUPPLY TO THE MUNICIPAL AREAS OF STELLENBOSCH	25TH COUNCIL MEETING: 2014-11-26: ITEM 7.5 RESOLVED (nem con)  (a)that a preliminary investigation be conducted by the Directorate: Engineering Services (Electrical Services) into the possibility and feasibility of taking over the electricity supply from Drakenstein Municipality;  (b)that billing cooperation be implemented between Drakenstein and Stellenbosch Municipality to implement more effective debt collection; and  (c)that SALGA be requested to expedite the Eskom process through political intervention.  (DIRECTOR: ENGINEERING SERVICES TO ACTION)	2014-11-26		IN PROGRESS	JOHANNESC	93.00	Negotiations between Stellenbosch & Drakenstein Municipalities are currently taking place.
367234	WRITING-OFF OF IRRECOVERABLE DEBT: MERITORIOUS CASE	7.3 WRITING-OFF OF IRRECOVERABLE DEBT: MERITORIOUS CASE 29TH COUNCIL MEETING: 2015-04-30: ITEM 7.3 RESOLVED (nem con)  that this matter be referred back to the Administration for further investigation.  (CHIEF FINANCIAL OFFICER TO ACTION)	2015-04-30		IN PROGRESS	ANDRET	98.00	Snr Legal Advisor is finalising his comments.
383887	PROGRESS REPORT – POLICY FOR SELF GENERATION OF ELECTRICITY	7.9 PROGRESS REPORT : POLICY FOR SELF- GENERATION OF ELECTRICITY 33RD COUNCIL MEETING: 2015-08-25: ITEM 7.9 RESOLVED (nem con)  that this matter be referred back to allow the Administration to submit a Progress Report to Council as mentioned in the item.  (ACTING DIRECTOR: ENGINEERING SERVICES TO ACTION)	2015-08-25		IN PROGRESS	JOHANNESC	85.00	It was resolved at Mayco meeting of 18/1/2017 that .Presentation to be made to Mayco
394114	Investigation with regards to the various	7.6 INVESTIGATION WITH REGARD TO THE VARIOUS RESIDENTIAL PROPERTIES IN MONT ROCHELLE NATURE RESERVE	2015-10-28		IN PROGRESS	DUPREL	85.00	Following up on outstanding

	<p>residential properties in Mont Rochelle Nature Reserve</p>	<p>35TH COUNCIL MEETING: 2015-10-28: ITEM 7.6</p> <p>RESOLVED (majority vote)</p> <p>(a) that Council rescind its resolution taken at the meeting dated, 2014-01-16, with regard to Item 7.2;</p> <p>(b) that the funds allocated to be spent on conducting the proposed investigation rather be spent on consolidating the 46 unsold erven with Mont Rochelle Nature Reserve and negotiating with the owners of the 14 sold (but undeveloped) erven (the priority being erven 342, 307, 314, 322, 355, 336, located in a visually sensitive area north-eastern slope of "Du Toits Kop" facing the Franschoek valley) regarding the possibility to exchange current erven within Mont Rochelle Nature Reserve with erven in a more suitable area (suitable in terms of environmental, visual and service delivery perspective); and</p> <p>(c) that any other feasible alternative that can limit the impact on the nature reserve that might be identified in the process be considered.</p> <p>The following Councillors requested that their votes of dissent be minuted: Councillors F Adams; JA Davids; DA Hendrickse; S Jooste (Ms); C Moses (Ms); P Mntumi (Ms); RS Nalumango (Ms); P Sitshoti (Ms); AT van der Walt and M Wanana.</p> <p>(DIRECTOR: PLANNING AND ECONOMIC DEVELOPMENT TO ACTION)</p>						<p>responses and replying to queries. Process ongoing.</p>
<p>413640</p>	<p>9.1 MOTION BY COUNCILLOR JK HENDRIKS: SUPPORT FOR INDIGENT PEOPLE IN RURAL AREAS</p>	<p>9.1 MOTION BY COUNCILLOR JK HENDRIKS: SUPPORT FOR INDIGENT PEOPLE IN RURAL AREAS</p> <p>38TH COUNCIL MEETING: 2016-02-24: ITEM 9.1</p> <p>The Speaker allowed Councillor JK Hendriks to put his Motion, duly seconded. After the Motion was motivated, the Speaker allowed debate on the matter. The matter was put to the vote yielding a result of all in favour.</p> <p>RESOLVED (nem con)</p> <p>(a) that the Administration be tasked to investigate to what extent rural indigent residents, especially those residing on farms, can be assisted with electricity, health and social services by the local-, provincial- and national spheres of government;</p> <p>(b) that any further recommendations and findings that could improve the quality of life of indigent residents be considered for implementation and support to rural indigent residents;</p> <p>(c) that a report with recommendations for implementation pertaining to the above be tabled for consideration at the next Council meeting scheduled for 2016-03-30; and</p> <p>(d) that Council nominate a multi-party delegation to engage organised agriculture</p>	<p>2016-02-24</p>		<p>IN PROGRESS</p>	<p>ANNELIER</p>	<p>95.00</p>	<p>External legal opinion sourced. Item will be refined for presentation at the March 2017 Council Meeting.</p>

		<p>to investigate what the municipality can do to address the situation of the farm workers, in co-operation with the farmers;                  (e) that the multi-party delegation comprise of the following Councillors:</p> <p>DA = Cllr JP Serdyn (Ms)                  ANC = Cllr JA Davids                  SCA = Cllr DA Hendrickse                  SPA = Cllr F Adams                  SCA = Cllr DA Hendrickse                  ACDP = Cllr DS Arends                  COPE = Cllr HC Bergstedt (Ms); and                  NPP = Cllr LL Stander</p> <p>(DIRECTOR: STRAT &amp; CORP TO ACTION)</p>						
428987	IMPROVING MUNICIPAL FINANCES	<p>7.5 IMPROVING MUNICIPAL FINANCES</p> <p>40TH COUNCIL MEETING: 2016-04-26: ITEM 7. 5</p> <p>During debate on the matter, the DA requested a caucus which the Speaker allowed.</p> <p>After the meeting resumed, it was</p> <p>RESOLVED (nem con)</p> <p>that this item be referred back for Administration to arrange for a workshop for all Councillors, whereafter the item be resubmitted to Council.</p> <p>(MUNICIPAL MANAGER TO ACTION)</p>	2016-04-26		IN PROGRESS	MARIUSW	20.00	Report is currently being finalised.
458852	Amendment of 2013 approved Municipal Spatial Development Framework and commencement of a Municipal Spatial Development Framework in terms of the Local Government: Municipal Systems Act (Act 32 of 200) for Stellenbosch Municipality WC0024 in line with the	<p>7.4.4 AMENDMENT OF 2013 APPROVED MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK AND COMMENCEMENT OF A MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK IN TERMS OF THE LOCAL GOVERNMENT: MUNICIPAL SYSTEMS ACT (ACT 32 OF 2000) FOR STELLENBOSCH MUNICIPALITY WC024 IN LINE WITH THE NEW PLANNING DISPENSATION WHICH INCLUDE THE LAND USE PLANNING BY-LAW (2015), THE WESTERN CAPE LAND USE PLANNING ACT (ACT 3 OF 2014) AND THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (ACT 16 OF 2013)</p> <p>2ND COUNCIL MEETING: 2016-10-05: ITEM 7.4.4</p> <p>RESOLVED (majority vote)</p> <p>that Council authorises the Municipal Manager to:</p> <p>(a) proceed with the development of a Municipal Spatial Development Framework</p>	2016-10-05		IN PROGRESS	BERNABYB	40.00	First IGSC meeting scheduled for 17 February 2017. Input requested and received from directorates as to minor amendments in the current MSFD to be tabled in March 2017. Process ongoing.

		<p>for Stellenbosch Municipality (WC024) (MSDF);</p> <p>(b) establish an intergovernmental steering committee (IGSC) to compile or amend its municipal spatial development framework in terms of Section 11 of the Land Use Planning Act;</p> <p>(c) establish a project committee;</p> <p>(d) proceed with all administrative functions to oversee the compilation of a first draft of the Municipal Spatial Development Framework for Council approval in terms of the Municipal Systems Act (2000); the Land Use Planning By-law (2015), Land Use Planning Act (2014) and the Spatial Planning Land Use Management Act (2013); and</p> <p>(e) use the MSDF as a platform to consider and align the following:</p> <ul style="list-style-type: none"> <li>(i) Strategic Environmental Management Framework (SEMF)</li> <li>(ii) Rural Area Plan (RAP)</li> <li>(iii) Urban Development Strategy leading to a Stellenbosch WCO24 SDF</li> <li>(iv) Heritage Resources Inventory</li> <li>(v) Integrated Human Settlement Plan</li> <li>(vi) Klapmuts Local Spatial Development Framework (LSDF)</li> <li>(vii) Stellenbosch LSDF amendment to be compliant with SPLUMA</li> <li>(viii) Jonkershoek LSDF amendment to be compliant with SPLUMA</li> </ul> <p>(f) proceed with the amendment of the current approved MSDF to be aligned with the 2017/18 IDP; and</p> <p>(g) both the amendment of the existing MSDF and the compilation of the new MSDF run concurrently with the Integrated Development Planning cycle.</p> <p>The following Councillors requested that their votes of dissent be minuted: Councillors F Adams; GN Bakubaku-Vos (Ms); DA Hendrickse; LK Horsband (Ms); FT Bangani-Menziwa (Ms); N Mananga-Gugushe (Ms); LM Mqeqeba; RS Nalumango (Ms); MD Oliphant; N Sinkinya (Ms) and P Sitshoti (Ms).</p>						
473292	8.1.2 ESTABLISHMENT OF A RULES COMMITTEE	<p>8.1.2 ESTABLISHMENT OF A RULES COMMITTEE</p> <p>3RD COUNCIL MEETING: 2016-10-26: ITEM 8.1.2</p> <p>RESOLVED (majority vote)</p> <p>that this item be referred back to allow the Administration to obtain a legal opinion and the applicable Terms of Reference.</p> <p>The following Councillors requested that their votes of dissent be minuted:</p> <p>Councillors F Adams; GN Bakubaku-Vos (Ms); FT Bangani-Menziwa (Ms); DA Hendrickse; LK Horsband (Ms); N Mananga-Gugushe (Ms); LM Mqeqeba; MD</p>	2016-10-26		IN PROGRESS	ROZANNEP	50.00	Item submitted to Special Council of 16 Feb 2017.



OUTSTANDING COUNCIL RESOLUTIONS 9 FEB 2017

		Oliphant; RS Nalumango (Ms); N Sinkinya (Ms) and P Sitshoti (Ms).						
473307	8.1.3 ESTABLISHMENT OF A DISCIPLINARY COMMITTEE	8.1.3 ESTABLISHMENT OF A DISCIPLINARY COMMITTEE 3RD COUNCIL MEETING: 2016-10-26: ITEM 8.1.3  RESOLVED (majority vote)  that this item be referred back to allow the Administration to obtain a legal opinion and the applicable Terms of Reference.  The following Councillors requested that their votes of dissent be minuted:  Councillors F Adams; GN Bakubaku-Vos (Ms); FT Bangani-Menziwa (Ms); DA Hendrickse; LK Horsband (Ms); N Mananga-Gugushe (Ms); LM Maqeba; MD Oliphant; RS Nalumango (Ms); N Sinkinya (Ms) and P Sitshoti (Ms).	2016-10-26		IN PROGRESS	ROZANNEP	50.00	Item submitted to Special Council of 16 Feb 2017.
473309	8.1.4 ESTABLISHMENT OF APPEAL AUTHORITY (SECTION 62: SYSTEMS ACT)	8.1.4 ESTABLISHMENT OF APPEAL AUTHORITY (SECTION 62: SYSTEMS ACT) 3RD COUNCIL MEETING: 2016-10-26: ITEM 8.1.4  RESOLVED (majority vote)  that this item be referred back to allow the Administration to obtain a legal opinion and the applicable Terms of Reference.  The following Councillors requested that their votes of dissent be minuted:  Councillors F Adams; GN Bakubaku-Vos (Ms); FT Bangani-Menziwa (Ms); DA Hendrickse; LK Horsband (Ms); N Mananga-Gugushe (Ms); LM Maqeba; MD Oliphant; RS Nalumango (Ms); N Sinkinya (Ms) and P Sitshoti (Ms).	2016-10-26		IN PROGRESS	ROZANNEP	50.00	Item submitted to Special Council of 16 Feb 2017.
473316	8.2 STRUCTURING OF COUNCIL: ESTABLISHMENT OF SECTION 80 COMMITTEES (PORTFOLIO COMMITTEES)	8.2 STRUCTURING OF COUNCIL: ESTABLISHMENT OF SECTION 80 COMMITTEES (PORTFOLIO COMMITTEES) 3RD COUNCIL MEETING: 2016-10-26: ITEM 8.2  RESOLVED (majority vote)  that this item be referred back to allow the Administration to obtain a legal opinion and the applicable Terms of Reference.  The following Councillors requested that their votes of dissent be minuted:	2016-10-26		IN PROGRESS	ROZANNEP	50.00	Item submitted to Special Council of 16 Feb 2017.

		Councillors F Adams; GN Bakubaku-Vos (Ms); FT Bangani-Menziwa (Ms); DA Hendrickse; LK Horsband (Ms); N Mananga-Gugushe (Ms); LM Maqeba; MD Oliphant; RS Nalumango (Ms); N Sinkinya (Ms) and P Sitshoti (Ms).						
473321	8.5 ESTABLISHMENT OF WARD COMMITTEES	<p>8.5 ESTABLISHMENT OF WARD COMMITTEES</p> <p>3RD COUNCIL MEETING: 2016-10-26: ITEM 8.5</p> <p>RESOLVED (majority vote)</p> <p>(a) that Council approves the recommendation that all ward committees be established according to the geographical electoral system in line with the consultation that was done with Ward Councillors on 17 October 2016;</p> <p>(b) that Council takes note of the policy guidelines and procedures, as well as the communication activities and timelines outlined above; and</p> <p>(c) that the election of ward committees may commence during the week of 12 January 2017.</p>	2016-10-26		IN PROGRESS	VERBONB	95.00	Item being finalised for February 2017 Council Meeting.
478886	QUESTION 1 BY COUNCILLOR F ADAMS: EMPOWERMENT AND WEALTH CREATION OPPORTUNITIES FOR BLACK PEOPLE	<p>10.5 QUESTION 5 BY COUNCILLOR F ADAMS: EMPOWERMENT AND WEALTH CREATION OPPORTUNITIES FOR BLACK PEOPLE</p> <p>4TH COUNCIL MEETING: 2016-11-23: ITEM 10.4</p> <p>RESOLVED (nem con)</p> <p>that it be noted that Councillor F Adams did not receive a response in respect of his question posed, and he requested that a written response be provided at the next meeting.</p>	2016-11-23		IN PROGRESS	ROZANNEP	100.00	Response from Executive Mayor included in Council 22 Feb 2017 agenda.
478888	QUESTION 1 BY COUNCILLOR LK HORSBAND (MS): COUNCIL POLICY ON ISSUING COUNCIL RELATED DOCUMENTS ON CD'S AND FLASH DRIVES TO COUNCILLORS	<p>10.3 QUESTION 1 BY COUNCILLOR LK HORSBAND (MS): COUNCIL POLICY ON ISSUING COUNCIL RELATED DOCUMENTS ON CD'S AND FLASH DRIVES TO COUNCILLORS</p> <p>4TH COUNCIL MEETING: 2016-11-23: ITEM 10.3</p> <p>During debate on the matter, the DA requested a caucus, which the Speaker allowed.</p> <p>RESOLVED (nem con)</p> <p>that it be noted that Cllr LK Horsband indicated that she did not receive a written response to her question.</p>	2016-11-23		IN PROGRESS	ROZANNEP	50.00	In process

		The Acting Municipal Manager addressed Councillor LK Horsband's question verbally, and he further undertook to provide relevant hard copies to Cllr Horsband (Ms).						
478900	WATER SERVICES BY-LAW	7.6.5 WATER SERVICES BY-LAW 4TH COUNCIL MEETING: 2016-11-23: ITEM 7.6.5  RESOLVED (nem con)  (a) that the attached Draft Water Services By-law be supported by Council in principle;  (b) that the proposed Draft By-law be duly advertised for public comment until the end of February 2017, and be re-submitted together with any comments/ objections by the public, for final approval and adoption by the Council; and  (c) that the Draft By-Law, once approved and adopted by Council, be promulgated by the Directorate: Strategic and Corporate Services' legal team in the Provincial Gazette.	2016-11-23		IN PROGRESS	DRIESVT	60.00	Call for comments have been published 19/1/2017 Notice 1/2017 closing date 20/2/.2017
478901	THE THIRD GENERATION INTEGRATED WASTE MANAGEMENT PLAN (IWMP) FOR STELLENBOSCH MUNICIPALITY	7.6.4 THE THIRD GENERATION INTEGRATED WASTE MANAGEMENT PLAN (IWMP) FOR STELLENBOSCH MUNICIPALITY 4TH COUNCIL MEETING: 2016-11-23: ITEM 7.6.4  RESOLVED (nem con)  (a) that the attached Draft 3rd Generation IWMP be supported by Council for approval in principle; and  (b) that the proposed Draft 3rd Generation IWMP be duly advertised for public comment until the end of February 2017, and be re-submitted together with any comments / objections by D:EA&DP and the public, for final approval and adoption by Council.	2016-11-23		IN PROGRESS	SALIEMH	5.00	In public participation process
478911	BY-LAW ON THE PREVENTION OF PUBLIC NUISANCES AND THE KEEPING OF ANIMALS	7.7.2 BY-LAW ON THE PREVENTION OF PUBLIC NUISANCES AND THE KEEPING OF ANIMALS 4TH COUNCIL MEETING: 2016-11-23: ITEM 7.7.2  RESOLVED (nem con)  (a) that Council approves the amended Draft By-Law on the Prevention of Public Nuisances and the Keeping of Animals, in principle; and	2016-11-23		IN PROGRESS	GERALDE	20.00	The By-Law on the Prevention of Public Nuisances and the Keeping of Animals was advertised for 90 days and the due date is 28 Feb 2017.

		(b) that the Administration be mandated to advertise said By-Law for public comment until the end of February 2017, whereafter same be re-submitted to Council for approval.						
478913	IMPOUNDMENT OF ANIMALS BY-LAW	<p>7.7.1 IMPOUNDMENT OF ANIMALS BY-LAW</p> <p>4TH COUNCIL MEETING: 2016-11-23: ITEM 7.7.1</p> <p>RESOLVED (nem con)</p> <p>(a) that Council considers the adoption and approval of the Draft Impoundment of Animals By- Law; and</p> <p>(b) that the proposed By-Law be duly advertised for public comment until the end of February 2017 and be re-submitted together with any comment/objections by the public, for final approval and adoption by Council.</p>	2016-11-23		IN PROGRESS	GERALDE	20.00	The By-Law on the Impoundment of Animals By-Law was advertised for 90 days and the due date is 28 Feb 2017.
488816	Draft Annual Report 2015/16	<p>7.2.1 TABLING OF THE DRAFT 2015/16 ANNUAL REPORT FOR THE STELLENBOSCH MUNICIPALITY IN ACCORDANCE WITH SECTION 121 OF THE MUNICIPAL FINANCE MANAGEMENT ACT (MFMA), ACT 56 OF 2003, READ TOGETHER WITH SECTION 46 OF THE LOCAL GOVERNMENT: MUNICIPAL SYSTEMS ACT, ACT 32 OF 2000</p> <p>5TH COUNCIL MEETING: 2017-01-25: ITEM 7.2.1</p> <p>During debate on the matter, Cllr DA Hendrickse requested that it be minuted that he is of the view that the Municipal Public Accounts Committee (MPAC) does not exist at this time.</p> <p>RESOLVED (majority vote)</p> <p>(a) that Council takes note of the 2015/16 Annual Report for the Stellenbosch Municipality;</p> <p>(b) that the Annual Report be made public for comment on the official website of the Stellenbosch Municipality and local print media for a period of 21 days;</p> <p>(c) that the Municipal Public Accounts Committee (MPAC) fulfil the oversight role by considering and evaluating the content of the Annual Report and make recommendations to Council when adopting an Oversight Report on the Annual Report;</p> <p>(d) that Council approves that MPAC can co-opt members of the public with expertise in specific fields to assist and advise the Committee; and</p>	2017-01-25		IN PROGRESS	VERNONB	90.00	(a) (b) (d) ( e) implemented.  (c ) in process upon finalisation of MPAC Committee.

		<p>(e) that Council approves that the co-opted members can be remunerated in line with the recommendations of the Financial Services Department as stated in the following schedule:</p> <p>Tariff Number of co-opted Members Not exceeding no. of hours Remuneration Per hour tariff for attendance of meeting 2 40 hours R 500 Once-off Tariff for duties performed in preparation 2 4 hours R 1500</p> <p>The following Councillors requested that their votes of dissent be minuted:</p> <p>Cllrs DA Hendrickse and LK Horsband (Ms).</p> <p>(STRAT &amp; CORP TO ACTION)</p>						
489359	REPORT BY THE MUNICIPAL MANAGER RE OUTSTANDING RESOLUTIONS TAKEN AT PREVIOUS COUNCIL MEETINGS	<p>6. REPORT/S BY THE MUNICIPAL MANAGER RE OUTSTANDING RESOLUTIONS TAKEN AT PREVIOUS COUNCIL MEETINGS</p> <p>5TH COUNCIL MEETING: 2017-01-25: ITEM 6</p> <p>Concerns were raised that the following outstanding resolutions either do not reflect as outstanding, or effect were not given to the decisions. These matters were noted for attention by the Municipal Manager.</p> <p>Pg 6 Council minutes dated 2016-11-23 "The following outstanding items do not appear on the list of outstanding resolutions: (i) Immovable Property Policy (ii) Tender 34 (iii) Decisions taken by the Acting Mayor during the previous recess</p> <p>The Acting Municipal Manager undertook to circulate a written response on the above matters to all Councillors by 30 November 2016. NOTED"</p> <p>CLLR DA HENDRICKSE:</p> <p>Items do not reflect as outstanding on the Agenda. He requested that the list be updated and resolutions be executed. MM undertook to follow up and report back to Council.</p> <p>9.1 MOTION BY COUNCILLOR JK HENDRIKS: SUPPORT FOR INDIGENT PEOPLE IN RURAL AREAS</p>	2017-01-25		IN PROGRESS	ROZANNEP	50.00	<p>Response by the relevant departments :</p> <p><u>Immovable Property Policy:</u> During the last council meeting of the previous council, the matter was referred back. Subsequently presentations were made to the new Executive Mayor during November2016 ,with the request that the matter be considered again. It was also recently discussed with the new MM, with the request that she discuss it with the Mayor.</p> <p>We still wait for the formal "go ahead" to put the item back on the agenda.</p>

		<p>38TH COUNCIL MEETING: 2016-02-24: ITEM 9.1</p> <p>The Speaker allowed Councillor JK Hendriks to put his Motion, duly seconded. After the Motion was motivated, the Speaker allowed debate on the matter.</p> <p>The matter was put to the vote yielding a result of all in favour.</p> <p>RESOLVED (nem con)</p> <p>(a) that the Administration be tasked to investigate to what extent rural indigent residents, especially those residing on farms, can be assisted with electricity, health and social services by the local-, provincial- and national spheres of government;</p> <p>(b) that any further recommendations and findings that could improve the quality of life of indigent residents be considered for implementation and support to rural indigent residents;</p> <p>(c) that a report with recommendations for implementation pertaining to the above be tabled for consideration at the next Council meeting scheduled for 2016-03-30; and</p> <p>(d) that Council nominate a multi-party delegation to engage organised agriculture to investigate what the municipality can do to address the situation of the farm workers, in co-operation with the farmers;</p> <p>(e) that the multi-party delegation comprise of the following Councillors:</p> <p>DA = Cllr JP Serdyn (Ms)          ANC = Cllr JA Davids          SCA = Cllr DA Hendrickse          SPA = Cllr F Adams          SCA = Cllr DA Hendrickse          ACDP = Cllr DS Arends          COPE = Cllr HC Bergstedt (Ms); and          NPP = Cllr LL Stander</p> <p>(DIRECTOR: STRAT &amp; CORP TO ACTION)</p> <p>Item long overdue.</p> <p>The Department should assist with timeframes.</p> <p>This multi-party delegation is not in place.</p> <p>Names of Cllr that no longer serve on Council should be replaced with new councillors.</p>						<p>This matter was first considered by the Standing committee in October 2013 and was eventually approved as a Draft in April 2014, wherafter it was advertised for public input.</p> <p><u>Tender 34</u>          Feedback to be provided.  <u>Decisions taken by the Acting Mayor during the previous recess</u>          Feedback to be provided</p> <p><u>MOTION BY COUNCILLOR JK HENDRIKS: SUPPORT FOR INDIGENT PEOPLE IN RURAL AREAS</u>          External legal input received. Item to be submitted to Council March 2017.</p>
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		<p>The Speaker RULED that:</p> <p>(i) the MM follow up on this matter.</p> <p>(ii) the Whip liaise with the MM to replace the old names of Councillors on the Multi-party list.</p>						
489365	<p>AMENDMENT TO TARIFF STRUCTURE WITH REGARDS TO RENTAL CATEGORY</p>	<p>7.4.3 AMENDMENT TO TARIFF STRUCTURE WITH REGARDS TO RENTAL CATEGORY</p> <p>5TH COUNCIL MEETING: 2017-01-25: ITEM 7.4.3</p> <p>RESOLVED (majority vote with abstentions)</p> <p>(a) that the Sundry Tariffs with regards to the Kayamandi Economic Tourism Corridor as stipulated on page 40 of the 2016/17 Tariff book be amended by the insertion of the following sentence under paragraph (g):</p> <p>“In meritorious cases, the Accounting Officer may grant discounts larger than 30% as indicated above”.</p> <p>(b) that the amendment be advertised for comments and objections for consideration before actual implementation.</p> <p>(CHIEF FINANCIAL OFFICER TO ACTION)</p>	2017-01-25		IN PROGRESS	MARIUSW	20.00	In progress
489388	<p>IDENTIFICATION OF POSSIBLE TRUST LAND IN PNIEL: STATUS REPORT</p>	<p>7.5.1 IDENTIFICATION OF POSSIBLE TRUST LAND IN PNIEL: STATUS REPORT</p> <p>5TH COUNCIL MEETING: 2017-01-25: ITEM 7.5.1</p> <p>RESOLVED (nem con)</p> <p>(a) that the content of the notice of the Minister, be noted;</p> <p>(b) that the process plan as set out in par. 3.1.5, submitted to the Minister, be endorsed;</p> <p>(c) that the Municipal Manager be authorised to attend to the public participation process as set out in paragraph 3.1.5;</p> <p>(d) that the proposed allocations, as set out in paragraph 3.1.4, be supported in principle; and</p> <p>(e) that, following the public participation process, a progress report be submitted to Council to deal with the submissions received as a consequence of the public participation process, whereupon final recommendations will be made to the Minister regarding the allocation/transfer of so-called Section 3 Trust land.</p> <p>(DIR: HUMAN SETTLEMENTS TO ACTION)</p>	2017-01-25		IN PROGRESS	TABISOM	30.00	<p>A notice, calling for public inputs/comments on the proposed allocations, has been compiled for publication during the 3<sup>rd</sup> week of February2017. We are also in the process of setting up a meeting with the Congregational Church of Pniel.</p>

478910	EVENTS POLICY	<p>7.7.3 EVENTS POLICY</p> <p>4TH COUNCIL MEETING: 2016-11-23: ITEM 7.7.3</p> <p>RESOLVED (nem con)</p> <p>(a) that Council considers the adoption and approval of the Draft Events Policy in principle; and</p> <p>(b) that the Draft Events Policy be advertised for public comment until the end of February 2017 and be re-submitted for final approval and adoption by Council.</p>	2016-11-23		IN PROGRESS	GERALDE	20.00	The Events Policy was advertised for 90 days and the due date is 28 Feb 2017.
478903	SECTION 78 PROCESS FOR AN EXTERNAL SERVICE DELIVERY MECHANISM WITH REGARDS TO PUBLIC	<p>7.6.2 SECTION 78 PROCESS FOR AN EXTERNAL SERVICE DELIVERY MECHANISM WITH REGARD TO PUBLIC TRANSPORT</p> <p>4TH COUNCIL MEETING: 2016-11-23: ITEM 7.6.2</p> <p>RESOLVED (majority vote)</p> <p>(a) that Council approves the proposal that an assessment of the municipality's capacity be done to determine its ability to provide the proposed public transport service through an internal mechanism and that the recommendation of the assessment be submitted to Council for consideration and decision; and</p> <p>(b) that, should the above assessment recommend the use of an external mechanism for the provision of the public transport service, a feasibility study be conducted for the provision of the service through an external mechanism.</p> <p>The following Councillors requested that their votes of dissent be minuted: Councillors F Adams; DA Hendrickse and LK Horsband (Ms).</p>	2016-11-23		IN PROGRESS	NIGELW		The Assessment of the municipalities capabilities is in process. Western Cape Department of Public Works Roads and Transport has appointed Pegasus to start with the process. Their first status quo assessment report will be tabled early in February 2017.
481580	AMENDMENT TO EXISTING ACTING ALLOWANCE POLICY	<p>4.4.2 AMENDMENT TO EXISTING ACTING ALLOWANCE POLICY</p> <p>URGENT COUNCIL: 2016-12-12: ITEM 4.4.2</p> <p>RESOLVED (majority vote with 3 abstentions)</p> <p>(a) that Clause 6 of the current Acting Allowance Policy 2013/2014 approved by Council on 30 May 2013 be deleted namely: "6. ACTING AS MUNICIPAL MANAGER</p> <ul style="list-style-type: none"> <li>• The Stellenbosch Municipal Council in consultation with the Executive Mayor may appoint a senior manager (director) to act as Municipal Manager during the absence of the Municipal Manager, in terms of delegation and in line with the applicable legislation and policies, while Council has the discretion to appoint a</li> </ul>	2016-12-12		IN PROGRESS	MARIUSW	50.00	Amendment has been advertised for comments and objections.



		<p>Municipal Manager in terms of section 54 A of the Local Government: Municipal Systems Act, 2000, Act 32 of 2000.</p> <ul style="list-style-type: none"> <li>• Senior managers (directors) in the employ of Stellenbosch Municipality will not be paid for acting in the stead of the Municipal Manger, during the absence of the Municipal Manager.“</li> </ul> <p>(b) that the following Clause 6 of the current Acting Allowance Policy be inserted to read as follows:</p> <ul style="list-style-type: none"> <li>• “The Stellenbosch Municipal Council in consultation with the Executive Mayor may appoint a senior manager (director) to act as Municipal Manager during the absence of the Municipal Manager, in terms of delegation and in line with the applicable legislation and policies, while Council has the discretion to appoint a Municipal Manager in terms of section 54 A of the Local Government: Municipal Systems Act, 2000, Act 32 of 2000.</li> <li>• An acting allowance is only payable when a Director acts as Municipal Manager for a minimum of five (5) consecutive working days. Acting Allowances will not be paid for any work done on Saturdays or Sundays.</li> <li>• The salary component for determining the acting allowance of the director will be 15% of his/her TCOE excluding bonuses up to a maximum allowable remuneration of the Municipal Manager according to the regulations.”</li> </ul> <p>(c) that the amended Acting Allowance Policy be advertised for comments.</p>						
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7.	<b>CONSIDERATION OF ITEMS BY THE EXECUTIVE MAYOR: (ALD G VAN DEVENTER (MS))</b>
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7.1	<b>COMMUNITY DEVELOPMENT AND COMMUNITY SERVICES: CLLR AR FRAZENBURG</b>
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NONE

7.2	<b>CORPORATE AND STRATEGIC SERVICES: (CLLR E GROENEWALD (MS))</b>
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7.2.1	<b>CONDONATION FOR ACTING APPOINTMENT AND ALLOWANCES FOR MANAGERS DIRECTLY ACCOUNTABLE TO THE MUNICIPAL MANAGER</b>
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## 1. PURPOSE OF REPORT

To request the MEC for Local Government in the Western Cape to condone the appointment the Acting Director Strategic & Corporate Services and Acting Director Engineering Services within Stellenbosch Municipality.

## 2. BACKGROUND

It is common cause that Section 56 (1)(a)(ii) of the Local Government: Municipal Systems Act 32 of 2000 the following is prescribed:

*“A municipal council, after consultation with the municipal manager, must appoint an acting manager directly accountable to the municipal manager under circumstances and for a period as prescribed”*

Section 56 (1)(c) of the Local Government: Municipal Systems Act 32 of 2000 furthermore prescribes that:

*“A person appointed in terms of paragraph (a)(ii) may not be appointed to act for a period that exceeds three months: Provided that a municipal council may, in special circumstances and on good cause shown, apply in writing to the MEC for local government to extend the period of appointment contemplated in paragraph (a), for a further period that does not exceed three months”.*

The MEC was not approached to extend the acting period of the current incumbents in the positions of Acting Director Strategic & Corporate Services and Acting Director Engineering Services. Please note that both vacancies were advertised, interviews were held and candidates were recommended for appointment.

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**MAYORAL COMMITTEE MEETING: 2017-02-15: ITEM 5.2.1****RESOLVED**

That it be recommended to Council:

that the MEC for Local Government in the Western Cape condone the acting appointment of the current incumbents in the respective positions of Acting Director Strategic & Corporate Services as well as Acting Director Engineering Services.

<b>Meeting:</b>	6 <sup>th</sup> Council: 2017-02-22	<b>Submitted by Directorate:</b>	Corporate and Strategic Services
<b>Ref No:</b>	4/3/4/1&4/3/4/6&4/12/3/1	<b>Author:</b>	Manager: HRM
<b>Collab:</b>	491282	<b>Referred from:</b>	Mayoral Committee: 2017-02-15

7.3	<b>ECONOMIC DEVELOPMENT AND PLANNING: [ALD JP SERDYN (MS)]</b>
7.3.1	<b>STELLENBOSCH MUNICIPALITY: INVASIVE ALIEN PLANTS MANAGEMENT PLAN</b>

#### **1. PURPOSE OF THE REPORT**

To present to Council the Stellenbosch Municipality's Invasive Alien Plants Management Plan for consideration and approval.

#### **2. BACKGROUND**

The National Environmental Management Biodiversity Act, 10 of 2004 (NEMBA), Section 76, states that all organs of state are required to draw up an invasive alien monitoring, control and eradication plan for the land under their control. The Stellenbosch Municipality Alien Invasive Plants (IAPs) Management Plan (**APPENDIX 1**) is the municipality's response to this obligation. This IAPs Management Plan also seeks to coordinate Stellenbosch Municipality's approach to invasive alien plant control in order to reduce future control costs in this regard and to improve the integrity of the natural areas and ecosystems in Stellenbosch Municipality.

#### **3. LEGISLATIVE FRAMEWORK**

As stated above, the National Environmental Management Biodiversity Act, 10 of 2004 (NEMBA), Section 76, requires that all organs of state draw up an invasive alien monitoring, control and eradication plan for the land under their control. Such a plan must include:

- (a) a detailed list and description of any listed invasive species occurring on the relevant land;
- (b) a description of the parts of that land that are infested with such listed invasive species;
- (c) an assessment of the extent of such infestation;
- (d) a status report on the efficacy of previous control and eradication measures
- (e) the current measures to monitor, control and eradicate such invasive species; and
- (f) measurable indicators of progress and success, and indications of when the control plan is to be completed.

#### **4. FINANCIAL IMPLICATIONS**

It is not possible to include the exact cost of the implementation of the management plan at this stage. Various variables influence cost of Invasive Alien Plant control, particularly the type of plants (species), maturity thereof and the densities of invasion at the time of control. The management plan does not specify timeframes in terms of which work needs to be undertaken,

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but rather prioritises the areas that need to be controlled and managed depending on the availability of resources.

## 5. COMMENTS FROM RELEVANT DEPARTMENTS

A draft version of the Stellenbosch Municipality AIPs Management Plan was sent to all directors on 1 September 2016 for input by 16 September 2016. The following feedback was received:

### 5.1 Financial Services

Implementation of the plan is budget dependent.

### 5.2 Human Settlements & Property Management

The content of the report and the specific focus areas identified in the report, are noted. The report is, however, silent on the Agricultural land owned by the Municipality as well as a number of other properties, such as the Wetlands at Wemmershoek and the land at the Theewaterskloof dam. It is suggested that the above properties be included in the study. (Department: Properties – received per e-mail dated 6 September 2016).

In response to the above comment, the following explanation was given:

As the management plan states, it pertains to land under our control and excludes land under lease agreement (as per our interpretation of NEMBA at this stage). The area at Wemmershoek (with the wetland referred to) as well as the portion of land towards the Theewaterskloof Dam is not under lease agreement and will indeed be included in the management plan. If any of the other land referred to are similarly not under lease agreement and currently being managed and maintained by Stellenbosch Municipality, these must be added. (Environmental Planning: Spatial Planning, Heritage & Environment – per e-mail dated 6 September 2016).

Subsequently, the areas of Culcattabos, Wemmershoek wetland area and Purgatory Outspan were added to the management plan.

### 5.3 Community & Protection Services

The Stellenbosch Municipality Invasive Alien Plants Management Plan (dated September 2016) is in order and is supported. It is in fact basically a formalisation of the work already conducted by our Nature Conservation section.

## MAYORAL COMMITTEE MEETING: 2017-02-15: ITEM 5.3.1

### RESOLVED

That it be recommended to Council:

- (a) that Council approves the Stellenbosch Municipality: Alien Invasive Plants Management Plan (dated September 2016), attached as **APPENDIX 1**, as Stellenbosch Municipality's invasive alien plants monitoring, control and eradication plan prepared in terms of the National Environmental

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Management Biodiversity Act (NEMBA) the plan be advertised for public input and additional inputs be incorporated for final adoption of Council; and

- (b) that the Stellenbosch Municipality: Alien Invasive Plants Management Plan be included as a project in the IDP 2016/17 as well as the 4<sup>th</sup> generation IDP.

<b>Meeting:</b>	<i>6<sup>th</sup> Council: 2017-02-22</i>	<b>Submitted by Directorate:</b>	<i>Planning &amp; Economic Development</i>
<b>Ref No:</b>	<i>PL 183 S</i>	<b>Author:</b>	<i>Director: Planning and Econ Dev</i>
<b>Collab:</b>	<i>489968</i>	<b>Referred from:</b>	<i>Mayco: 2017-02-15</i>



# STELLENBOSCH

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## ANNEXURE 1

**Stellenbosch Municipality Invasive Alien Plant Management Plan (September 2016)**

**STELLENBOSCH MUNICIPALITY**  
**ALIEN INVASIVE PLANTS MANAGEMENT PLAN**

**September 2016**



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This document is a revision and update of the document

***A Management Plan for Alien Invasive Plants on Municipal Land in Stellenbosch Municipality***  
(2013)

compiled by

**Lizelle Koen**

studying at the Faculty of AgriScience, Department of Entomology and Conservation,  
University of Stellenbosch.



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## 1. INTRODUCTION

The National Environmental Management Biodiversity Act, 10 of 2004 (NEMBA), Section 76, states that all organs of state are required to draw up an invasive and alien monitoring, control and eradication plan for the land under their control. Such a plan must include:

- (a) a detailed list and description of any listed invasive species occurring on the relevant land;
- (b) a description of the parts of that land that are infested with such listed invasive species;
- (c) an assessment of the extent of such infestation;
- (d) a status report on the efficacy of previous control and eradication measures
- (e) the current measures to monitor, control and eradicate such invasive species; and
- (f) measurable indicators of progress and success, and indications of when the control plan is to be completed.

In terms of Section 4(2)(a) of the NEMBA all municipalities are required to manage and conserve biological diversity. This includes taking steps to control and eradicate Invasive Alien Plants (IAP) in areas that they own or manage. The purpose of this document is to respond to this obligation and to coordinate Stellenbosch Municipality's (the Municipality) approach in this regard in order to reduce future IAP control costs and improve the integrity of the natural areas and ecosystems in Stellenbosch Municipality.

## 2. THE SIGNIFICANCE OF THE REGION & THE THREAT OF IAPs

A primary reason for the conservation of the natural environment of the Greater Stellenbosch Municipality is that it forms an integral part of the world-renowned Cape Floral Kingdom.

The Cape Floral Kingdom is internationally recognised as one of the six Floral Kingdoms of the world (0,06% of the earth's surface). As shown by Figure 1, it is the only Floral Kingdom contained, in its entirety, within a single country. The Cape Floral Kingdom is characterised by its exceptional richness in plant species and its endemism. More than 8 700 species are known to occur, with more than 68% of these species being confined to the Cape Floral Kingdom. Thus this Floral Kingdom compares with some of the richest floras worldwide, surpassing many tropical forest regions in its floral diversity.

The enormous diversity found in the Cape Floral Kingdom is attributed to the age of this kingdom. The last Ice Age had far less of an influence on this area than it did on the Northern Hemisphere. Plant life in the Northern Hemisphere was almost wiped out while conditions in the Western Cape were altered very little. The diversity can also be attributed to the harsh conditions and infertile soil of the area which has forced plants to adapt to ensure their survival. The Cape Floral Kingdom is of immense scientific importance, both nationally and internationally. It covers only 4% of South Africa, but contains 45% of all plant species of Southern Africa. About 75% of all plants in the South African Red Data Book are found in the Cape Floral Kingdom. Of these species, 1 700 are threatened. Many

Fynbos species are extremely localised in their distribution, with sets of such localised species organised into 'centres of endemism'<sup>1</sup>.

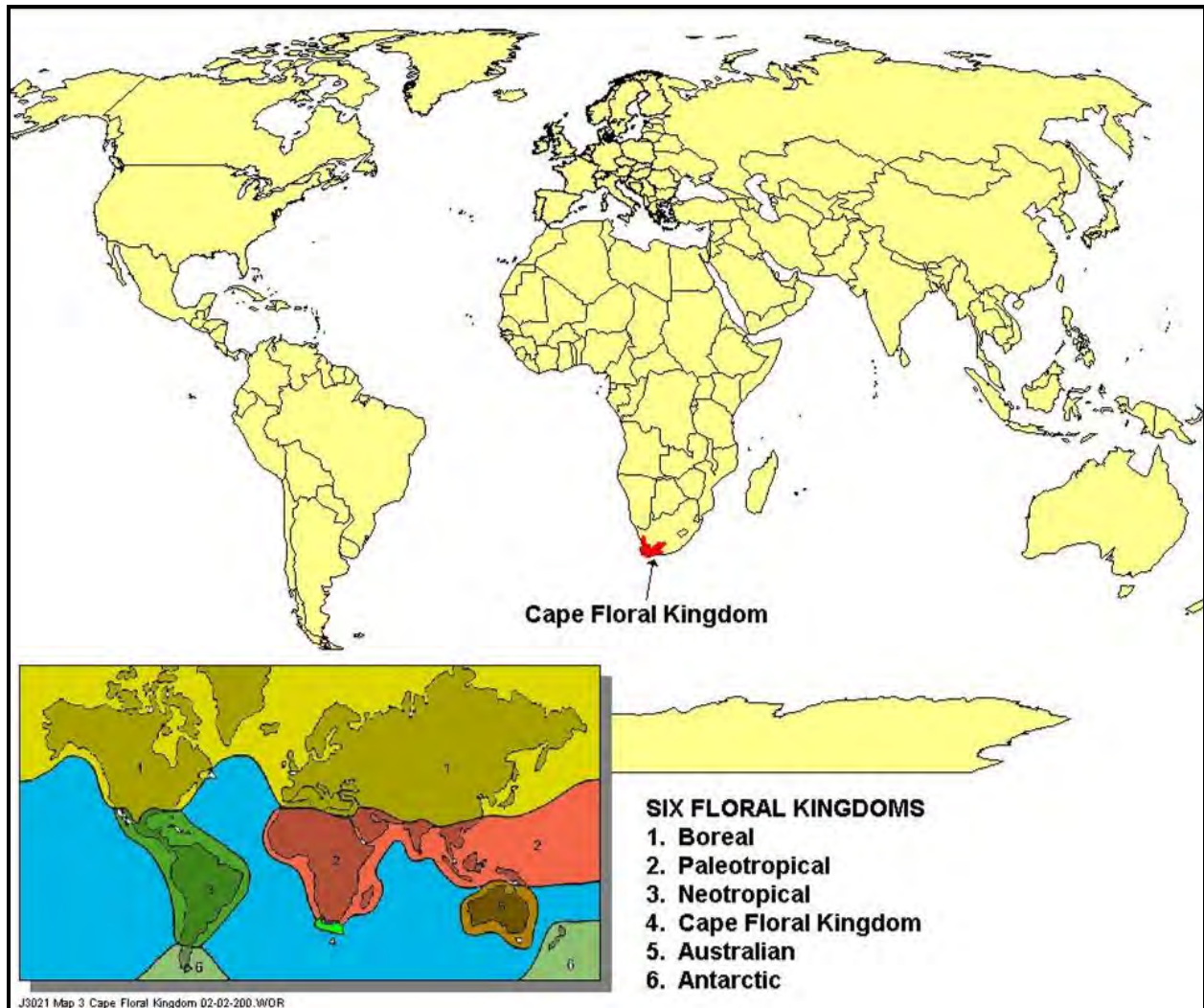


Figure 1: The Cape Floral Kingdom in International Context.

Biological invasion has become a major cause for concern worldwide. Being a result of human induced environmental change<sup>2</sup>, biological invasion is not only threatening global biodiversity, but it plays a major factor in both global and local extinctions, as well as causing substantial economic and human health problems. Defined as exotic or non-endemic species, alien species become invasive by passing through a series of barriers and establish new populations in areas at a distance from their immediate area of introduction<sup>3</sup>. These barriers are geographic, environmental, reproductive, dispersal, environmental<sup>4</sup>. Consequently, the lack of native enemies and controlling agents enable these invasive species to out-compete native species for available resources and space while altering

<sup>1</sup> Low & Robelo, 1996.  
<sup>2</sup> Tsoar *et al.*, 2011; Vitousek *et al.*, 1997.  
<sup>3</sup> Richardson *et al.*, 2000; Tsoar *et al.*, 2011.  
<sup>4</sup> Richardson *et al.*, 2000.

the surrounding natural environment. This in turn leads to unnatural successions and the displacement of many natural vegetation communities<sup>5</sup>. The extent of this displacement of natural vegetation communities and thus the unnatural alteration of many native habitats has been of major concern for conservationists due to the dramatic effect they have on both native fauna and flora and, consequently, on many interactions and ecosystem structures which may have altering effects on ecosystem services that we as humans rely on<sup>6</sup>.

### 3. WHAT ARE INVASIVE ALIEN PLANTS

Invasive alien plants are plant species that have been introduced, either intentionally or unintentionally, to South Africa. They can reproduce rapidly in their new environments and, as mentioned above, tend to out-compete indigenous plants. The result usually includes a variety of negative ecological, social, and economic impacts. Invasive alien species pose the biggest threat to biodiversity after direct habitat destruction.

Approximately 8 750 alien species have been introduced into South Africa, 161 of which are seriously invasive species, and is estimated to cover over 10 million hectares (almost 8%) of South Africa's land surface. Expectations are that the impact will double every fifteen years if they are left un-managed<sup>7</sup>. Known for its renowned fynbos biome, the Western Cape is the most severely invaded province, with the wetter catchments of the coastal mountain ranges and the broad coastal lowlands being the most effected regions. The invasion of AIPs within the fynbos biome has called for elevated levels of alarm since the early decades of this century<sup>8</sup>. Invasive plant species such as the *Acacia saligna* (Port Jackson), *Acacia mearnsii* (Blackwattle) and *Pinus pinaster* (Cluster Pines) are found in the fynbos introduced to enhance the value of the Cape's resources, pines originated from Europe while the *Acacias* are originally from Australia. Although many of these species still support several industries, their negative impact are becoming more prominent, leading to a urgent need to protect our natural resources.

IAPs are characterised by being able to reproduce rapidly in their new environments, and this is usually due to a combination of factors, including:

- A lack of natural enemies in the new environment
- Resistance to local diseases and other plant pathogens
- Highly competitive growth and colonising strategies that provide them with a competitive edge, and an ability to out-grow local indigenous plants

IAPs can significantly alter the composition, structure and functionality of ecosystems. As a result, they degrade the productive potential of the land, intensify the damage caused by veld fires and flooding, increase soil erosion, and impact on the health of rivers and estuaries. Indigenous species may be reduced in numbers/coverage, or may be lost as a result of IAP infestations, posing a threat to South Africa's natural heritage in sensitive locations.

<sup>5</sup> Enright, 2000; Le Maitre *et al.*, 2002.

<sup>6</sup> Le Maitre *et al.*, 2002.

<sup>7</sup> Schonegeval 2001; Versfeld, Maitre and Chapman, 1998.

<sup>8</sup> Macdonalds *et al.* 1985.

IAP infested natural habitats suffer reduced capacity to produce ecosystem services that help support a healthy and productive living environment for people. Availability of natural products, such as medicinal plants, fodder and building materials is decreased, and disease-carrying pests such as mosquitoes and rats may be more numerous due to a reduction in natural predators with declining ecosystem functioning. The aesthetic, recreational and cultural values of the natural environment are also significantly decreased where IAPs take over. IAPs also threaten local and national water security. The notable reduction of South Africa's water resources from IAP infestations has far-reaching ecological, economic and social implications.

## 4. LEGISLATIVE CONTEXT

### 4.1 CONSERVATION OF AGRICULTURAL RESOURCES ACT, 43 OF 1983

In terms of the amendments to the regulations under the Conservation of Agricultural Resources Act, 43 of 1983 (CARA), all declared aliens must be controlled. Landowners are legally responsible for the control of invasive alien plants on their property. In terms of the above act alien invasive plants are described to one of the following categories:

- Category 1: Prohibited and must be controlled.
- Category 2: May be grown in demarcated areas provided that there is a permit in place and steps taken to prevent spread.
- Category 3: May no longer be planted. Existing plants may be retained as long as all reasonable steps are taken to prevent spread, except within the flood line of watercourses and wetlands.

### 4.2 NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 10 OF 2004

National Environmental Management: Biodiversity Act, 10 of 2004 (NEMBA), regulates all invasive organisms in South Africa. Regulations have been published in Government Notices R.506, R.507, R.508 and R.509 of 2013 under NEMBA. According to this act and the regulations any species designated under Section 70 cannot be propagated, grown, bought or sold without a permit. Categories listed are:

- Category 1a: Invasive species requiring compulsory control. Any specimen of a Category 1a listed species must, by law, be eradicated.
- Category 1b: Invasive species requiring compulsory control as part of an invasive species control program. These species must be removed and destroyed.
- Category 2: Invasive species regulated by area. A demarcation permit is required to import, possess, grow, breed, move, sell, buy or accept as gift any plants listed as Category 2 plants. No permits will be issued for Category 2 plants to exist in riparian zones.
- Category 3: Invasive species regulated by activity. An individual plant permit is required to undertake any of the following restricted activities: import, possess, grow,



breed, move, sell, buy or accept as gift. No permits will be issued for Category 3 plants to exist in riparian zones.

Aliens that are regulated in terms of CARA as weeds and invader plants are exempted from NEMBA. This implies that the provisions of the CARA in respect of listed weeds and invader plants supersede those of the NEMBA.

## 5. ALIEN MANAGEMENT PRINCIPLES

### 5.1 PLANNING & PREPARATIONS

Proper planning and preparations are fundamental to achieving cost-effective and successful IAP control. Once there is a formalised work plan for clearing IAPs, preparation for clearing can begin. These preparations include procuring the required equipment and materials, having staff undergo the required training, and ensuring that the relevant land-owners and neighbours are notified of the clearing activities before they are undertaken – if they are to be impacted on in any way.

#### 5.1.1 Planning

- a) Species and areas has to be prioritized and cleared according to their impact on natural resources and their potential for spreading to non-invaded areas<sup>9</sup>. Considerations in this regard include:
  - i) Aliens must be cleared in a manner that reduces the risk of cleared areas being re-invaded by other invaded areas. For example, upstream area should be cleared before downstream areas if the river transports the seeds.
  - ii) A balance needs to be maintained between clearing new area and follow-up operations on previously cleared areas.
  - iii) Prevention is cheaper than clearing and therefore un-invaded areas must be protected from invasion.
  - iv) The economic benefits of clearing areas with high tourism, biodiversity, productivity or water yield potential are necessary to maintain the support for the continuation of the clearing project. In other words, the benefits of clearing, other than merely the cost, must be carefully considered.
  - v) IAPs that pose a fire risk to houses or infrastructure should be targeted as a priority. Creating an effective “fire break” is important where woody/fire prone IAPs are located in dense stands near settlements, power lines etc.
  - vi) Areas with young, less dense trees, which have smaller seed banks and a potential high rate of spread, should be targeted first. Focussing on these areas requires less resources and will prevent further invasion and the build-up of seed banks. Dense mature stands should be left for last, as they most probably won’t increase in density or pose a greater threat than they are at the moment.
- b) The ability and resources available for follow up operations should determine the size and location of the initial clearing operation.

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<sup>9</sup> Schonegevel, 2001.

- c) Invasive trees located away from any structures or roads can be ring-barked, poisoned and left standing rather than felled.
- d) To avoid the threat of soil erosion when clearing dense infestations of IAPs on steeper slopes, work should progress horizontally along the contours. IAPs should be cut in bands of approximately 3m in width along the slope contour; the cut material should then be rolled back so that it forms a “frill” along the band. This will help slow down water run-off. A 2m swath of uncut material should be left before starting on the next 3m wide band. As the cut bands start to re-vegetate, work on the uncut bands can begin.
- e) On gentle gradients, clearing should start from the outside of a work block and move inwards towards the centre, to assist in containing potentially invasive plant material and seeds within a confined area.
- f) Disposal of the cut IAP material needs to be carefully considered. Options may include: burning on site (note this comes with serious risks that need to be managed); chipping and composting (note that this is not appropriate if the plant material contains seeds); use of the woody biomass for charcoal manufacture; transportation of the material to a garden refuse or landfill site for disposal. Whatever disposal method is selected must meet all legal requirements and must not create risk for local residents and infrastructure. Note that burning of some types of IAPs stimulates seed release or rapid seed germination.
- a) Identify the clearing methods that are best for the specific project site and target species, as well as associated field equipment and personal protective equipment (PPE) required.
- b) Identify the required herbicides for IAPs if chemical control is to be used. Only herbicides registered for use on the target species may be used.
- c) Identify training needs for project workers and supervisors based on the nature of the area to be cleared, the target IAPs and identified clearing methods. This may include: IAP identification; safety training for use of specialised equipment, such as chainsaws; specialised training for working in difficult or sensitive terrain.

### 5.1.2 Preparations

- a) If the area where IAP clearing will take place is not municipal-owned land, the land-owner needs to be notified of the clearing activities that will be taking place. If there are neighbours that may be negatively affected by noise, road and pathway closures, or herbicide spraying associated with the clearing activities, they should also be notified prior to the work starting.
- b) Herbicides, equipment and PPE should be procured and be on site before the work starts.
- c) A safe storage area for the herbicides must be established which is bunded to contain any leaking containers. Herbicide storage areas must be secured to ensure that children and animals cannot access the chemicals, and that the chances of theft are minimised.
- d) A site camp may be set up to accommodate vehicles bringing workers onto the site, herbicide and equipment storage areas, ablutions and changing areas for workers. The site camp must be located outside of sensitive natural areas, must not restrict access routes or points for local residents and businesses, and must not damage private property or community gardens. If the site camp is on private property, the land-owner must have given permission for use of this area.

- e) All necessary staff and worker training must be completed prior to the clearing activities being started.

## 5.2 BUDGETING

AIP control is expensive. General items to be budgeted for include the following:

- a) Labour
- b) Equipment / tools
- c) Herbicides
- d) PPEs
- e) Fuel

It should also be established to what extent follow-up action will be required so that provision in this regard can be made. If follow-up work is structured and done correctly the overall management costs should decline. If follow-up work is not done correctly, the initial investment in clearing is often lost.

Always do sufficient research into the types of weeds present. Large gum trees will require significantly more resources to clear than a few bugweed plants. As such, a survey to determine species density and distribution, together with a table that assigns approximate costs to clearing each type of IAP present, is essential. If specialised IAP clearing contractors are to be used, be sure to compare quotations and qualifications/experience. If a team is not qualified or experienced, it is unlikely that they will implement effective IAP control.

## 5.3 CONTROL METHODS

### 5.3.1 Mechanical Control

Mechanical control involves the physical destruction or total removal of plants. Mechanical methods are generally appropriate for sparse infestations and for species that do not coppice after cutting. They include:

#### 5.3.1.1 Hand Pulling

Hand pulling is the removal of plants by hand, ensuring that the root is also removed. Hand pulling is only recommended when an area is sparsely invaded, has a high rainfall (the soil should ideally be damp or soft), warm temperatures, and sandy soils; and the plants are small enough to be pulled out successfully with the roots intact. Hand pulling does create soil disturbance, but if the area is sparsely invaded such disturbances are unlikely to be ecologically damaging.

#### 5.3.1.2 Manual removal using hand tools

Manual removal using hand tools such as cane knives, tree loppers and slashers can be used to remove IAPs. The use of hand tools is probably the most widely adopted, and often the most

effective, of all the methods. This method is labour intensive creating numerous jobs. Methods of cutting the plants include:

- Ring-barking:** Useful for killing large trees. A cane knife or axe is used to remove the tree's bark and cambium, in a horizontal band about 30cm wide (about 50cm from the ground). Herbicide, if used, should be applied immediately after ring-barking on the cut area.
- Cut-stumping:** Plants with a stem/ trunk diameter larger than 10mm can be cut as low to the ground as possible with a saw or cane knife. Herbicide, if used, should be applied to the cut surface immediately after cutting.
- Slashing:** The seed stalks/branches of annuals (plants that die each year after they set seed) can be slashed with a cane knife, mattock, bill hook or slasher before the seeds have matured. This is an effective method significantly reducing the presence of viable seeds that will germinate in the new season. Costs are generally low for controlling annuals in this way, as no herbicide is required.
- Strip-barking:** With the use of a cane knife or axe, the bark of large trees can be stripped completely, from waist height down to the base of the trunk. Herbicide, if used, should be applied to the stripped surface immediately after strip-barking. This is an effective but time-consuming method.
- Frilling:** Small trees can be frilled by cutting an angled groove into the bark and cambium, right the way around the tree trunk. This can be achieved with either a cane knife or axe, depending on how hard the bark and cambium layers of the tree are. Herbicide is then applied into the groove, which kills the tree as it seeps into the cambium tissue. This is the preferred method of killing small trees, as it is usually much quicker and therefore more cost-effective than ring-barking or strip-barking.

Advantages	Disadvantages
Effective method in areas with low infestations	Not an effective method for dense infestations, as the cost of clearing is extremely high, with little or no impact
High job creation and associated poverty alleviation potential	Time consuming – may be slower to complete than other forms of control
No contamination of water with herbicides as these are applied directly to the tree	If no herbicides are used then the manual control techniques must be very well executed to ensure success

### 5.3.1.3 Manual removal using mechanised tools

A variety of mechanised tools can be used for IAP clearing. They include:

- Brush-cutter:** Heavy duty motorised brush-cutters that are usually powered by a small two-stroke engine are popular for controlling low-growing thickets of IAPs. Importantly, a suitable blade must be fitted to the brush-cutter, for example, fitting a steel blade

will allow for cutting of thicker stems. Herbicide application to the cut stems should follow immediately after cutting.

**Chainsaw:** A chainsaw is ideal for felling large trees and can be used to cut logs and branches into shorter lengths. Common target species for felling include large specimens of *Syringa*, Pine, Gum and Wattle. Training for chainsaw operators is essential. Operators need to understand the techniques of felling, i.e. ensuring that the tree falls in the desired direction. Each operator must also understand and be able to apply the necessary safety precautions during the felling process. Understanding the effective use and operation of the chainsaw itself is critical. The operator should also have the means and knowledge to undertake any required onsite servicing of the motor and sharpening of the chain.

Advantages	Disadvantages
Dense stands of IAPs can be cleared.	The cost of the equipment, fuel and servicing – although this may be balanced by reduced labour costs.
May be possible to clear very large areas of IAPs faster than without mechanised tools	Requires specialised training and more safety equipment than non-mechanised methods
	Possible pollution caused by bar oil.

### 5.3.2 Chemical Control

Chemical control of IAPs involves the use of herbicides (plant poison) to kill targeted plants. Managers and herbicide operators must have a basic understanding of how herbicides function, as this will guide the correct selection of herbicides for different purposes and plants. The use of inappropriate herbicides and the incorrect use of the appropriate herbicides are wasteful and expensive practices. They often do more harm than good. This is especially problematic when working in close proximity to watercourses. Some herbicides can quickly contaminate fresh water systems and/or be transported downstream where they may remain active in the ecosystem. This is especially the case for herbicides with a high soil residual effect, i.e. herbicides that remain active after contact with soil.

Herbicides are classified as either selective or non-selective. Selective herbicides are usually specific to a particular group of plants, e.g. those specified for use on broad leaf plants will be effective on most broad leaf plants, but should not kill narrow leaved species such as grasses. Non-selective herbicides can kill any plant they come into contact with, and are therefore not suitable for use in areas where indigenous plants are present.

The contractor also needs to have a valid Pest Control Operators Licence (limited weeds controller) according to the “Fertilizers Farm Feeds, Agricultural Remedies and Stock Remedies Act”, Act No. 36 of 1947. This is regulated by the Department of Agriculture, Forestry and Fisheries.

### 5.3.2.1 Chemical Application Training

Protective gear must be used at all times and applicable guidelines for mixing and storing of herbicides must be adhered to. Herbicide applicators should have completed a certified training course. Herbicide applicators need to understand the implications of splash and drift. When a plant is sprayed with herbicide, it is almost certain that excess herbicide will leave the target area. This might not be problematic in areas of high-density infestations: excess herbicide will either drift or drip onto other target IAPs, it is however problematic when there are many non-target species close by. The misting effect, where tiny droplets drift via a breeze to non-target species, often occurs when using high velocity nozzles. Ideally, low velocity and high volume nozzles should be used for drenching, while high velocity, low volume nozzles should be used for misting.

### 5.3.2.2 Chemical Application Techniques

Chemical application techniques include foliar (leaf) application, stem applications (basal stem, total frill, stem injection) and stump applications (cut stump, total stump, scrape and paint):

**Foliar spraying:** This method uses a knapsack sprayer to spray IAPs below 1 metre in height. Leaves are sprayed to the point of run-off. Correct training and certification is essential before a team member uses this method. Foliar spraying is generally regarded as a cheaper method than cut stump treatment, because fewer people are required to treat larger areas. It does, however, require large amounts of clean water (for mixing with herbicides), and therefore only practical where water is available.

**Handheld spraying:** Handheld spraying is a means to apply herbicide after cut stumping, ring-barking, frilling and strip-barking. The most common and convenient handheld sprayer has a 1.5 litre capacity and a nozzle that can be set to achieve the correct spray width. Handheld sprayers are cheap, and application of herbicide is accurate.

**Aerial spraying:** Application of herbicides from a fixed wing craft, or helicopter is primarily used for spraying very high densities IAPs present in areas that might otherwise be difficult to reach or control. The results are good, but aerial spraying is expensive and selectivity is impossible. Aerial spraying is only used in severe cases of infestation. Careful consideration of the herbicide type and mix are essential, given the risks of contaminating water and the impacts to fish and other aquatic biodiversity as well as impacts on human health.

Advantages	Disadvantages
Achieve results over a short period (within 6 weeks of application).	Herbicides are expensive.
Large areas can be treated quickly.	The use of herbicides may contaminate sites used for drinking water, for washing and for fishing, and can therefore threaten human and animal health.
Complements mechanical control methods, increasing the effectiveness of IAP control activities.	May kill non-target plants or species
	Specialised training and certification is required for use

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of herbicides.

### 5.3.2.3 How to choose the correct herbicide

Choose the most appropriate herbicide by considering the following:

**Active ingredient:** Each herbicide has a chemical compound or active ingredient that makes it effective. Herbicides sold under different brand names may have the same active ingredient. It is critical that a herbicide with the correct active ingredient is selected. The concentration of the active ingredient can also differ from one product to the next. As such, the mixing ratios may differ. It is critical that the recommended mixing ratios are adhered to and the guideline document and label supplied with the product should always be consulted prior to calibration.

**Residual effect:** The residual effect is the length of time that a herbicide will remain active once in the soil. Some herbicides denature immediately on contact with soil, while others can remain active in the soil for up to two years. The shorter the residual effect of an herbicide, the less likely it is that non-target species will be killed. The residual effect of an herbicide should be checked before purchasing.

**Dye:** Dye is often mixed with herbicides to ensure a clear visual indication of which plants have been treated and which have not. This allows workers to see where they have applied the herbicide, and allows for easy inspection of work a few days later. Some herbicides contain a pre-mixed dye that eliminates the need for on-site mixing of dye. If a dye must be added, ensure that it is of good quality and that it is chemically compatible with the active ingredient and adjuvant. The use of different colour dyes for different herbicides is a useful approach. It makes it very easy for workers to differentiate which herbicide to apply to which plants where such a distinction is required (e.g. red dye can be selected for herbicide used to treat Lantana, and blue for Blue Gum, etc.).

**Registered herbicides:** A large variety of herbicides and their supporting products such as dyes, wetting agents, etc. are available on the market, which have been registered for a range of IAPs. Beware of cheap imports that do not carry a South African registration number.

**Recommended Adjuvants:** Some herbicides require the use of a “wetter”, or adjuvant, to be effective. Always check if a product has a recommended adjuvant or if an adjuvant must be added for targeting specific IAPs. Herbicides applied to leaves by foliar application often require a specific adjuvant, as do those applied to trees with very waxy stems. Always check with the manufacturer if there is any uncertainty regarding adjuvants.

#### 5.3.2.4 Choosing the correct 'carrier'

Either water or diesel can be used as a "carrier" for certain herbicides. However, water is the preferred carrier, because diesel is expensive and can have very negative impacts on the natural environment. There is also often a risk of diesel theft. Diesel should never be used for foliar applications due to its very negative impact on the environment. Diesel should only be used in direct application to stems, and run-off is to be minimised.

In general:

- Only use herbicides that are registered for use on the specific species to be treated.
- Spray plants during the active growing period. When leaf colour starts to turn for winter it is too late to apply herbicides.
- Spray plants before the seeds are produced.
- Avoid using herbicides on drought-stressed or diseased plants or in extremely hot or cold conditions.
- Herbicide should not be applied during wet conditions, before or after rain. If it rains after application, it is important to monitor the effect as one may need to re-apply.
- Carefully read and understand the instructions on the label prior to initiating chemical control.
- Always store herbicides in the original container and in secure storage areas out of reach of children and animals.
- All persons must wear the required personal protective equipment when working with herbicides.
- Avoid skin contact with herbicides and avoid breathing in the vapour.
- Herbicide should always be applied immediately after the selected mechanical control method. Once the stem has dried it will not absorb the herbicide.
- Keep herbicide in the shade at the work site to keep it cool.
- To avoid spills, keep herbicide containers on a waterproof tarpaulin, or inside a big plastic bucket. When mixing herbicides, ensure that you use a funnel to avoid spilling. Should you spill the herbicide, it can be poured back into the container from the plastic bucket.
- Containers containing mixed herbicide should be clearly marked (e.g. 'glyphosate mix'). Likewise, containers filled with water to be used for mixing herbicide should also be clearly marked to ensure that people do not drink from them.
- Always use a measuring jug to measure the correct quantity required.
- To mix herbicides, half fill the appropriate size container with water, and then add the herbicide using the measuring jug. Secondly, close the container and shake, and then fill the rest of the container with water.
- Keep the herbicide away from food.

#### 5.3.3 Biological Control

IAPs thrive and spread in an exponential manner partly due to the lack of natural enemies (e.g. browsers or pathogens) that might occur in their land of origin. Biological control, or bio-control, is the introduction of these natural enemies to remove the plants' competitive advantage, and reduce



population vigour to a level comparable to that of the natural vegetation. These natural enemies are termed ‘biological control agents’ and most include insects, mites and micro-organisms such as fungi or bacteria. Biological control agents usually attack specific parts of the plant. They can either attack the reproductive organs directly, e.g. on the parent plant (flower buds, flowers, or fruit), or the seeds after they have dropped. The ‘stress’ caused by a bio-control agent may kill a plant outright, or it might impact on the plant’s reproductive capacity. In certain instances, the reproductive capacity is reduced to zero and the population is thus effectively sterilized. All of these outcomes will help to reduce rates of spread of the species.

Advantages	Disadvantages
Most environmentally friendly and most sustainable of all IAP control methods.	Generally slow, especially initially.
Usually does not require high or long-term maintenance.	Low levels of infestation, with occasional outbreaks, will remain a feature of systems under biological control.
Relatively low cost implication over the long term.	Any use of chemicals around biocontrol agent colonies may adversely affect the potency of this control method.
	Cannot be used where the biocontrol agent would threaten commercial populations of the target species that may exist nearby. This includes community woodlots.
	Biocontrol agents are not available for all target IAP species in the eThekweni Municipal Area

#### 5.4 FOLLOW-UP AND REHABILITATION

There will always be some measure of regeneration of the cleared IAPs after the initial clearing work has been done. Proper follow-up work is thus essential and should be conducted regularly. If follow-up clearing is not done, the progress made in the initial clearing exercise will be lost within a few years as the IAPs become re-established. Research has shown that if follow-up IAP clearing is executed properly and consistently, the costs and time expended on each consecutive follow-up reduces drastically. The “maintenance” stage can then be reached, where regular monitoring will be required for any seedlings that may have germinated. Where dense stands of IAPs have been cleared, the re-establishment of indigenous vegetation needs to be supported to help reduce the re-emergence of IAP species and to reduce the risk of soil erosion where the soil surface is poorly vegetated.

In most soils, the seeds from the plants of the former natural habitat that occupied the area prior to IAP infestation still survive. So, natural regeneration without the need for planting may be possible in many cases. However, if natural regeneration is not likely owing to the length of time that IAP infestation has been in place, or if the soil has been disturbed so that the natural seed stocks are destroyed, planting/seeding is required. When planting for restoration purposes, it is not always easy to continue to access these areas to water/maintain the plants. It is thus important to use only plants that have been properly hardened off from the nursery production system to minimize the loss of plants. Complex restoration projects (for example involving the stabilization of major erosion areas and wetland rehabilitation projects involving the construction of weirs), it is necessary to contract the

services of a specialist environmental rehabilitation professional to provide a plan and guidance on implementation.

In terms of follow-ups cleared areas should be monitored a regular basis for emergent seedlings and remove these (hand pulling or chemical control). Maintenance work should be done in late summer when seedlings can be seen amongst the other plants and follow-up work undertaken on a 3 to 6 monthly basis, depending on the rate of re-growth.

All areas of exposed soil should immediately be protected by placing packed brush on the slope, or creating erosion control barriers using branches, sticks or logs placed horizontally across the slope at 1m intervals (the steeper the slope the closer the barriers should be placed to each other).

If the soil remains relatively undisturbed and the area has some indigenous vegetation left in tact, the natural regeneration processes of the indigenous vegetation on the site should be managed. This involves regular follow-ups to remove emergent IAPs and protecting the area from other forms of disturbance (uncontrolled fire, heavy grazing/ browsing pressure, vehicles accessing the area etc.) while the vegetation re-establishes naturally.

If required, indigenous vegetation can be planted on the cleared areas. Plants used for rehabilitation purposes must be sourced from within 50km of the rehabilitation site to ensure that the genetic composition of the introduced plants is not significantly different from that of naturally occurring indigenous plants in/around the rehabilitation area.

## 5.5 MONITORING

In order to assess the impact of the clearing activities, follow-ups and rehabilitation efforts, monitoring must be undertaken.

Photographic records must be kept of areas to be cleared prior to work starting and at regular intervals during the initial clearing activities. Similarly, photographic records should be kept of the area from immediately before follow-up clearing activities, and after. Rehabilitation processes/efforts must also be recorded.

Records must be kept of daily operations, e.g. area/location cleared, number of labour units and amount of herbicide used. This will assist with planning as each site will require work, once or twice a year, for a number of years and of evaluating the costs against the benefits of the work.

## 6. SAFETY STANDARDS & GUIDELINES

Safety is of the utmost importance when dealing with IAP control. Staff often work in remote areas and with potentially dangerous tools and chemicals. The proper safety training and equipment is required.

## 6.1 HERBICIDE SAFETY

The herbicide storeroom needs to comply with national Occupational Health and Safety standards, as well as the municipal Scheduled Trade and Occupational Bylaws. Section 'H' in the bylaw is triggered if there is "herbicide manufacture, and bulk blending, storage and commercial usage of herbicides". Contractors who trigger these requirements will therefore need to be in possession of a permit for these purposes and will need to produce evidence to the municipality that they have satisfied all the requirements of the bylaw (note that municipal staff managing clearing operations need to meet these requirements).

- A herbicide storeroom should have adequate ventilation, thus allowing fresh air to circulate within.
- Clean water needs to be available in close proximity to the storeroom.
- The floor must be non-porous. This is important so that when the floor is cleaned (which needs to be on a regular basis), no residue of herbicides remain. Place herbicide containers on wooden pallets to increase ventilation and make mopping up after spillages easier.
- 'No Smoking' and 'No Fire' signs should be posted on the door of the storeroom, as well as a sign stating that it is chemical store, and who the responsible person is for the store.
- Keep the storeroom locked to prevent herbicide getting into the wrong hands.
- A spill kit needs to be kept in the storeroom to mop up any spill. The spill kit must contain a bucket with sand and a spade. The sand is to be placed on the spill to absorb the liquid. Once the sand has absorbed the spill, it is to be collected and disposed of where it cannot contaminate the environment. It is preferable to keep contaminated sand in a bucket and dispose of it with empty containers at a certified chemical recycling plant.
- Obtain the Material Safety Data Sheet from the supplier of the herbicide and ensure that you are familiar with the product before using it. Keep the Material Safety Data Sheet in the storeroom in case of an emergency.
- Always store herbicides in the original labelled container to avoid confusion with other products. Do not store other products in the store, such as protective clothing, food, etc. as they may become contaminated.
- All empty herbicide containers, or herbicides that have reached their expiry date, need to be safely disposed of. This must be done at a registered chemical recycling company. It is important that all empty containers are spiked before disposal. This ensures that they cannot later be used for carrying drinking water, food etc.

## 6.2 PERSONAL PROTECTIVE EQUIPMENT

The use of Personal Protective Equipment (PPE) by staff controlling IAPs in the field is required by law. The PPE specifications differ for the different types of control. Mechanised control includes the use of a chainsaws and brush-cutters and will therefore require slightly different PPE from someone using manual control (cane knife, slasher, knapsack sprayer, etc.).

Table 1: PPE required for manual control:

Item	Specifications
Overall	100% Cotton, two-piece overalls are the best for absorbing perspiration; they last longer and are cooler. However, various cotton/polyester blends are available and suitable.
Rubber gloves	Standard rubber gloves for fieldwork are sufficient.
Leather gloves	Standard wrist length leather gloves are appropriate.
Safety boots	Investing in a good quality safety boot might save you in the long run. Gumboots or standard safety boots, which support the ankles, are acceptable. Steel toecaps are recommended for workers working with hand tools or with large trees.
Hat – (hardhat/ wide brim hat)	If working with large trees, on steep gradients or if any other safety risks may be present, then wearing a hardhat is advisable. Alternatively, a wide brim hat can be used to protect the worker from the sun.
Safety glasses	Large, clear safety glasses, which allow air to pass through, are acceptable.
Face mask	A face mask which covers the nose and mouth is essential when mixing herbicides and for foliar spraying.

Table 2: PPE required for mechanised control:

Item	Specifications
Chainsaw safety pants	Standard safety chainsaw and long pants that provide protection against the chainsaw.
Leather gloves	Standard wrist length, leather gloves.
Safety boots with steel cap	Steel toecaps are essential for safety of the workers. Safety boots, not gumboots, are to be worn as they provide support around the ankle.
Hardhat	A hardhat with a visor and earmuffs are necessary for all mechanised control.
Safety glasses	Chainsaw safety glasses provide total cover around the eye area, thus preventing wood chips, stones, etc. entering.
Raincoat	A standard two-piece raincoat. However, it is better not to use mechanised control when it is raining.

### 6.3 HEALTH AND SAFETY REPRESENTATIVES AND FIRST AIDERS

For every 20 people employed, one person needs to be trained as a first aider and a separate person as a health and safety representative. Appointments need to be made in writing and the person needs to clearly understand his/her responsibilities before signing. Persons appointed can be one of the workers, with these appointments bearing additional responsibilities. It is advisable to train an extra person as people can resign or be absent which leaves no first aider in field.

**7. STELLENBOSCH MUNICIPALITY**

**7.1 CONTEXT**

Stellenbosch Municipality forms part of the Cape Winelands District Municipality of the Western Cape Province of South Africa (refer to Figure 2). The Municipality adjoins the Cape Metropolitan Area to the west and the Breede Valley, Drakenstein and Theewaterskloof Municipalities to the east, south and north respectively.

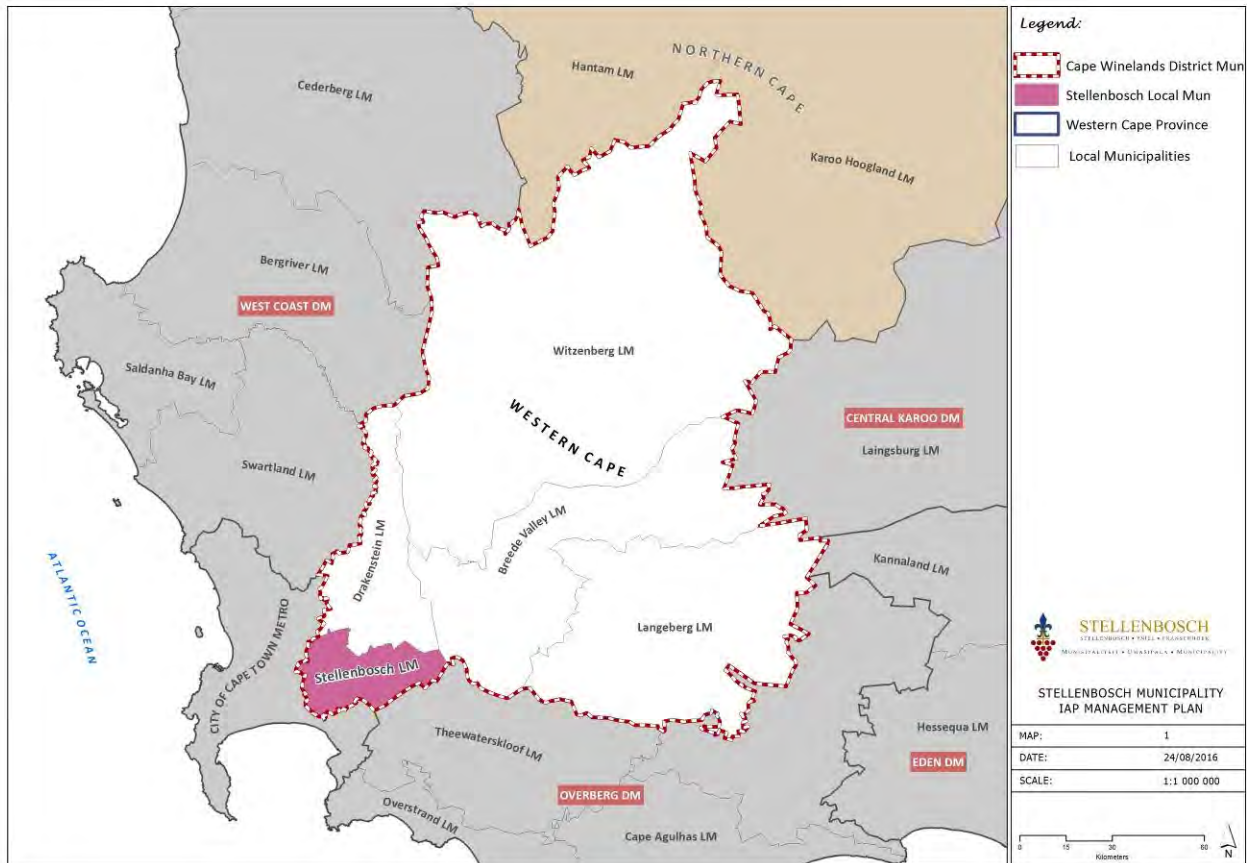


Figure 2: Location and context of Stellenbosch Municipality.

Stellenbosch Municipality is an amalgamation of the previous municipal areas of Stellenbosch, Franschhoek and Pniel as well as a major portion of the previous Winelands District Council’s area of jurisdiction and constitutes a geographical area of approximately 830 km<sup>2</sup>.

The Municipality is located in the heart of the Cape Winelands, which is dominated by agricultural land of his historic and aesthetic value, and globally-important natural habitats. The Municipality is bounded to the east and south by the Drakenstein, Wemmershoek and Limietberg mountain ranges. The Hottentots Holland range (i.e. Stellenbosch, Jonkershoek and Simonsberg Mountains) and the Bottelary Hills are in the immediate vicinity of the town of Stellenbosch.

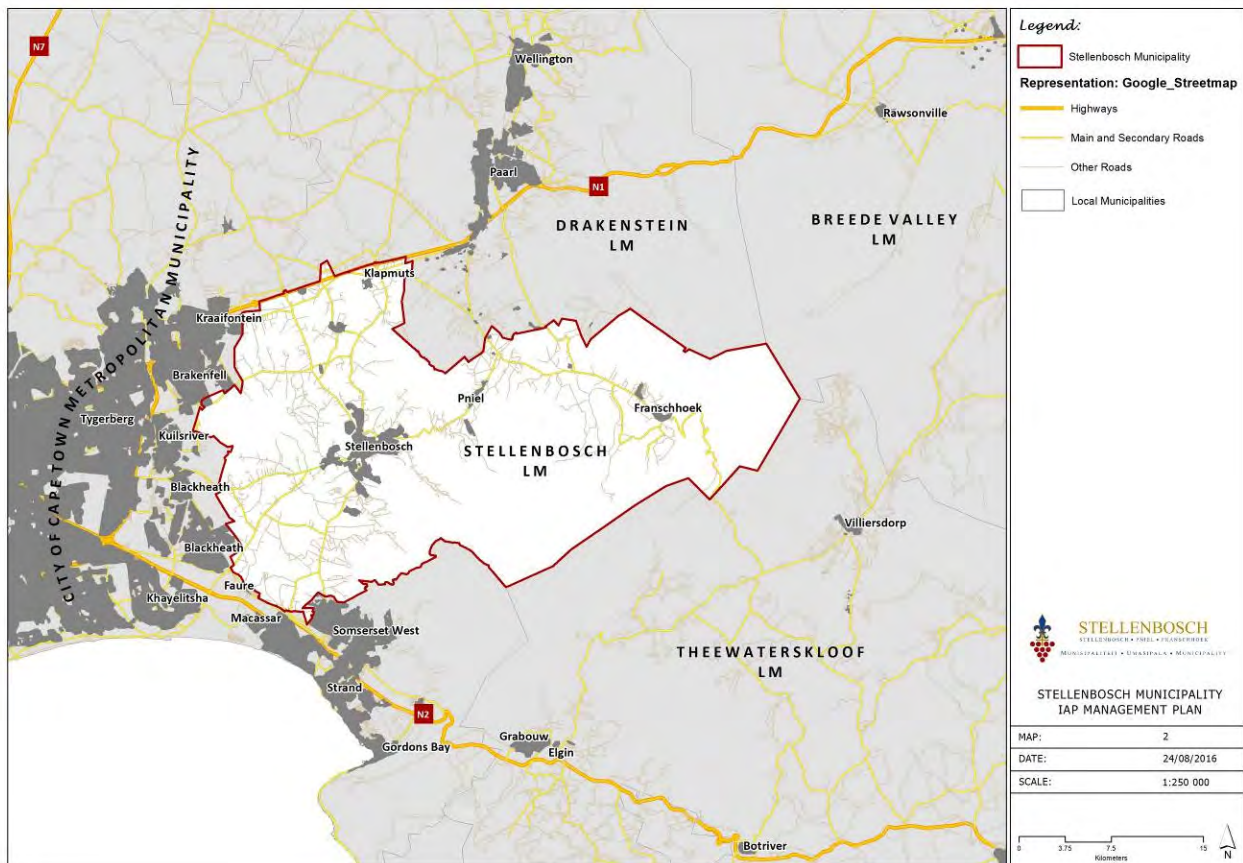


Figure 3: Local context of the Stellenbosch Municipality.

## 7.2 MUNICIPAL LAND FORMING PART OF THIS PLAN

Stellenbosch Municipality owns several properties with high conservation potential (Figure 4). These properties include:

- Papegaaiberg Nature Reserve
- Paradyskloof, including the areas of Stellenboschberg and Brandwacht
- Ida’s Valley Dam Area
- Botmaskop
- Louwsbos Plantation
- Jonkershoek Picnic Site
- Culcattabos
- Jan Marais Park
- Mont Rochelle Nature Reserve
- Wemmershoek Wetland Area
- Purgatory Outspan

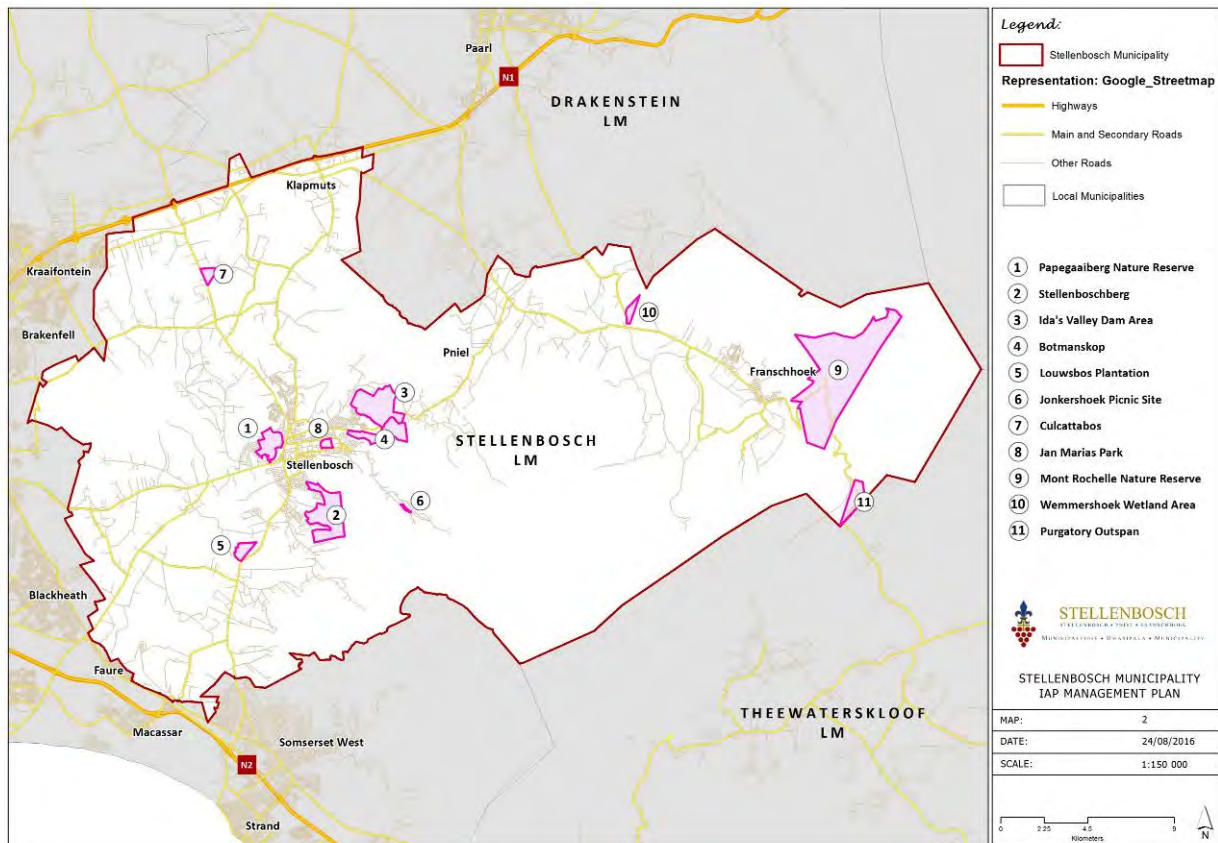


Figure 4: Stellenbosch Municipality properties that are the subject of this plan.

**8. ALIEN INVASIVE PLANT SPECIES OF STELLENBOSCH MUNICIPALITY**

There are several exotic plant species within the Stellenbosch region that has a negative effect on the indigenous fynbos biodiversity and ecosystems. The main invasive species are summarized in the table below. Each species has individual as well as collective negative environmental impact which affects the health and stability of the indigenous ecosystems in which they are found. If controlling methods of these invasive species are not implemented, continues invasive effects within indigenous areas may cause a severe loss of biodiversity with severe consequences on ecosystem health and ecosystem services.

Table 3: Description and impact of AIP occurring in Stellenbosch Municipality (Bromilow, 2010 / Striton, 1978)

Species Name	Category	Description	Environmental Impact
<b>Scientific:</b> <i>Acacia implexa</i>  <b>Common:</b> Screw-pod wattle, lightwood,	CARA  Cat 1  NEMBA  Cat 1a	Erect tree to 15m tall, single-stemmed or divided near ground level into 2 or 3 main stems. Leaves dark green, narrowly elliptic and sickle shaped, 7-20 cm long and 6-25 mm wide, much narrowed at the base. Bi-pinnate leaves may persist on young plants. Bark rough and greyish. Flowers arranged in globular heads, creamy to pale yellow, flowering from December to March. Pods narrow, coiled	<ul style="list-style-type: none"> <li>• Fast growing</li> <li>• Invades agricultural lands, planted forests and disturbed areas</li> <li>• Can become</li> </ul>

Species Name	Category	Description	Environmental Impact
Hickory wattle <b>Family:</b> Fabaceae		and twisted to 25 cm long, 4-7 mm wide. Seeds are dark brown, longitudinal, fleshy tissue growing from the point of attachment of a seed	highly invasive if not controlled
<b>Scientific:</b> <i>Acacia mearnsii</i> <b>Common:</b> Black Wattle <b>Family:</b> Fabaceae	CARA Cat 2 NEMBA Cat 2	An evergreen tree growing 5-10m high, black wattle has dark olive-green finely hairy leaves. Pale yellow or cream spherical flowers in large fragrant sprays blooming from August to September. Fruits are dark brown, finely haired pods. Black wattle has invaded grasslands, competing with and reducing indigenous species, and reducing grazing land for wild and domestic animals	<ul style="list-style-type: none"> <li>Decreases diversity of ground living invertebrates.</li> <li>Decreases stream flow</li> <li>Destabilizations of stream banks</li> <li>Can increase erosion, but also used for land stabilization</li> </ul>
<b>Scientific:</b> <i>Acacia melanoxylon</i> <b>Common:</b> Australian Blackwood <b>Family:</b> Fabaceae	CARA Cat 2	An erect, evergreen, unarmed tree from 10 to 35 m in height, with a clean bole and dance crown. The bark is rough, fibrous and usually light grey-brown. The slightly curved, 6-12 cm long phyllodes (flattened-leaf-stalk) have 3-7 prominent longitudinal veins. A few feathery compound leaves are often present at the apex of phyllodes. The flowers are creamy white occurring in rounded inflorescences and are produced at the ends of branches or in the axils of phyllodes. Flowering usually occurs from August to September. Seeds are small, black and surrounded by a dull reddish seed-stalk.	<ul style="list-style-type: none"> <li>Fast growth rate</li> <li>Major invader of forests, fynbos shrubland and grasslands.</li> <li>Transform native communities by replacing native non-tree vegetation</li> </ul>
<b>Scientific:</b> <i>Acacia pygnantha</i> <b>Common:</b> Golden Wattle <b>Family:</b> Fabaceae	CARA Cat 1 NEMBA Cat 1b	Slender, evergreen tree 4-8m high with drooping branches and dull green, leathery, distinctly curved leaves. Bright yellow, spherical flower heads in large sprays from August to September. Brown and almost straight pods.	<ul style="list-style-type: none"> <li>Competes with and replaces indigenous species</li> <li>Invades coastal and mountain fynbos, rivers and roadsides</li> </ul>
<b>Scientific:</b> <i>Acacia saligna</i> <b>Common:</b> Port Jackson <b>Family:</b> Fabaceae	CARA Cat 2 NEMBA Cat 1b	An evergreen tree, growing 3-7m high, with blue-green turning bright green leaves. Bright yellow, globe-shaped flowers bloom from August to November. Brown pods with hardened, whitish margins.	<ul style="list-style-type: none"> <li>Increases the biomass</li> <li>Increases litter fall</li> <li>Changes nutrient chemistry in lowland fynbos.</li> <li>Changes seed dispersal dynamics</li> <li>Increases the</li> </ul>



Species Name	Category	Description	Environmental Impact
			biomass <ul style="list-style-type: none"> <li>• Changes size and distribution of fuel</li> <li>• Decreases moisture content resulting in change in fire regime</li> <li>• Attrition of seed banks of native plants in dense stands over time</li> </ul>
<b>Scientific:</b> <i>Eucalyptus grandis</i>  <b>Common:</b> Saligna gum  <b>Family:</b> Myrtaceae	CARA  Cat 2	A tall, evergreen tree with a shaft-like trunk 25-55m high with smooth bark except for the part of the trunk up to 4m from the ground. The bark peels in long, thin strips to expose a powdery, white, grey-white or blue-grey surface. Dark green leaves which are glossy above and paler below. Cream flowers appear from April to August. Brown fruit capsules with a bluish-grey powdery surface. This tree invades forest clearings, plantations, watercourses and roadsides.	<ul style="list-style-type: none"> <li>• Reduces stream flow</li> <li>• Affects soil erosion to a variable degree</li> <li>• Competes with and replaces indigenous species</li> </ul>
<b>Scientific:</b> <i>Paraserianthus lophantha</i>  <b>Common:</b> Stink Bean  <b>Family:</b> Fabaceae	CARA Cat 1  NEMBA Cat 1b	A fine bi-pinnate leaved evergreen shrub or tree growing 4-6m high, somewhat resembles the large-leafed black wattle ( <i>Acacia mearnsii</i> ). The dark green leaves are paler below, up to 300 mm or longer and golden-hairy. Cream-coloured flowers appear in dense, bottlebrush-like heads from June-August followed by brown compressed seedpods with raised edges. The seeds emit a nauseating odour when crushed and this tree is poisonous. It invades forest margins, riverbanks, moist slopes in fynbos and wooded kloofs.	<ul style="list-style-type: none"> <li>• Competes with and replaces indigenous species</li> <li>• Reduce stream flow</li> </ul>
<b>Scientific:</b> <i>Pinus pinea</i>  <b>Common:</b> Umbrella Pine, Stone Pine  <b>Family:</b> Pinaceae	NEMBA  Cat 3	A coniferous tree 12-30m high, forming an umbrella-shaped crown with dense foliage at maturity. The trunk is straight, often forking with reddish-brown bark and deeply cracked into plates. Light green leaf needles in bundles of two. Nut-brown, woody cones 10-15cm long. It invades grasslands and mountain fynbos.	<ul style="list-style-type: none"> <li>• Out-competes native trees</li> <li>• Dense stands limit options for fire management</li> <li>• Decreases stream flow</li> </ul>
<b>Scientific:</b> <i>Pinus pinaster</i>  <b>Common:</b> Cluster Pine  <b>Family:</b> Pinaceae	CARA Cat 2  NEMBA  Cat 2	A coniferous tree 8-15m high, conical when young, becoming cylindrical with a tall, bare trunk when older. Reddish-brown bark, which is deeply cracked into plates. Dull grey-green leaf needles in bundles of two. Cones initially purple, turning light brown 9-18cm long. This pine invades mountains and lowland fynbos.	<ul style="list-style-type: none"> <li>• Out-competes and replaces indigenous trees</li> <li>• Dense stands limit options for fire management</li> </ul>

Species Name	Category	Description	Environmental Impact
			<ul style="list-style-type: none"> <li>Decreases stream flow</li> <li>Reduces grazing</li> </ul>
<p><b>Scientific:</b> <i>Pittosprum undulatum</i></p> <p><b>Common:</b> Australian chessewood</p> <p><b>Family:</b> Pittosporaceae</p>	<p>CARA</p> <p>Cat 1</p> <p>NEMBA</p> <p>Cat 1b</p>	<p>Evergreen shrub or broadly conical tree up to 12m high. Dark green, shiny leavers tapering at both ends and usually wavy margins at the end of the branches. Fragrant white flowers in terminal clusters from August to September. Showy, orange turning brown capsules.</p>	<ul style="list-style-type: none"> <li>Competes with and replaces indigenous species</li> <li>Indigenous birds might neglect the dispersal of indigenous plants due to their preference for the fruits of this alien species.</li> </ul>
<p><b>Scientific:</b> <i>Populus canescens</i></p> <p><b>Common:</b> Gray Poplar</p> <p><b>Family:</b> Salicaceae</p>	<p>CARA</p> <p>Cat 2</p> <p>NEMBA</p> <p>Cat 2</p>	<p>It is a medium-sized deciduous tree, growing to heights of up to 16-27 m (rarely more), with a trunk up to 2 m diameter and a broad rounded crown. The bark is smooth and greenish-white to greyish-white. The leaves are 4-15 cm long, five-lobed, with a thick covering of white scurfy down on both sides but thicker underneath. The flowers are catkins up to 8 cm long, produced in early spring. The female catkins lengthen to 8–10 cm after pollination, with several green seed capsules, maturing in late spring to early summer. It also propagates by means of root suckers growing from the lateral roots, often as far as 20-30 m from the trunk, to form extensive clonal colonies</p>	<ul style="list-style-type: none"> <li>Form dense and uniform stands along riverbanks and in vleis.</li> <li>Can spread into surrounding veld</li> </ul>
<p><b>Scientific:</b> <i>Robinia pseudoacacia</i></p> <p><b>Common:</b> Black Locust</p> <p><b>Family:</b> Fabaceae</p>	<p>CARA</p> <p>Cat 2</p> <p>NEMBA</p> <p>Cat 1b</p>	<p>A deciduous tree up to 12m high, exceptionally 25m, with an oval or rounded crown and bark that is dark brown and deeply furrowed. It suckers freely and often forms thickets. Young stems and branchlets have short spines. Small, bright green leaves above and paler beneath which become yellow in autumn. White, fragrant flowers in drooping spray from September to November. Reddish-brown pods. The seeds, leaves and inner bark are poisonous seeds.</p>	<ul style="list-style-type: none"> <li>Competes with and replaces indigenous species</li> <li>Dense stands can cover vast areas</li> <li>Can reduces and restrict water access to animals</li> <li>Poisonous to human and domestic livestock</li> </ul>

Species Name	Category	Description	Environmental Impact
<b>Scientific:</b> <i>Rubus fruticosus</i>  <b>Common:</b> European Blackberry  <b>Family:</b> Rosaceae	CARA  Cat 2  NEMBA  Cat 2	Thorny shrub to 2m high with strongly arching stems that root at the growing point of the shoot. Green leaves, sometimes grey-downy beneath. White or pink flowers with petals that is much longer than the sepals, appearing from September to January. The flowerheads are prickly. The edible fruits are red turning black.	<ul style="list-style-type: none"> <li>Hybridizes with native <i>Rubus</i> species</li> <li>Competes with and replaces indigenous woody and grassland species</li> <li>Dense stands are impenetrable and restrict access to forestry plantations</li> <li>Restrict access to grazing and water by domestic and wild animals</li> </ul>

Table 4: Summary of the invasive alien plant species within the relevant sites of Stellenbosch Municipality

Species	Louwsbos Plantation	Stellenbosch-berg	Jonkershoek Picnic Site	Papegaaiberg NR	Jan Marais * NR	Botmaskop	Ida's Valley Dam Area	Mont Rochelle NR	Culcattabos	Wemmersh.	Purgatory
<i>Acacia implexa</i>		X		X		X	X				
<i>Acacia mearnsii</i>		X	X			X	X	X	X		X
<i>Acacia melanoxylon</i>		X				X	X	X			
<i>Acacia pygnantha</i>		X				X	X				
<i>Acacia saligna</i>	X		X	X			X		X		X
<i>Eucalyptus globulus</i>		X		X		X	X	X			
<i>Paraserianthus lophantha</i>			X								
<i>Pinus pinea</i>	X	X	X	X		X	X	X		X	

<i>Pittosprum undulatum</i>			X								
<i>Populus canescens</i>			X								X
<i>Robinia pseudoacacia</i>			X								
<i>Rubus fruticosus</i>			X								

\* There are no invasive alien plants within Jan Marais Nature Reserve, with exception of several old Eucalyptus and *Pinus pinaster* trees.

## 9. MANAGING ALIEN INVASIVE PLANT SPECIES IN STELLENBOSCH MUNICIPALITIE

There have been many attempts to control the spread of invasive alien plant species since the 1940's, though success has been diminutive due to the easily spreading nature of these species. More recently studies have been researching the spread and effects of invasive species, though up until 1985 little has been written on the controlling aspects<sup>10</sup>. During more recent years many studies have been focused on prioritizing invasive species for their control and management<sup>11</sup>.

Many management plans are at fault due to their focus on reducing the density of invasive species rather than the causing disturbance that leads to their establishment<sup>12</sup>. By only focussing on reducing the density of invasion species, and not the underlying causing disturbance, many of these plans lead to the control and management of one species, only to have another establish in the disturbed area<sup>13</sup>. Managing invasive species should thus firstly focus on managing for the ecosystem and the disturbance that caused their establishment in order to prevent further establishment of invasive species. Managing for the disturbance to ensure an increased ecologically and environmentally aware management plan should include ecosystem management, integrated environmental management and watershed management<sup>14</sup>. Though the general aim for invasive alien plant management is to clear and manage area by area, certain factors (such as the species present, terrain, availability of resources) may cause controlling efforts to be limiting and thus lead to an attempt for species controlling instead. An integrated controlling strategy is therefor required. An integrated controlling strategy involves the integration of control for management area ("block") in which more than one alien species may be encountered and the integration of mechanical, chemical and biological control of a given species.

<sup>10</sup> Macdonals *et al.* 1985

<sup>11</sup> Van Wilgen *et al.* 2007; van Wilgen *et al.* 2012

<sup>12</sup> Edwards, 1998

<sup>13</sup> Edward 1998; Allen and Starr, 1982; Allen and Hoekstra, 1992; Denny, 1992.

<sup>14</sup> Edward 1998; Margerum and Born, 1995

## 9.1 ALIEN INVASIVE PLANTS IN STELLENBOSCH MUNICIPALITY

The following sections were taken directly from the Management Plan for Alien Invasive Plants on Municipal Land in Stellenbosch Municipality<sup>15</sup>. This work is regarded as still being relevant at the time of the compilation of this plan. Actual implementation, however, will require verification and the degree of representation thereof as part of the planning of operations as described in Section 5-5.1 above.

In the Management Plan for Alien Invasive Plants on Municipal Land in Stellenbosch Municipality<sup>16</sup> a general ecological description along with the current alien infestation was compiled for each site listed in Section 7.2 above. This was done to determine the best control strategy for the removal of invasive alien plants within each site.

The methodology for estimating the density of invasive alien plant infestation within each site included informal interviews with individuals from the municipal staff, a review of all invasions alien plant related municipal documents and site visits. Informal interviews, as well as all documents relating to alien invasive plants generated by the Municipality, was gathered to determine the current extent of the knowledge on the current invasive alien infestation within the sites, including what measures has been taken to address the infestation. Site visits were further conducted to estimate the current invasive alien infestation within the sites using the standard manual for determining invasive alien plant densities generated by David Le Maitre and Dirk Versfeld<sup>17</sup> (1994). Within each site the densities of each invasive alien plant species was determined (see Table 5)<sup>18</sup> and recorded onto a generated map of each site. The table below has been simplified and the densities rounded off to facilitate mapping and classification. The table can also be used to convert between the different density measures e.g. from plants per ha and canopy diameter to density per ha.

Table 5: Guideline density conservation table for use in mapping aliens by species and size class.

	Size class	Tall shrubs	Medium trees	Tall trees
<b>Rare</b>				
Individuals are known to occur in the area, but are few and far between				
<b>Occasional (&gt;10 canopy diameters apart; &lt;2% cover)</b>				
<b>Density (plant/ha)</b>	Seedlings	<1100	<400	<400
	Young	<100	<40	<25
	adult	<40	<25	<10
<b>Very scattered (6-10 canopy diameters apart; 2-3% cover)</b>				
<b>Density (plant/ha)</b>	Seedlings	<3000	<1000	<1000
	Young	<250	<120	<75
	adult	<120	<75	<30
<b>Scattered (3-6 canopy diameters apart; 3-5% cover)</b>				
<b>Density</b>	Seedlings	<10000	<3600	<3600

<sup>15</sup> Lizelle Koen, 2013

<sup>16</sup> Lizelle Koen, 2013

<sup>17</sup> Le Maitre and Versfeld, 1994

<sup>18</sup> Le Maitre and Versfeld, 1994

(plant/ha)	Young	<900	<400	<220
	adult	<250	<150	<100
<b>Medium (1-3 canopy diameters apart; 5-25% cover)</b>				
Density (plant/ha)	Seedlings	1000-55000	3600-20000	3600-20000
	Young	900-5000	400-2100	220-1200
	adult	250-2200	150-1200	100-500
<b>Dense (0.1-1 canopy diameters apart; 25-27%)</b>				
Density (plant/ha)	Seedlings	55-350000	20-120000	20-120000
	Young	5000-30000	2200-14000	1200-7600
	adult	2200-14000	1200-7600	500-2000
<b>Closed (&lt;0.2 diameters apart; 75% cover)</b>				
Density (plant/ha)	Seedlings	>3500000	>120000	>120000
	Young	>30000	>14000	>7600
	adult	>14000	>7600	>2000

For riparian strips: 10m wide = 0.1 ha per 100 m, 20 m wide = 0.1 ha per 50 m

## 9.2 PRIORITIZING SITES FOR CLEARING STRATEGIES

The limitations of financial and labour resources prevent the simultaneous implementation of integrated controlling strategies within all invaded areas. Prioritizing of areas and invasive alien species is an important process when planning controlling strategies<sup>19</sup>. The following factors should be recognized when prioritizing areas and invasive alien species for the implementation of integrated controlling strategies:

- units should be assigned to priorities per management unit;
- sometimes it is advisable to await the development of biological control techniques;
- it is necessary to assess the potential for maintain control of priority areas;
- the constraints implicit n habitat conservation imperatives conservation should be considered;
- the relative cost effectiveness of embarking on a control programme should be considered;
- the role of visitor perception of the alien problem should be considered;
- the effect of alien plant species on water yield should be given primary consideration;
- identification of the source of invasion is of primary importance, as any control programme which is initiated should attack the source of invasion. Both internal and external sources and patterns of invasion should be identified.

Le Maitre *et al.* (2002) also added that areas with high recreation value, indigenous biodiversity, low-density invasion (cover of less than 25%) and recent fire occurrence should have a high priority allocation. He also suggested that the identification of invasive alien species present is not as important as environmental characteristics of the area in which the site occurs. Another factor, which is important to consider, is that of potential water release from removing invasive alien species. This is especially important within areas such as Stellenbosch where water availability becomes scarce during dryer seasons.

<sup>19</sup> Macdonald *et al.* 1985

According to the above factors, the relevant municipal properties are prioritized as follows (Culcattabos, Wemmershoek Wetland and Purgatory were added to the following prioritization done by Koen, 2013):

1. Papegaaiberg: Papegaaiberg Nature Reserve contains a highly endangered vegetation type namely Renosterveld. Removing invasive alien plants will decrease its threat of biodiversity loss.
2. Brandwacht: Brandwacht is one of the few sites still having high indigenous biodiversity and protective measures to prevent any threat of loss, such as invasive alien plants, should be reduced.
3. Stellenboschberg: Though this site is transformed, recent clearing efforts has led to disturbed areas which need to be continuously monitored and cleared to prevent the establishment of new populations which may be more difficult to clear in the future. Recreation value of the site is high due to its close proximity to residential areas.
4. Paradyskloof: Paradyskloof has high indigenous biodiversity that is currently under threat by invasive alien plants. The clearing of invasive alien plants may aid in the prevention of biodiversity loss. The area is also in close proximity to a residential area and have a high recreational value.
5. Ida's Valley Dam: The Ida's Valley Dam Area has a high water supply value and the removal of the invasive alien plants may aid in the increase of water availability during drier periods.
6. Botmaskop: Botmaskop is divided into two sites. One has high recreational value, although it has been transformed for plantation purposes and the second high biodiversity potential.
7. Louwsbos Plantation: Louwsbos Plantation is relatively small in comparison with the other properties. The property's vegetation has been completely transformed and rehabilitation of the site will be necessary to re-establish indigenous biodiversity.
8. Jonkershoek Picnic Site: This site is a relatively small area along the upper reach of the Eerste River. The large invasive trees provide aesthetic value to visitors. Selective clearing along the whole of the Eerste River may increase water supply.
9. Culcattabos: Culcattabos, on the R304 to the north of Stellenbosch town is heavily invaded with *Eucalyptus globulus*.

Both Jan Marais Nature Reserve and Mont Rochelle Nature Reserve, as well as the Wemmershoek Wetland Area and Purgatory Outspan, were regarded as cleared of alien invasive species and were not included within the prioritizing list.

## 10. MANAGING ALIEN INVASIVE PLANT SPECIES ON A SITE SPECIFIC SCALE

### 10.1 PAPEGAAIBERG NATURE RESERVE

#### 10.1.1 Location

Papegaaiberg is located within the town of Stellenbosch (refer to Figure 5). Papegaaiberg Nature Reserve is bordered in the west by the Onder-Papegaaiberg residential area and the farm Middelvlei. Kayamandi forms the northern boundary while the industrial areas of Plankenbrug and Papegaaiberg, Distell cellars, the Bergkelder, Bosman's Crossing and Oudemolen collectively form the eastern boundary of the nature reserve. The Stellenbosch cemetery and Oude Libertas form the southern boundary.

Papegaaiberg is approximately 140ha in size and rises gradually from all sides towards its highest point of approximately 159m relatively the centre of Papegaaiberg. The area has recently been declared a nature reserve in terms of Section 23 of the National Environmental Management: Protected Areas Act, 57 of 2003.

#### 10.1.2 Soil

The soil of Papegaaiberg is well-drained dark alluvial to clay soils with a low to medium base status.

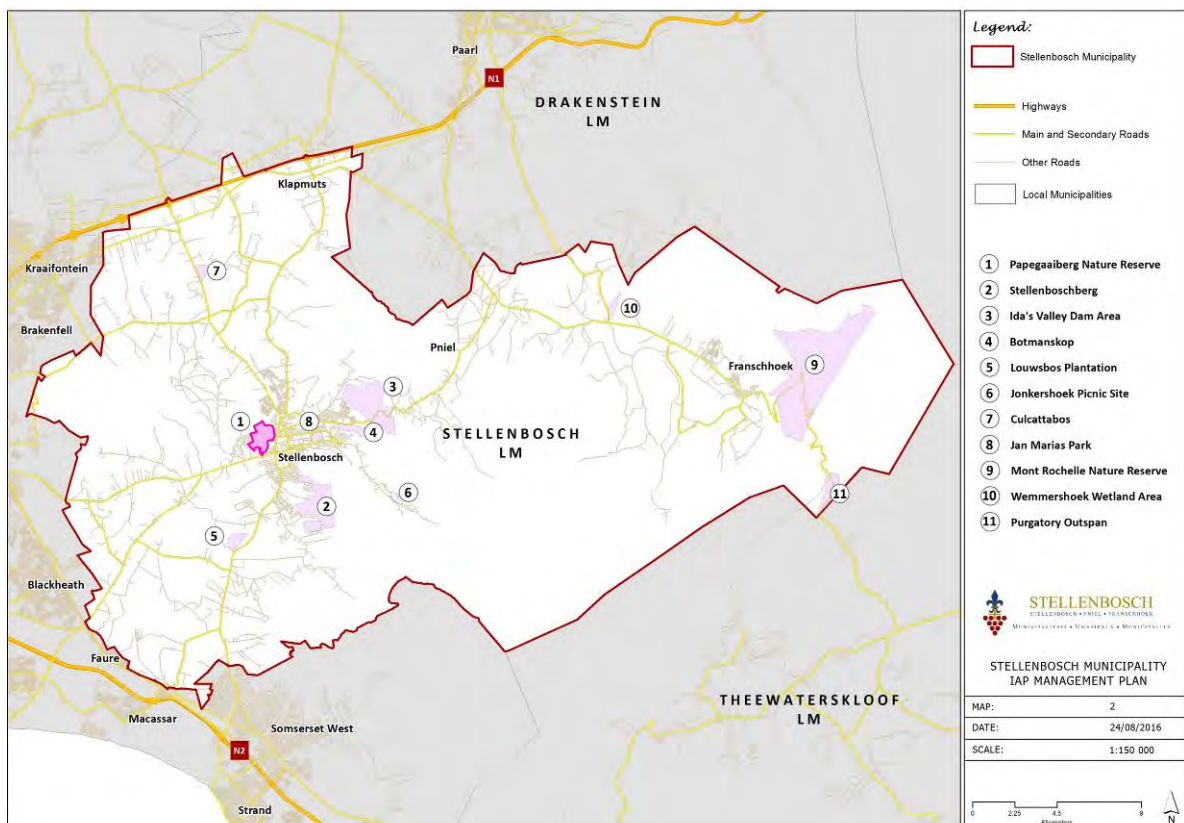


Figure 5: Papegaaiberg Nature Reserve.





Figure 6: Local context of Papegaaiberg Nature Reserve.

### 10.1.3 Hydrology

Papegaaiberg forms part of quarternary catchment<sup>20</sup> No. G22G and G22H. There are two rivers that flow adjacent to the foot of Papegaaiberg, namely Krom River and Plankenbrug River. The Plankenbrug River joins the Eerste River south of Papegaaiberg.

### 10.1.4 Vegetation

Remnants of almost extinct Renosterveld vegetation types, Swartland Shale Renosterveld and Swartland Granite Renosterveld, are found on Papegaaiberg, making it significantly important in terms of its conservation status. Both Swartland Shale Renosterveld and Swartland Granite Renosterveld are critically endangered vegetation types<sup>21</sup>. It has been estimated that as little as 10% of the area in which Swartland Renosterveld occurs is left undisturbed or intact. This is mainly due to its high fertility quality that it has been transformed for agricultural reasons. The remaining remnants are found in isolated areas such as Papegaaiberg, which is usually on steeper or elevated areas. Only approximately 20% of the areas where Swartland Granite Renosterveld occurs remain left. These areas were transformed mostly for agricultural reasons and urbanization.

<sup>20</sup> Catchment (or catchment area) is defined as the entire land area from which water flows into a river; catchments can be divided into smaller 'sub-catchments' which are usually the area which drains a tributary to the main river or a part of the main river.

<sup>21</sup> Dennis Moss Partners, 2011

### 10.1.5 Current Alien Invasive Plant Infestation

The major invasive alien plants located on Papegaaiberg include *Acacia saligna*, *Acacia mearnsii*, *Pinus pinea* and *Eucalyptus globulus*. Of these *Acacia saligna* and *Acacia mearnsii* has the highest densities (Figure 7). Though invasion density on Papegaaiberg is less than 50%, there is a high invasion density at the foot of the mountain.

The western slope of Papegaaiberg is highly infested by both *Acacia saligna* and *Acacia mearnsii* (Figure 8 and 9). This may be due to the occurrence of fire several years prior to the survey. The lack of follow-up removal strategies has led to the establishment of both species within the disturbed area, which are able to out-competing native species for the natural and spatial resources. Though infestation increases up the slope of Papegaaiberg *A. saligna* densities are still relatively high in comparison with the other invasive species. *A. mearnsii* and *Eucalyptus globulus* (Figure 10) densities decrease up the slope of the mountain.

*Eucalyptus globulus* is mostly contained along the southern slope, though several individuals are found on the northern slope. *E. globulus* also occurs on the recently burnt western slope, though the higher growth rate of *Acacia saligna* and *Acacia mearnsii* most likely enabled these species to outcompete both *E. globulus* and *Pinus pinea* (Figure 11) for nutrient and spatial resources. *P. pinea* densities are relatively low, with exception to several large pine trees located along the foot of Papegaaiberg.

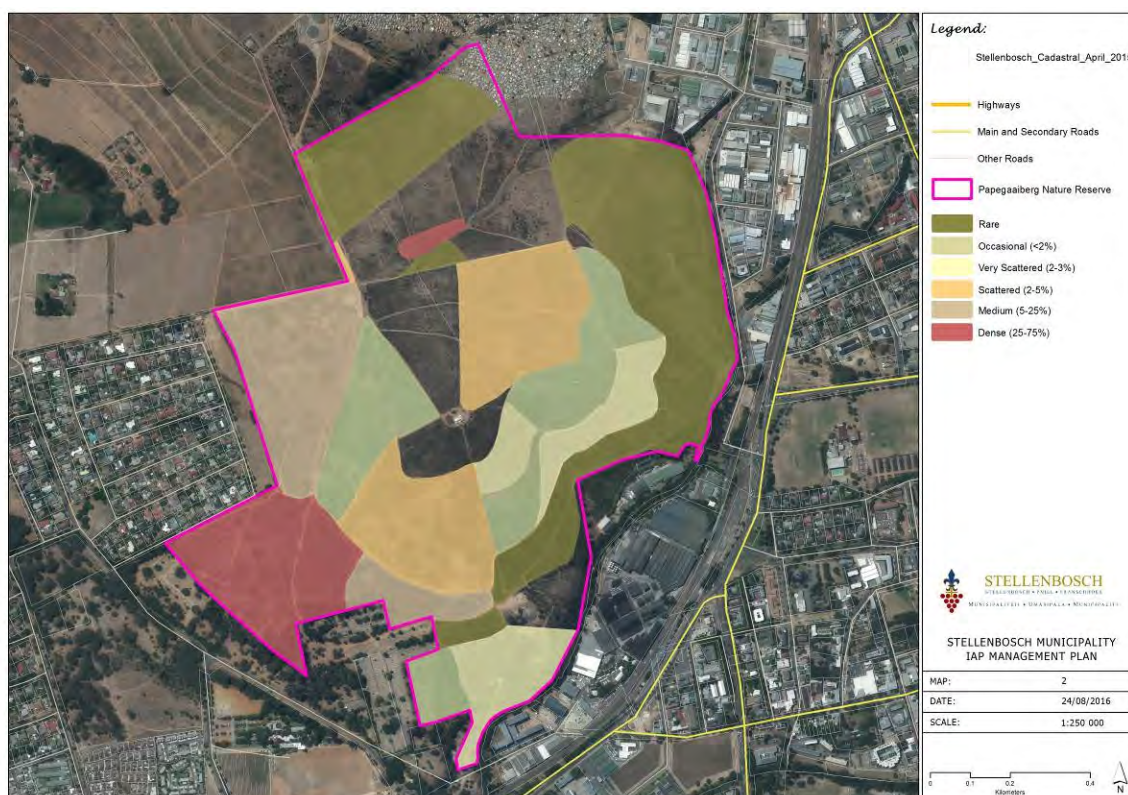


Figure 7: Alien invasive plant density (%) on Papegaaiberg Nature Reserve.

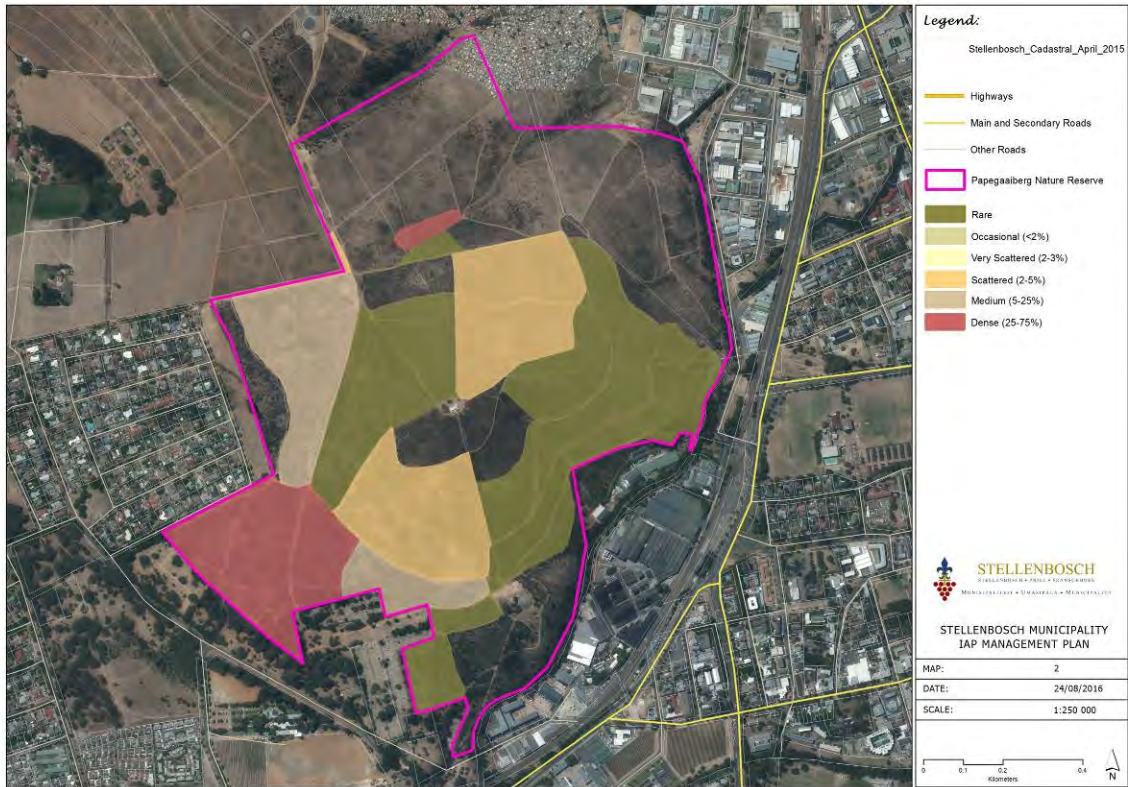


Figure 8: *Acacia saligna* density (%) on Papegaaiberg Nature Reserve.

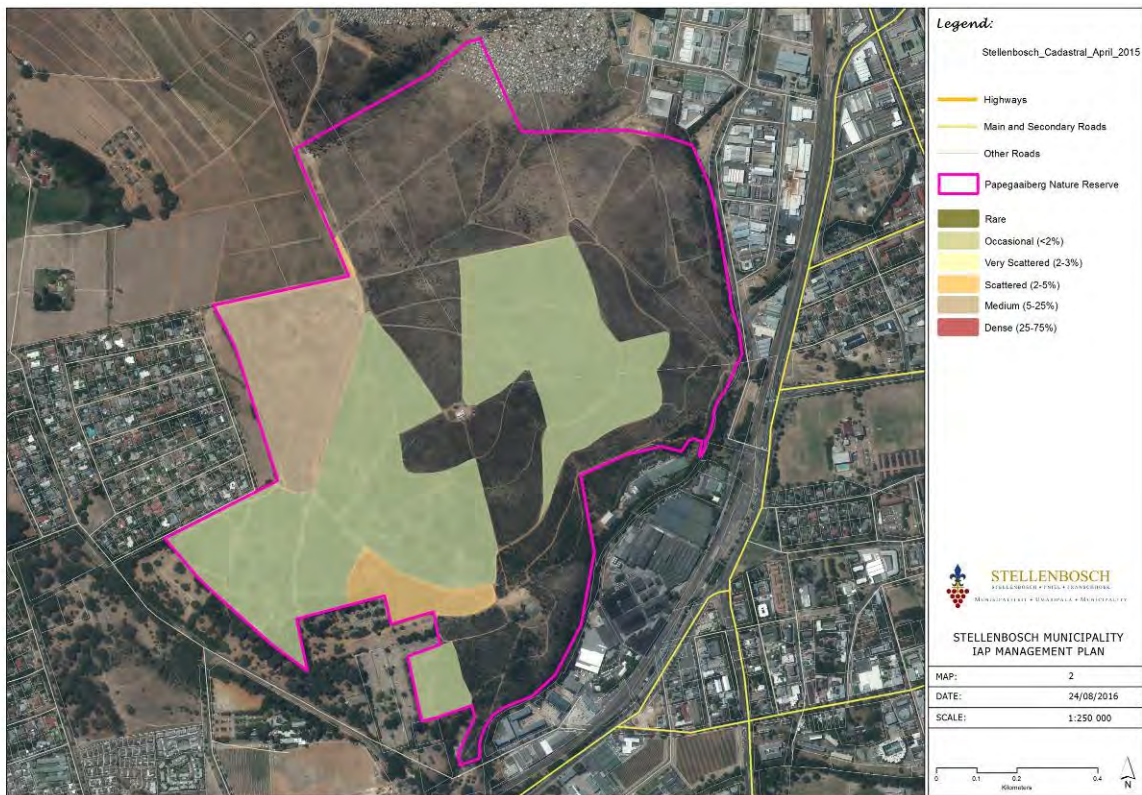


Figure 9: *Acacia mearnii* density (%) on Papegaaiberg Nature Reserve.



Figure 10: Eucalyptus globulus density (%) on Papegaaiberg Nature Reserve.

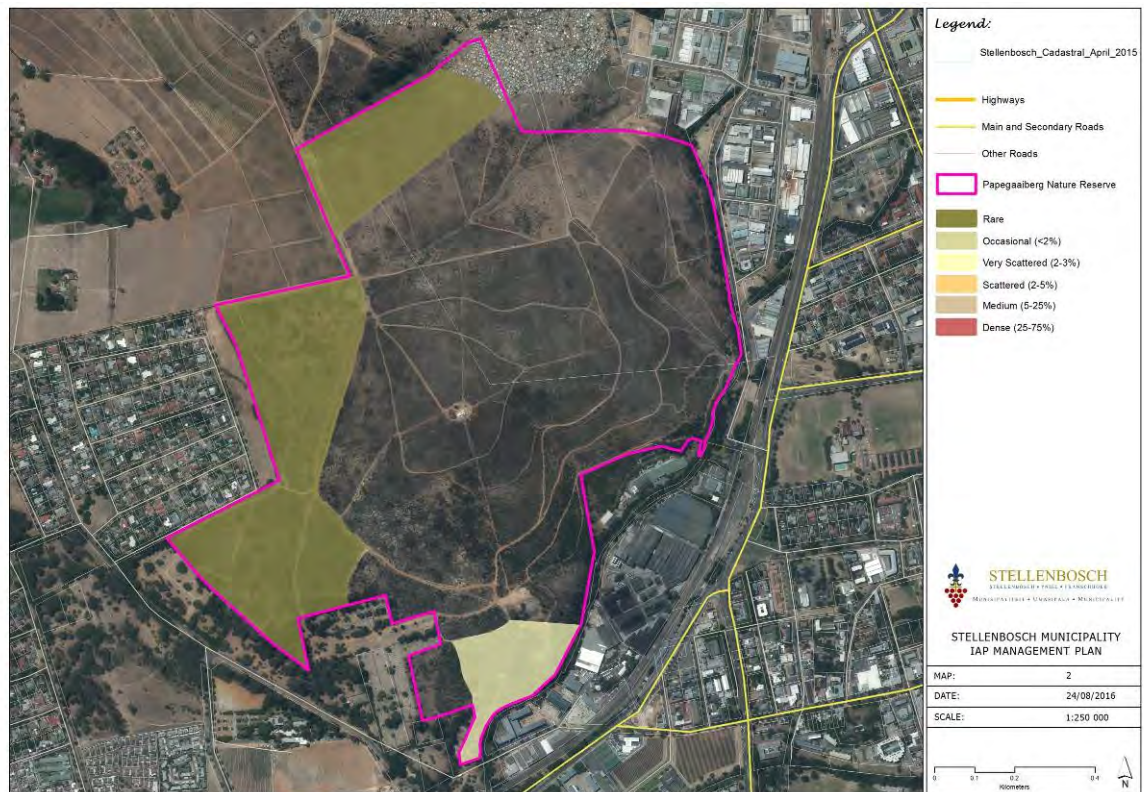


Figure 11: Pinus pinea density (%) on Papegaaiberg Nature Reserve.

### 10.1.6 Clearing Methods

The high conservation significance of the Renosterveld on Papegaaiberg makes the removal of invasive alien plant species a high priority. A comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants. When clearing an area that occurs on a slope, clearing strategies should initiate at the top of the slope and continue downwards. This strategy will reduce erosion effect as well as minimize the re-establishment process of invasive alien plants within the cleared areas from overhead populations. Large tree trunks should be strategically placed to reduce soil erosion on slopes after invasive alien clearing.

Strategies for clearing alien invasive species should be a combination of mechanical and chemical methods (Table 7, Section 11). All species should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw), followed by the application of chemical herbicides to the cut surface to prevent resprouting. Each species has its own corresponding herbicide requirements to prevent resprouting activities and should be applied soon after tree felling (see Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts. Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow ups and monitoring should occur annually and remaining or re-established invasive species should be removed when located.

### 10.1.7 Zonation as an aid to the management of invasive alien plant species

A zonation map (Figure 12) was constructed as an aid for clearing alien invasive plants on Papegaaiberg. Roads on the property were used for zone boundaries. The property is divided into 5 large zones (A-E) and divided into smaller zones to assist clearing strategies.

To prevent spread of alien invasive plants down the slope into cleared areas during clearing, clearing should start at the summit of Papegaaiberg, which is also the centre of the site, marked as A1-A5. When zones A1-A5 are cleared, continue downward to zones B1-B5, followed by zones C1-C5. Zones E1-E3 should be cleared last.

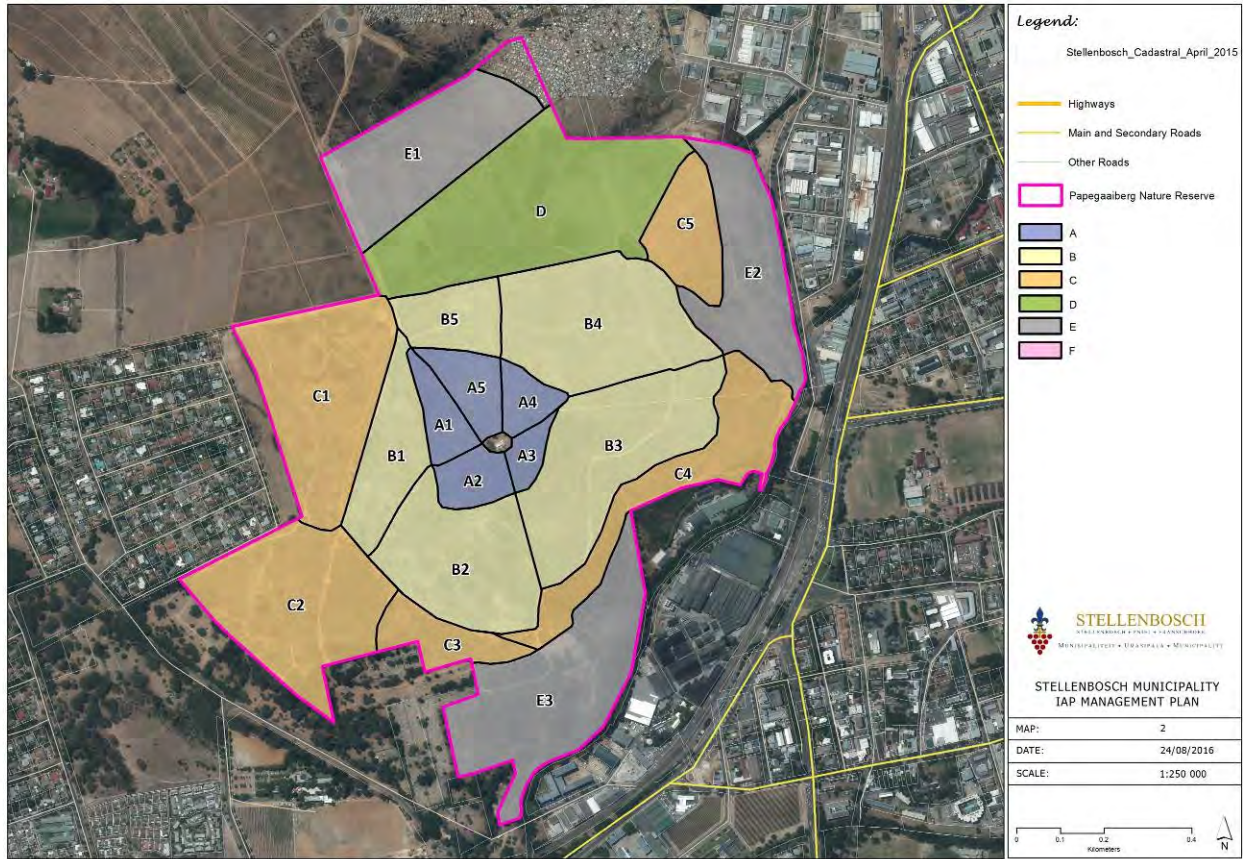


Figure 12: Zonation of Papegaaiberg as an aid for alien invasive plant clearing

## 10.2 STELLENBOSCHBERG (including the areas of Paradyskloof and Brandwacht)

### 10.2.1 Location

The area is located in the town of Stellenbosch, along the western slope of the Stellenbosch Mountain range (Figure 13 & 14). Brandwacht is bordered on its northern boundary by farms, while the western boundary is bordered by the Krigevile and Brandwacht residential areas. The southern boundary of Brandwacht is adjacent to the Stellenboschberg site, which is bordered by farmland and the Paradyskloof residential area on the western boundary. The southern boundary of Stellenbosch site is adjacent with the Paradyskloof site, which is bordered by farmland on the western and southern borders.

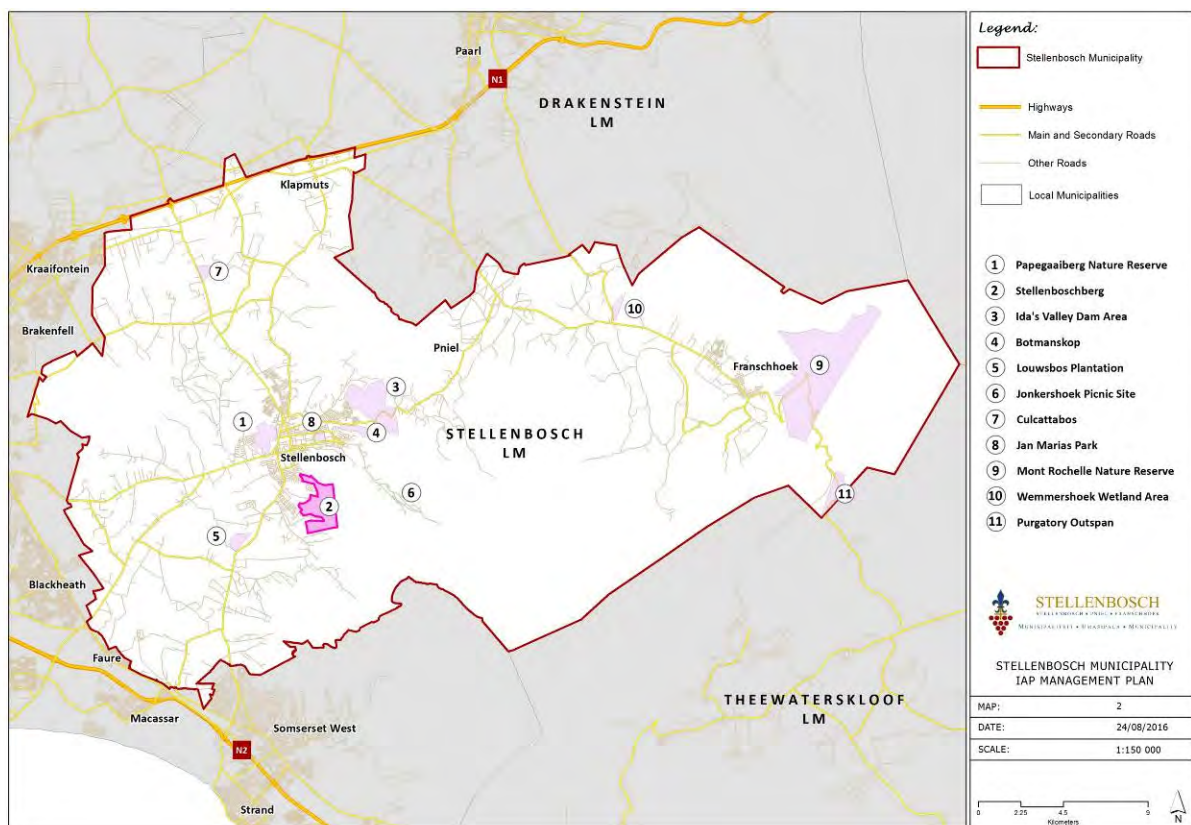


Figure 13: Stellenboschberg.

### 10.2.2 Soil

The soil of the property is red and a yellow soil which is freely drained, structure-less and has a low to medium base status.

### 10.2.3 Hydrology

The sites borders the Hottentots-Holland mountain catchment area, which is a quaternary catchment and play an important role in the water resources of the broader area.

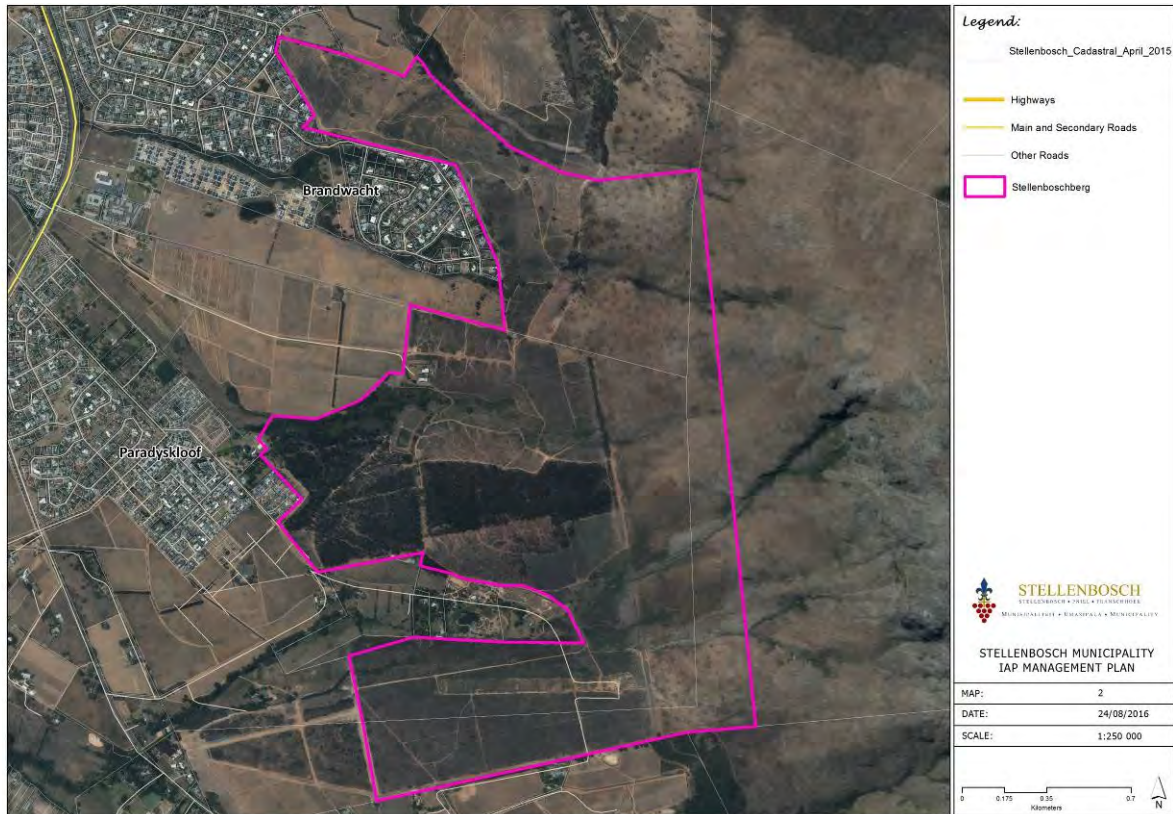


Figure 14: Local context of Stellenboschberg.

#### 10.2.4 Vegetation

The vegetation type of Paradyskloof is Cape Wineland Shale fynbos and is a vulnerable terrestrial ecosystem. Cape Wineland Shale Fynbos soil is naturally poor in nutrients, moist and is slightly acidic. Mostly found in lower mountain slopes and high, rolling plains in the Western Cape, the biodiversity of the Cape Wineland Shale Fynbos is, however, incredibly high. The Cape Wineland Shale Fynbos comprises of a diversity of protea, erica, geophyte and daisy species as well as some endemic species. The vegetation type is of conservation significance because of its high vulnerability state due to its location on lower slopes, which are mostly used for agricultural and urban development. Of the 54% remaining natural areas only 25% are formally protected.

#### 10.2.5 Current Alien Invasive Plant Infestation

The site is heavily invaded (Figure 15). Brandwacht has the least infestations with only a third of the site being heavily infested, mainly by *Acacia saligna*, *Acacia mearnsii* and *Eucalyptus globulus*. The infestation of *Acacia saligna* within Brandwacht (Figure 16) is less severe than that of *Acacia mearnsii* (Figure 17) and *Eucalyptus globulus* (Figure 18), covering only about 2% of the infested land surface. *Acacia mearnsii* is more abundant, infesting about 5% of the infested land surface, while a medium density boundary of *Eucalyptus globulus* stands occurs at the top of Brandwacht. These large stands of trees change the soil composition and thus affect soil erosion to a variable degree.



Within the Stellenboschberg site, most of the natural vegetation originally has been transformed into pine plantations. The pine species *Pinus pinea* is the main invading species and occupies more than 75% of Stellenboschberg's land surface (Figure 19). This can mainly be attributed to the plantation history of the area, consequently filling the seed bank with pine seeds over the plantation period. New seedlings sprout from the seed bank when vacant space becomes available after harvesting or clearing activities. There is a high occurrence of seedlings within the site, which is contributed to the disturbance caused by clearing efforts that occurred several months earlier. Within the disturbed area opportunistic recruitment of other invasive species, such as *Acacia saligna* and *Acacia mearnsii* was able to establish (Figure 16 and 17). Though their infestation is less severe than that of *Pinus pinea*, it is important to take into account the fast spreading nature of the species (via wind or human dispersal from already established populations) may lead to high infestation in the area if left unmanaged.

Paradyskloof is infested with *Pinus pinea*, *Eucalyptus globulus*, *Acacia implexa*, *Acacia melanoxolyn*, *Acacia mearnsii*, *Acacia saligna* and *Acacia pygnantha*, of which *Acacia saligna* and *Acacia mearnsii* infestation is the most severe, collectively covering up to 25% of the site. A boundary of large *Eucalyptus globulus* trees occur between the sites and the upper mountain slope, though these were most likely introduced purposefully as a buffer zone between the sites and the upper mountain slope.

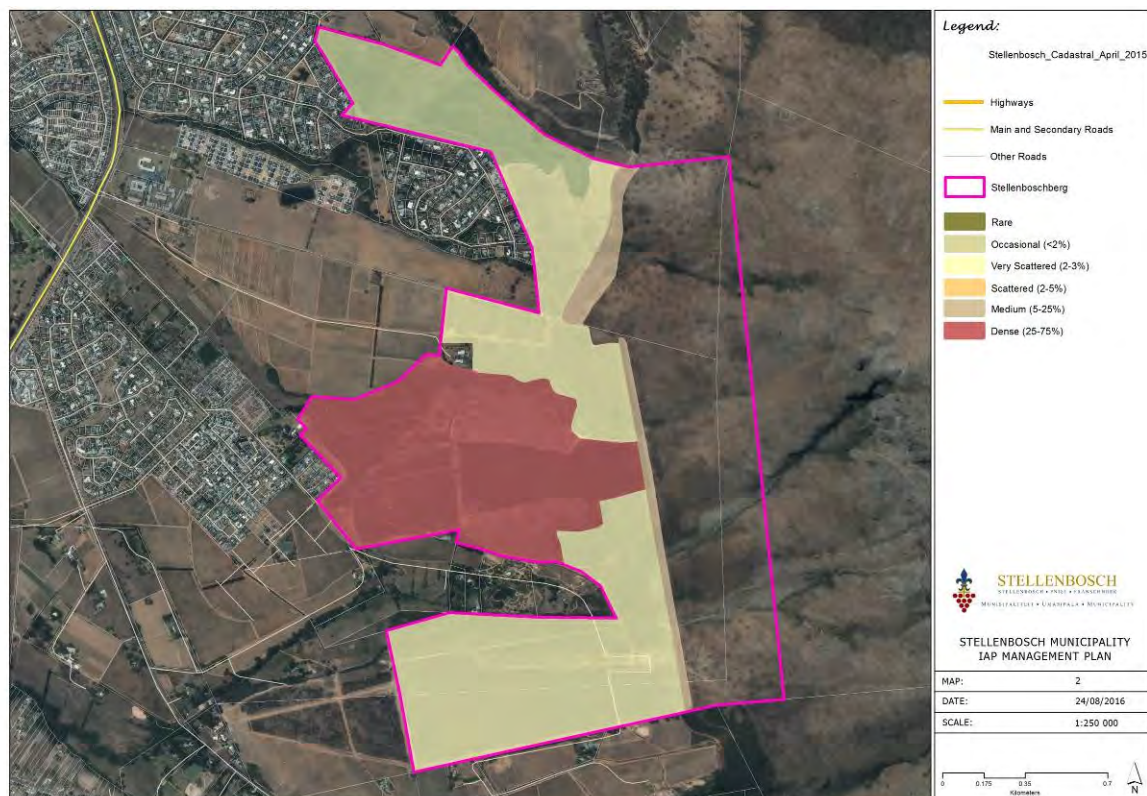


Figure 15: Alien invasive plant density (%) on Stellenboschberg.

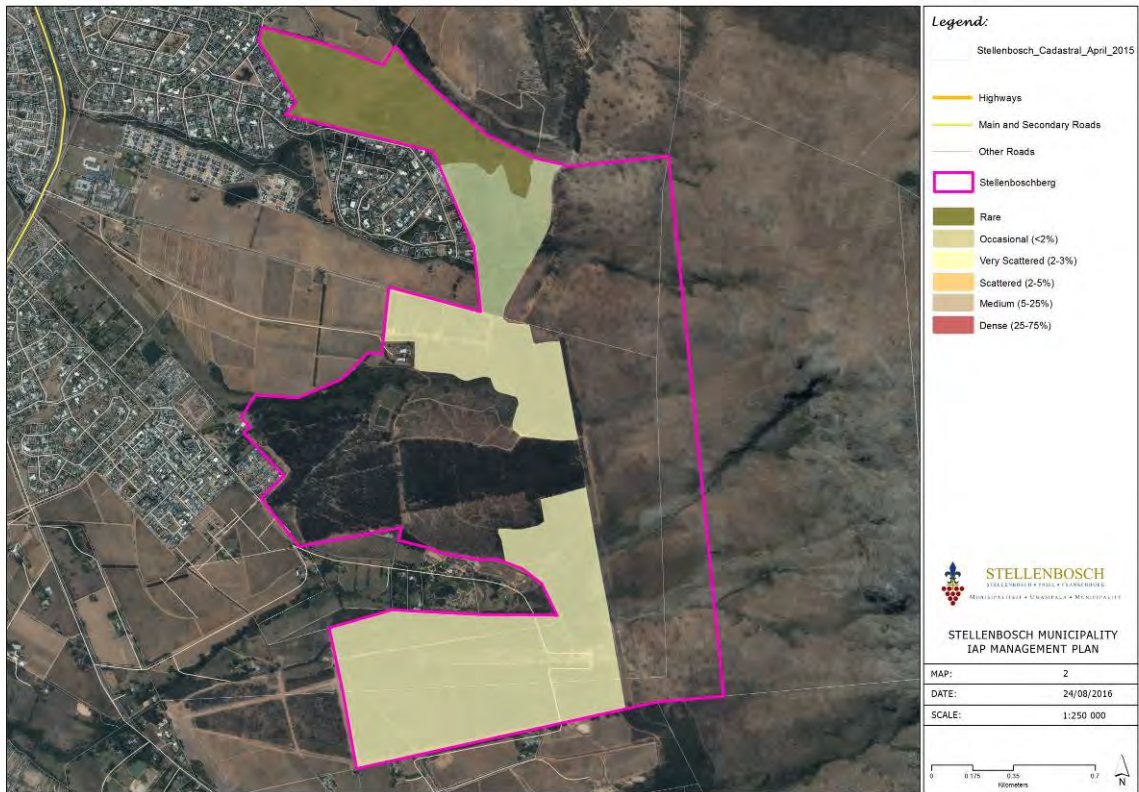


Figure 16: *Acacia saligna* density (%) on Stellenboschberg.

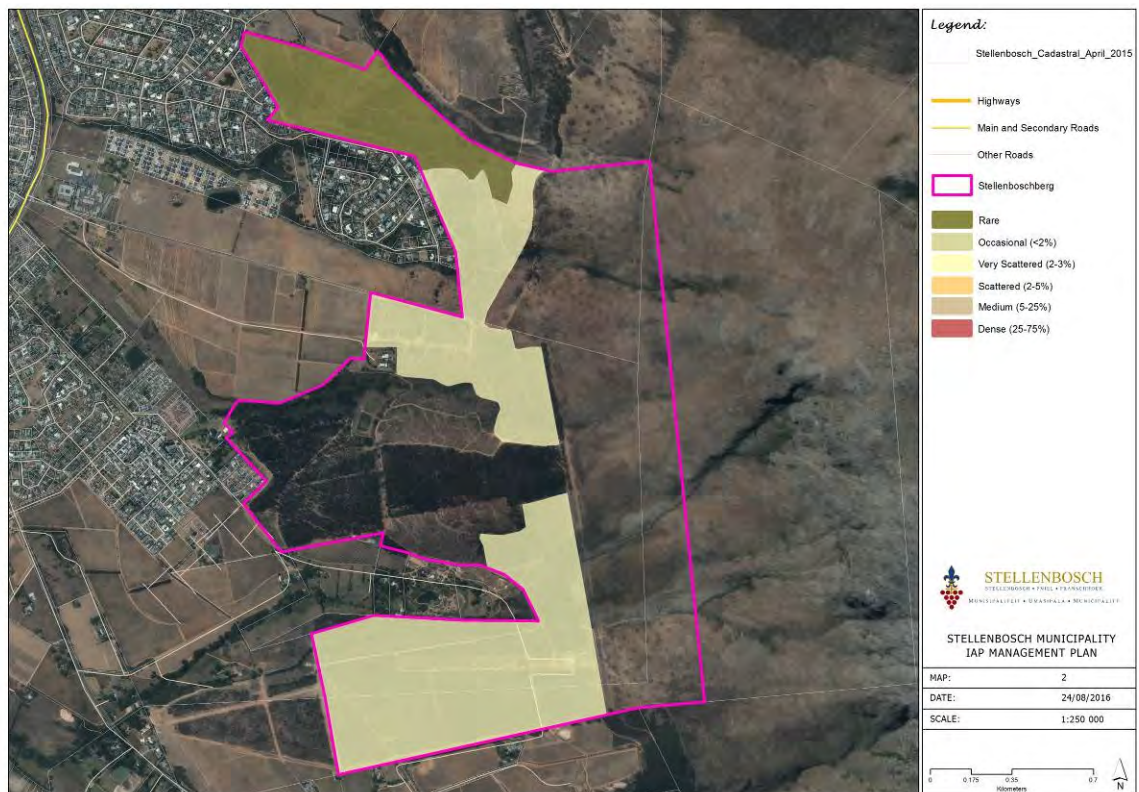


Figure 17: *Acacia mearnii* density (%) on Stellenboschberg.

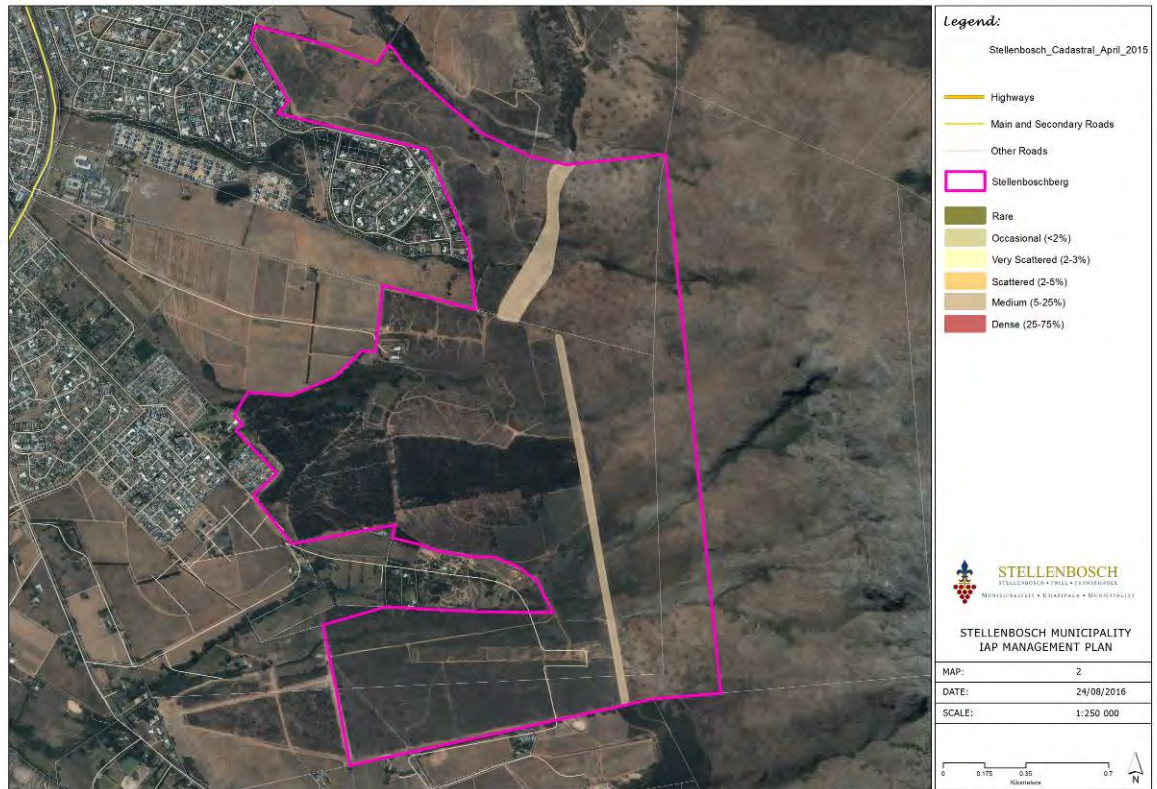


Figure 18: Eucalyptus globulus density (%) on Stellenboschberg.

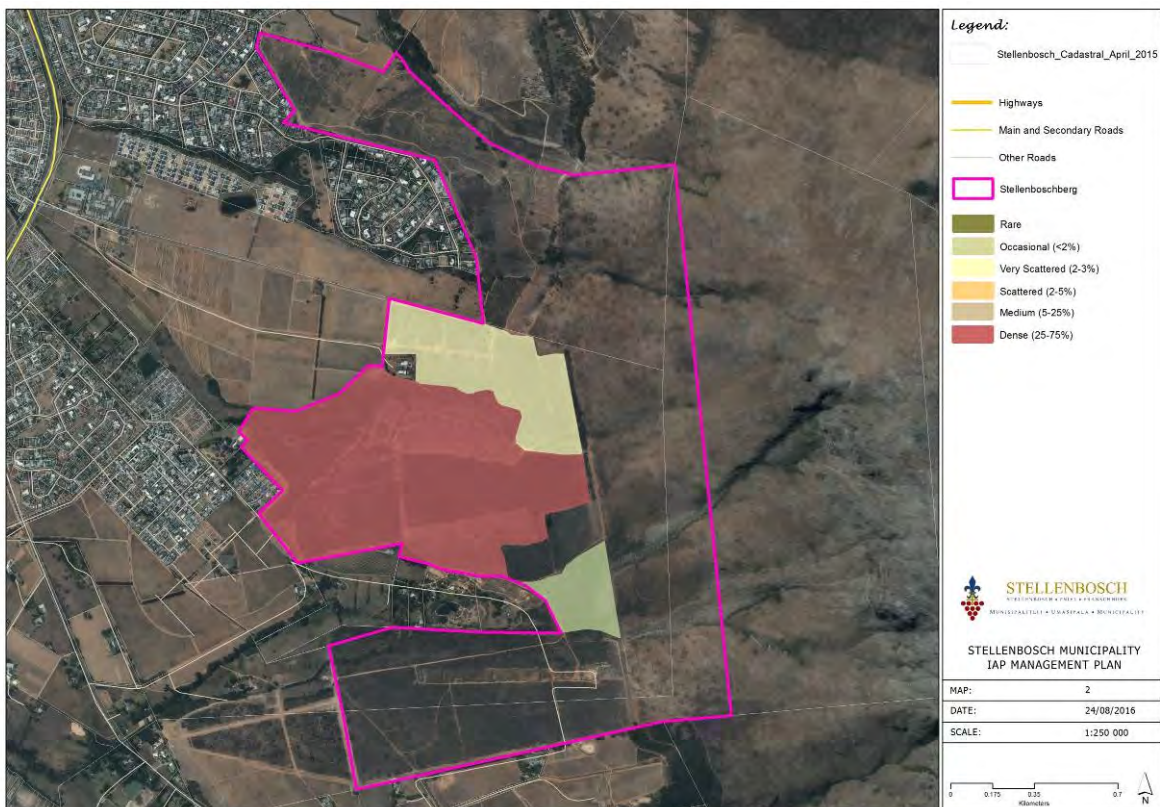


Figure 19: Pinus pinea density (%) on Stellenboschberg.

### 10.2.6 Clearing Methods

Past clearing efforts have taken place on Stellenboschberg, though the lack of follow up strategies has enabled the establishment of seedlings within the cleared areas. A comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants. When clearing an area that occurs on a slope, clearing strategies should initiate at the top of the slope and continue downwards. This strategy will reduce erosion effect as well as minimize the re-establishment process of invasive alien plants within the cleared areas from overhead populations. Strategic placement of large tree trunks should reduce soil erosion on slopes after invasive alien clearing.

The Brandwacht site is still rich in native biodiversity. To reduce the threat of biodiversity loss within the site, invasive alien plants should be removed as soon as possible. Clearing strategies should thus start on the upper slope in the Brandwacht site and continue downwards.

Removal strategies for clearing invasive alien species on Stellenboschberg should be a combination of mechanical and chemical methods (Table 7, Section 11). All species should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw), followed by the application of chemical herbicides to the cut surface to prevent resprouting. Each species has its own corresponding herbicide requirements to prevent resprouting activities and should be applied soon after tree felling (see Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts.

Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow ups and monitoring should occur annually and remaining or re-established invasive species should be removed when located.

### 10.2.7 Zonation as an aid to the management of invasive alien plant species

A zonation map (Figure 20) was constructed as an aid for clearing alien invasive plants in Brandwacht, Stellenboschberg and Paradyskloof. The property boundaries and road was used for zone boundaries. The property is divided into 4 large zones (A-D). Clearing operations should start from the highest points within zones A, B and D and proceed downhill.

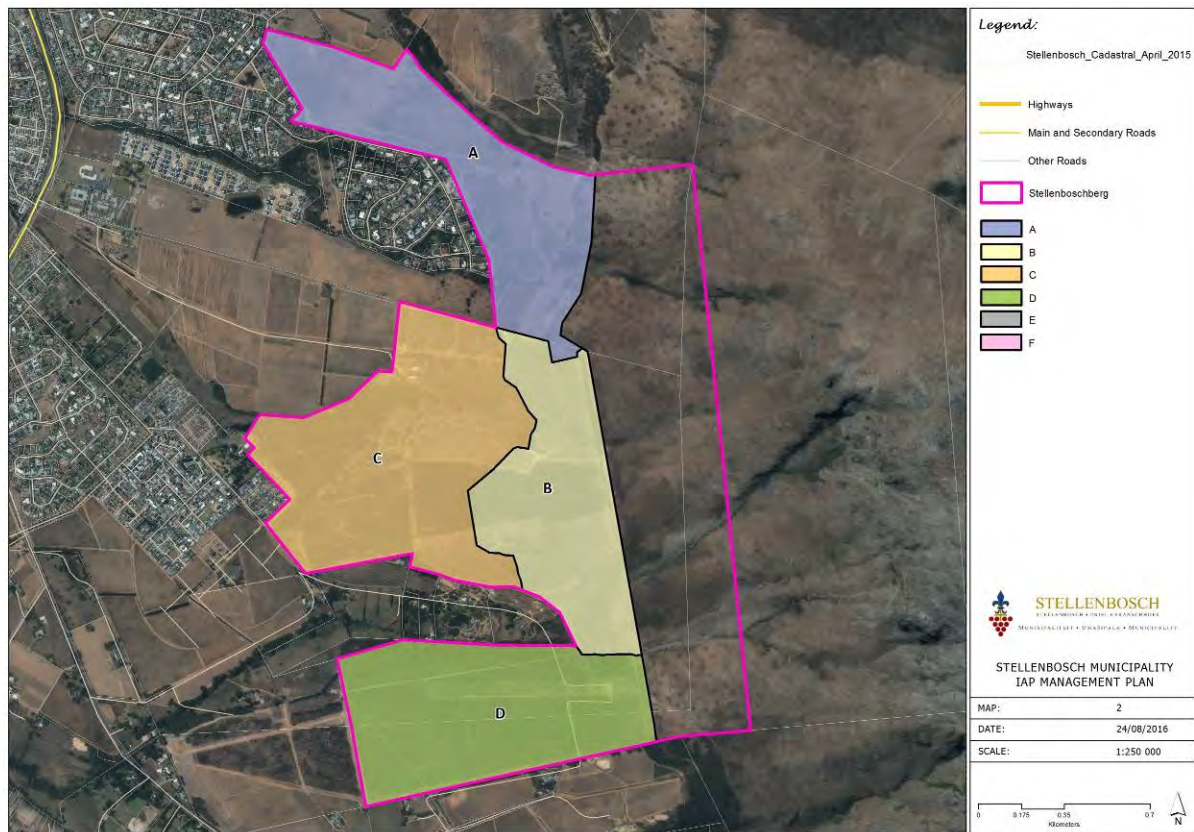


Figure 20: Zonation of Stellenboschberg as an aid for alien invasive plant clearing

### 10.3 IDA'S VALLEY DAM AREA

#### 10.3.1 Location

Ida's Valley is situated on the edge of the town of Stellenbosch, above the Helshoogte pass across from Botmaskop. Ida's Valley residential area borders the area on its southern boundary, while the western boundary is bordered by privately owned land. The northern boundary as well as the eastern boundary is bordered by private farmlands which are mostly vineyards. The eastern boundary is adjacent the Tokara farmland. The area is more or less 250ha in size and is the main water supply for Stellenbosch.

#### 10.3.2 Soil

The soil of the Ida's Valley Dam Area is red and yellow soils with low-medium status that is freely drained and structure-less.

#### 10.3.3 Hydrology

The Ida's Valley Dam Area is located in a quarternary catchment draining from Simonsberg and the Hottentots Holland Mountain Catchment Area. Botmaskop forms part of quarternary catchment No. G22G with a small portion falling within quarternary catchment No. G22F. Although the catchment

functions of the planning area may seem insignificant, it is important to note that the latter forms part of an integrated group of ecosystems that collectively determine the health of the total catchment<sup>22</sup>.

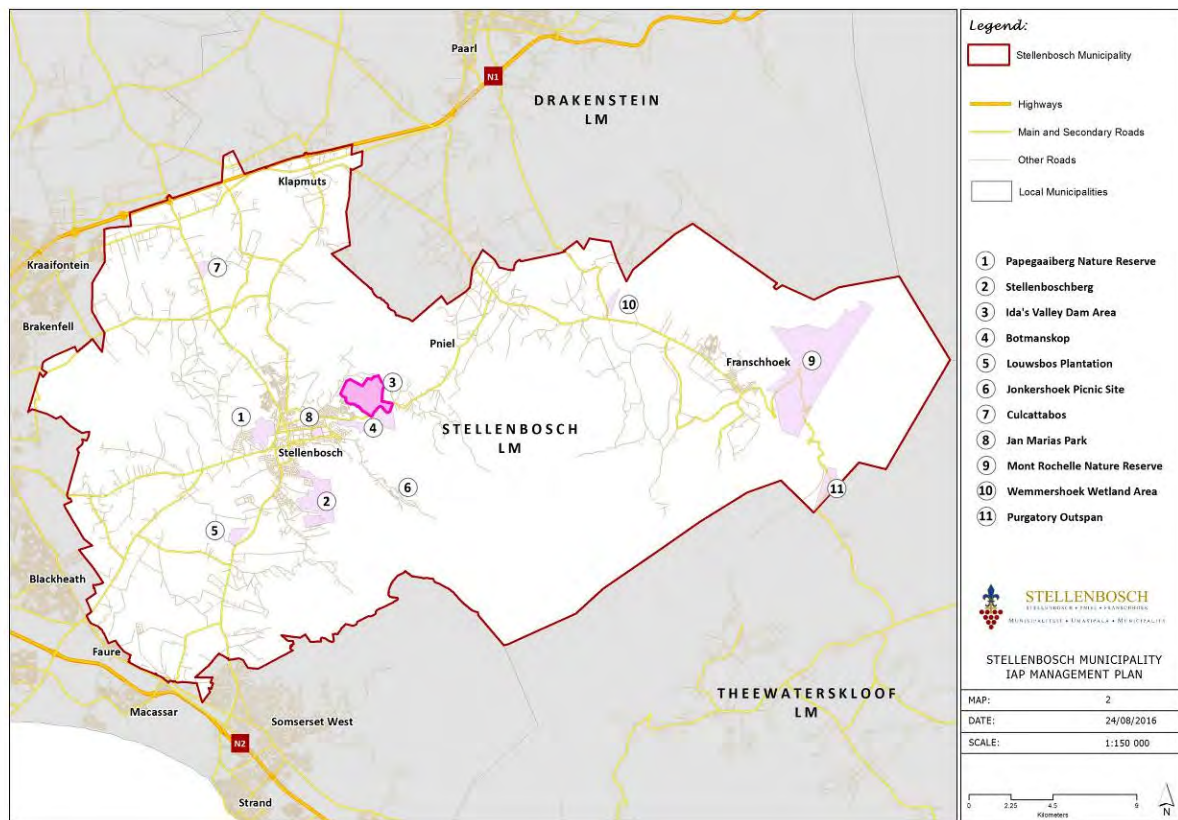


Figure 21: Ida's Valley Dam Area.

The primary threat to environmental health is fragmentation of the community-supporting ecosystems. Fragmentation generally leads to a cycle of environmental degradation, which consequently influences the well-being of the dependent communities. Ecosystems and/or catchments are mutually dependent on every natural component for their existence. The loss, or degradation, of one component thus affects all others, possibly leading to the collapse of the total system on which communities may depend for their livelihood. Hence the importance of conserving every natural part, or life form, of a system that forms part of the natural water cycle.

The Krom River arises in the Simonsberg Mountains approximately 9 km north east of Stellenbosch. The river feeds the Ida's Valley Dam. The river flows through forestry and agricultural areas before entering Ida's Valley. The quality of the Krom River is average to poor and is influenced by urban and agricultural run-off. The value of the river as a habitat for indigenous flora and fauna has been substantially altered and compromised due to the growth of alien invasive plants.

<sup>22</sup> Catchment (or catchment area) is defined as the entire land area from which water flows into a river; catchments can be divided into smaller 'sub-catchments' which are usually the area which drains a tributary to the main river or a part of the main river.

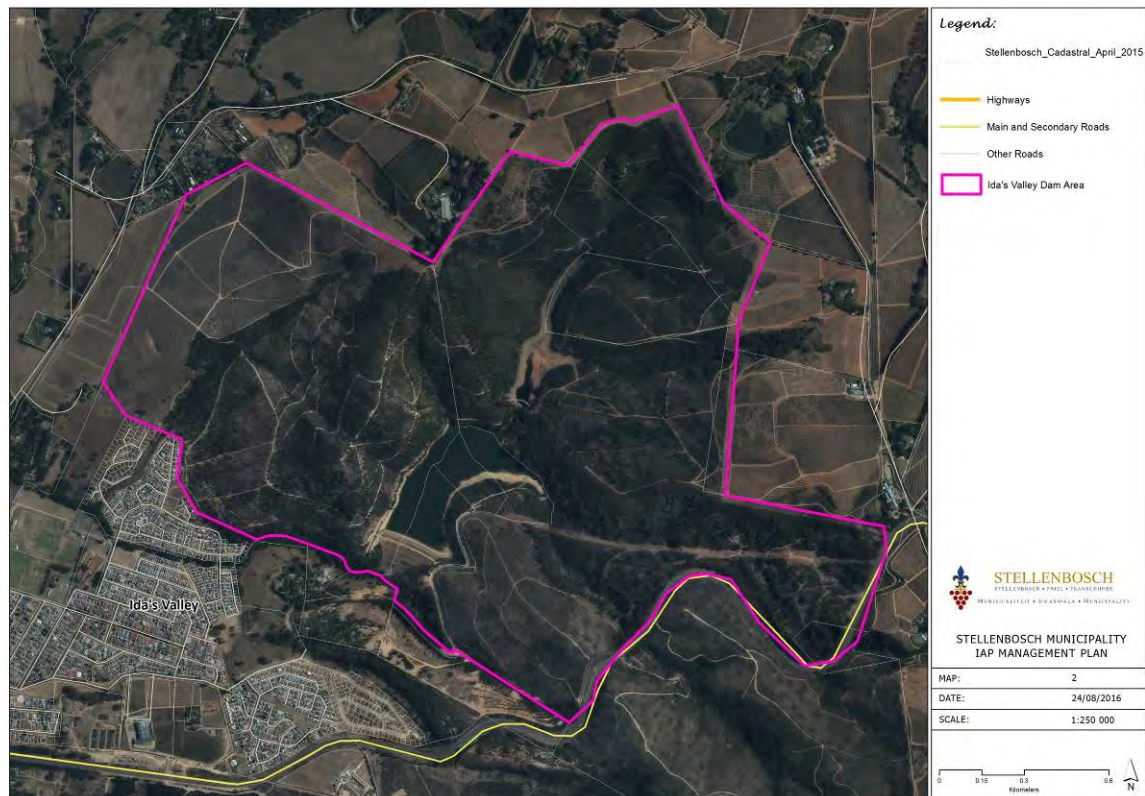


Figure 22: Local context of Ida's Valley Dam Area.

#### 10.3.4 Vegetation

Botmaskop consists of two vegetation types, namely Boland Granite Fynbos and Cape Wineland Shale Fynbos. Both are vulnerable vegetation types within the Western Cape. Boland granite fynbos has 56 Red Data plant species and 23 endemic plant species. There are approximately 62% remaining natural areas, of which 14% is protected in the Hawequas, Hottentots Holland and Paarl Mountain Nature Reserve.

The Cape Wineland Shale Fynbos comprises of a diversity of Protea, Erica, geophyte and daisy species as well as some endemic species. The vegetation type is of conservation significance because of its high vulnerability state due to its location on lower slopes, which are mostly used for agricultural and urban development. Of the 54% remaining natural areas, only 25% are actively protected (SANBI 2009).

#### 10.3.5 Current Alien Invasive Plant Infestation

Over 80% of Ida's Valley's land surface is infested with and transformed by invasive alien plants, making the Ida's Valley Dam Area the most invaded site in the survey (Figure 23). The major invasive alien plants of the Ida's Valley Dam Area are *Pinus pinea* and *Eucalyptus globulus* (Figures 25 and 26).

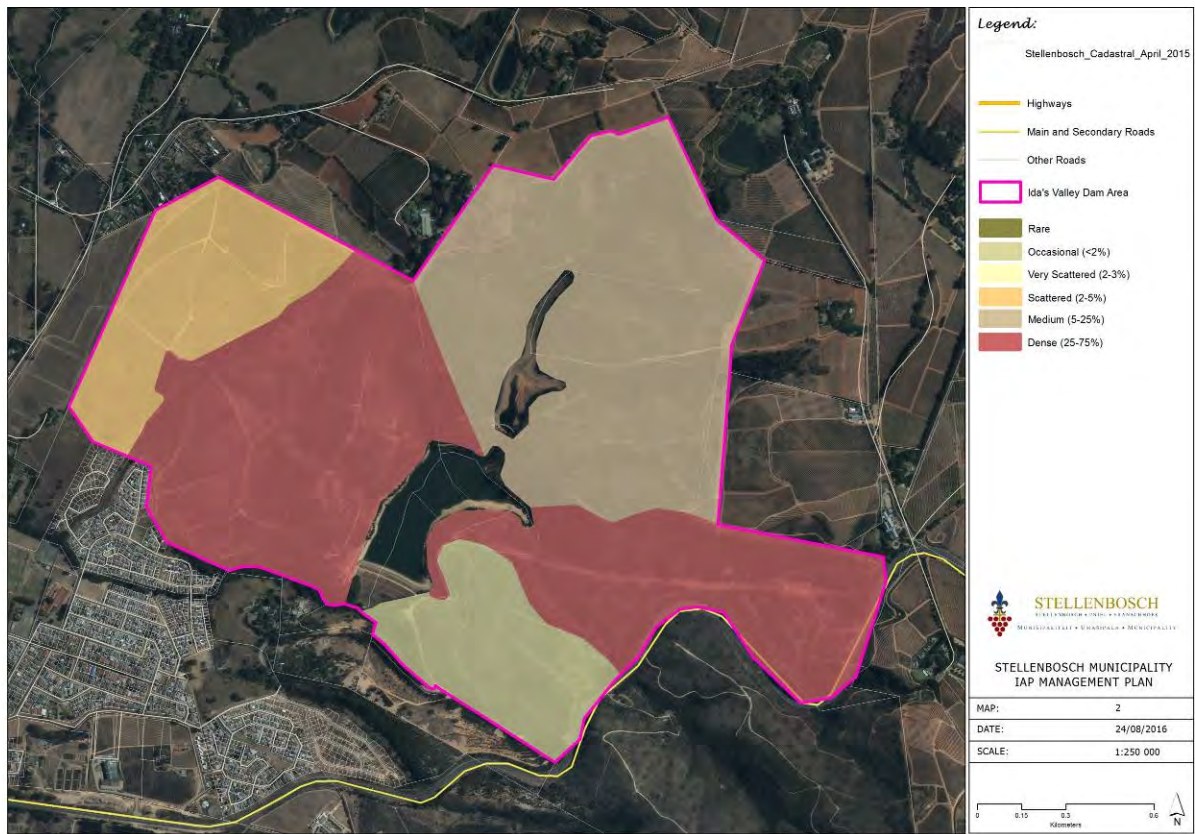


Figure 23: Alien invasive plant density (%) on Ida's Valley Dam Area.

Both *P. pinea* and *E. globulus* occur in large, dense stands, which cover over 55% of the sites land surface. Though clearing effortst have taken place along the northern boundary of Ida's Valley, the disturbance and lack of follow-up efforts has led to re-establishment of both *P. pinea* and *E. globulus* as well as the new establishment of *Acacia saligna* and *Acacia mearnsii* (Figure 24).

Other invasive alien plant species such as *Acacia implexa*, *Acacia melanoxylon* and *Acacia pygnantha* also occur in the Ida's Valley Dam Area, though their infestation is of a lesser extent.



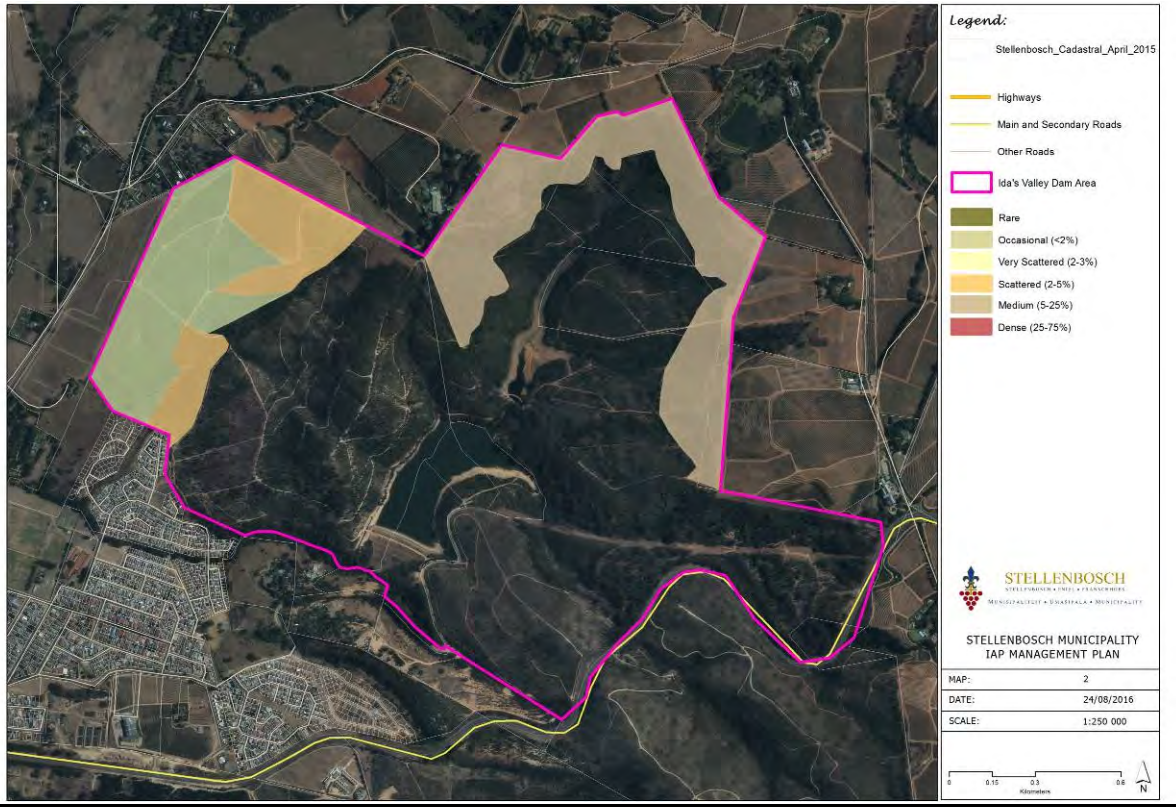


Figure 24: *Acacia saligna* and *Acacia mearnii* density (%) on Ida's Valley Dam Area.

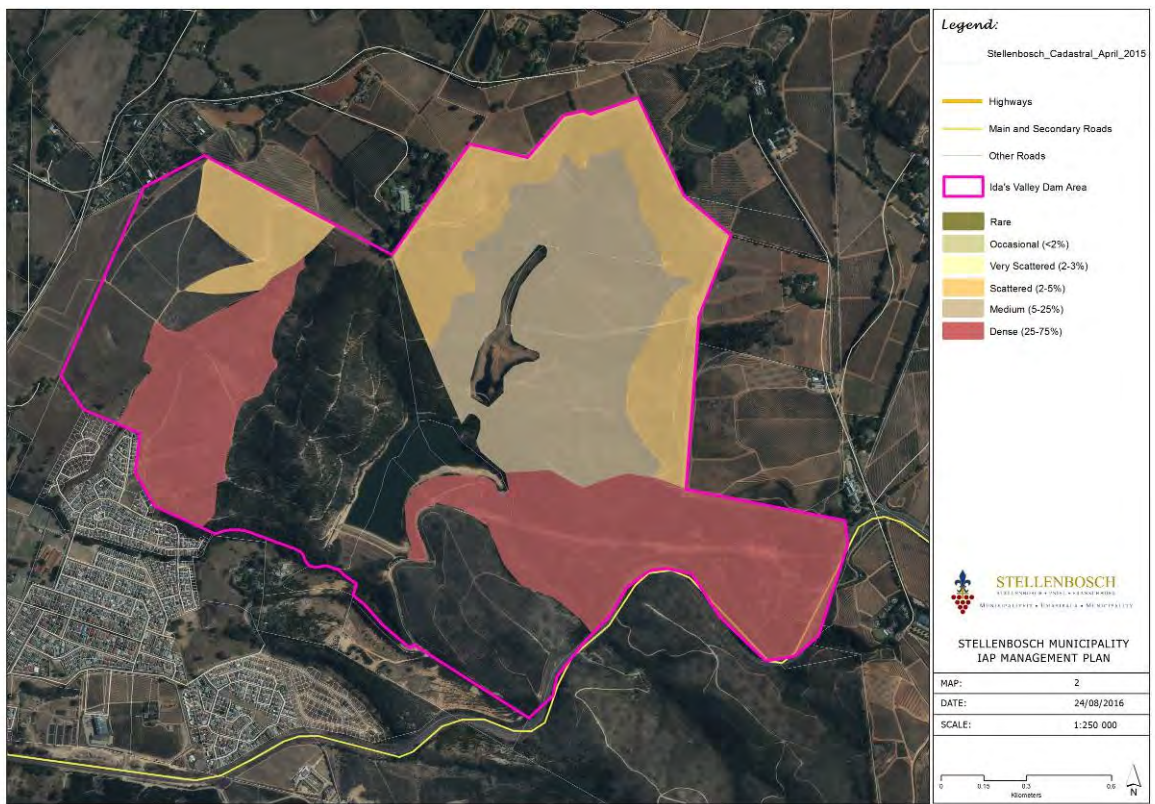


Figure 25: *Eucalyptus globulus* density (%) on Ida's Valley Dam Area.

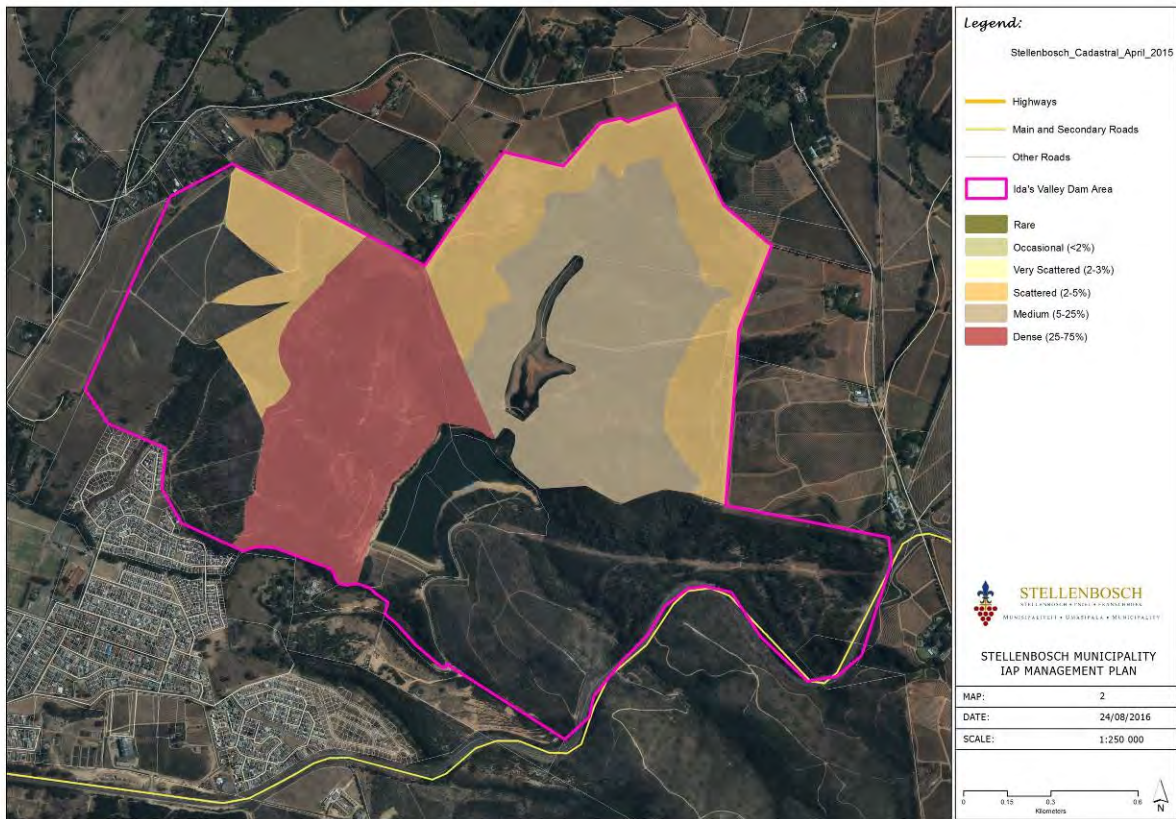


Figure 26: Pinus pinea density (%) on Ida’s Valley Dam Area.

**10.3.6 Clearing Methods**

Past clearing efforts have taken place along the northern boundary of Ida’s Valley Dam Area, though the lack of follow up strategies has led re-establishment of invasive alien plants in these areas. A comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants. When clearing an area that occurs on a slope, clearing strategies should initiate at the top of the slope and continue downwards. This strategy will reduce erosion effect as well as minimize the re-establishment process of invasive alien plants within the cleared areas from overhead populations. Strategic placement of large tree trunks should reduce soil erosion on slopes after invasive alien clearing.

Removal strategies for clearing invasive alien species in Ida’s Valley Dam Area should be a combination of mechanical and chemical methods (Table 7, Section 11). Invasive alien plants should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw). All the invasive alien species that occur within Botmaskop have resprouting characteristics and herbicides should be applied to the cut surface. Each species has its own corresponding herbicide requirements to prevent resprouting and should be applied soon after tree felling (see Appendix Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable

amounts. Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow-ups and monitoring should occur annually and remaining or re-established invasive species should be removed when located. Biomass should be disposed of at a distance from the property. Wood from large trees can be retailed as timber products.

**10.3.7 Zonation as an aid to the management of invasive alien plant species**

A zonation map (Figure 27) was constructed as an aid for clearing alien invasive plants on Ida’s Valley. Roads on the property were used for zone boundaries. The property is divided into 6 large zones (A-F) and each larger zone is further divided into smaller zones.

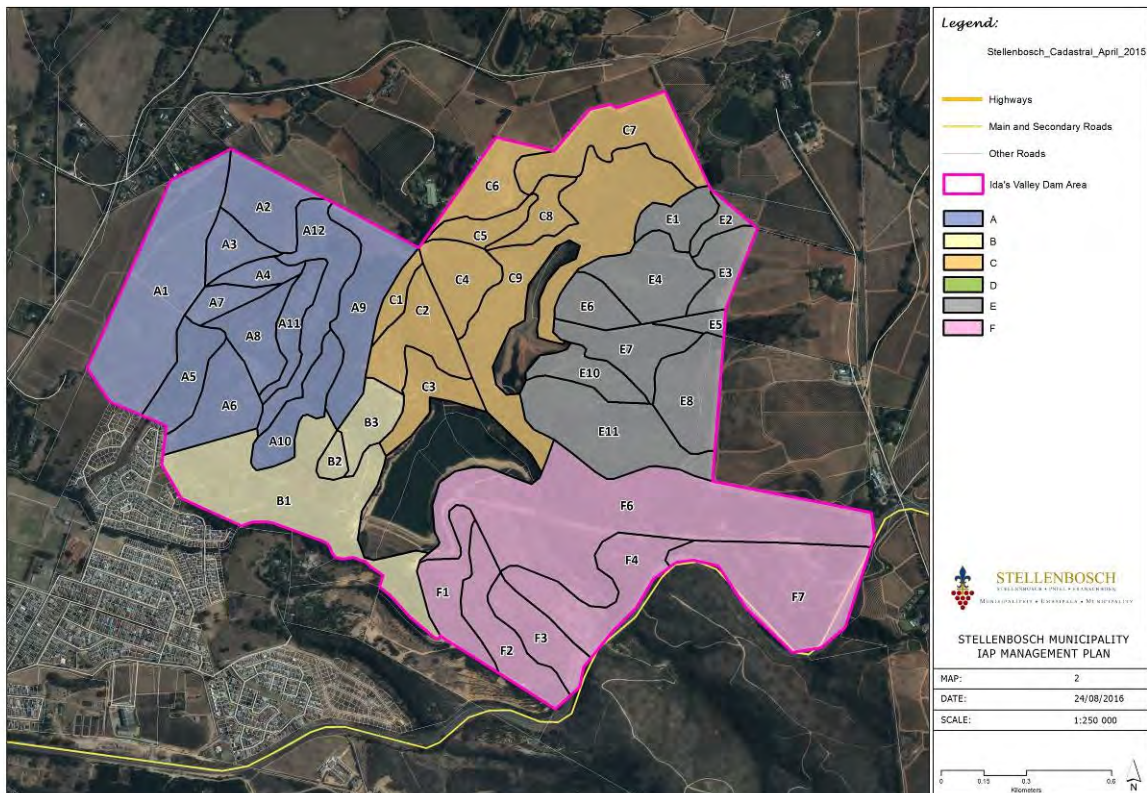


Figure 27: Zonation of Ida’s Valley Dam Area as an aid for alien invasive plant clearing

Clearing should start within zones C and E (these zones are at the highest point within the Ida’s Valley Dam Area) should start at the highest points and continue in all four directions towards the boundaries of the zones. When zones C and E are cleared, clearing within zone D should start at the highest point and continue in all four directions towards the boundary of the adjacent zones. Once zone D is cleared, clearing should start at the highest points within B and continue to the boundary of the zone after which clearing will continue into zone a and move towards the north and western boundaries. Once clearing in these zones are done, clearing should continue from the highest point within zone F, which is on the boundary of zones F and E, and continue downward towards the southern boundary. Once clearing of both sites has been concluded, follow-up and monitoring strategies should occur annually following the same strategy.

## 10.4 BOTMASKOP

### 10.4.1 Location

Botmaskop, situated in the town of Stellenbosch, is divided into two sites, east and west (see Figure 28) south of the Helshoogte pas. The eastern site is bordered by the Rozendal residential area on the western boundary, while the Plumbago Cottage property borders the site on the southern boundary. The northern and eastern boundaries are adjacent to private farmlands. The western site is bordered by private farmlands on the southern and eastern boundaries, while the north and western boundaries are bordered adjacent the Helshoogte pas, across from the Ida's Valley Dam Area.

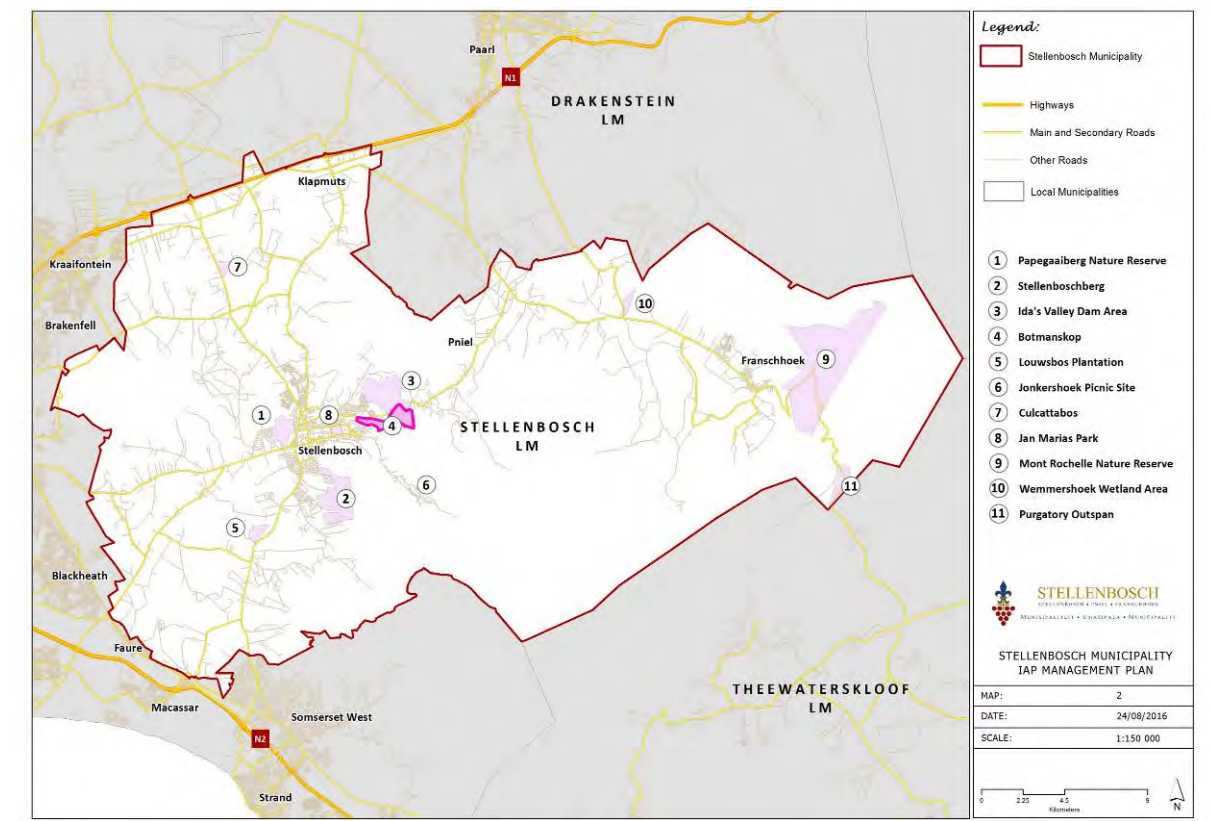


Figure 28: Botmaskop.

Botmaskop is classified as a hill with a height less than 300m. The area was previously used as pine and eucalyptus plantation with a size of approximately 46ha. The site is located at the base of the Jonkershoek mountain range and gradually rises from the southern boundary to the northern boundary.

### 10.4.2 Soil

The soil of Botmaskop is red and yellow with low-medium base status and rock with limited soils that is freely drained, structure-less soils and has a non-soil land classes.

### 10.4.3 Hydrology

Botmaskop is situated on the edge of the catchment described in the Ida's Valley Dam Area section above.

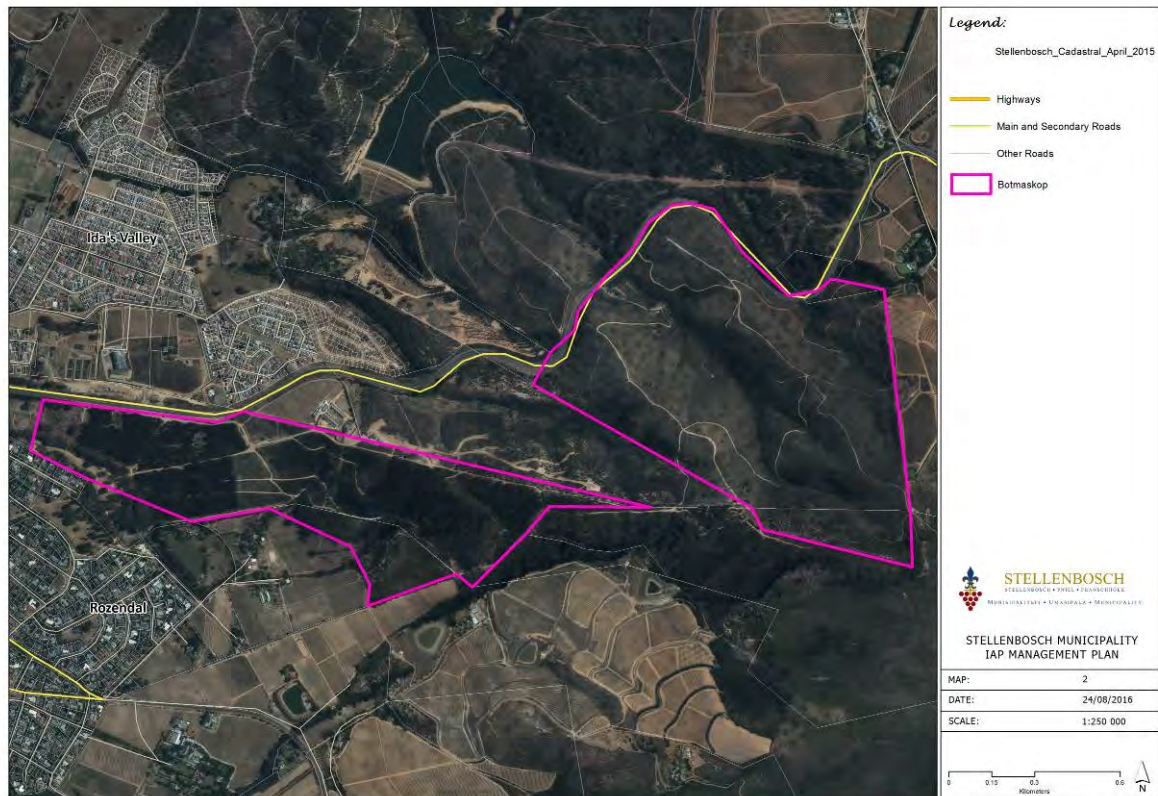


Figure 29: Local context of Botmaskop.

### 10.4.4 Vegetation

Botmaskop consists of two vegetation types, namely Boland Granite Fynbos and Cape Wineland Shale Fynbos. Both are vulnerable vegetation types within the Western Cape.

### 10.4.5 Current Alien Invasive Plant Infestation

The original vegetation of Botmaskop has been completely transformed for *Pinus pinea* and *Eucalyptus globulus* plantation purposes (Figure 30). The transformation and introduction of pine trees into the site, for extensive pine production intended for industrial use, has led to the complete infestation by these invasive alien plants. Though past removal efforts have taken place, the disturbance and lack of follow-up efforts has led to re-establishment of *P. pinea* and *E. globulus* recruitments within the cleared areas. Other invasive alien species such as *Acacia implexa*, *Acacia melanoxylon*, *Acacia mearnsii* and *Acacia pygnantha* is also located within the sites, though not to such an extent as *P. pinea* and *E. globulus*.

The original vegetation of Botmaskop in site 2 is not as severely infested as that of site 1 and the invasive alien plants (mainly *Pinus pinea* and *Eucalyptus globulus*) mostly occurs on the south-western slopes of the site (Figure 31 and 32). *Acacia implexa*, *Acacia melanoxylon*, *Acacia mearnsii* and *Acacia pygnantha* is also located within the sites, though also to a lesser extent as that of *P. pinea* and *E. globulus*. Invasion densities within the site increase within valleys and near water resources where conditions are more favourable. The less invaded areas, on the lower plains of the site, are natural fynbos vegetation, though infestation within these areas may increase if left unmanaged.

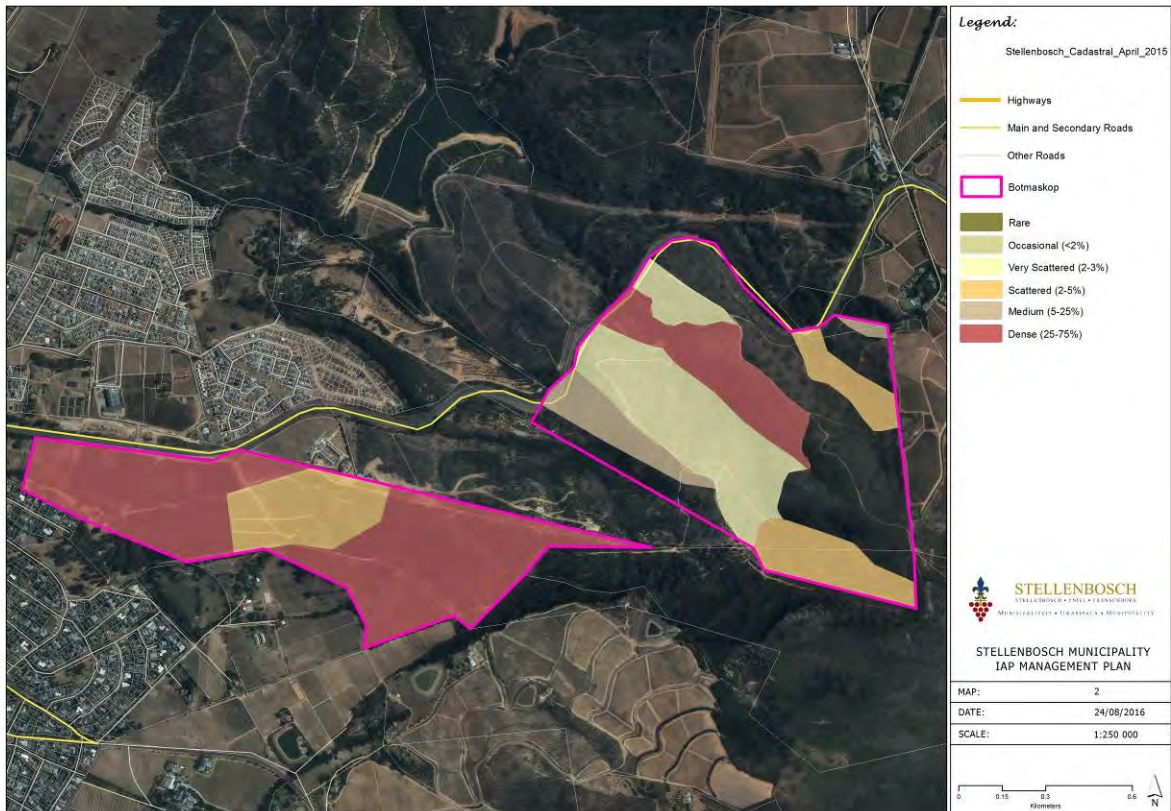


Figure 30: Alien invasive plant density (%) on Botmaskop.

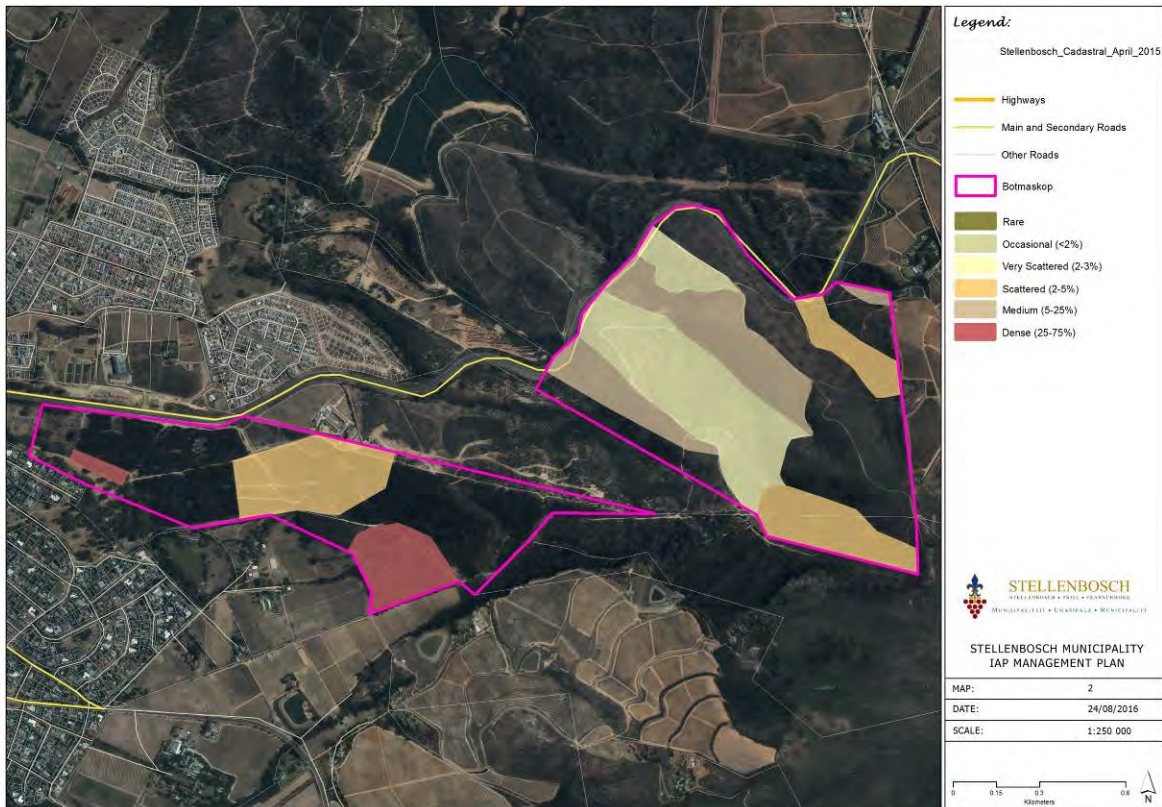


Figure 31: Eucalyptus grobolus density (%) on Botmaskop.

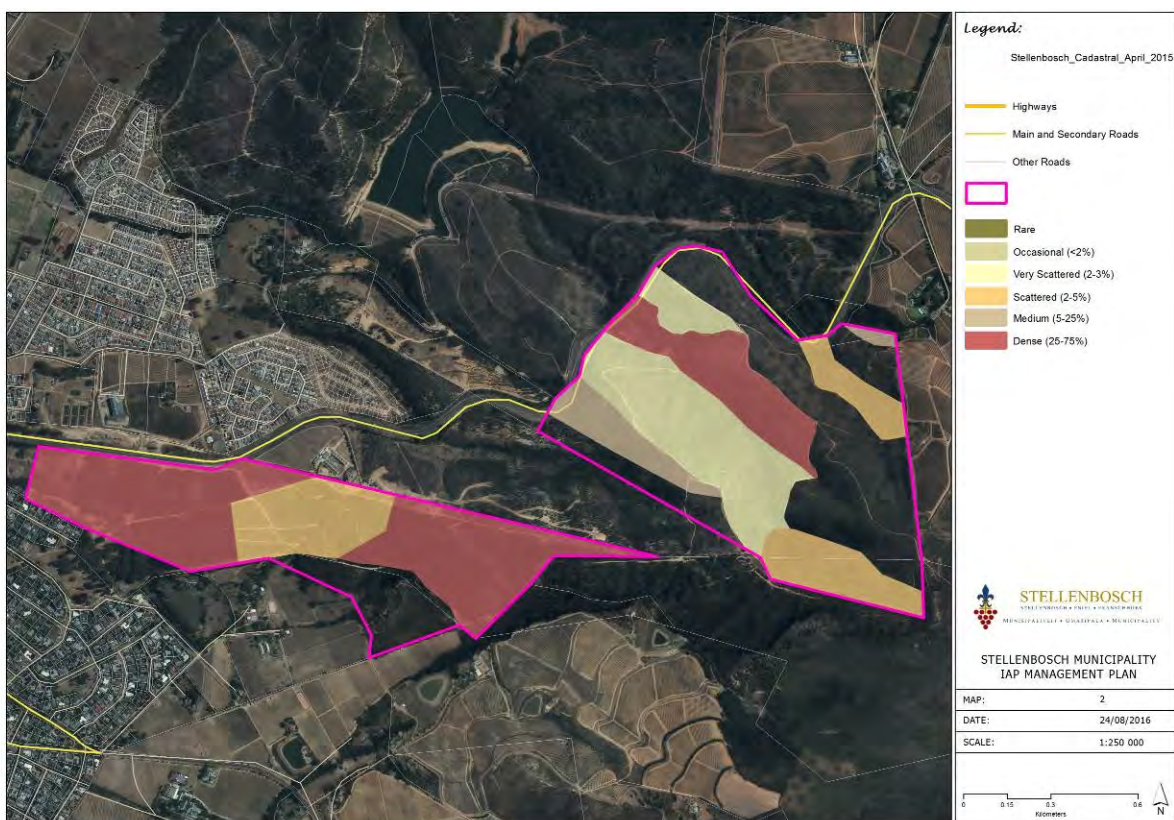


Figure 32: Pinus pinea density (%) on Botmaskop.

#### 10.4.6 Clearing Methods

Past clearing efforts have taken place within Botmaskop, though the lack of follow up strategies has led these clearing efforts to be unsuccessful. Thus, a comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants. When clearing an area that occurs on a slope, clearing strategies should initiate at the top of the slope and continue downwards. This strategy will reduce erosion effect as well as minimize the re-establishment process of invasive alien plants within the cleared areas from overhead populations. Strategic placement of large tree trunks is a further way to reduce soil erosion on slopes after invasive alien clearing.

Removal strategies for clearing invasive alien species on Botmaskop should be a combination of mechanical and chemical methods (Table 7, Section 11). Invasive alien plants should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw). All the invasive alien species that occur within Botmaskop have resprouting characteristics and herbicides should be applied to the cut surface. Each species has its own corresponding herbicide requirements to prevent resprouting and should be applied soon after tree felling (see Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts.

In Botmaskop, eastern site, zones A and B (Figure 33) have the potential to be transformed into a picnic site for local residents. Within these two zones removal of invasive alien species should be selective as to create an ambiance and aesthetic valued environment for visitors. This will also include possible rehabilitation of the areas and re-establishment of natural vegetation to increase these values within the zones. Rehabilitation and re-establishment of natural vegetation will also be necessary to re-establish the original vegetation within the site.

Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow-ups and monitoring should occur annually for a minimal of 5 years and remaining or re-established invasive species should be removed when located. Biomass should be disposed of at a distance from the property. Wood from large trees can be retailed as timber products.

#### 10.4.7 Zonation as an aid to the management of invasive alien plant species

A zonation map (Figure 33) was constructed as an aid for clearing alien invasive plants on Botmaskop. Roads on the property were used for zone boundaries. The eastern site is divided 5 large zones (A-E) and the western site into 6 large zones (A-F) and each larger zone further divided into smaller zones.

Clearing strategies within site the eastern should start on the northern boundary of sites A, C and E proceed southwards to sides B and D.



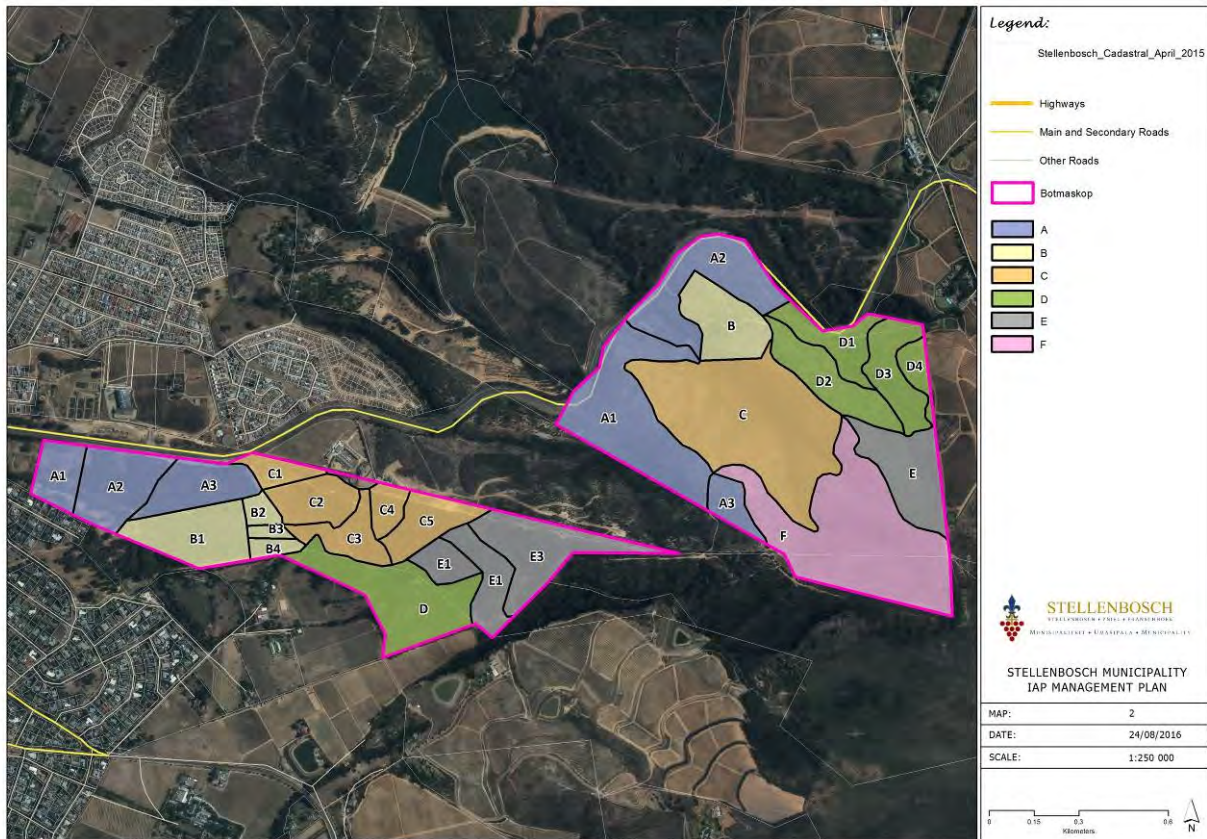


Figure 33: Zonation of Botmaskop as an aid for alien invasive plant clearing

For the western site clearing should start at on the highest point within zones C and E and continue downward in both northern and southern directions to the adjacent zones. Clearing should then start at the highest point of these zones and continue downward towards the next adjacent zones boundary. Once clearing of both sites has been concluded, follow-up and monitoring strategies should occur annually following the same strategy.

## 10.5 LOUWSBOS PLANTATION

### 10.5.1 Location

Louwsbos plantation is located along the R44 road between Stellenbosch and Somerset. The western boundary is border by several farms, including Kleinbosch lodge, Zimzala and Bellevue Manor Bed and Breakfast. On the southern boundary the property is bordered by a water storage dam and greenhouse agricultural property, while the western boundary is bordered by the Stellenbosch Flying club. De Zalze Golf Club borders the property on the northern boundary. Louwsbos Plantation is a recently acquired stone pine plantation and is approximately 47ha in size. The property is relatively flat terrain. There is a horse training farm and school located within the borders of the property and their training equipment is spread across the property.

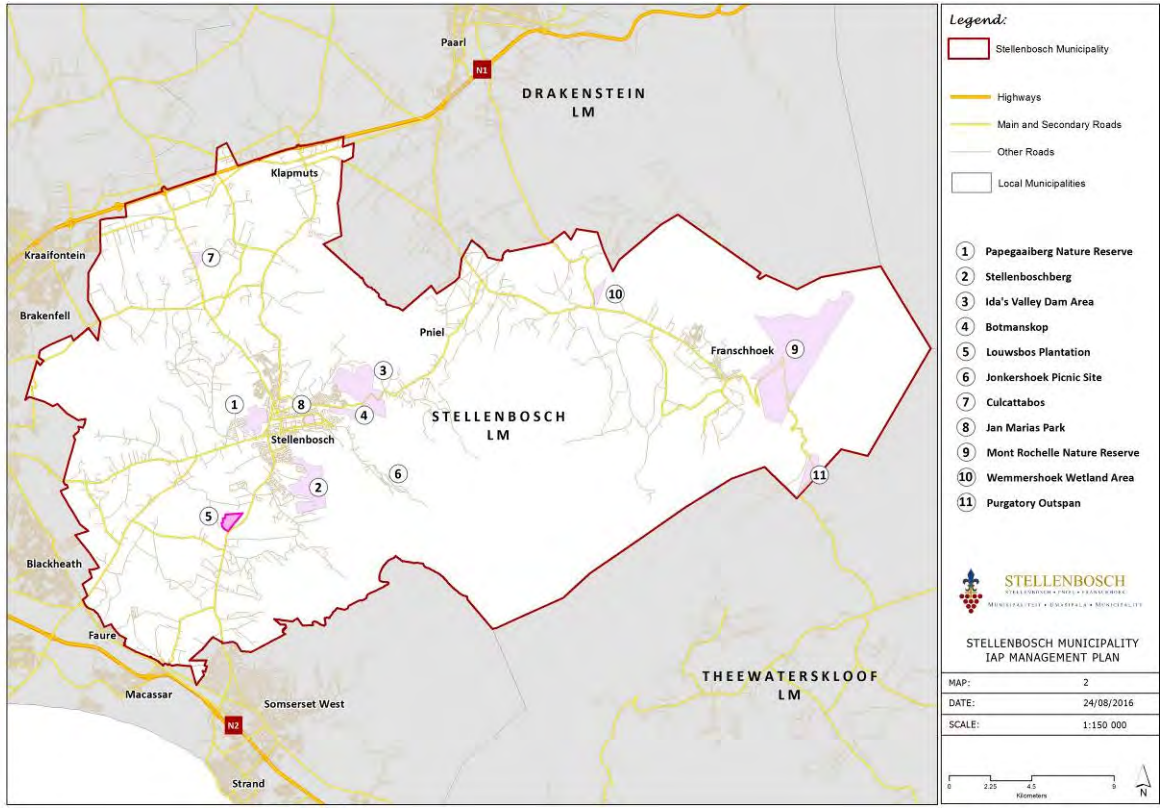


Figure 34: Louwsbos Plantation.

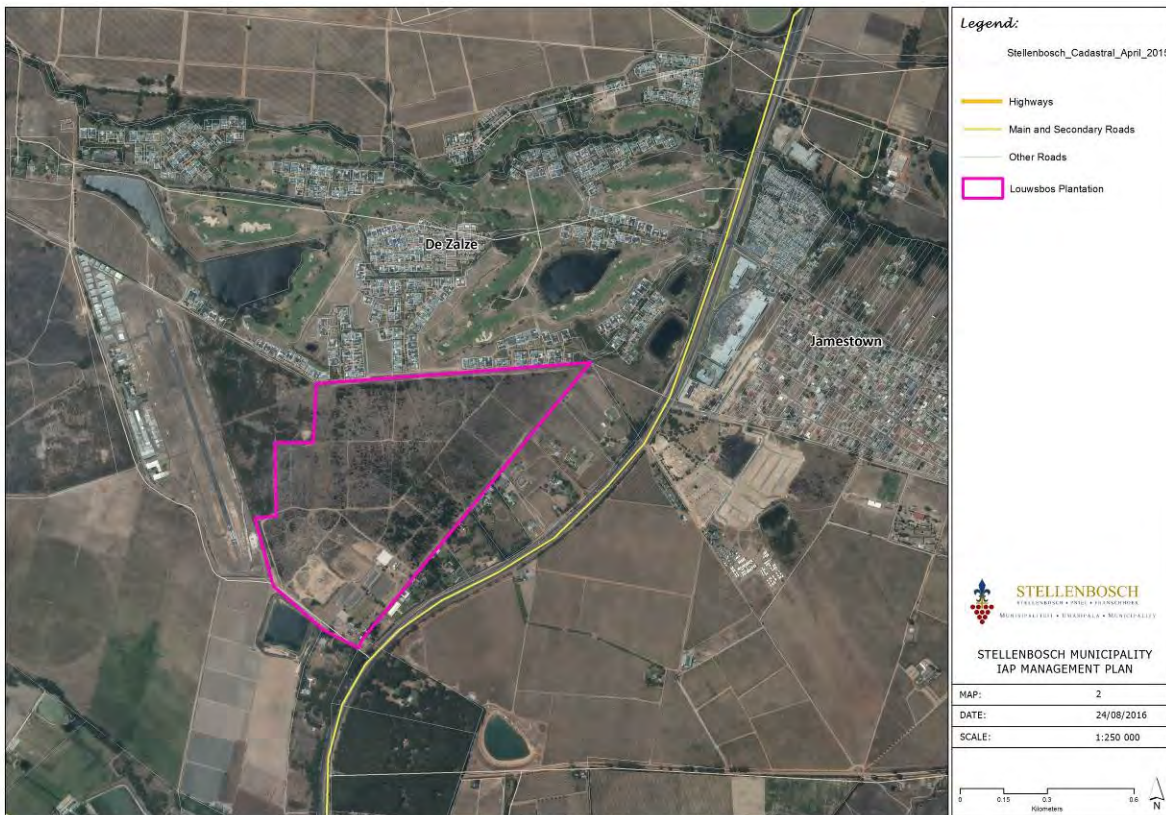


Figure 35: Local context of Louwsbos Plantation.

### 10.5.2 Soil

The soil is imperfectly drained soil which is shallow with a plinthic horizon. It is a marked clay accumulation which is strongly structured and is a non-reddish colour.

### 10.5.3 Hydrology

Though there are no rivers flowing through the property nor are there any wetlands within the property boundaries.

### 10.5.4 Vegetation

The Swartland Granite Renosterveld vegetation type of Louwbos plantation is an almost extinct vegetation type. Approximately 85% of all Swartland Granite Renosterbos has been transformed to agricultural and urbanization activities. Of the 15% remaining natural area, less than 1% is actively protected. The vegetation type contains about 127 Red Data plant species and 27 endemic plant species. The near extinct status of this vegetation type makes the conservation and rehabilitation efforts of its remaining remnants of high conservation importance (SANBI 2009).

### 10.5.5 Current Alien Invasive Plant Infestation

The natural vegetation originally occurring in Louwbos plantation has been completely transformed for pine plantation purposes. The transformation and introduction of pine trees into the site, for extensive pine production intended for industrial use, has led to the complete infestation by invasive alien plants. Though past removal efforts have taken place, the disturbance and lack of follow-up efforts has led to re-establishment of Pine tree recruitments as well as the establishment of new invasive species, such as *Acacia saligna*, into the site (Figure 36).

The Pinus species *Pinus pinea* is the main invading species in Louwbos plantation and occupies more than 75% of the sites land surface (Figure 37). This can mainly be attributable to the plantation history of the area, consequently filling the seed bank with pine seeds over the plantation period. New seedlings sprout from the seed bank when vacant space becomes available after harvesting or clearing activities.

The infestation of *Acacia saligna* is less severe and covers only approximately 8.3% of the property (Figure 38), though the fast spreading nature of the species (via wind or human dispersal from already established populations) may lead to high infestation in the area if left unmanaged.

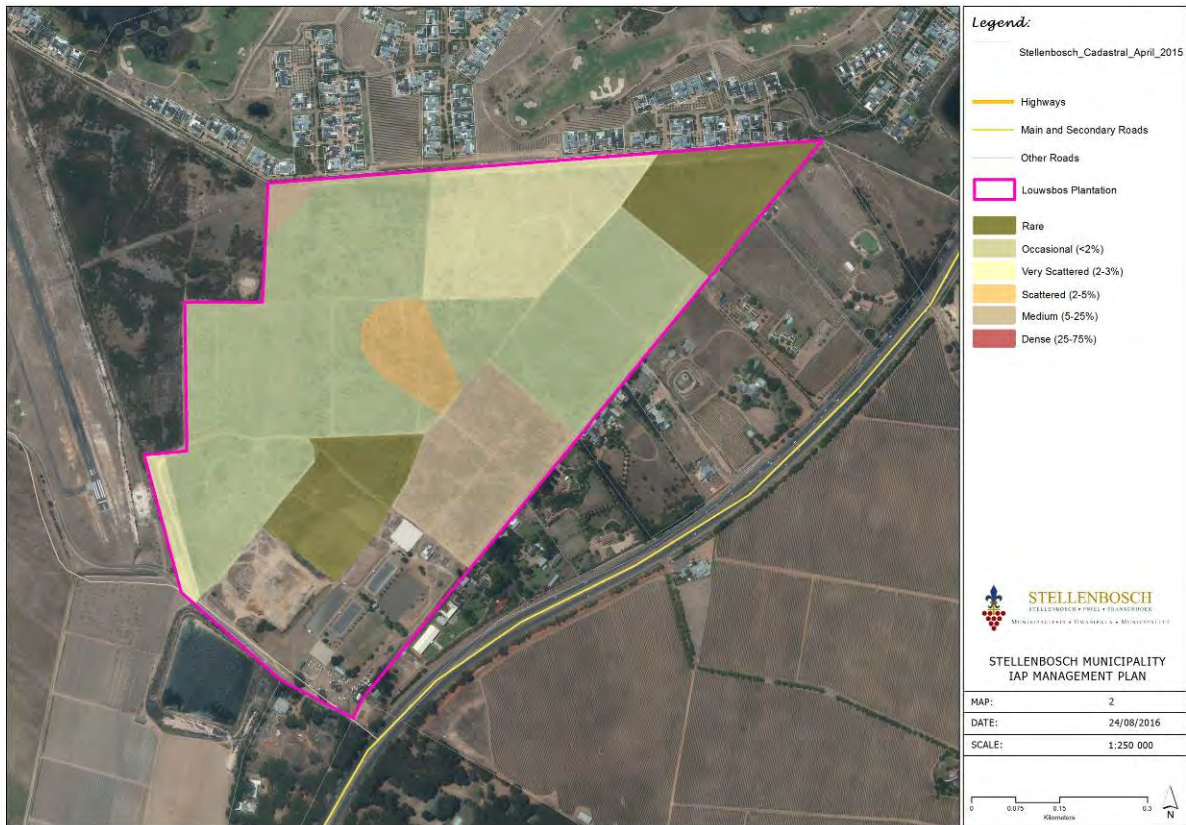


Figure 36: Alien invasive plant density (%) of Louwsbos Plantation.

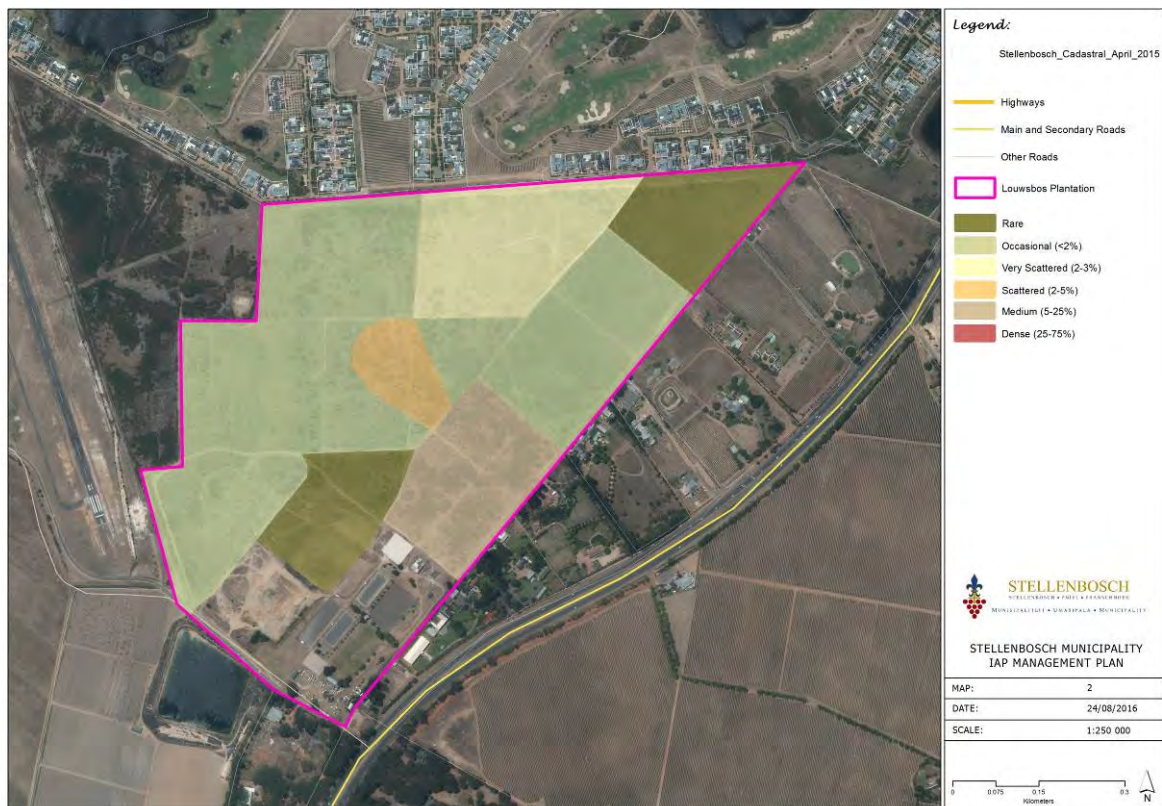


Figure 37: Pinus pinea density (%) of Louwsbos Plantation.



Figure 38: *Acacia saligna* density (%) of Louwsbos Plantation.

### 10.5.6 Clearing Methods

Past clearing efforts have taken place within Louwsbos plantation, though the lack of follow up strategies has led these clearing efforts to be unsuccessful. Thus, a comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants.

Removal strategies for clearing invasive alien species in Louwsbos plantation should be a combination of mechanical and chemical methods (Table 7, Section 11). Both *Pinus pinea* and *Acacia saligna* should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw). Both *P. pinea* and *A. saligna* have resprouting characteristic and herbicides should be applied to the cut surface. Each species has its own corresponding herbicide requirements to prevent resprouting activities and should be applied soon after tree felling (see Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts. Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow ups and monitoring should occur annually and remaining or re-established invasive species should be removed when located. Biomass should be disposed of at a distance from the property. Wood from large trees can be retailed as timber products.

### 10.5.7 Zonation as an aid to the management of invasive alien plant species

A zonation map (Figure 39) was constructed as an aid for clearing alien invasive plants on the Louwsbos Plantation siet. Roads on the property were used as zone boundaries. The property is divided into 6 large zones (A-F) and each larger zone is further divided into smaller zones. Clearing of alien invasive plants in Louwsbos Plantation should start at the western boundary of zone A1 and move in a north eastern direction towards A2. Continue to clear zones A2 to A4. When Zone A is cleared, continue onto zones B1 and C1, then D1 and finally E1 and F1 and finish clearing in zone F3. Repeat this working cycle when conducting monitoring and removal of re-establish alien species.

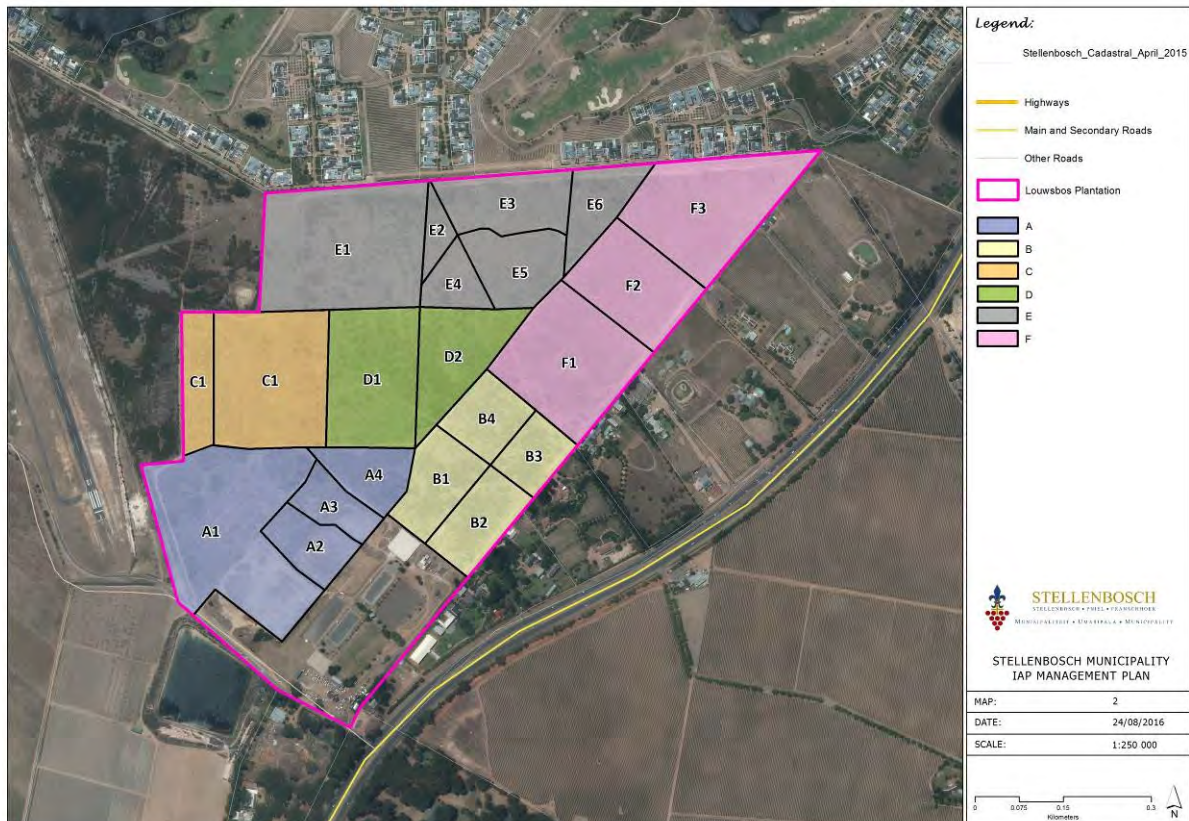


Figure 39: Zonation of Louwsbos Plantation as an aid for alien invasive plant clearing

## 10.6 JONKERSHOEK PICNIC SITE

### 10.6.1 Location

Jonkershoek Picnic Site is located within the valley between the Stellenbosch and Jonkershoek Mountain ranges and is accessible along the Jonkershoek road. The entrance to the picnic area is 1800m before the entrance of the Jonkershoek Nature Reserve, on the western side of the road. The property is bordered by the Eerste River to the south and by the Jonkershoek Road to the north. The eastern boundary is bordered by the Oki Jooste Camp Site.

The property is approximately 8ha in size and is relatively flat. The site is open to the public and there are braai and lavatory structures within the site.

### 10.6.2 Soil

The soil of Jonkershoek Picnic site consists of Lithosols, rocky with limited soil.

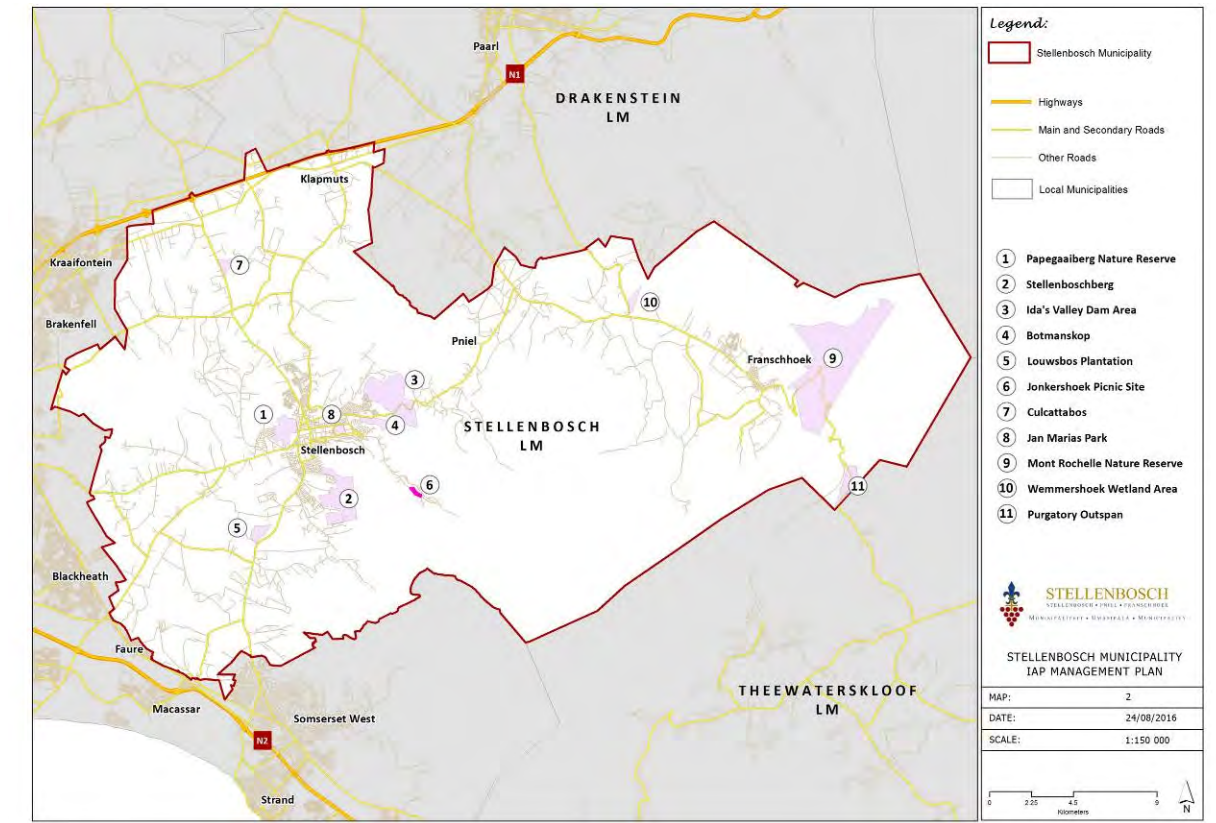


Figure 40: Jonkershoek Picnic Site.

### 10.6.3 Hydrology

Jonkershoek Picnic Site is bordered by the Eerste River, which originates within the Jonkershoek mountain range. Three rivers, also originating within the mountain range, enter the Eerste River above the Jonkershoek Picnic site. These rivers are, in order of entering with the Eerste River, the Lambrechtsbos River, the Adolskloof River and Bosboukloof River.

### 10.6.4 Vegetation

Jonkershoek Picnic site is located within the Boland granite fynbos vegetation type. Boland granite fynbos has 56 Red Data plant species and 23 endemic plant species. There are approximately 62% remaining natural areas, of which 14% is protected in the Hawequas, Hottentots Holland and Paarl Mountain Nature Reserve. The 38% area lost has been transformed into vine orchards (SANBI 2009).

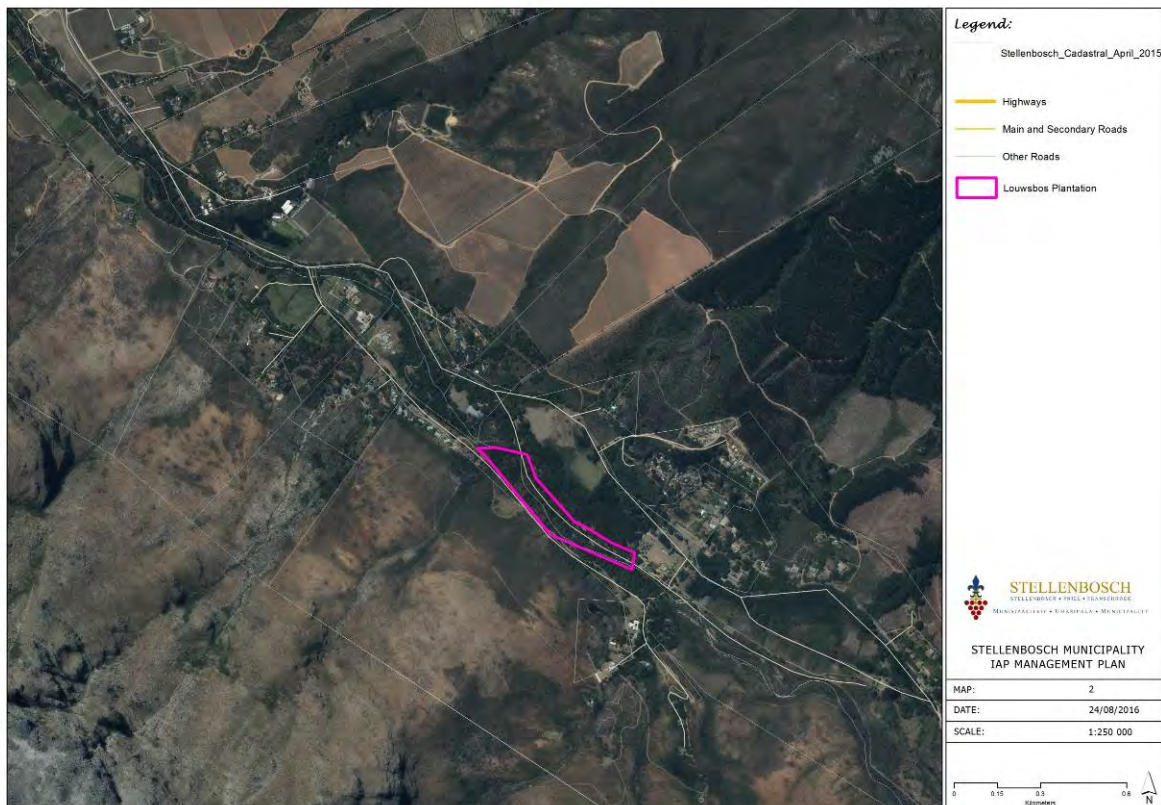


Figure 41: Local context of Jonkershoek Picnic Site.

### 10.6.5 Current Alien Invasive Plant Infestation

The natural vegetation originally occurring at Jonkershoek Picnic Site has been completely transformed by the large invasive trees that occur there (Figure 42). These invasive plants include *Acacia mearnsii*, *Acacia saligna*, *Rubus fruticosus*, *Robinia pseudoacacia*, *Populus canescens*, *Pinus pinea*, *Paraserianthus lophantha* and *Pittosporum undulatum*. The density of invasion is higher on the banks of the Eerste River.

### 10.6.6 Clearing Methods

The ambiance and aesthetic value provided by the tall trees makes Jonkershoek Picnic Site a popular picnic area for visitors. The complete removal of these trees will thus be regarded as undesirable. Selective clearing of invasive alien species will be the best removal strategy in order to decrease invasive species impact on the natural environment as well as keeping the ambiance and aesthetic value of the site. Invasive species with the highest negative environmental impact potential should be selected for removal. These species are *Acacia saligna*, *Acacia mearnsii*, *Acacia pygnantha*, *Acacia melanoxylon*, *Paraserianthus lophantha*, *Rubus fruticosus* and *Robinia pseudoacacia*. Clearing strategies should start at the area within the site from which the river enters the property and move downstream. This will minimize the re-establishment process of invasive alien plants within the cleared areas from overhead populations.





Figure 42: Alien invasive plant density (%) of Jonkershoek Picnic Site.

Removal strategies for clearing invasive alien species in Jonkershoek Picnic Site should be a combination of mechanical and chemical methods (Table 7, Section 11). Young trees should be removed mechanically by uprooting and large trees should be removed mechanically by tree felling of larger trees (via axe or chainsaw). The following species has resprouting characteristics and herbicides should be applied to the cut surface:

- *Acacia saligna*;
- *Acacia mearnsii*;
- *Acacia pygnantha*;
- *Acacia melanoxylon*;
- *Rubus fruticosus*;
- *Robinia pseudoacacia*.

*Paraserianthus lophantha* does not resprout and chemical methods are thus not necessary. The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts. Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow-ups and monitoring should occur annually for a minimal of 5 years and remaining or re-established invasive species should be removed when located. The remaining invasive alien plants (such as *Populus canescens* and *Pinus pinea*), should be continuously monitored to ensure their negative environmental impacts do not increase. If these environmental impacts do increase, these species should also be removed.

Further recommendations for clearing strategies along the Eerste River includes collaborating with farmers and landowners downstream from Jonkershoek Picnic Site to clear invasive alien species along the river as an attempt to increase stream flow and thus water availability within the Jonkershoek area.

**10.6.7 Zonation as an aid to the management of invasive alien plant species**

A zonation map (Figure 43) was constructed as an aid for clearing alien invasive plants on Jonkershoek Picnic Site. The property boundaries and road was used for zone boundaries. The property is divided into 4 large zones (A-D).

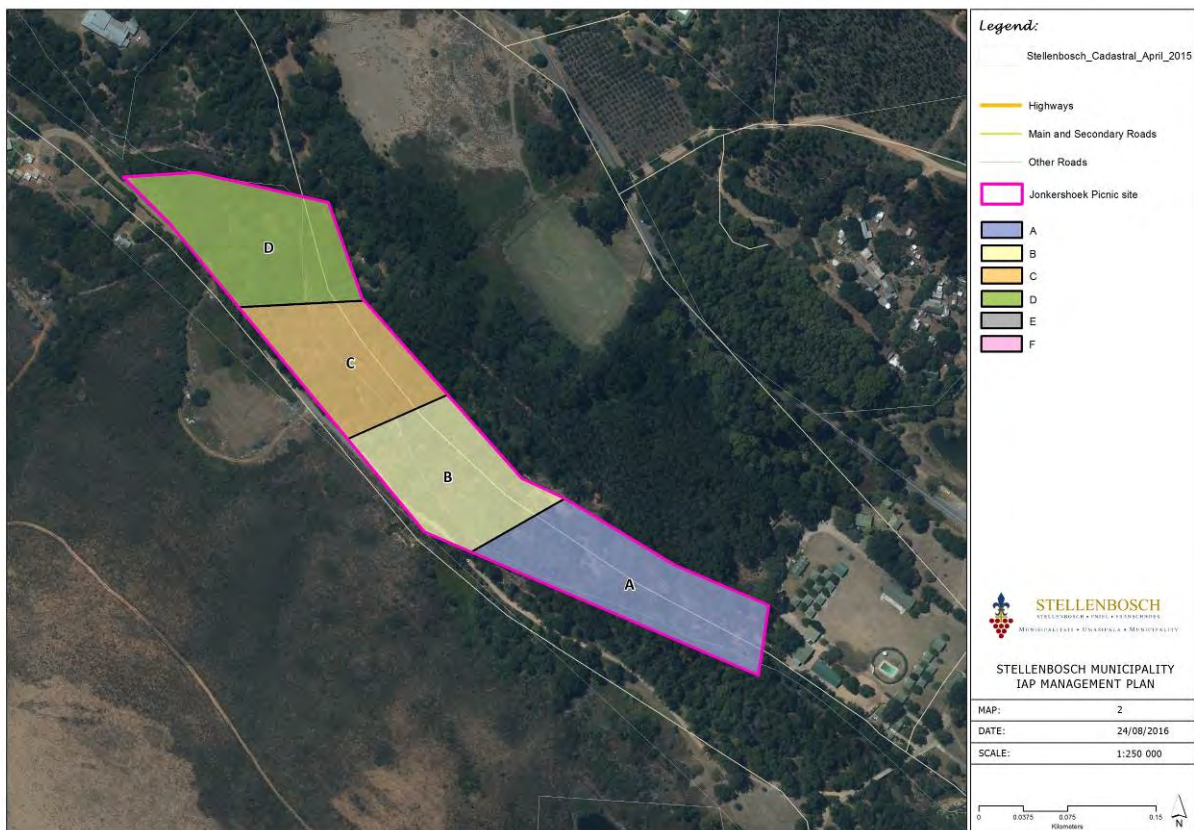


Figure 43: Zonation of Jonkershoek Picnic Site as an aid for alien invasive plant clearing.

Clearing of alien invasive plants on Jonkershoek Picnic Site should start at the north-western boundary of zone A and move in a south-eastern western direction towards zone B. Continue to clear zones B, C to D. Repeat this working cycle when conducting monitoring and removal of re-establish alien species.

## 10.7 CULCATTABOS

### 10.7.1 Location

Culcattabos borders the R304 to the north of Koelenhof and covers an area of approximately 40ha. Culcattabos is surrounded by privately owned agricultural land that is actively farmed. Because of this the area is highly transformed.

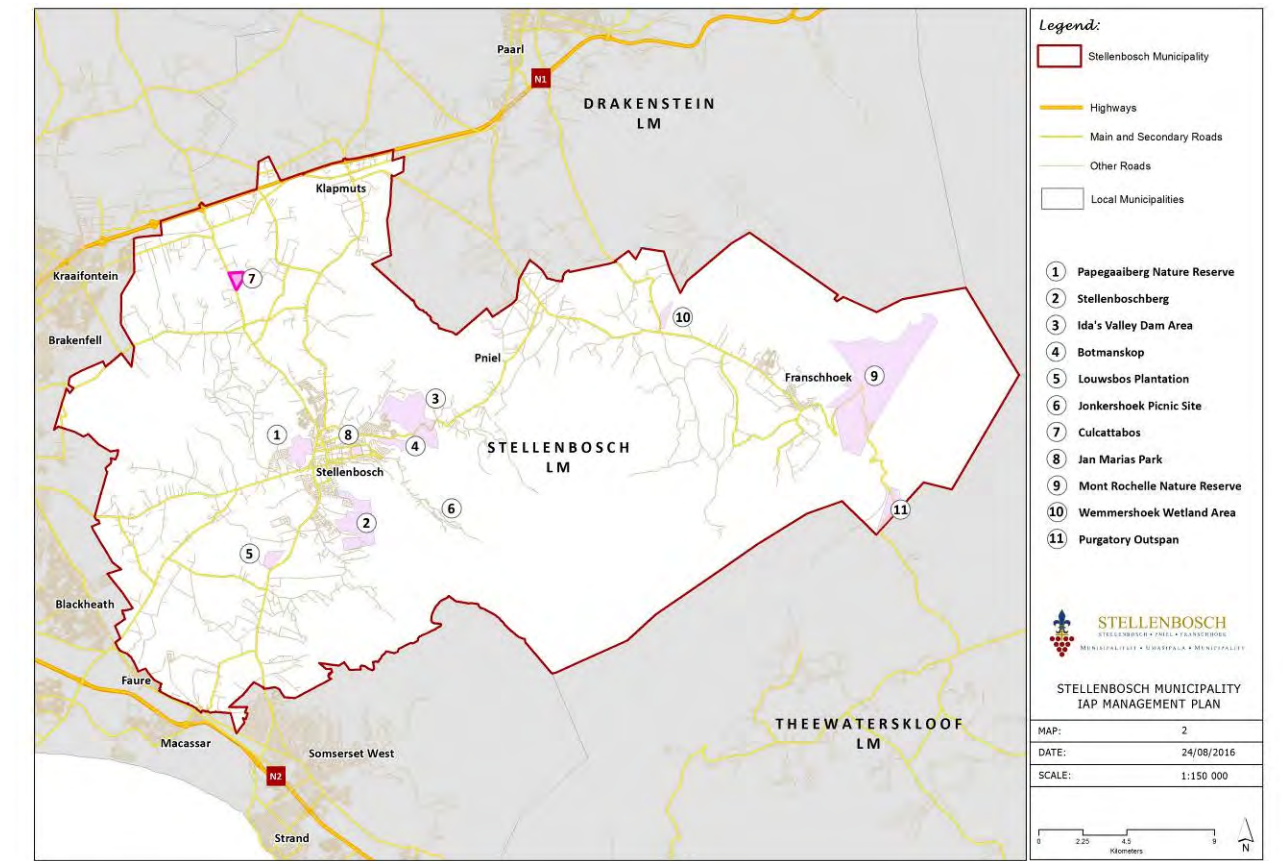


Figure 44: Culcattabos.

A stream that joins the Plankenbrug towards Stellenbosch town flows past the eastern portion of the site.

### 10.7.2 Current Alien Invasive Plant Infestation

Culcattabos is heavily with *Eucalyptus globulus* across the whole of the property.

### 10.7.3 Clearing Methods

A comprehensive management strategy needs to be followed to ensure successful clearing of invasive alien species on Culcattabos, especially due to the degree of infestation in the area and the

maturity thereof. Such a management strategy includes initial clearing methods with several follow-up and monitoring efforts to ensure successful clearing of invasive alien plants.

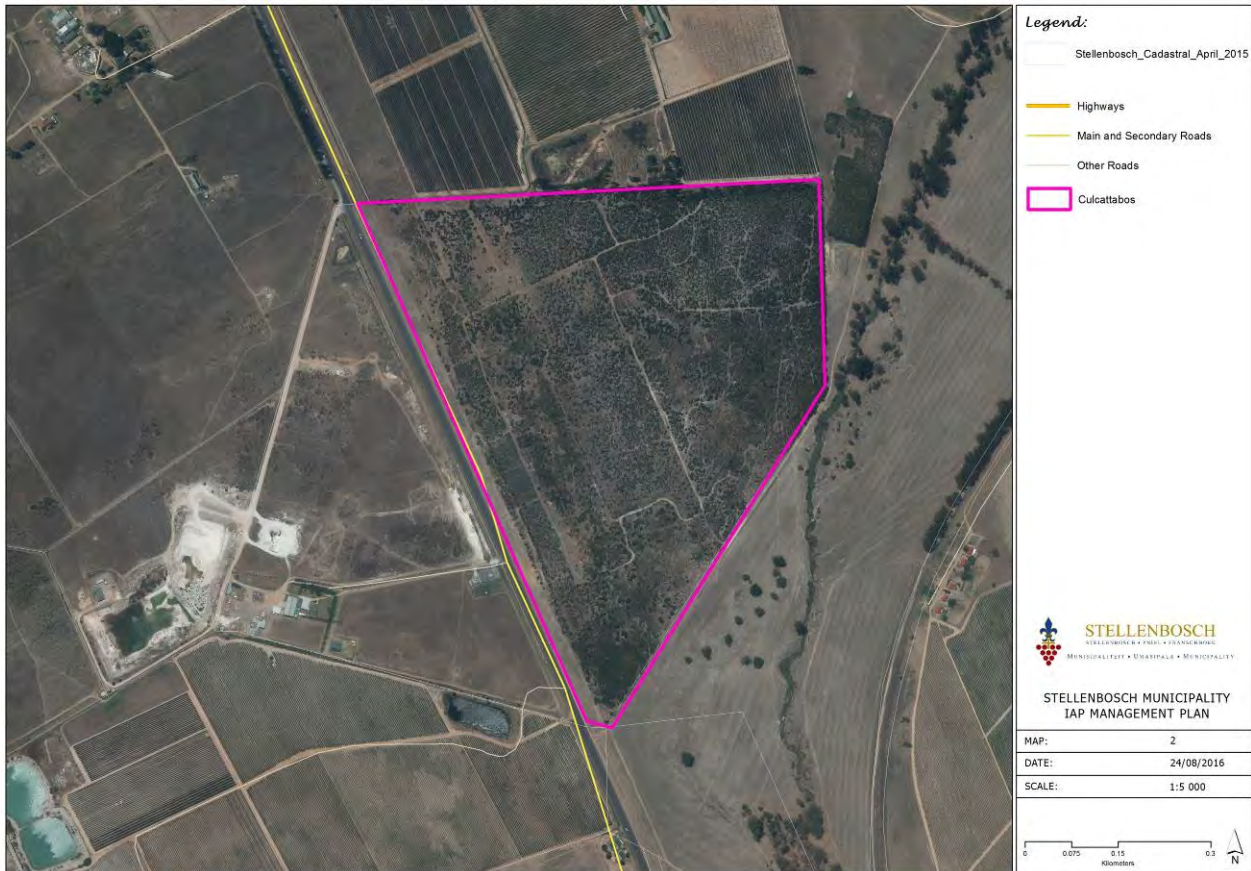


Figure 45: Culcattabos.

Removal strategies for clearing invasive alien species on Culcattabos should be a combination of mechanical and chemical methods (Table 7, Section 11). Trees should be removed mechanically by uprooting young plants and tree felling of larger trees (via axe or chainsaw). Herbicides should be applied to the cut surface soon after tree felling (see Table 7, Section 11). The use of herbicides may have negative effects on the health of soil composition and the natural ecosystem and should thus be used with caution and in reasonable amounts. Continuous follow-up and removal of new seedlings after the initial clearing efforts are essential in order to clear the property of invasive alien plants. Follow ups and monitoring should occur annually and remaining or re-established invasive species should be removed when located. Biomass should be disposed of at a distance from the property. Wood from large trees can be retailed as timber products.

**10.7.4 Zonation as an aid to the management of invasive alien plant species**

A zonation map (Figure 46) was constructed as an aid for clearing alien invasive plants on the Culcattabos site. The property boundaries and road was used for zone boundaries. The property is divided into 3 large zones (A-C).

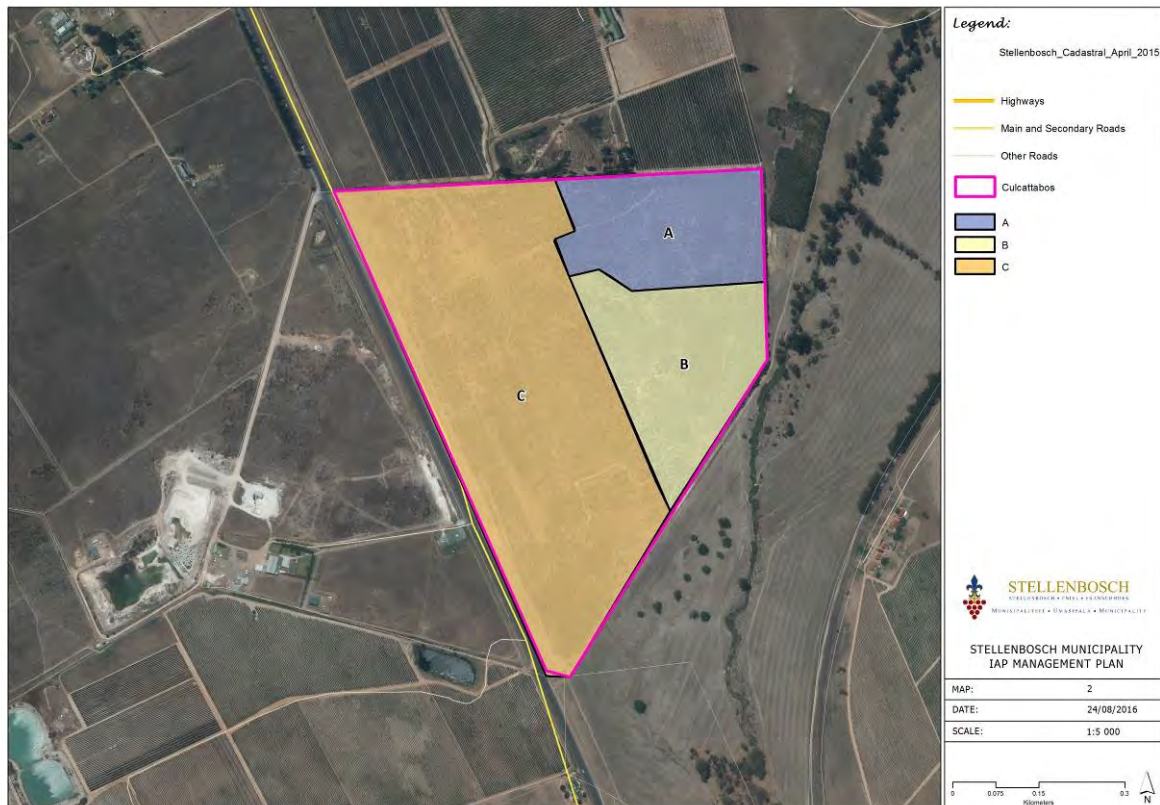


Figure 46: Zonation of Culcattabos as an aid for alien invasive plant clearing.

Clearing of alien invasive plants at Culcattabos should start at the north-eastern corner of zone A and move in a south-western direction towards C. Repeat this working cycle when conducting monitoring and removal of re-establish alien species.

## 10.8 JAN MARAIS NATURE RESERVE

### 10.8.1 Location

Jan Marais Nature Reserve is situated within the town of Stellenbosch and covers an area of about 23ha. There are private residential properties adjacent the reserves north, east and south boundaries, though a road separates the reserve with the north and east residential properties. Along the western border, separated by a road, is the Stellenbosch High School. The terrain is relatively flat and open to the public during the day.

### 10.8.2 Soil

The soil is imperfectly drained sandy soil and is mostly comprised of rock with limited soil.

### 10.8.3 Hydrology

There are no rivers that flow through the reserve, though there is a wetland found within the boundaries of the reserve. This wetland is an important habitat for many species such as dragon and damselflies.

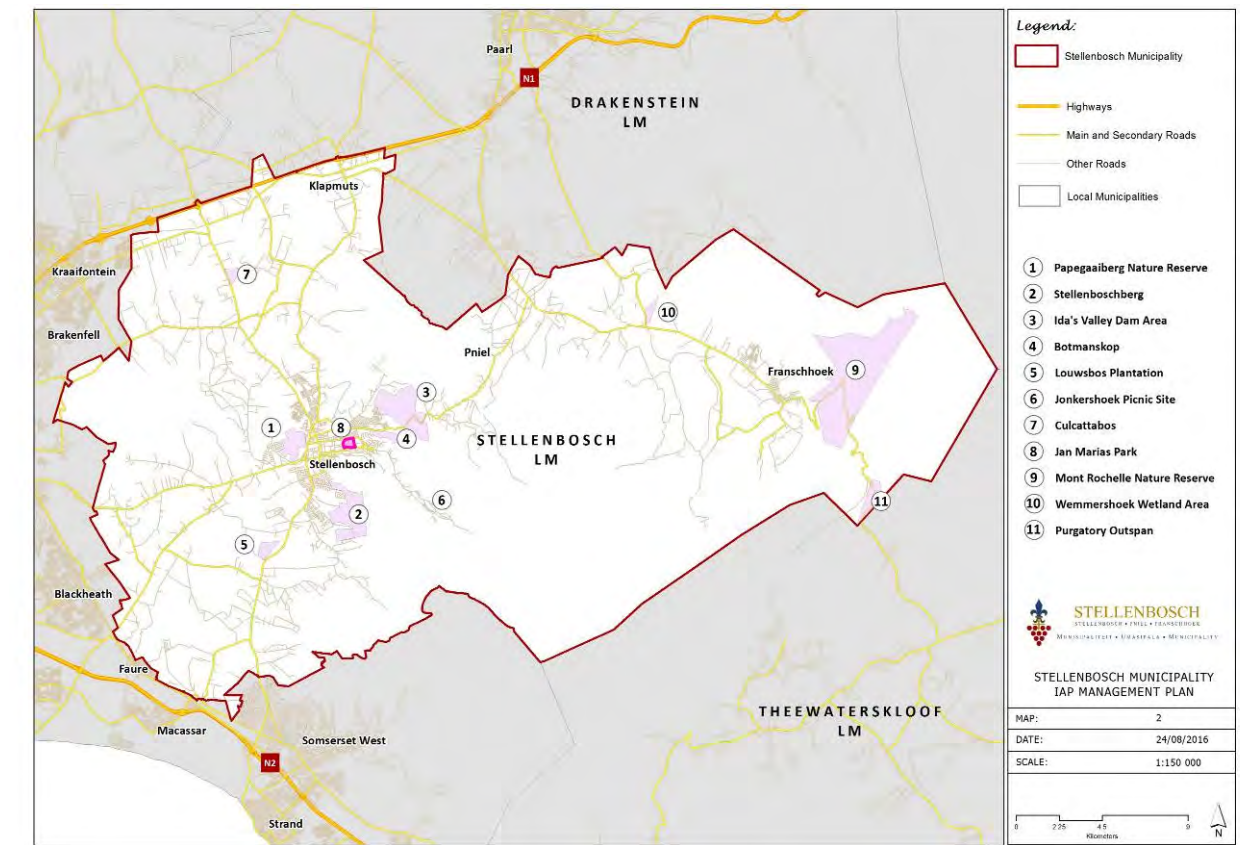


Figure 47: Jan Marais Nature Reserve.

### 10.8.4 Vegetation

The reserve is a formal land based protected area with Boland Granite Fynbos vegetation type, which is highly threatened due to extensive farming activities and thus falls within the vulnerable terrestrial ecosystem. Boland granite fynbos has 56 Red Data plant species and 23 endemic plant species. There are approximately 62% remaining natural areas, of which 14% is protected in the Hawequas, Hottentots Holland and Paarl Mountain Nature Reserve.

### 10.8.5 Current Alien Invasive Plant Infestation

There are no major infestations of alien invasive plants within Jan Marais Nature Reserve with the exception of several large *Eucalyptus globulus* and large *Pinus pinea* trees along the northern border of the reserve. Continuous monitoring regularly occurs to ensure no regrowth of any invasive species.

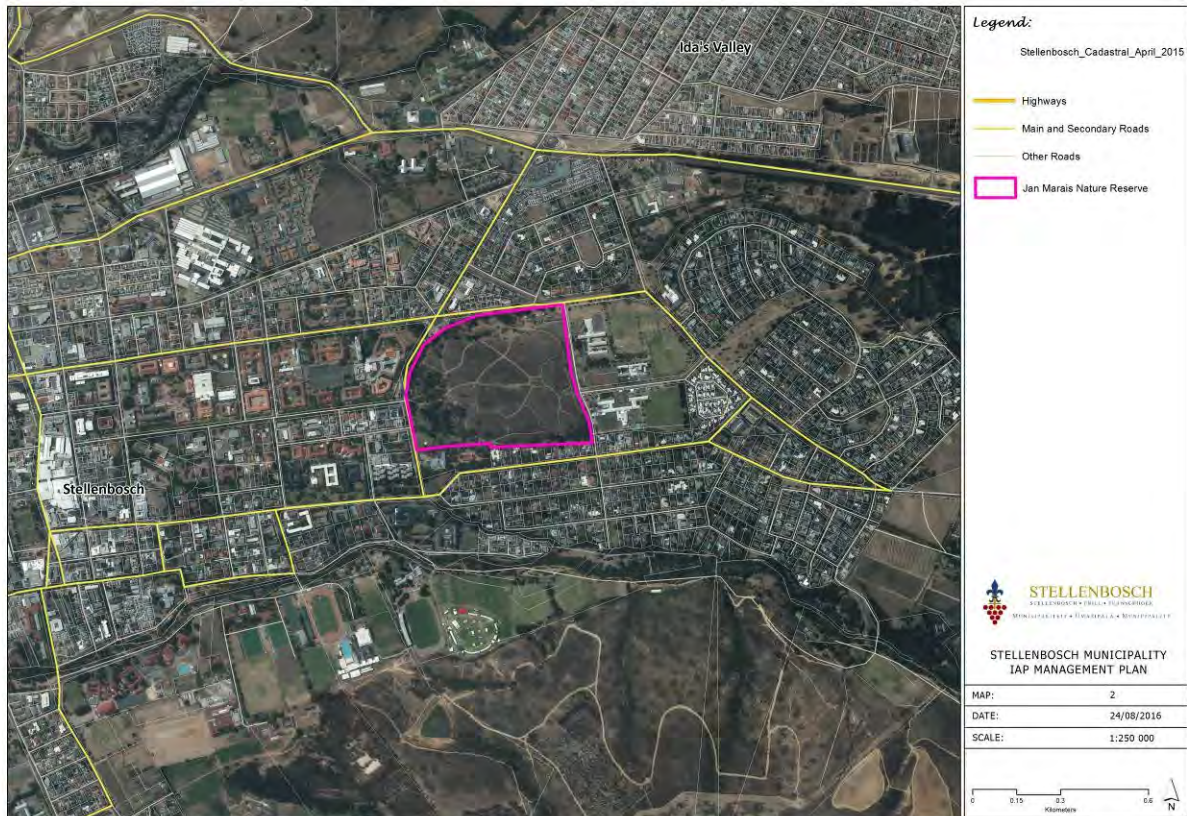


Figure 48: Jan Marais Nature Reserve.

### 10.8.6 Clearing Methods

Jan Marais Nature Reserve is by all standards cleared of alien invasive species, though continuous monitoring for possible establishment of invasive species should occur regularly. If an alien invasive plant is found within the reserve it should be removed (by uprooting it) and disposed of away from the reserve.

## 10.9 MONT ROCHELLE NATURE RESERVE

### 10.9.1 Location

Mont Rochelle Nature Reserve occurs on the edge of the town Franschoek, on the slope of the Franschoek Mountain Range. The northern boundary of the reserve is virtually at the uppermost height of the mountain range, while the eastern boundary, which runs along the Lambrechts road. The southern boundary borders a plantation while a private residential area to the south and a pine plantation to the north border the western boundary.

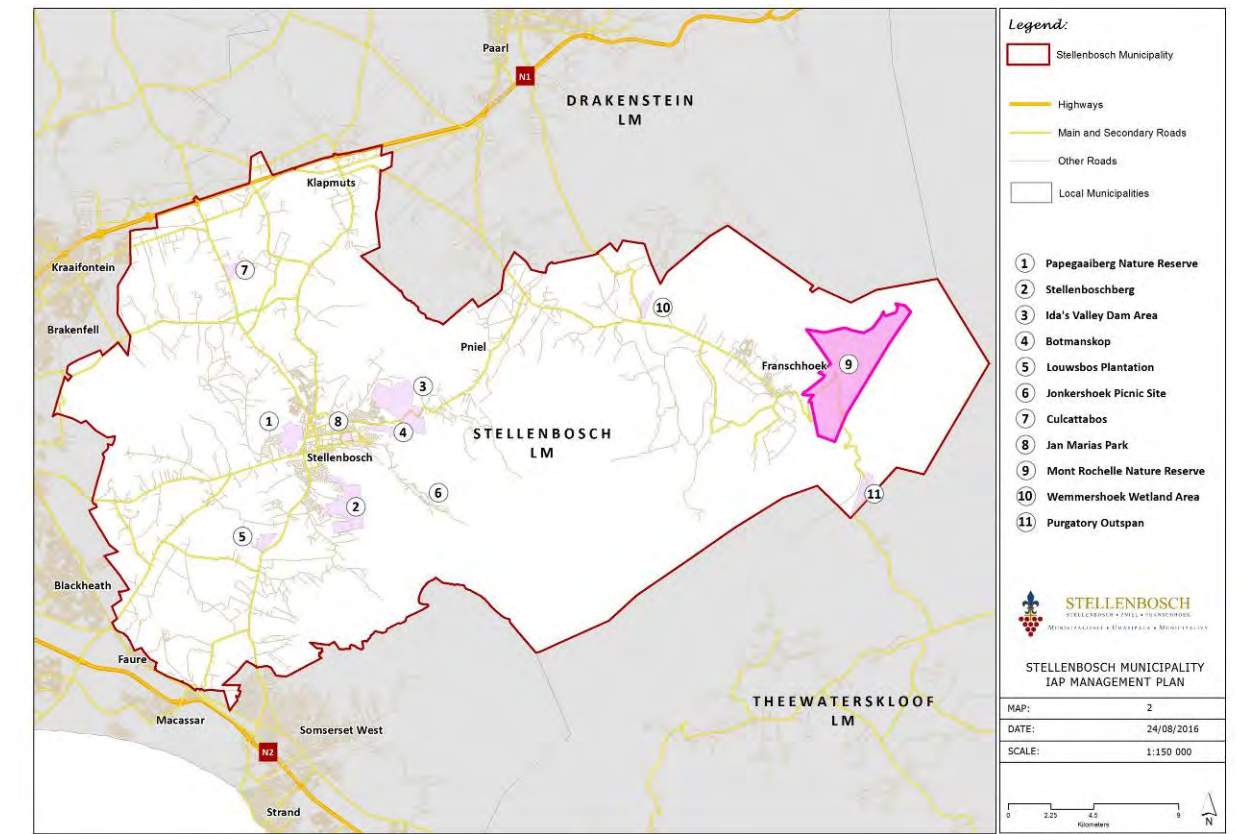


Figure 49: Mont Rochelle Nature Reserve.

Mont Rochelle Nature Reserve is approximately 95ha in size. The reserve gradually increases in height up the slope of the Franschhoek Mountain.

### 10.9.2 Soil

The soil type is rock with minimum development soils that is usually shallow on hard, weathered rock and is with/without intermediate diverse soils. It has a non-soil land class with structure less and poorly drained soils. Lime is rare or absent in the landscape.

### 10.9.3 Hydrology

Two rivers are located in close proximity of the Reserve. De Toits River flows adjacent the eastern boundary (which is up slope from the reserve) and the Franshoek River.

### 10.9.4 Vegetation

The Boland granite fynbos and Kogelberg sandstone fynbos vegetation types found in Mont Rochelle Nature Reserve are of significant conservation importance. Boland granite fynbos has 56 Red Data plant species and 23 endemic plant species. There are approximately 62% remaining natural areas, of which 14% is protected in the Hawequas, Hottentots Holland and Paarl Mountain Nature Reserve. The 38% area lost has been transformed into vine orchards.



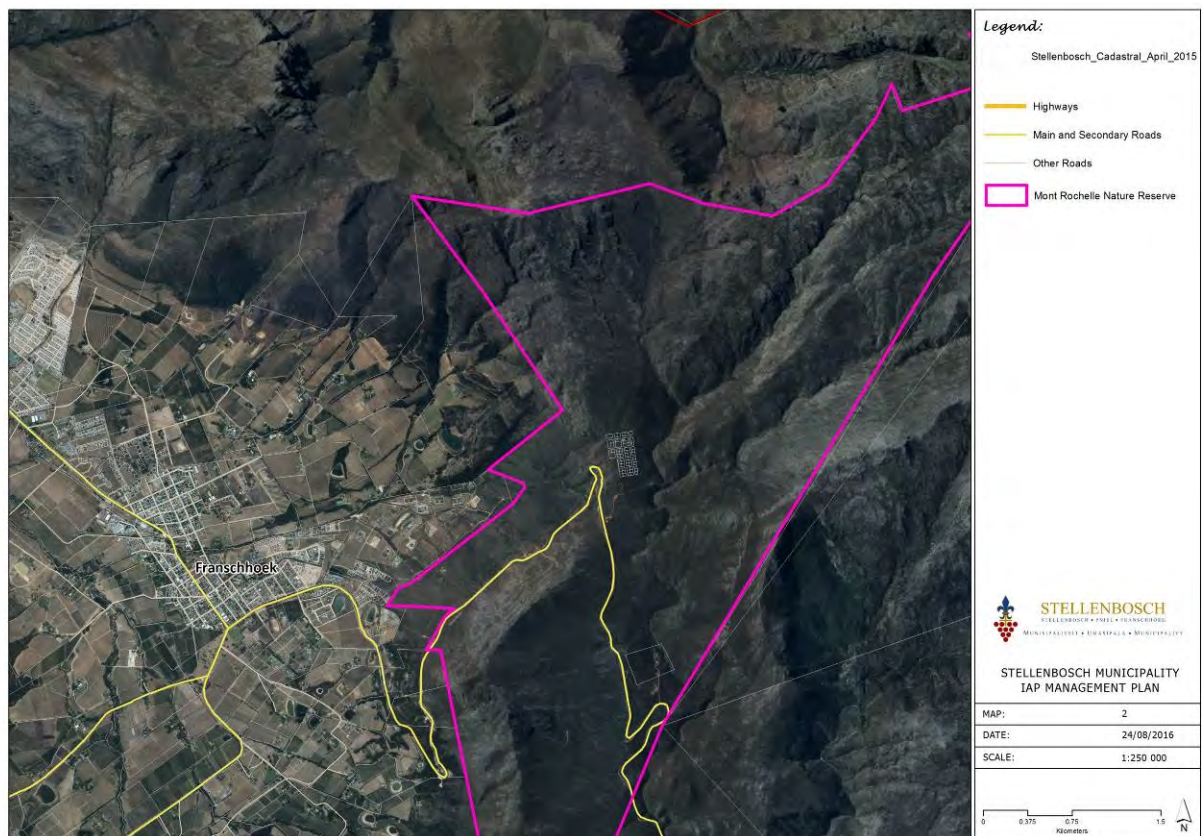


Figure 50: Local context of Mont Rochelle Nature Reserve.

Kogelberg sandstone vegetation is well protected with a remaining 88% of which approximately 58% is actively protected in the Hottentots Holland and Groenlandberg nature Reserve as well as the Kogelberg Biosphere Reserve. There are 99 Red Data plant species located within the Kogelberg sandstone fynbos, and has 176 endemic plant species (SANBI 2009).

#### 10.9.5 Current Alien Invasive Plant Infestation

There are no major infestations of alien invasive plants within Mont Rochelle Nature Reserve. The presence of *Pinus* species, *Eucalyptus* species, *Acacia Mearnsii* and *Acacia melanoxylon* is classified as exceedingly rare and was thus not recorded. Continuous monitoring, however, should transpire regularly to ensure no regrowth of any invasive species occurs. If a species sprouts it is removed almost immediately and destroyed.

#### 10.9.6 Clearing Methods

Mont Rochelle Nature Reserve is by all standards cleared of alien invasive species. The Pine plantation, located on the northern side of the southern western boundary, and the Eucalyptus plantation, located on the southern boundary, has potential to spread into the reserve, and continuous monitoring for possible establishment of invasive species should occur regularly. If an

alien invasive plant is found within the reserve it should be removed (by pulling the plant out) and disposed of away from the reserve.

## 10.10 WEMMERSHOEK WETLAND AREA

### 10.10.1 Location

Wemmershoek wetland area is located at the intersection of the R45 and the R301 at Wemmershoek on the way to Franschoek town. The whole of the property is approximately 40ha in size sloping towards the Franschoek River with a wetland at the lowest point.

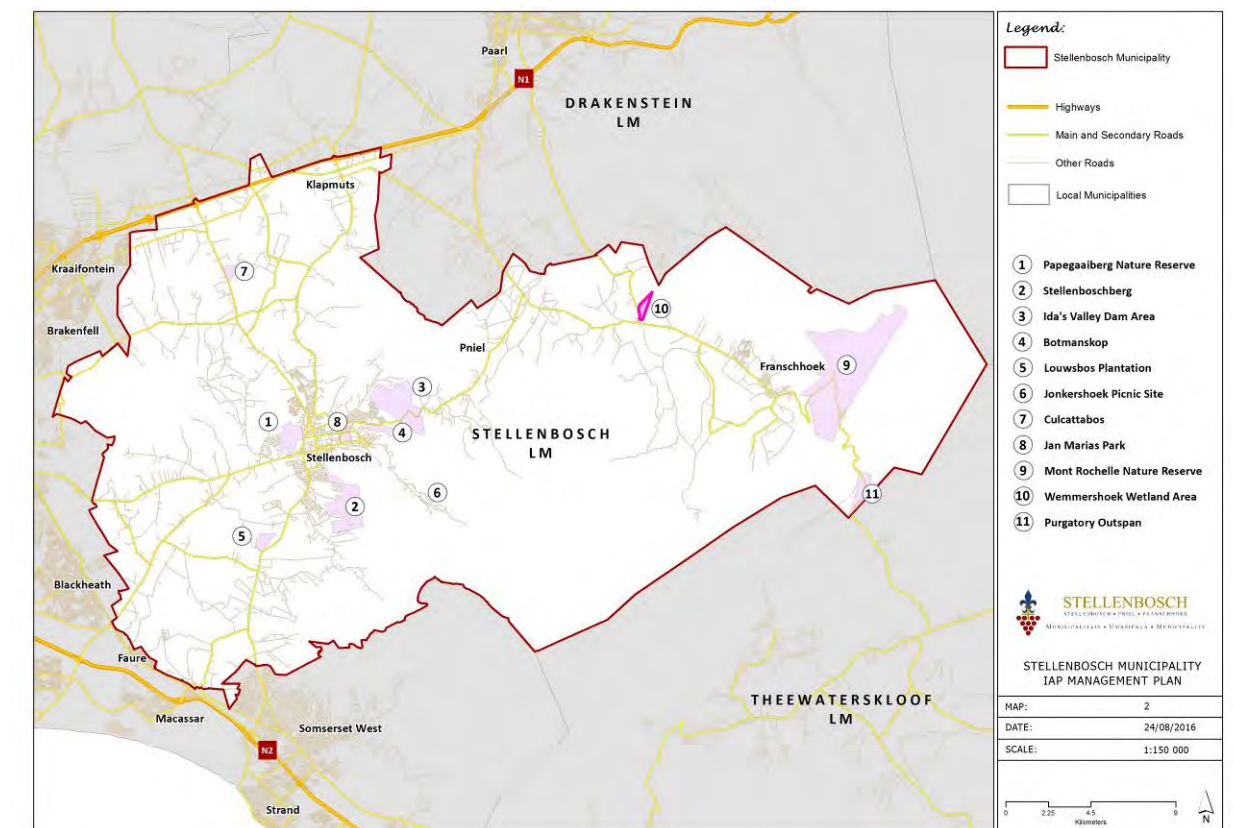


Figure 51: Wemmershoek Wetland Area.

### 10.10.2 Vegetation

Although the property has no formal protection status, a recent survey listed various Red Data plant species, especially in the vicinity of the wetland.

### 10.10.3 Current Alien Invasive Plant Infestation

There are no major infestations of alien invasive plants within the Wemmershoek wetland area.

Continuous monitoring, however, should transpire regularly to ensure no regrowth of any invasive species occurs. If a species sprouts it should be removed immediately and destroyed.

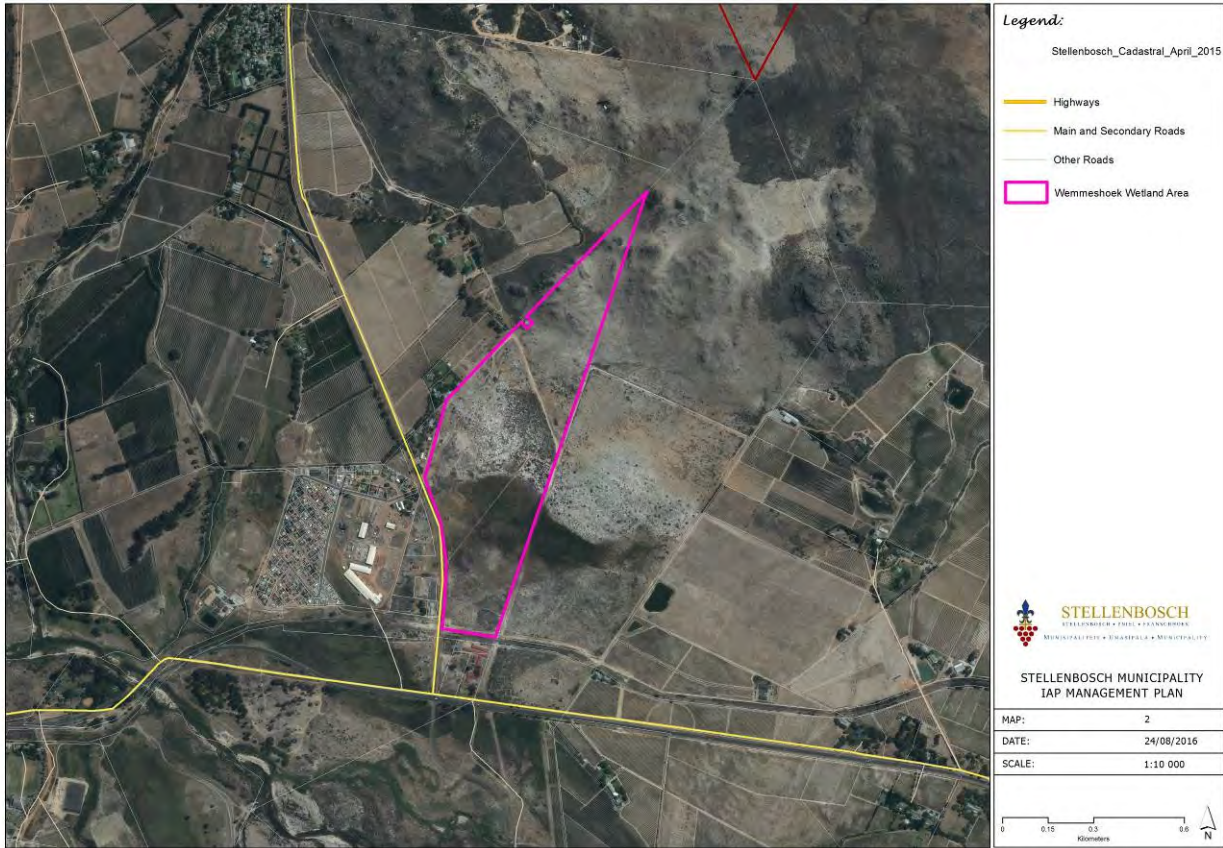


Figure 52: Wemmershoek Wetland Area.

### 10.10.6 Clearing Methods

Wemmershoek wetland area is by all standards cleared of alien invasive species. Continuous monitoring for possible establishment of invasive species should occur regularly. If an alien invasive plant is found within the area it should be removed (by pulling the plant out) and disposed of away from the property.

## 10.11 PURGATORY OUTSPAN

### 10.11.1 Location

Purgatory Outspan is located on the Theewaterskloof Dam's side of the Franschhoek Pass (see Figure 53 below). It is located at the foot of the pass on the municipal boundary and consists of an area of approximately 120ha.

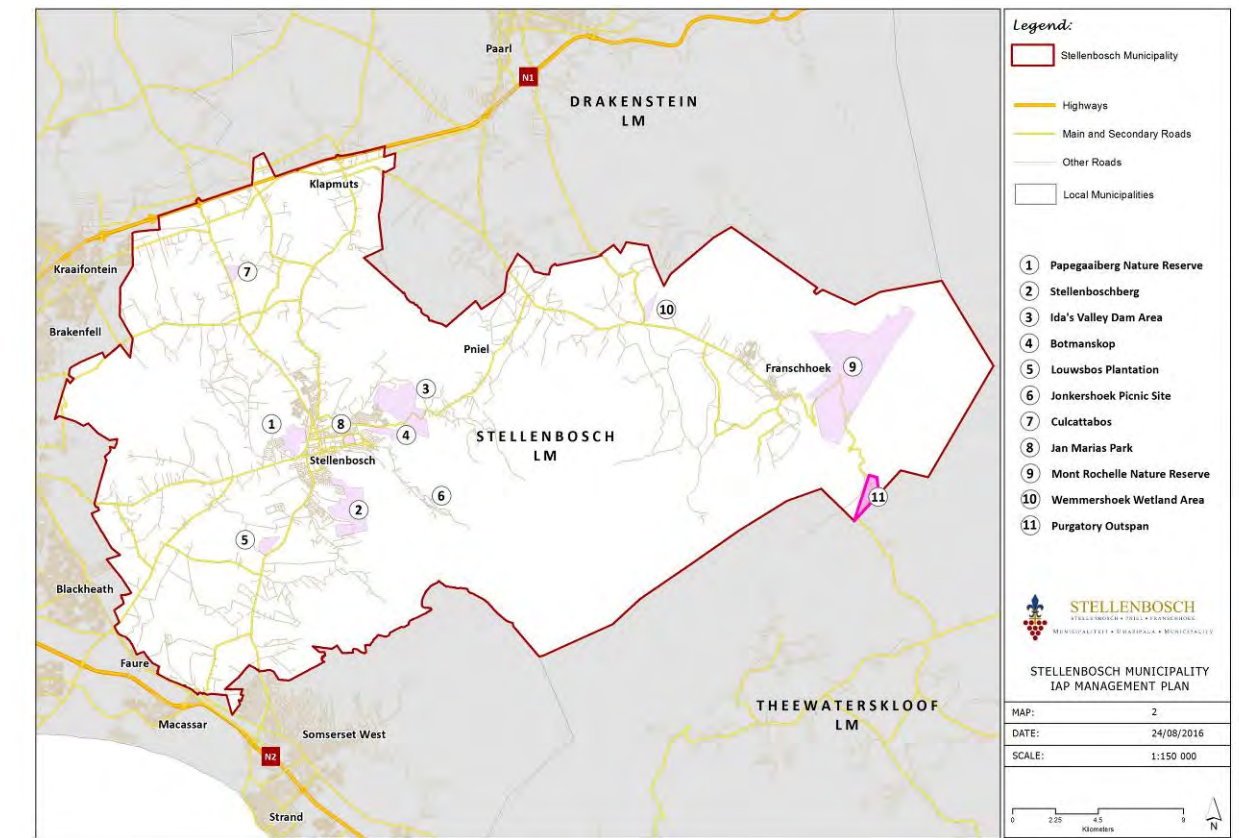


Figure 53: Purgatory Outspan.

### 10.11.2 Hydrology

Purgatory Outspan is located in a drainage area feeding the Theewaterskloof Dam.

### 10.11.4 Vegetation

The Boland granite fynbos and Kogelberg sandstone fynbos vegetation types found in the Purgatory Outspan area are of significant conservation importance. Boland granite fynbos has 56 Red Data plant species and 23 endemic plant species. There are approximately 62% remaining natural areas, of which 14% is protected in the Hawequas, Hottentots Holland and Paarl Mountain Nature Reserve. The 38% area lost has been transformed into vine orchards.

Kogelberg sandstone vegetation is well protected with a remaining 88% of which approximately 58% is actively protected in the Hottentots Holland and Groenlandberg nature Reserve as well as the Kogelberg Biosphere Reserve. There are 99 Red Data plant species located within the Kogelberg sandstone fynbos, and has 176 endemic plant species (SANBI 2009).

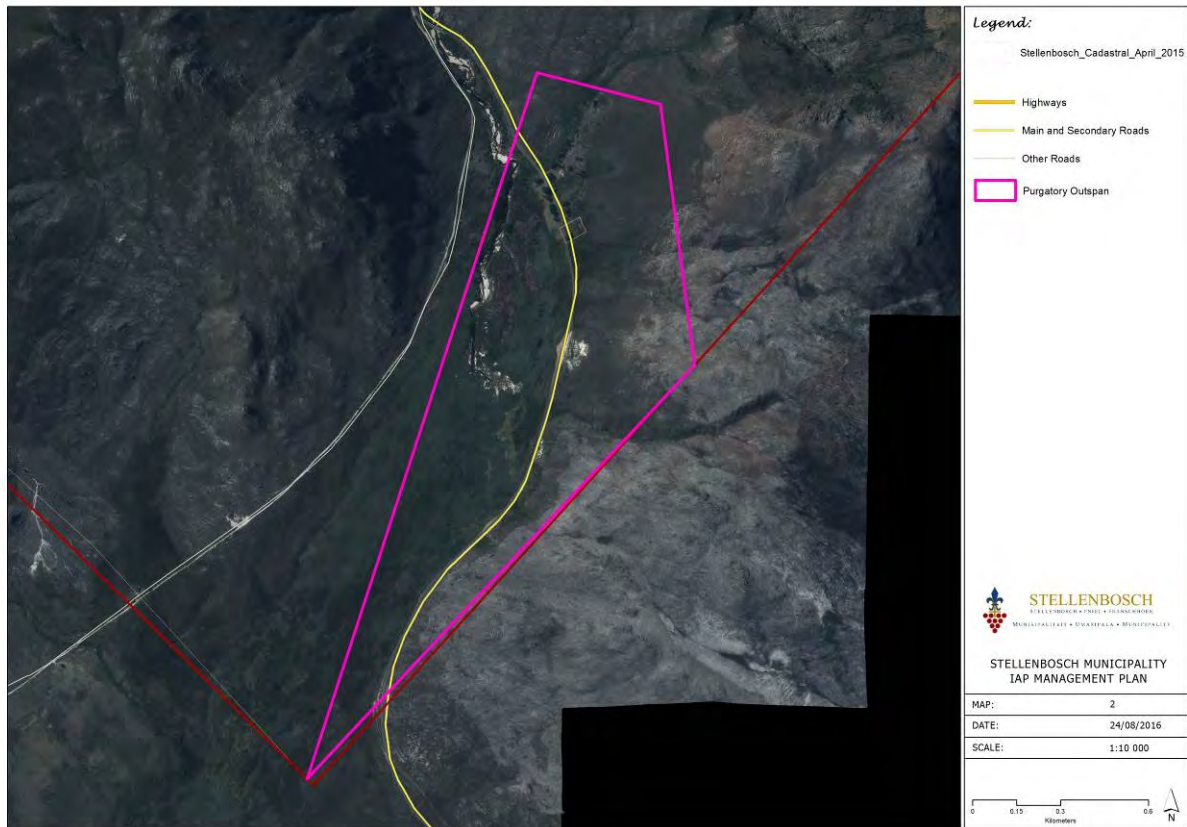


Figure 54: Local context of Purgatory Outspan.

**10.11.5 Current Alien Invasive Plant Infestation**

There are no major infestations of alien invasive plants within the Purgatory Outspan area. Continuous monitoring, however, should transpire regularly to ensure no regrowth of any invasive species occurs. If a species sprouts it is removed almost immediately and destroyed.

**10.11.6 Clearing Methods**

The Purgatory Outspan area is by all standards cleared of alien invasive species. Monitoring for possible establishment of invasive species should occur regularly. If an alien invasive plant is found on the property it should be removed (by pulling the plant out) and disposed of away from the site.

## 11. STRATEGIES FOR CLEARING

Table 7: Control methods of alien invasive plant species occurring in the Stellenbosch Municipal Area<sup>23</sup>.

Species	Plant Invasion Impact	Control methods	Control Caution
<i>Acacia implexa</i> (Screw-pod wattle)	Screw-pod wattle is a fast growing tree and invades agricultural lands, planted forest and disturbed areas. It can become highly invasive if not controlled.	<b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling.  <b>Chemical:</b> There is no registered herbicide for this species.	There is no registered chemical for this species, thus mechanical removal of this species should be executed with caution.
<i>Acacia mearnsii</i> (Black Wattle)	Black wattle forms dense impenetrable 'jungle thickets' that suppresses indigenous vegetation.  When occurring along watercourses may reduce water flow.	<b>Mechanical:</b> Uproot and sever below junction of roots. Tree felling.  <b>Chemical:</b> Trees severed above ground should be treated with herbicides, such as 2,4,5-T in diesel oil. Glyphosphate can be used to control seedlings and saplings. <ul style="list-style-type: none"> <li>• CHOPPER (L3444), HATCHET (L7409). Use 1 l/10 l water. Apply to freshly cut stumps. Apply at least 10 ml per 100 mm of stump diameter.</li> <li>• ACCESS 240 LS (L4920), BROWSER (L7357). Use 150 ml + 50 ml Actipron Super or BP Crop Oil/10 ml water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> <li>• LUMBERJACK 360 SL (L7295), TIMBREL 360 SL (L4917). Use 300 ml + 50 ml Acrtipron Super or BP Crop Oil/10l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> </ul>	Do not fell, bulldoze or burn without immediate follow up with herbicides due to rapid resprouting.
<i>Acacia melanoxylon</i> (Blackwood)	Grows best in moist and cool situations and is most common in forests, on forest margins and along streams.	<b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling.  <b>Chemical:</b> Trees severed above ground should be treated with	The wood and ornamental products of this species is highly used. This may cause it to be continuously planted for harvesting reasons. Thus, management

<sup>23</sup>

Bromiow 2010; Striton 1978; Anon 2005

Species	Plant Invasion Impact	Control methods	Control Caution
	It is a strong competitor with indigenous forest and riverine woodland trees and in shaded areas its seedlings are able to flourish. This species also spreads vegetatively by suckers from its long surface roots.	herbicides. <ul style="list-style-type: none"> <li>• CONFRONT 360 SL (L7314). Use 400 ml + 50 ml Actipron Super/10 l water. Apply to cut surface of low cut stumps within 3 hours of felling.</li> <li>• TIMBREL 360 SL (4917). Use 600 ml + 50 ml Acrtipron Super/10l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> </ul> <p><b>Biological:</b> Use as a long-term programme. Release of seed feeding weevil (<i>Melanterius maculatus</i>): attacks seeds of Black Wattle and reduces seed bank.</p>	of plantation of the species in highly important to prevent possible escape and establishment outside plantation borders.
<i>Acacia saligna</i> (Port Jackson)	Confined to coastal plains with mean annual rainfall of >250 mm. It is able to establish in dry areas as well as in the wetter areas, and the spread is affected by soil moisture, altitude and seed dispersal agents (mainly man and water).	<b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling. <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• CONFRONT 360 SL (L7314). Use 250 ml + 50 ml Actipron Super/10 l water. Apply to cut surface of low cut stumps within 3 hours of felling.</li> <li>• LUMBERJACK 360 SL (L7295), TIMBREL 360 SL (L4917). Use 300 ml + 50 ml Acrtipron Super or BP Crop Oil/10l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> </ul>	Port Jacksons reproduce rapidly after fire occurrences. Apply herbicides almost immediately after severing due to rapid resprouting. Port Jackson will rapidly spread to disturbed areas, thus continuous monitoring of disturbed areas are important.
<i>Acacia pygnantha</i> (Golden Wattle)	Less widely distributed and invasive as other wattles. Introduced as stabilizing agent. Replaces indigenous vegetation.	<b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling. <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• MOLOPO 500 SC (L5854) (Soil treatment). Use 1,5 l/2,25l water. Apply on the soil at the base of the target plant before or during rainy season. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x</li> </ul>	This species requires a combination of mechanical, chemical and cultural techniques when removed.

Species	Plant Invasion Impact	Control methods	Control Caution
		<p>2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 16 ml)</p> <ul style="list-style-type: none"> <li>• MOLOPO 800 SC (L7043) (Soil treatment). Use 937 g/3,752 l water. Apply on the soil at the base of the target plant. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x 2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 8 doses)</li> </ul>	
<i>Eucalyptus grandis</i> (Saligna gum)	<p>Eucalyptus species use a large amount of water, thus reducing stream flow and lowering water supply.</p> <p>Eucalyptus species are highly competitors and are able to outcompete indigenous species, thereby threatening local biodiversity.</p>	<p><b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling. Seedlings can be removed by hand and are also susceptible to fire.</p> <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• ROUNDUP MAX (L6790). Use 265 g/10 l water. Apply to cut surface of low cut stumps within 3 hours of felling.</li> <li>• LUMBERJACK 360 SL (L7295), TIMBREL 360 SL (L4917). Use 300 ml + 50 ml Acrtipron Super or BP Crop Oil/10l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> </ul>	Apply herbicides almost immediately after severing due to rapid resprouting.
<i>Paraserianthus lophantha</i>	This species forms monospecific stands and has altered the landscape in many areas where it occurs.	<p><b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling.</p> <p><b>Chemical:</b> This species does not resprout from burnt or cut stems and does not require herbiced application.</p>	Seedfeeding bio-control agents have not been affective and long-term follow-ups are needed to remove this species.
<i>Pinus pinea</i> (Stone Pine)	This species easily establishes in cool moist areas where they transform the landscape and reduce the carrying capacity of the area as well as increase fire risk.	<p><b>Mechanical:</b> Uprooting young plants (especially in moist soil). Uproot and sever below junction of roots. Tree felling.</p> <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• ROUNDUP MAX (L6790). Use</li> </ul>	Accumulation of fuel load increases the danger of fire.



Species	Plant Invasion Impact	Control methods	Control Caution
		<p>265g/10 l water. Apply to cut surface of low cut stumps within 3 hours of felling. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x 2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 16 ml)</p> <ul style="list-style-type: none"> <li>• MOLOPO 800 SC (L7043) (Soil treatment). Use 937g/3,752 l water. Apply on the soil at the base of the target plant. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x 2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 8 doses)</li> </ul>	
<i>Pinus pinaster</i> (Cluster Pine)	<p>Seedlings germinate easily and establish in cool, moist soil. Pine trees reduce carrying capacity of invaded areas such as mountain and lowland fynbos, and thus threaten native biodiversity.</p>	<p><b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling. Burn approximately 12 to 24 months after clearing to eliminate seedlings.</p> <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• ROUNDUP MAX (L6790). Use 265g/10 l water. Apply to cut surface of low cut stumps within 3 hours of felling. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x 2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 16 ml)</li> <li>• MOLOPO 800 SC (L7043) (Soil treatment). Use 937g/3,752 l water. Apply on the soil at the base of the target plant. For seedlings use 2 ml /plant; for trees up to 1 m use 2 x 2 ml /tree; for trees 1-2 m use 3-4 x 2 ml /tree; for each additional metre above 2 m use 2 x 2 ml (maximum of 8 doses)</li> </ul>	<p>Accumulation of fuel load increases the danger of fire.</p>
<i>Pittosprum undulatum</i>	<p>This species has a fast growth rate and</p>	<p><b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of</p>	<p>There is no registered chemical for this species,</p>

Species	Plant Invasion Impact	Control methods	Control Caution
	shades out many other plants. Its ability to adapt to higher nutrient soils enables it to out-compete indigenous species. Its seeds are highly favourable by birds, and they may neglect the seed of indigenous species, causing a reduction in their seed dispersal.	<p>roots. Tree felling.</p> <p><b>Chemical:</b> There is no registered herbicide for this species.</p>	thus mechanical removal of this species should be executed with caution.
<i>Populus canescens</i>	These trees are found throughout the country on riverbanks and in vleis, where they form dense and uniform stands. They can spread into surrounding veld.	<p><b>Mechanical:</b> Uproot young plants. Uproot and sever below junction of roots. Tree felling.</p> <p><b>Chemical:</b> Trees severed above ground should be treated with herbicides.</p> <ul style="list-style-type: none"> <li>• CHOPPER (L3444), HATCHET (L7409). Use 500 ml/10 l water. Apply to the cut surface of low cut stumps. Apply at least 10 ml per 100 mm of stump diameter.</li> <li>• ACCESS 240 SL (L4920), BROWSER (L7357). Use 200 ml + Actipron Super or BP Crop Oil//10 l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> <li>• LUMBERJACK 360 SL (L7295), TIMBREL 360 SL (L4917). Use 600 ml + 50 ml Actipron Super or BP Crop Oil/10l water. Apply to the cut surface of low cut stumps within 3 hours of felling.</li> </ul>	This species is difficult to control mechanically as they are able to coppice when cut and regenerates vigorously from root suckers. Herbicides should thus be used when controlling this species.
<i>Robinia pseudoacacia</i> (Black locust)	This species is found on riverbanks and alongside roads. The seeds, inner bark and shoots are poisonous. The flowers compete with native species for pollinators. Dense clonal clusters replace other	<p><b>Mechanical:</b> any attempts to cut down this tree will stimulate sucker production from roots and stumps. Mechanical control is thus non-optional.</p> <p><b>Chemical:</b> This trees species does not respond well to herbicides, though systematic application products are available.</p> <ul style="list-style-type: none"> <li>• CONFRONT 360 SL (L7314). Use</li> </ul>	This species is able to resprout even several years after it appears to be killed. Thus, annual monitoring and follow up treatments are important.

Species	Plant Invasion Impact	Control methods	Control Caution
	indigenous vegetation.	<p>200ml + 50ml Actipron Super/10l water. Apply as full cover spray to actively growing plants. Plants too high should be slashed and regrowth sprayed.</p> <ul style="list-style-type: none"> <li>• PLENUM 160 ME (L7702). Use 150ml + 50ml Actipron Super/10l water. Apply as full cover spray to actively growing plants.</li> </ul>	
<i>Rubus fruticosus</i> (European Blackberry)	This species is recently described as a problem species, though it has little impact in southern parts of South Africa. In Natal, it forms dense stands and the thorny bushes are impenetrable, which restrict the movement of humans and animals.	<p><b>Mechanical:</b> cultivation/removal of the rhizome.</p> <p><b>Chemical:</b> Specialized herbicides are used due to underground runners and are mostly effective in autumn because the sap transports the chemical to the roots.</p> <ul style="list-style-type: none"> <li>• ROUNDUP MAX (L6790). Use 80g/10l water with knapsack sprayed over 100g/10l water with mist-blower. Apply as full cover.</li> <li>• ROUNDUP TURBO (L7166). Use 240ml/10l water with knapsack sprayed and 320 ml /10l water with mist-blower.</li> <li>• MAMBA MAX 480 SL (L7714). Use 220ml/10l water with knapsack sprayed and 300 ml /10l water with mist-blower.</li> </ul> <p>KILO WSG (L7431). Use 300ml/10l water with knapsack sprayed or 400 ml /10l water with mist-blower. Apply as full cover spray to actively growing plants. Slash growth in winter and apply when new growth is more than 0,5 m high.</p>	Underground runners make this species difficult to eradicate, and specialised herbicides should be used when controlling the species. Herbicides should be applied during autumn when downward sap movement can transport the herbicide to the roots.

## 12. PREVIOUS CONTROL AND ERADICATION MEASURES

There are several programmes established in South Africa that focus on the removal and control of alien invasive plants as well as management of water and natural ecosystems. These include Working for Water, Working for Wetlands, Working on Fire and the Expanded Public Works Programme. Most of these have been utilized within Stellenbosch Municipality. Whilst Stellenbosch Municipality clears

some areas with workers appointed through the Expanded Public Works Programme, most of the clearing is done by appointed contractors.

The Working for Water programme and the Expanded Public Works Programme rely on governmental funding, which vary annually. The financial budget should therefore be revised annually.

All of the sites in this plan have had some form of control and eradication work done, however, as mentioned above, generally the lack of a strategic approach to such work as well as follow-up removal strategies has led to the re-establishment of targeted species which have been able to out-competing native species for the natural and spatial resources.

### 13. AUDITING

Control and eradication work performed in terms of this plan must be audited annually. The environment audit to be undertaken is a methodical examination of each site's status in terms of its IAP infestation and to determine the success or impact of the control and eradication measures undertaken.

The environmental audit consists of three stages, namely *pre-audit*, *on-site audit* and *post-audit*. Pre-audit includes the administrative issues associated with planning the audit, selecting the institution to conduct the audit, and preparing the audit protocol. The main purpose of the pre-audit stage will be to develop an audit plan, based on the most recent information and the results of the previous year's audit. The audit plan must also address where the audit is to be conducted, what the scope and objectives of the audit are, how the audit will be conducted (keeping in mind that the results of the audit must be comparable to previous year's audit results), and when the audit is to be conducted.

The on-site audit involves the recording of required information. The audit team gathers information by observation, conducting photographic studies, taking measurements, and conducting tests as was determined during the pre-audit stage. During the on-site audit stage the strength and weaknesses of the methods of information gathering must be evaluated in order to determine whether the process of auditing is effective in achieving its goal. In keeping with the adaptive management approach, the auditing process must also be looking for continual improvement. All the information obtained is recorded and a comprehensive record of the audit and the state of affairs produced.

The audit report is completed during the post-audit stage. Such report will reflect previous, current results, and recommended improvement goals. The audit report will also indicate failures or deficiencies and recommendations for corrective actions.

Table 6: Environmental Indicators for auditing purposes<sup>24</sup>.

BIODIVERSITY & NATURAL HERITAGE	
Species Diversity	BD01 – Threatened and extinct species per taxonomic group BD02 – Endemic species per taxonomic group BD03 – Alien (non-indigenous) species per taxonomic group

<sup>24</sup> Environmental Indicators for National State of the Environment Reporting, DEAT, 2002

	BD04 – Population trends of selected species BD05 – Distribution and abundance of selected alien species
Habitat Change	BD06 – Extent of conserved area BD08 – Disturbance regimes: fire frequency BD09 – Disturbance regimes: flood and drought
Resource Value	BD11 – Contribution to job creation: eradication of alien species
Natural Heritage Resources	NH01 – Status of natural heritage resources NH02 – Investment into natural heritage resources NH03 – Visitors to natural heritage resources
<b>LAND USE</b>	
Land Use	LU01 – Land cover LU02 – Land productivity vs potential
Land Condition	LU03 – Soil loss LU04 – Land degradation

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<b>7.3.2</b>	<b>NORTHWARDS EXTENSION OF STELLENBOSCH URBAN PLANNING AND DEVELOPMENT PROJECT: FEASIBILITY REPORT</b>
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**1. PURPOSE OF REPORT**

To report to Council on the feasibility of the proposed development initiatives for the northwards extension of Stellenbosch for purposes of an integrated urban development in execution of the previous decision and to recommend for further implementation of the process.

**2. BACKGROUND****35<sup>TH</sup> COUNCIL MEETING: 2015-10-28: ITEM 7.4****RESOLVED** (majority vote)

- (a) that Council confirm that the municipal owned properties (lease areas):
- Rem Farm 183;
  - Portion 23 of Farm 183;
  - Portion 36 of Farm 183; and
  - Leased Portions A, B and C of Farm 183, are not needed to provide the minimum level of basic municipal services in terms of Section 14(2)(a) of the Local Government: Municipal Finance Management Act, 56 of 2003, but that the land is required for the establishment of urban development and integrated human settlements;
- (b) that the Municipal Manager be authorised to proceed with processes to secure the requisite land use rights, approvals and authorisations on the entire developable area, including the privately owned land of WS Smit and others for a northward extension of the urban area abutting Kayamandi;
- (c) that the Municipal Manager be authorised to negotiate the acquisition and/or availability of the privately owned land and/or disposal of municipal land for integrated human settlement development purposes, including, but not limited to land swaps, land availability agreements and outright acquisitions or disposals;
- (d) that the Municipal Manager be authorised to proceed with planning and tender processes for the development of the municipal land and all other land identified as necessary to achieve the objective of creating an integrated development for the extension of the urban area northwards of Kayamandi, inclusive of, but not limited to:
- Land valuations;
  - Land availability and related agreements;
  - Environmental authorisation;
  - Land use approvals;
  - Subdivision of agricultural land;
  - Heritage permits;
  - Feasibility assessment;
  - Project management; and
  - External services provision

- 
- (e) that the Municipal Manager be authorised to conduct a public participation process to facilitate the determinations made by Council in terms of Section 14(2)(a) and (b) of the MFMA;
  - (f) that the Municipal Manager be authorised to dispose of the municipal land in accordance with the Stellenbosch disposal management system at a value to be determined by the Municipal Manager considering the benefit to be derived for the community; a
  - (g) that the Municipal Manager proceed with the recruitment and appointment of a seasoned project manager (with relevant qualification/s and experience) to project manage amongst other the planning; feasibility studies; fund raising; property negotiations; design and implementation of this project for at least two years;
  - (h) that the Council resolution of 2014-06-25 be honoured in that a Land availability study (Phase 1) that includes analyses of the socio-economic situation, land use, topography / soils / drainage, heritage, traffic and access, proximity to and capacity of services infrastructure be concluded, leading to a feasibility assessment and decision to proceed / terminate the process by Council, prior to commencement of subsequent phases; and
  - (i) that Council appoint an independent objective consultant to undertake the feasibility study.

*The following Councillors requested that their votes of dissent be minuted:  
Councillors DA Hendrickse; AT van der Walt and M Wanana.*

### 3. DISCUSSION

The planning and authorisation process for the proposed extension may only proceed following a decision on the feasibility of the proposed development, as set out in the resolution above. The following two steps in the lengthy process have been concluded:

- Project Preliminaries: Includes compilation of a project committee, determination of establishment criteria and the identification of the developable land, stakeholder liaison, entering memoranda of agreement for the authorisation processes, budgetary process confirmation, tender processes for appointment of the professional team for the authorisation and project management.
- Land availability study Phase 1: Includes analysis of the socio-economic situation, land use, topography / soils / drainage, heritage, traffic and access, proximity to and capacity of services infrastructure. This leads to a feasibility assessment and decision to proceed / terminate.

Following on a decision on this item, as recommended below, the following steps toward the achievement of the integrated human settlement will then proceed:

- Authorisation process Phase 2: It includes the following statutory authorisation and internal processes: Heritage impact assessment; Environmental authorisation; Bulk services assessment; Feasibility update; Land use planning application. Amongst others the external

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services upgrading is considered and planned, as it too must form part of the planning and design. Part of this process also includes the land acquisition agreements, as at this stage will the usable land be known and can the Municipality acquire the land essential for the development or enter in development agreements with the land owners, keeping in mind that the scale of the development is such that it will occur over a period of five to ten years.

- Proposal call for developer (of municipal land) Phase 3: Once the authorisations are completed and the permitted uses and land and required services upgrades are defined and known, can the project team prepare a call for proposals from developers for the municipal land.
- Development Phase 4: The developers will use the authorisations to plan the product details and ensure appropriate cross-subsidisation and development phasing to achieve the desired developmental outcomes. The project team plays a monitoring role.

### 3.1 Land availability

The attached study (**APPENDIX 1**) indicates that the available developable land is limited to roughly 86 ha. The total area available for planning purposes, i.e. including amongst others land for the proposed western bypass, bulk infrastructure and drainage areas is roughly 100 ha.

Maximising the use of the land for integrated human settlement purposes, i.e. including all facilities and uses in support of residential development, such as schools, churches, parks, retail development, health care facilities and public transport facilities, creates roughly 5 200 residential opportunities.

The remaining land in the study area is simply not suitable for urban development purposes, due to the slope, soil and drainage characteristics.

### 3.2 Proposal

The proposal is broadly for each landowner to contribute to the overall development pro rata to the value of his/her land in the larger project. It will not be feasible for landowners to individually apply for development of the land, given the nature and scale of the proposed development and the overall cost of the provision of external services, considering the need for road infrastructure essential to mitigate the overall impact of the development.

All the developable land will be combined into one developable property, which requires the municipality to invest its land into the development as its contribution thereto and permitting the development thereof subject to certain conditions and requirements. The remaining non-developer land will have to be disposed of for agricultural purposes after consolidation of the individual pieces into the best possible economic units. A map indicating which land will have to be subdivided and consolidated is attached hereto as part of **APPENDIX 1**.

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### 3.3 Feasibility

The feasibility of the development will depend on a number of factors, including but not limited to the overall cost of the development including internal and external services, the provision of social and community facilities and accessibility, i.e. transport connectivity. In addition thereto, the cooperation of private landowners, inclusion of the larger project in the spatial development framework and the current IDP, government support for project approval related to subsidised housing and the subdivision of agricultural land and the establishment of development model will have significant impact on whether or not the development can be achieved in the foreseeable future and in execution of Council's vision.

The major determinant of the financial feasibility of the proposed development is the number of units potentially developable in a specific market category relative to the land and development cost. In theory, it is more affordable to develop lower cost/value housing on gentle slopes on affordable land in proximity of existing external services infrastructure. Higher cost/value housing can be developed on steeper slopes on land with exceptional value as it creates a status effect for which clients are willing to pay.

In this instance, the proposed development also needs to cross subsidise the redevelopment of the Kayamandi CBD, certain areas of Cloeteville and affordable housing on other identified municipal properties.

Cross subsidisation can only be factored into the development if it provides primarily for the higher cost/value residential market which is less price sensitive and need not be subsidised by the municipality.

The attached property valuations (**APPENDIX 1**) indicate a total value of R289 600 000,00 for the land in the developable area, of which roughly 30% belongs to the municipality, with a total value of R87 775 000,00. The remaining land is in private ownership. The land cost is therefore approximately R55 692,00 per residential opportunity, keeping in mind that roughly 15 ha of the land will be used for non-residential purposes, as indicated above. This land is also saleable. The indicative land cost for a subsidy housing erf is in the region of R 35 000,00, given the value of roughly R330,00 per square metre for the land prior to development.

As was initially indicated, approximately 30% of the proposed development should be for subsidised housing, whereas the remainder of the development should be in affordable and middle market housing, in order to create opportunities for cross subsidisation and to increase the supply of housing for people working in Stellenbosch who have to commute to town by road daily.

The total cost of the development should therefore not only be measured in the actual development cost and the potential income to be derived from the disposal of these residential units, but also in the reduction in travel and transport costs to the greater community, including the municipality which must provide for the necessary infrastructure and do the maintenance thereof.

Given that the municipality must contribute roughly 30% towards the development cost of the area in order to ensure it provides in the stated

housing needs, it needs to provide funding towards the installation of external services pro rata to its demand as well as internal services relevant to the type of development it envisages. This contribution is not limited solely to the development but also to the actual planning and design cost for the development, to be budgeted for the 2017/18 and 2018/19 financial years.

The indicative land costs indicate that the development could be feasible if cross subsidisation occurs and the municipality does not venture into the acquisition and development of more than the current 30% portion of the overall development.

Another aspect of the feasibility that must be considered, is the feasibility of the provision of external services. It is obvious that such a large-scale development will require significant extension of the existing municipal services infrastructure, not the least of which is sewerage, water and electricity networks together with additional solid waste removal, fire and emergency response and maintenance of all municipal land and facilities. The immediate capital cost required for subsidised housing is normally provided from municipal infrastructure grants, urban settlement development grants and other national funding sources. The municipality must however apply for these grant funding resources to ensure that it can cover its share of the relevant development cost.

Indications are that the existing infrastructure cannot accommodate the development (refer also to **APPENDIX 3: Transportation Implications For The Proposed Northwards Extension Of Stellenbosch Urban Planning And Development Project**), however the systems can accommodate further connections. As for the provision of additional road infrastructure, an entirely new waste water/sewerage system needs to be installed to allow for a rising main to convey wastewater from the proposed development across the watershed into Devon Valley, from where it can gravitate to the Stellenbosch wastewater treatment works, rather than trying to connect same to the existing Plankenbrug line. The cost related to the provision of external services will be shared pro rata, as briefly explained above, by all land owners/developers participating in the larger development.

<b>COST ITEM</b>	<b>NO UNITS</b>	<b>PER UNIT (R)</b>	<b>TOTAL (R)</b>
Land Cost			289 620 000
Internal Civil Services - subsidy	1 560	44 500	69 420 000
Internal Civil Services – GAP	3 640	44 500	161 980 000
Bulk Civil Services	5 200	12 287	63 895 241
Top Structure – subsidy only	1 560	110 947	173 077 320
			<b>757 992 561</b>

<b>SOURCES OF INCOME</b>			
Civil Services Subsidy (DoHS)	5 200	43 626	226 855 200
Geotechnical variance DoHS (10%)	5 200	436	22 685 520
Bulk service contributions	3 640	12 287	44 726 669
Sale GAP opportunities	3 640	100 000	364 000 000
Sale commercial erven	41,5 ha	3 000	124 500 000
			<b>782 767 389</b>

*DoHS – Western Cape Government : Department of Human Settlements  
Excludes any electrical reticulation*

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The individual land owners in the area have in principle agreed to inclusion of their properties for planning purposes, however a development model still needs to be established prior to their participation in the implementation of the planning. Not only that, but the municipality is not in a position to do detailed planning and design on the private land holdings for purposes of a project or development beneficial to the developers or landowners as opposed to the municipality. The municipality is permitted to give zonings to the properties but would have to leave the final designs, layouts and planning implementation to each individual landowner or the developer for the larger project.

A complex set of agreements would be required to implement the development, commencing with the cooperation agreements of the individual landowners through to agreements for establishment of a development body. Indications are that the landowners first require a view of the overall planning at the level of the SDF prior to them entering into any agreements for cooperation. Thus, as also highlighted in **APPENDIX 2** (legal comment) Council needs to confirm the inclusion of the project into the IDP for the coming financial year.

#### 4. FINANCIAL IMPLICATION

The financial implication of this development is substantial. Under par 3.3 (**APPENDIX 1** Feasibility) indications are that it is about a R800 million project. Professional fees for this development can then be about R80 million.

The current proposal according to the January 2017 Draft Feasibility Report (feasibility) is to develop GAP housing and social amenities north of the municipal property and covers about 60 Ha of the 100 Ha development on privately owned land.

The municipal land and private land south of the municipal land will be used for BNG; social housing; GAP and serviced sites.

The feasibility indicates the following cost estimates:

- R146 million for bulk services including water; sewerage; stormwater and electrical supply
- R182 million for the dualling of the R304 provincial road
- Excludes cost estimates for taxi ranks and sidewalks that will be required for public transport and non-motorised transport.
- Excludes cost estimates social amenities like halls and sportsfields and schools etc.
- Excludes land costs
- Excludes additional servicing costs due to geotechnical conditions like steep slopes

The bulk and social services are therefore estimated around **R400 million**.

Some of the R400 million can be funded from provincial grants and must be applied for. Budget prioritisation support from the relevant provincial departments should be obtained upfront. The Provincial Treasury should also be engaged on this requirement for provincial funding allocations to the various provincial departments.

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The current DORA allocation of the Municipal Infrastructure Grant (MIG) to the Municipality is around R36 million per year which can also be utilised for this project. Other projects in Municipality also require funding from MIG.

Provincial department of Human Settlements already confirmed support the project and requested the urgent submission of the Project Initiation Document from the Municipality to be considered at the provincial Project Planning Committee for the provision of planning funding.

As this project is regarded as a catalytic project it might be possible to motivate for additional funding over and above the normal subsidy funding and should be applied for. Additional funding will be required to provide the required services and purchase of land.

This project will be implemented over a couple of years and important for the financial implication of the project will be the phasing of implementation which will determine the possible revenues and expenditures for the project.

The Directorate Economic Development and Planning requires to proceed:

- to secure the requisite land use rights,
- approvals and authorisations on the entire developable area,
- including land acquisition and disposals,
- prioritisation of the budgets required for the development planning process in the following financial year and the required public participation processes in keeping with the relevant legislation applicable to the development project.

The verbal indication of these requirements is that R5,5 million will cover these professional fees.

The provincial housing subsidy for professional fees are R6556,28 per unit and includes detailed engineering and construction supervision fees. The unit subsidies included for urban design and town planning included in the R6556,28 is R300.00 and R368.20 respectively.

The subsidy for a 5200 unit development for urban design and town planning is therefore R3,474,640 if the GAP and higher GAP also qualify for these subsidies. It must be taken into account that the Municipality already incurred expenditure on the feasibility.

The subsidy quantum appears very low, but is sufficient for the volumes and efficiencies obtained by Turnkey Developers who must deliver the housing products within the subsidy quantum.

To reduce the financial risk of the taxpayer it is proposed to proceed with the minimum professional work paid by the municipality before Turnkey Developers for subsidy housing can be procured as well as to unlock the private GAP developments north of the municipal land.

This amount must be quantified and motivated to be considered in the current budget cycle which must be approved in March and May by Council for implementation from July 2017.

The estimated R400 million items must also be captured in the current budgeting process.



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Finance would support the following recommendations:

- (a) that Council confirm that the development planning process may proceed in order to achieve the aim of an integrated human settlement development covering an area of approximately 86 ha in the study area as indicated in **APPENDIX 1**;
- (b) that Council support the extension of the current urban edge to be considered by the public during the April 2017 IDP/budget/SDF process;
- (c) that the Director: Integrated Human Settlement and Property apply to the Provincial Department of Integrated Human Settlements for grant funding to support the planning and authorisation processes as well as the purchase of private land
- (d) that Director: Integrated Human Settlement and Property apply to the Provincial Departments (including Provincial Treasury) for funding portions of the estimated R400 million
- (e) that the project be included in the IDP for the 2017/18 financial year as a priority project; and
- (f) that the minimum planning budget requirement be quantified and considered during the current budget cycle for the budget to be approved in March and May 2017.

## 5. COMMENTS FROM OTHER RELEVANT DEPARTMENTS

A project steering committee meeting was held on 4 February 2017 to discuss the item and to reach agreement on the recommendations. The meeting was attended by all the relevant stakeholders, including the project managers, directors group and managers involved in the decision-making process, the development project and in the strategic planning (**APPENDIX 5**).

At the meeting it was agreed to incorporate the recommendations as proposed by the Directorate: Financial Services, with the exclusion of recommendations (c) and (d).

It was further agreed that an urgent report would be prepared and submitted to the municipal manager for further discussion with the Executive Mayor and possibly for formal consideration in an item, due to a comparative assessment of the four major development projects currently being considered by the municipality. These projects are:

- the Northern Extension Development Planning Project (this item);
- the Van Der Stel and Surrounding Area Development Planning Project (previously referred to as the Stellenbosch TOD project);
- the Vlotenburg integrated human settlements and development project; and
- the Jamestown integrated human settlements and development project.

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**INTEGRATED HUMAN SETTLEMENT AND PROPERTY**

As undertaken at our discussion on 13 January 2017, a presentation was made to the Human Settlements Provincial Minister and his senior management team on 17 January 2017, during their visit to us, wherein much enthusiasm for the initiative and concept was expressed. They have subsequently confirmed their “in-principle” support in writing (see attached **APPENDIX 4**). There are a few engagements that need to be had in this regard to ensure that we sing from the same hymn sheet in taking the process forward.

**FINANCIAL SERVICES**

Additional to the Financial implications above Finance also comments that:

The feasibility largely depends on:

- The mix of housing opportunities provided
- Support from Department of Human Settlements (provincial and national)
- Subsidies availability
- Cross-subsidation potential
- Market appetite
- Turnkey developers’ appetite
- Bank loans’ availability for developers and home buyers
- Phasing of the implementation

**ENGINEERING SERVICES****APPENDIX 3**

The preliminary action plan for investigating the bulk services needed to support this development seems suitable for this exercise. I assume a sensitivity analysis of what type of development would bring the best return on investment would be done at a later stage.

The planning must include sites for electrical substations. Once there is a proposed layout the Electricity Department should be approached for the position and size of required sites.

**LEGAL SERVICES**

Refer **APPENDIX 2**

**6. CONCLUSION**

The land values and estimated development cost are in keeping with related costs elsewhere in the area and indications are that the municipality would be in a position to fund its pro rata share of the development cost. This pro rata share could be funded by the municipality contributing its landholding to the development as well as making some provision for the contribution of housing subsidies.

In addition thereto, the municipality would have to make provision for planning and design costs in the following two financial years as its pro rata share of the initial planning and project costs. All expenditure incurred in the process could be recouped through disposal of its land in the larger development.

**MAYORAL COMMITTEE MEETING: 2017-02-15: ITEM 5.3.2**

**RESOLVED**

That it be recommended to Council:

- (a) that Council support the development planning process to proceed in order to achieve the aim of an integrated human settlement development covering an area of approximately 86 ha in the study area as indicated in **APPENDIX 1**; and
- (b) that Council supports investigating the extension of the current urban edge to be considered by the public during the April 2017 IDP/budget/SDF process.

**NB: ALL THE APPENDICES ARE UNDER SEPARATE COVER**

<b>Meeting:</b>	<i>6<sup>th</sup> Council: 2017-02-22</i>	<b>Submitted by Directorate:</b>	<i>Planning &amp; Economic Development</i>
<b>Ref No:</b>	<i>15/10</i>	<b>Author:</b>	<i>Director: Planning &amp; Econ Dev</i>
<b>Collab:</b>	<i>490656</i>	<b>Referred from:</b>	<i>Mayco: 2017-02-15</i>

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<b>7.4</b>	<b>FINANCIAL SERVICES: [CLLR S PETERS]</b>
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NONE

<b>7.5</b>	<b>HUMAN SETTLEMENTS: [CLLR PW BISCOUBE]</b>
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NONE

<b>7.6</b>	<b>INFRASTRUCTURE: [CLLR J DE VILLIERS]</b>
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NONE

<b>7.7</b>	<b>PROTECTION SERVICES: [PC: CLLR Q SMIT]</b>
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NONE

<b>7.8</b>	<b>YOUTH, SPORTS AND CULTURE: [PC: XL MDEMKA (MS)]</b>
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NONE

8.	<b>CONSIDERATION OF REPORTS, COMMUNICATIONS, PETITIONS AND APPLICATIONS SUBMITTED BY THE MUNICIPAL MANAGER</b>
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8.1	<b>DETERMINATION OF UPPER LIMITS OF SALARIES, ALLOWANCES AND BENEFITS OF COUNCILLORS FOR THE 2016/2017 FINANCIAL YEAR</b>
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### 1. PURPOSE OF REPORT

To table the recommended increase in the upper limits of salaries, allowances and benefits of Councillors for the 2016/2017 financial year.

### 2. BACKGROUND

The National Minister for Cooperative Governance and Traditional affairs on 21 December 2016 published the upper limits for the salaries, allowances and benefits for the 2016/17 financial year in the Government Gazette No. 40519 (**APPENDIX 1**). In terms of Section 17 the Regulation will take effect from 1 July 2016.

### 3. DISCUSSION

#### 3.1 Implementation of Government Gazette

The Upper Limits Notice may not be implemented before respective municipal councils have considered a report on the upper limits and have resolved on the levels of remuneration which will apply in that Municipality. This consideration must occur with regard to the financial year (in this instance 2016/2017) within which the payments will have to be made, and the affordability thereof for Municipalities. This implies that the budget for the year in question must reflect the liability to pay the level of remuneration determined by the council and this must in turn be cash funded.

Further, before implementation, it is necessary for a council to consult with the MEC responsible for Local Government in the Province, motivating the affordability and demonstrating that the liability has been budgeted for. Failure to follow these steps will result in an adverse audit opinion being expressed by the Auditor General. Issues that need particular noting, are listed below. In essence, the Notice does not deviate from the format of previous years, but there are some changes that are also highlighted below:

#### 3.2 Calculation of Municipality's Grading

In order to determine which of the remuneration levels are applicable to Stellenbosch Municipality, the grading of the municipality needs to be determined according to the calculation/formula provided:

Category	Details	Number of Points	Source
Total Municipal Income	R1 183 820 239	33.33	Audited AFS for 2015/16 – As per definition given in Notice.
Total Population	173 419	25.00	Community Survey 2016: Statistical Release No P0301 – As per Definition given in Notice.
<b>Total Number of Points</b>		<b>58.33</b>	

Stellenbosch Municipality therefore remains unchanged at a Grade 4 for purposes of determining the upper limits of the remuneration of Public Office bearers.

### 3.3 Limited Change in Remuneration Packages

When comparing the latest Notice with the previous one, it becomes clear that only the remuneration packages of Full Time Chairpersons of Section 79 Committees, Part Time Chairpersons of Section 79 Committees and Part Time Councillors have increased, while others have remained the same.

POSITION	PREVIOUS UPPER LIMIT	NEW UPPER LIMIT	INCREASE
F/T Mayor or Executive Mayor	R787 061	R787 061	R0
F/T Speaker, Deputy Mayor or Deputy Executive Mayor	R629 647	R629 647	R0
F/T Exco Member, Mayco Member, Whip or Chairperson of a Sub Council	R590 296	R590 296	R0
F/T Chairperson of Section 79 Committee	R550 942	R572 979	R22 037
P/T Mayor or Executive Mayor	R434 935	R434 935	R0
P/T Speaker, Deputy Mayor or Deputy Executive Mayor	R347 947	R347 947	R0
P/T Exco Member, Mayco Member or Whip	R326 201	R326 201	R0
P/T Chairperson of Section 79 Committee	R304 454	R316 632	R12 178
P/T Councillor	R237 236	R246 725	R9 489

Remuneration packages that are increased, are done so by 4%. All municipalities, regardless of grading, are treated in the same manner.

### 3.4 Compulsory Pension Fund Membership

Section 12 of the new Notice now stipulates that “Every councillor shall contribute to a pension fund” and that an amount equal to 15% of a councillor’s basic monthly salary must be deducted for such purposes. Membership of pension funds was previously at the discretion of each individual councillor.

Of concern with regards to this matter is that the Notice is implementable from 1 July 2016. Back dating compulsory membership of a pension fund for 7 – 8 months at 15% of basic salary is simply not practical.

### 3.5 Increased Cell Phone Allowance

Cell Phone allowance for all Stellenbosch councillors increases from R1 739 to R1 900 per month.

### 3.6 Data Bundles

Data Bundles remain at R300 per month but the Notice still speaks of a councillor being “reimbursed” to an amount not exceeding R300 per month.

The term “reimbursed” implies that councillors should spend the money and then be reimbursed for it upon proof of expenses. Administratively speaking, this is not feasible. Enquiries were made when the previous Notice was

issued and the advice at the time was that the allowance should just be paid regardless, if so approved by the Council.

The undertaking was given that the next Notice would be rectified in this regard, but this was obviously not done.

### 3.7 Special Risk Cover (SASRIA)

The limits of R1.5million on residential property and R750 000 on vehicles remain the same.

Section 13 (4) however, makes it clear that a councillor is obliged to submit details of properties and vehicles to be covered by the municipality's insurance and that any councillor who fails to submit the required information, forfeits the benefit of the insurance.

Despite a number of requests, several councillors have not submitted the required information as yet.

Also important is for councillors to note that this cover is for Riot and Unrest related incidents only and is not intended to replace any current short term insurance that might be in place.

### 3.8 Affordability

The total anticipated amount in terms of the latest Gazette payable to all councillors for the 2016/2017 year, are less than budgeted and should therefore be implemented subject to approval by the Minister.

## 4. PARTIES CONSULTED

Finance: The 2016/2017 budget is sufficient to absorb the increase. Council did budget for the following amounts for 2016/2017:

• Allowance Councillors	= R 11,307,821
• Councillors Travel Allowance	= R 3,816,545
• Councillors Telephone Allowance	= R 807,946
• Councillors Medical Allowance	= R 129,034
• Councillors Pension Allowance	= R 965,470
The total amount budget is	= R 17,026,816

## RECOMMENDED

- (a) that the upper limits pertaining to Councillors' remuneration as determined by the National Minister for Cooperative Governance and Traditional Affairs, be adopted and approved by Council;
- (b) that the Administration effect implementation after due process has been followed, which includes: Notifying the MEC for Local Government of the Council resolution, the availability of funds in terms of affordability and the schedule containing the increased salaries, allowances and benefits;
- (c) that the following specific adjustments to the upper limits are approved by Council for implementation by the Administration effective from 1 July 2016, subject to approval by the MEC for Local Government; and

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(d) that the MEC for Local Government be informed of the following challenges:

- Implementation date for the Pension fund for Councillors;
- The administrative burden regarding the cell phone allowances and data bundles.

<b>Meeting:</b>	<i>6<sup>th</sup> Council: 2017-02-22</i>	<b>Submitted by Directorate:</b>	<i>Strategic &amp; Corporate Services</i>
<b>Ref No:</b>	<i>5/22</i>	<b>Author:</b>	<i>Manager: HRM</i>
<b>Collab</b>	<i>492319</i>	<b>Referred from:</b>	



## GOVERNMENT NOTICES

### DEPARTMENT OF CO-OPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

NO. 1600

21 DECEMBER 2016

#### REMUNERATION OF PUBLIC OFFICE BEARERS ACT, 1998 (ACT NO. 20 OF 1998)

#### DETERMINATION OF UPPER LIMITS OF SALARIES, ALLOWANCES AND BENEFITS OF DIFFERENT MEMBERS OF MUNICIPAL COUNCILS

Under the powers vested in me by sections 7(1), 8(5)(a) and 9(5)(a) of the *Remuneration of Public Office-bearers Act, 1998 (Act No. 20 of 1998)*, I, David Douglas Des van Rooyen, Minister for Cooperative Governance and Traditional Affairs, hereby –

- (a) after consultation with the member of the Executive Council responsible for local government in each province; and
- (b) after taking into consideration the matters listed in paragraphs (a) to (i) of section 7(1) of the Act,

determine the upper limits of the salaries, allowances and benefits of the different members of municipal councils as set out in the Schedule.



**DES VAN ROOYEN, MP**  
**MINISTER FOR COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS**

## SCHEDULE

### PREAMBLE

The salary and allowances of a member of a municipal council is determined by that municipal council by resolution of a supporting vote of a majority of its members, in consultation with the member of the Executive Council responsible for local government in each province, having regard to the upper limits as set out hereunder, the financial year of a municipality and affordability of municipality to pay within the different grades of the remuneration of councillors, including the National Treasury austerity measures.

For purposes of implementation of this Government Notice, "in consultation with" means that a municipal council must obtain concurrence of the MEC for local government prior implementation of the provisions of this Notice.

### 1. Definitions

In this Schedule, unless the context indicates otherwise, a word or phrase to which a meaning has been assigned in the *Remuneration of Public Office-bearers Act, 1998* (Act No. 20 of 1998) (hereinafter referred to as "the Act") and the *Local Government: Municipal Structures Act, 1998* (Act No. 117 of 1998) (hereinafter referred to as "the Structures Act"), has that meaning and –

"**basic salary**" means the amount payable to a councillor that excludes travel allowance, housing allowance, municipal contribution to a pension fund and municipal contribution to a medical aid scheme as provided for in items 9(1), 9(2), 12(1) and 12(2) of this Notice;

"**Demarcation Act**" means the *Local Government: Municipal Demarcation Act, 1998* (Act No. 27 of 1998);

"**existing municipality**" in relation to this Notice means a municipality that existed prior to the 2016 local government elections which was not affected by the boundary re-determination that only came into effect at the commencement of the first election of the new council of that municipality;

"**full-time councillor**" means a councillor who has been elected or appointed to an office which has been designated as full-time in terms of section 18(4) of the Structures Act;

**“grade”** in relation to this Notice means the grade of municipal council as determined in terms of item 4;

**“new municipality”** in relation to this Notice means the municipality established in terms of section 21 of the Demarcation Act consisting of the disestablished areas of the existing Thulamela Local Municipality and Makhado Local Municipality that came into effect at the commencement of the first election of the council of that municipality following the 2016 local government elections;

**“out of pocket expenses”** means actual and necessary expenses incurred by a councillor which have been specifically authorised or provided for in terms of the municipality's policy, in connection with a specific official or ceremonial duty that has been delegated to the councillor in question;

**“part-time councillor”** means a councillor other than a full-time councillor;

**“section 79 committee”** means a committee of the municipal council established in terms of section 79 of the Structures Act;

**“SETAs”** means the Sector Education and Training Authorities established in terms of section 9 of the *Skills Development Act, 1998* (Act No. 97 of 1998);

**“special risk cover”** means an insurance cover, provided to a councillor by the municipality, which covers the loss of or damage to a councillor's personal fixed or moveable property and assets, excluding property used by such councillor for business purposes, as well as life and disability cover, for any loss or damage caused by riot, civil unrest, strike or public disorder;

**“superseding municipality”** means an incorporating, merged or split municipality that came into effect at the commencement of the first election of the council of that municipality following the 2016 local government elections;

**“tools of trade”** means the resources provided by a municipal council to a councillor to enable such councillor to discharge his or her duties in the most efficient and effective manner, and at all times remain the assets of the municipality concerned;

**“total municipal income”** means gross income in respect of a metropolitan, local or district municipality based on actual income received as stated in the audited financial statements of that municipality for the 2015/ 2016 financial year. The gross income for the municipality will include the following:

- rates on property;
- fees for services rendered by the municipality, or on its behalf by a municipal entity;
- surcharges;
- other authorised taxes;

- levies and duties;
- income from fines for traffic offences and contravention of municipal by-laws or legislation assigned to the local sphere of government;
- regional services council replacement grant for district municipalities;
- interest earned on invested funds other than national and provincial conditional grants;
- rental for the use of municipal movable or immovable property; and
- amounts received as agent for other spheres of government.

The gross income excludes the following:

- transfers and / or grants from the national fiscus; and
- all value added tax (VAT) refunds.

“total population” means the official statistics of the population residing in the area of jurisdiction of a metropolitan, local or district municipality, as published in the Community Survey 2016: Statistical Release No. P0301, in terms of the *Statistics Act, 1999* (Act No. 6 of 1999); and

“total remuneration package” means the annual total cost to a municipality of a basic salary component, housing allowance, municipal contribution to a pension fund and municipal contribution to a medical aid scheme payable to a councillor as provided for in items 9(1), 9(2), 12(1) and 12(2) of this Notice.

## 2. Allocation of number of points for total municipal income

The number of points allocated for the total municipal income of a municipality is as follows:

TOTAL MUNICIPAL INCOME			NUMBER OF POINTS
R 0	-	R 10,000,000	8.33
R 10,000,001	-	R 50,000,000	16.67
R 50,000,001	-	R 200,000,000	25.00
R 200,000,001	-	R 1,500,000,000	33.33
R 1,500,000,001	-	R 2,000,000,000	41.67
More than R2,000,000,000			50.00

### 3. Allocation of number of points for total population

The number of points allocated for the total population within a municipality, is as follows:

TOTAL POPULATION			NUMBER OF POINTS
0	-	50,000	8.33
50,001	-	100,000	16.67
100,001	-	250,000	25.00
250,001	-	550,000	33.33
550,001	-	1,800,000	41.67
More than 1,800,000			50.00

### 4. Determination of grade of municipal council

(1) The sum of the number of points allocated to a municipal council, other than a municipal council referred to in sub-items (2), (3) or (4), in terms of items 2 and 3 respectively, determines the grade of such municipal council as follows:

GRADE OF MUNICIPAL COUNCIL	POINTS
1	0 to 16.66
2	16.67 to 33.33
3	33.34 to 50.00
4	50.01 to 66.67
5	66.68 to 83.35
6	83.36 and above

(2) The criteria for determination of the grading of municipality affected by the redetermination of boundaries is provided for under item 18 dealing with transitional measures.

### 5. Upper limits of the annual total remuneration packages of full-time councillors

The upper limits of the annual total remuneration packages of full-time councillors are as follows:

GRADE	MAYOR OR EXECUTIVE MAYOR	SPEAKER, DEPUTY MAYOR OR DEPUTY EXECUTIVE MAYOR	MEMBER OF THE EXECUTIVE COMMITTEE OR MAYORAL COMMITTEE, WHIP OR CHAIRPERSON OF A SUBCOUNCIL	CHAIRPERSON OF A SECTION 79 COMMITTEE
	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE
6	1 242 409	1 003 393	940 680	913 086
5	921 912	737 529	691 433	671 152
4	787 061	629 647	590 296	572 979
3	758 012	606 410	568 510	551 832
2	709 765	567 812	532 323	516 708
1	689 087	551 266	516 811	501 651

The mayor of a plenary type municipality should be remunerated according to the total remuneration package column of mayor/ executive mayor.

#### 6. Upper limit of annual total remuneration package or allowance in respect of appointed councillors

(1) A councillor appointed to a district council in terms of section 23(1)(b) of the Structures Act, may be paid the upper limit of the total remuneration package or allowance as follows:

- (a) If a councillor is elected or appointed as speaker, mayor, executive mayor, member of a mayoral committee, member of an executive committee, chairperson of a section 79 committee or part-time member of a district council, such councillor is entitled to an amount equal to the difference between the total remuneration package that a councillor receives as a member of the local council and the total remuneration package allocated to that office in the district council in terms of items 5, 6, 7, 8, 9, 10 and 11, as the case may be.
- (b) If the total remuneration package payable to a councillor as a member of the local council is equal to or higher than the total remuneration package that an appointed councillor to the district council receives, such a councillor is, in addition to the total remuneration package, entitled to a sitting allowance not exceeding R962: Provided that this allowance is limited to R962 per day, regardless of the number of meetings

of the district council or committees of that council that are attended by such councillor on a specific day.

(2) A district municipality is responsible for –

- (a) the payment of the remuneration or the allowance referred to in sub-item (1);
- (b) the reimbursement of travel expenses not exceeding the applicable tariffs prescribed by the national department responsible for transport for the use of privately-owned vehicles incurred by a councillor for the execution of official duties on behalf of that district municipality, in terms of that district council's policy; and
- (c) the reimbursement of cell phone expenses not exceeding 50% of the applicable allowances as prescribed under item 10 incurred by a part-time councillor for the execution of official duties on behalf of that district municipality, in terms of that district council's policy.

**7. Upper limit of allowance in respect of councillors serving in the governance and intergovernmental structures of organised local government**

(1) A councillor elected or appointed to serve in a governance structure of organised local government must, in addition to the total remuneration package applicable to that councillor, be paid an allowance not exceeding R962 per sitting and actual attendance of any meeting: Provided that the allowance is limited to R962 per day, irrespective of the number of meetings attended by such councillor on a specific day.

(2) **Organised local government is responsible for –**

- (a) the payment of the allowance referred to in sub-item (1);
- (b) the payment of accommodation expenses incurred for attending a meeting of governance and intergovernmental structures in terms of applicable organised local government policy; and

- (c) reimbursement of travel expenses, not exceeding the applicable tariffs prescribed by the national department responsible for transport for the use of privately-owned vehicles, incurred by a councillor for attending a meeting of governance and intergovernmental structures.

#### 8. Upper limits of the annual total remuneration packages of part-time councillors

The upper limits of the annual total remuneration packages of part-time councillors are as follows:

GRADE	MAYOR / EXECUTIVE MAYOR	SPEAKER, DEPUTY MAYOR OR DEPUTY EXECUTIVE MAYOR	MEMBER OF THE EXECUTIVE COMMITTEE OR MAYORAL COMMITTEE OR WHIP	CHAIRPERSON OF SECTION 79 COMMITTEE	OTHER PART-TIME MEMBERS
	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE	TOTAL REMUNERATION PACKAGE
6	693 101	586 335	519 826	504 578	458 706
5	509 454	407 564	382 091	370 882	288 998
4	434 935	347 947	326 201	316 632	246 725
3	418 883	335 106	314 168	304 945	237 620
2	392 221	313 776	294 166	285 537	222 496
1	380 791	304 632	285 594	277 215	215 753

The mayor of a plenary type municipality should be remunerated according to the total remuneration package column of mayor/ executive mayor.

#### 9. Upper limits of allowances of full-time and part-time councillors

The upper limits of allowances of full-time and part-time councillors, that constitute part of the annual total remuneration package, are as follows:

(1) Motor vehicle and travel allowance

- (a) A full-time or part-time councillor listed in item 5 and 8 of this Notice may structure his or her basic salary to provide for motor vehicle allowance;
- (b) If a councillor contemplated in paragraph (a) is unable to utilise his own vehicle for official purposes, such a councillor may utilise a municipal-owned vehicle: Provided that the municipal council must, in line with the approved municipal policy, exercise



prudent financial management to ensure that the provision of motor vehicle does not undermine the need to prioritise service delivery and sustain viable municipalities.

- (c) Nothing herein contained prevents any other councillor other than a mayor, deputy mayor or speaker from making use of a municipal-owned vehicle for attendance at a specific function which that councillor has been delegated to attend, outside of the ordinary scope of work of such councillor.
- (d) A councillor who utilises his or her motor vehicle must, for purpose of claiming kilometres travelled, keep a travel logbook containing the following information relating to actual official and private kilometres travelled per month as may be determined from time to time by the South African Revenue Service:
  - (i) Date of travel;
  - (ii) Kilometres travelled; and
  - (iii) Travel details, where to and reason for the trip.
- (e) If a councillor uses a municipal-owned motor vehicle for official purposes, such councillor will not be reimbursed for kilometres travelled.

(2) Housing allowance

A councillor may structure his or her salary to provide for housing allowance as part of the total remuneration package.

(3) Out of pocket expenses

A councillor may, in addition to the total remuneration package, be reimbursed for reasonable and actual out of pocket expenses incurred during the execution of official or ceremonial duties, in accordance with the applicable council policy.

**10. Upper limits of cell phone allowance for councillors**

A councillor may, in addition to the annual total remuneration packages provided for in terms of items 5 and 8 respectively, be reimbursed for the expenditure on the use of cell phone allowance not exceeding the following amounts:

- (1) R3400.00 per month to a executive mayor or mayor, deputy mayor and speaker of only a grade 6 municipal council;
- (2) R2400.00 per month to an executive mayor or mayor, deputy mayor and speaker of grade 4 and 5 municipal councils; and
- (3) R1900.00 per month to an executive mayor or mayor, deputy mayor and speaker of grade 1, 2 and 3 of a municipal council, including any other councillor.

**11. Upper limits of mobile data bundles for councillors**

A councillor may, in addition to the annual total remuneration packages provided for in terms of items 5 and 8 respectively, be reimbursed for the expenditure on the use of data bundles not exceeding R300 per month.

**12. Upper limits of pension fund contributions and medical benefits of councillors**

- (1) Pension fund
  - (a) Every councillor shall contribute to a pension fund registered in terms of the Pension Fund Act, 1956 (Act No. 24 of 1956).
  - (b) A municipality shall deduct an amount equal to 15% from a councillor's monthly basic salary and pay it over to a pension fund to which a councillor is a member.

(2) Medical Scheme

- (a) A councillor may participate in a medical scheme registered in terms of the Medical Schemes Act, 1998 (Act No. 131 of 1998).
- (b) A municipality shall deduct the relevant membership fee from a councillor's monthly basic salary and pay it over to a medical scheme of which a councillor is a member.
- (c) If a councillor already belongs to another medical scheme, such councillor may annually submit proof of membership of the medical scheme to the municipality.

**13. Special risk cover**

(1) A municipality must, in addition to the annual total remuneration packages provided for in items 5 and 8 respectively, take out risk insurance cover, to provide for the an insurance cover, provided to a councillor by the municipality, which covers the loss of or damage to a councillors personal fixed or moveable property and assets, excluding property used by such councillor for business purposes, as well as life and disability cover, for any loss or damage caused by riot, civil unrest, strike or public disorder. The special risk insurance on residential property will be limited to R1, 5 million while on vehicles it is limited to R750 000. The life and disability insurance cover is limited to 2 times the total remuneration package of a councillor.

(2) In the event where the residential property of a councillor was damaged or destroyed as a result of riot, civil unrest, strike or public disorder, the municipality may, subject to affordability, provide alternative accommodation to the affected councillor, for a period of 30 days from the date of such an incident.

(3) Notwithstanding sub-item (2), the municipal council may, on good cause shown, review its decision referred to in sub item (2), limited to 30 days per incident.

(4) A councillor is obliged to submit to the municipality details of property, assets and beneficiaries to be covered by the special risk insurance upon request. A councillor who fails to submit the required details referred to herein will forfeit the benefits associated with the special risk insurance cover.

(5) If a councillor already belongs to another special risk cover, such councillor must declare to the municipality the details of property, assets and beneficiaries to be covered by the special risk insurance.

**14. Tools of trade**

(1) A municipal council may extend the following tools of trade to a councillor:

	<b>TOOLS OF TRADE</b>	<b>APPLICABLE TO:</b>
(a)	Braille reader	All visually impaired councillors.
(b)	Office space and furniture; Parking bay; Business cards; Calculators; Letter-heads; Stationery; Toner cartridges; Diaries; Postage costs; Office telephone; and Appropriate mobile technology and multi-digital office (excluding cell phones and mobile data card as per item 10 and 11), including laptop and or desktop computer, facsimile, printer, photocopier and scanner.	Full-time councillors, part-time Executive Mayors or Mayor, part-time Deputy Executive Mayors or Deputy Mayors, part-time Speakers, part-time Members of Mayoral Committee or Members of Executive Committee and part-time Chairpersons of Section 79 Committees.
(c)	Business cards; Calculators; Letter-heads; Stationery; and Diaries.	Part-time councillors and the usage must comply with policy directives of the municipality.
(d)	Postage costs; Office telephone; and Multi-digital office, facsimile, printer, photocopier and scanner.	Part-time councillors to have access to these tools of trade at the municipal offices.
(e)	Personal security	All councillors, subject to a threat and risk analysis conducted by the South African Police Service.

(2) If a municipal council makes available tools of trade in terms of sub-item (1), such a municipal council must take into account accessibility, affordability and cost control, equity, flexibility, simplicity, transparency, accountability and value of tools of trade.

- (4) The application of sub-tem (1) is subject to concurrence by the MEC for local government in the province.

#### 15. Capacity building

(1) A municipality must make provision in its budget for the development and implementation of capacity building programme for councillors.

(2) This capacity building programme may include specific training conducted by national departments, associated government agencies and SETAs, provincial departments, municipalities and organised local government.

(3) The training programme must take into consideration the capacity needs to fulfil a councillor's statutory obligations and affordability by a municipality.

#### 16. Overpayment

(1) Any remuneration paid to a councillor of a municipality otherwise than in accordance with section 167(1) of the *Local Government: Municipal Finance Management Act, 2003* (Act No. 53 of 2003) including any bonus, bursary, loan, advance or other benefit, is an irregular expenditure and the municipality –

- (a) must recover that remuneration from the political office bearer or member; and
- (b) may not write-off any expenditure incurred by the municipality in paying or giving that remuneration.

(2) The MEC must report to the Minister –

- (a) any transgression of subsection (1); and
- (b) any non-compliance with this Notice.

## 17. Information to be submitted to the Minister

(1) Every municipality must in terms of section 107 of the Municipal Systems Act submit to the MEC responsible for local government in the province, by not later than 28 February 2017, a report containing the following information in respect of its councillors as at 1 July 2016 on an official letterhead of the municipality, signed by the municipal manager:

- (a) Total number of councillors;
- (b) Designation;
- (c) Part-time or full-time;
- (d) Name of incumbent;
- (e) Gender;
- (f) Total municipal income;
- (g) Total population;
- (h) Grading of municipal council;
- (i) Date concurrence granted by the MEC;
- (j) Total remuneration package; and
- (k) Any allowance(s) payable to a councillor.

(2) Upon receipt of the data referred to in sub-item 1, the MEC must submit a consolidated report to the Minister by not later than 31 March 2017.

(3) If the municipal manager fails to submit the report contemplated in sub-item (1) within the prescribed timeframe or submits fraudulent information to mislead the Minister, such municipal manager will be deemed to be in breach of the Code of Conduct for Municipal Staff as contained in Schedule 2 of the Act.

## 18. Transitional measures

(1) A municipality that does not have any municipal income is a grade 1 municipal council as envisaged in item 4(1): Provided that –

- (a) LIM 345, the new municipality in Limpopo Province that was established in terms of section 21 of the Demarcation Act by merging parts of Thulamela and Makhado local

municipalities that came into effect at the commencement of the first election of the council of that municipality following the 2016 local government elections, is a grade 3 municipality; and

- (b) superseding municipalities that came into effect at the commencement of the first election of the council of that municipality following the 2016 local government elections with different gradings, must utilise the highest total municipal income between one of the superseding municipalities based on the audited financial statements for the 2015 /16 financial year; and
- (c) superseding municipalities that came into effect at the commencement of the first election of the council of that municipality following the 2016 local government elections with the same grading, must utilise the highest total municipal income between one of the superseding municipalities based on the audited financial statements for the 2015 /16 financial year.

(2) If a municipality has no audited financial statements for 2015/16 financial year by the date of publication of this Notice, the audited financial statements for the 2014/15 financial year will apply.

#### **19. Short title and commencement**

This Notice is called the Determination of Upper Limits of Salaries, Allowances and Benefits of Different Members of Municipal Councils and takes effect from 1 July 2016.

**K: COUNCILLOR AND BOARD MEMBER ALLOWANCES AND EMPLOYEE BENEFITS**

Summary of Employee and Councillor remuneration R thousand	Ref	2012/13	2013/14	2014/15	Current Year 2015/16			2016/17 Medium Term Revenue & Expenditure Framework		
		Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full Year Forecast	Budget Year 2016/17	Budget Year +1 2017/18	Budget Year +2 2018/19
		A	B	C	D	E	F	G	H	I
<b>Councillors (Political Office Bearers plus Other)</b>	1									
Basic Salaries and Wages		8,576	9,042	9,628	10,668	10,668	10,668	11,308	11,986	12,705
Pension and UIF Contributions		503	565	257	911	911	911	965	1,023	1,085
Medical Aid Contributions		116	180	244	122	122	122	129	137	145
Motor Vehicle Allowance		3,065	3,250	3,408	3,601	3,601	3,601	3,817	4,046	4,288
Cellphone Allowance		616	896	895	762	762	762	808	856	908
Housing Allowances		-	-	-	-	-	-	-	-	-
Other benefits and allowances		-	-	-	-	-	-	-	-	-
<b>Sub Total - Councillors</b>		<b>12,877</b>	<b>13,933</b>	<b>14,431</b>	<b>16,063</b>	<b>16,063</b>	<b>16,063</b>	<b>17,027</b>	<b>18,048</b>	<b>19,131</b>
% increase	4		8.2%	3.6%	11.3%	-	-	6.0%	6.0%	6.0%
<b>Senior Managers of the Municipality</b>	2									
Basic Salaries and Wages		5,480	5,904	6,412	7,803	7,803	7,803	7,899	8,316	8,815
Pension and UIF Contributions		797	891	746	331	331	331	638	676	717
Medical Aid Contributions		94	142	-	151	151	151	50	53	56
Overtime		-	-	-	-	-	-	-	-	-
Performance Bonus		127	-	-	465	465	465	299	-	-
Motor Vehicle Allowance	3	371	419	771	391	391	391	784	831	881
Cellphone Allowance	3	54	55	55	62	62	62	46	49	51
Housing Allowances	3	-	-	-	-	-	-	-	-	-
Other benefits and allowances	3	-	-	-	73	73	73	34	36	38
Payments in lieu of leave		-	-	-	-	-	-	-	-	-
Long service awards		-	-	-	-	-	-	-	-	-
Post-retirement benefit obligations	6	-	-	-	-	-	-	-	-	-
<b>Sub Total - Senior Managers of Municipality</b>		<b>6,925</b>	<b>7,411</b>	<b>7,983</b>	<b>9,278</b>	<b>9,278</b>	<b>9,278</b>	<b>9,749</b>	<b>9,961</b>	<b>10,559</b>
% increase	4		7.0%	7.7%	16.2%	-	-	5.1%	2.2%	6.0%
<b>Other Municipal Staff</b>										
Basic Salaries and Wages		148,922	161,452	181,827	226,423	226,423	226,423	241,278	259,870	279,486
Pension and UIF Contributions		28,369	29,312	32,273	37,744	37,744	37,744	45,391	48,796	52,455
Medical Aid Contributions		12,563	13,739	15,303	18,129	18,129	18,129	22,289	23,850	25,520
Overtime		10,614	12,319	15,993	12,674	12,674	12,674	13,055	13,969	14,947
Performance Bonus		0	-	-	-	-	-	-	-	-
Motor Vehicle Allowance	3	8,067	9,181	9,453	9,919	9,919	9,919	15,198	16,270	17,417
Cellphone Allowance	3	506	551	594	585	585	585	838	897	960
Housing Allowances	3	1,325	1,265	1,384	1,870	1,870	1,870	2,774	2,968	3,176
Other benefits and allowances	3	26,206	47,702	49,008	34,219	34,219	34,219	46,743	50,117	53,735
Payments in lieu of leave		-	-	-	-	-	-	-	-	-
Long service awards		-	-	-	-	-	-	-	-	-
Post-retirement benefit obligations	6	-	-	-	-	-	-	-	-	-
<b>Sub Total - Other Municipal Staff</b>		<b>236,572</b>	<b>275,521</b>	<b>305,836</b>	<b>341,564</b>	<b>341,564</b>	<b>341,564</b>	<b>387,565</b>	<b>416,737</b>	<b>447,697</b>
% increase	4		16.5%	11.0%	11.7%	-	-	13.5%	7.5%	7.4%
<b>Total Parent Municipality</b>		<b>256,374</b>	<b>296,866</b>	<b>328,250</b>	<b>366,905</b>	<b>366,905</b>	<b>366,905</b>	<b>414,341</b>	<b>444,746</b>	<b>477,387</b>
			15.8%	10.6%	11.8%	-	-	12.9%	7.3%	7.3%

Extract: Original Budget



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9.	MATTERS FOR NOTIFICATION
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9.1	REPORT ON DECISIONS TAKEN BY THE EXECUTIVE MAYOR
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NONE

9.2	REPORT BY THE MUNICIPAL MANAGER
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NONE

<b>10.</b>	<b>CONSIDERATION OF NOTICES OF QUESTIONS AND NOTICES OF MOTIONS RECEIVED BY THE SPEAKER</b>
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<b>10.1</b>	<b>QUESTION 1 BY COUNCILLOR F ADAMS: EMPOWERMENT AND WEALTH CREATION OPPORTUNITIES FOR BLACK PEOPLE</b>
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A Notice of Question, in terms of Section 38(2) of the Rules of Order regulating the Code of Conduct of Council and Council Committee meetings, dated 2016-11-15, was received from Councillor F Adams.

The said Question is attached as **APPENDIX 1** and the appropriate response as **APPENDIX 2**.

**FOR CONSIDERATION**

<b>Meeting:</b>	<i>6<sup>th</sup> Council: 2017-02-22</i>	<b>Submitted by Directorate:</b>	<i>Office of the Municipal Manager</i>
<b>Ref No:</b>	<i>3/4/1/4</i>	<b>Author:</b>	<i>MM: (Ms G Mettler)</i>
<b>Collab:</b>		<b>Referred from:</b>	

15 NOV 2016

Clr. Franklin Adams

Democratic New Civic Association

15 November 2016

For Attention : The Speaker

Clr. Donovan Joubert

**Re: Question:**

I hereby request that the following question must serve in terms of the Rules of Order at the November 2016 Council member.

**Motivation/Background:**

Apartheid was declared as a Crime against humanity. By implication all those who designed, benefit and practice Apartheid can be seeing as criminals.

It is also a fact, that the primarily objective of Apartheid was to advance the live hood of predominately white people to the expense of the black majority.

Today we are still witness the gross discrepancies between white people and their black counter parts within my beloved town. As the previous Mayor **rightfully eluded, that Stellenbosch is one of the most Unequal towns. Unfortunately, he failed to do change matters.**

Equality is one of the cornerstones of our Bill of Rights, but the question is this relevant to the decision makers of this town. Definite not and there is an ill conducive environment for **black people to fulfil there economic ambitions and dreams. It is quite obvious , that the Municipality and private sector are not prepare to undo the Legacy of apartheid that promote Segregation and Exclusion. There is deliberate resistance by apartheid beneficiaries to protect the status quo.**

We can witness this, by all the development taken place during the past twenty vears. There was no empowerment of local black people and transformation is definitely not part of their agenda.

**As local government has a critical role to play in rebuilding local communities and environment, including transformation and a prosperous and truly non- racial society.**

Question:

I request the Mayor to explain, how she envisage to bring about an conducive environment to empower and create wealth for all black people within in WEC 24 through interventions and strategies.

Regards

  
Clr. Franklin Adams



**STELLENBOSCH**  
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MUNISIPALITEIT • UMASIPALA • MUNICIPALITY



## OFFICE OF THE EXECUTIVE MAYOR

### 10.5 QUESTION 5 BY CLLR F ADAMS: EMPOWERMENT AND WEALTH CREATION OPPORTUNITIES FOR BLACK PEOPLE

The Stellenbosch municipality has the function to create the environment for investment and growth. This is also a priority on my agenda.

The first step in creating the environment for growth and development is to review all the policies and by-laws. This process is currently underway. It is also important for the municipality to foster relationships and partnerships with formal business.

Another opportunity would be to align EPWP to be part of the MIG projects.

Local economic development (LED) can be improved by using procurement to impact on LED, and this is currently being reviewed.

The importance of the informal sector must also be acknowledged and more attempts must be made to support tourism and the green economy.

Councillors are invited to bring to the attention of the Mayor any potential projects that might be of benefit to the particular group / sector.

**Adv. G M M van Deventer**  
**EXECUTIVE MAYOR**

Date: 2017-02-15

<b>10.2</b>	<b>QUESTION BY COUNCILLOR DA HENDRICKSE: BLAAUWKLIPPEN</b>
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A Notice of Question, in terms of Section 38(2) of the Rules of Order regulating the Code of Conduct of Council and Council Committee meetings, dated 2017-02-07, was received from Councillor DA Hendrickse.

The said Question is attached as **APPENDIX 1** and the appropriate response as **APPENDIX 2**.

**FOR CONSIDERATION**

<b>Meeting:</b>	6 <sup>th</sup> Council: 2017-02-22	<b>Submitted by Directorate:</b>	Office of the Municipal Manager
<b>Ref No:</b>	3/4/1/4	<b>Author:</b>	MM: (Ms G Mettler)
<b>Collab:</b>		<b>Referred from:</b>	



7 February 2017

The Single Whip  
 Stellenbosch Municipal Council  
 Plein Street  
 STELLENBOSCH  
 7600

Attention : Clr W Pietersen (Ms)

Dear Whip

**RE NOTICE OF QUESTIONS TO SERVE AT THE FEBRUARY 2017 COUNCIL MEETING**

**\* QUESTION NO 1**

What is the conditions of the Donation of R 3 920 000 that Blaauwkippen has put on what this monyes can be used for .

**MOTIVATION**

The acting MM Mr Bosman has previously refused to disclose the amount and conditions that Blaauwklippen has put re the Court settlement . Now I read in the Adjustments budget ( See Attached Extract )that Blaauwklippen has given donation of R 3 920 000.

**QUESTION NO 2**

What is the total amount the Stellenbosch municipality has paid to date to the Sustainability Institute Innovation Laboratory (Pty) Ltd (SILL) for the I-shack project in Enkaneni , under the guise of ESKOM indigent grant.

**Motivation**

SILL got donar funding to install solar panels and for which the resident where SILL installed a solar panel unit must pay a monthly levy ranging from R100 to R150. ESKOM does not supply and grid electricity to this I-sahak project and thus SILL does not make any payments to ESKOM. Thus why must Stellenbosch municipality pay ESKOM electricy grant to SILL when no ESKOM electricity provided by SILL. From the contract it also seem that the municipality will pay this ESKOM grant forever as there is no termination date to the contract. ( See attaché BAC minutes )

Regards

Clr DA Hendrickse

2017/02/07

MUNICIPALITY - MUNISIPALITEIT  
 STELLENBOSCH  
 07 FEB 2017  
 OFFICE OF THE SPEAKER

The detailed list of the adjustments made is as follows:

<b>Operational Revenue</b>						
Directorate Name	E/I Vote number	Department Name	Item Name	Approved Budget	Adjustments	Proposed Budget
Planning & Development Service	1/8125/4213	Kayamandi Economic Tourism Cor	Rental Income: Kayamandi Corri	-323 100	100 000	-223 100
Planning & Development Service	1/9933/0928	Spartial Development Framework	Operational Grant Funding	-400 000	-500 000	-900 000
<b>Sub Total: Planning and Development</b>						
				<b>-723 100</b>	<b>-400 000</b>	<b>-1 123 100</b>
Human Settlements	Various	New Housing	Rental Income: Housing Schemes	-12 903 220	4 501 987	-8 401 233
Human Settlements	1/3784/4220	New Housing	Operational Grant Funding	-	-22 732 714	-22 732 714
Human Settlements	1/3784/4800	New Housing	Housing Capital Grant Funding	-34 150 000	22 732 714	-11 417 286
Human Settlements	1/2235/4800	Property Management	Library Capital Grant Funding	-2 000 000	-2 723 714	-4 723 714
Human Settlements	new vote	New Housing	Donation: Blaauklippen	-	-3 920 000	-3 920 000
<b>Sub Total: Human Settlements and Property Management</b>						
				<b>-49 053 220</b>	<b>-2 141 727</b>	<b>-51 194 947</b>
Financial Services	1/9900/4469	Financial Services	Investment Interest	-33 268 990	-8 500 000	-41 768 990
Financial Services	1/9900/4105	Financial Services	Property Rates	-324 181 564	-1 278 059	-325 459 623
<b>Sub Total: Finance</b>						
				<b>-357 450 554</b>	<b>-9 778 059</b>	<b>-367 228 613</b>
Engineering Services	1/4400/4620	Engineering Service: Electricity	Electricity Sales	-361 738 130	10 452 885	-351 285 245
Engineering Services	1/6650/4620	Engineering Service: Water	Water Sales	-128 472 870	-2 725 253	-131 198 123
Engineering Services	1/6605/4270	Engineering Service: Sewerage	Annual Fees	-60 516 000	-2 925 057	-62 591 057
Engineering Services	1/6605/4390	Engineering Service: Sewerage	Industrial Effluent Charges	-11 287 010	-3 000 000	-14 287 010
<b>Sub Total: Engineering Services</b>						
				<b>-562 014 010</b>	<b>1 802 575</b>	<b>-560 211 435</b>





## MEMORANDUM

*Office of the Municipal Manager  
Kantoor van die Munisipale Bestuurder*

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To : SPEAKER  
From : MUNICIPAL MANAGER  
Date : 13 February 2017  
RE : REPLY TO QUESTIONS IN TERMS OF SECTION 38 (12) OF THE  
RULES OF ORDER: BLAAUWKLIPPEN AND I-SHACK ENQUIRY

---

Dear Speaker,

With reference to the question received from Councilor D Hendrickse, submitted in terms of section 38 of the Rules of Order Regulating The Conduct of Council and Council Committee Meetings, dated 7 February 2017 herewith my reply in terms of section 38 (12):

\* Question 1:

"What is the conditions of the Donation of R 3 920 000 that Blaauwklippen has put on what is the monyes can be used for."

Response

The former Acting MM (Richard Bosman) formally responded to the issue pertaining the Settlement Agreement between the Municipality and Blaauwklippen to the effect that the terms of the agreement are subject to a confidentiality clause which precludes the municipality from making information available on the terms of the agreement. As the confidentiality clause is still applicable, I'm not at liberty to make the requested disclosure thereof.

Legal input received confirmed that Council mandated the administration to undertake the mediation on its behalf and therefore it's only proper that the administration take an item to Council to give feedback on the outcome. The item will have to serve in-committee to cover the confidentiality aspect. Said item will serve at Council In-Committee during April 2017.

Question 2:

"What is the total amount the Stellenbosch municipality has paid to date to the Sustainability Institute Innovation Laboratory (Pty) Ltd (SILL) for the I-shack project in Enkaneni, under the guise of ESKOM indigent grant."

Response

Please see detailed response by the Chief Financial Officer attached as Appendix 1.

Regards

  
GERALDINE METTLER  
MUNICIPAL MANAGER

<b>10.3</b>	<b>QUESTION BY COUNCILLOR DA HENDRICKSE: I-SHACK PROJECT</b>
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A Notice of Question, in terms of Section 38(2) of the Rules of Order regulating the Code of Conduct of Council and Council Committee meetings, dated 2017-02-07, was received from Councillor DA Hendrickse.

The said Question is attached as **APPENDIX 1** and the appropriate response as **APPENDIX 2**.

**FOR CONSIDERATION**

<b>Meeting:</b>	6 <sup>th</sup> Council: 2017-02-22	<b>Submitted by Directorate:</b>	Office of the Municipal Manager
<b>Ref No:</b>	3/4/1/4	<b>Author:</b>	MM: (Ms G Mettler)
<b>Collab:</b>		<b>Referred from:</b>	



7 February 2017

The Single Whip  
 Stellenbosch Municipal Council  
 Plein Street  
 STELLENBOSCH  
 7600

Attention : Clr W Pietersen (Ms )

Dear Whip

**RE NOTICE OF QUESTIONS TO SERVE AT THE FEBRUARY 2017 COUNCIL MEETING**

**QUESTION NO 1**

What is the conditions of the Donation of R 3 920 000 that Blaauwklippen has put on what this monyes can be used for .

**MOTIVATION**

The acting MM Mr Bosman has previously refused to disclose the amount and conditions that Blaauwklippen has put in the Court settlement . Now I read in the Adjustments budget ( See Attached Extract )that Blaauwklippen has given donation of R 3 920 000.

**\* QUESTION NO 2**

What is the total amount the Stellenbosch municipality has paid to date to the Sustainability Institute Innovation Laboratory (Pty) Ltd (SILL) for the I-shack project in Enkaneni , under the guise of ESKOM indigent grant.

**Motivation**

SILL got donar funding to install solar panels and for which the resident where SILL installed a solar panel unit must pay a monthly levy ranging from R100 to R150. ESKOM does not supply and grid electricity to this I-sahak project and thus SILL does not make any payments to ESKOM. Thus why must Stellenbosch municipality pay ESKOM electricy grant to SILL when no ESKOM electricity provided by SILL. From the contract it also seem that the municipality will pay this ESKOM grant forever as there is no termination date to the contract. ( See attaché BAC minutes )

Regards

Clr DA Hendrickse

2017/02/07





**STELLENBOSCH MUNICIPALITY**

**MINUTES**

**OF**

**BID ADJUDICATION COMMITTEE MEETING**

**26 June 2015**

**TO:**

Chief Financial Officer

Director: Engineering Services

Director: Human Settlements and Property Management

Director: Planning and Economic Development

Director: Strategic and Corporate Services

Minutes of the Bid Adjudication Committee, held on 26 June 2015

Chief Financial Officer

CHAIRPERSON

## MINUTES

1. Opening

The Chairperson welcomes all members present and drew their attention to the undertaking of confidentiality and of impartiality and made it clear that all members first familiarise themselves with the contents of the declaration and that no one had any interest directly or indirectly to declare and in this instance referred the members to the summary of preferred bidder names on the summary page. Circulating and signing of the attendance register.

2. Present

Marius Wüst  
C Patrick  
A van Niekerk  
T Mfeya  
L Mdunyelwa  
T Rhode (Co-opted)  
A Treurnich (Co-opted)

3. Leave of absent

None.

4. Minutes of previous meeting

## 5. ADJUDICATION COMMITTEE: 26 June 2015

## 5.1 Bid: B/SM 47/15: Off-the-Grid Electricity provision in Enkanini.

The BAC recommendation of 23 January 2015 with regards to the above-mentioned tender reads as follows (first paragraph only):

*"After thorough deliberation of item by the bid adjudication committee members, the offer of The Sustainability Institute innovation Laboratory (Pty) Ltd (SIIL) was accepted and approved for the provision of off-the-grid electricity and related equipment to residents of the Enkanini informal settlement in Stellenbosch until 30 June 2017, as they scored the highest points."*

The recommendation was approved as it stands.

I am however, of the opinion that the resolution does not adequately describe the nature and extent of the payment that the municipality will be making to SIIL with regards to this particular tender.

The intention is that SIIL be paid a subsidy per customer, equal to the amount of subsidy paid to other regular registered indigent consumers in respect of electricity and to a maximum of 1500 SIIL customers.

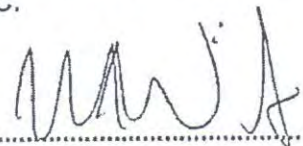
The amount payable per subsidy is stipulated in the Indigent Policy and is amended on an annual basis. Subsidy paid to SILL will obviously also increase in line with amendments made to the policy.

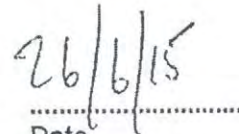
For the sake of clarity and to remove any uncertainty in this regard, I hereby request that the BAC resolution of 23 January 2015 with regards to B/SM 47/15 be amended by the insertion of the following, last sentence:

*The municipality will pay an indigent subsidy to SILL in terms of Clause 1(3)(b) of the approved Indigent Policy. Such subsidy will be paid per I-Shack customer and will be restricted to a maximum of 1500 I-Shack customers. The amount of subsidy payable per customer will be equal to the Indigent subsidy per household (inclusive of VAT) as stipulated in the Indigent Policy as amended.*

APPROVAL

The respective amendment for Bid B/SM 47/15 was unanimously approved by the BAC.

i)   
.....  
Chairperson  
M Wüst

  
.....  
Date

6. General

7. Adjournment

Meeting adjourned at 08:49

Minutes compiled by P Ribeiro (Ms)

Date: 26 June 2015



## MEMORANDUM

*Office of the Municipal Manager  
Kantoor van die Munisipale Bestuurder*

To : **SPEAKER**  
From : **MUNICIPAL MANAGER**  
Date : **13 February 2017**  
RE : **REPLY TO QUESTIONS IN TERMS OF SECTION 38 (12) OF THE  
RULES OF ORDER: BLAAUWKLIPPEN AND I-SHACK ENQUIRY**

Dear Speaker,

With reference to the question received from Councilor D Hendrickse, submitted in terms of section 38 of the Rules of Order Regulating The Conduct of Council and Council Committee Meetings, dated 7 February 2017 herewith my reply in terms of section 38 (12):

Question 1:

"What is the conditions of the Donation of R 3 920 000 that Blaauwklippen has put on what is the monyes can be used for. "

Response

The former Acting MM (Richard Bosman) formally responded to the issue pertaining the Settlement Agreement between the Municipality and Blaauwklippen to the effect that the terms of the agreement are subject to a confidentiality clause which precludes the municipality from making information available on the terms of the agreement. As the confidentiality clause is still applicable, I'm not at liberty to make the requested disclosure thereof.

Legal input received confirmed that Council mandated the administration to undertake the mediation on its behalf and therefore it's only proper that the administration take an item to Council to give feedback on the outcome. The item will have to serve in-committee to cover the confidentiality aspect. Said item will serve at Council In-Committee during April 2017.

Question 2:

"What is the total amount the Stellenbosch municipality has paid to date to the Sustainability Institute Innovation Laboratory (Pty) Ltd (SILL) for the I-shack project in Enkaneni, under the guise of ESKOM indigent grant."

Response

Please see detailed response by the Chief Financial Officer attached as Appendix 1.

Regards

  
GERALDINE METTLER  
MUNICIPAL MANAGER

## APPENDIX 1





**STELLENBOSCH**  
STELLENBOSCH • PNIEL • FRANSCHHOEK  
MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

## INTERNAL REPORT

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<b>TO</b>	<b>:</b>	<b>MUNICIPAL MANAGER</b>
<b>FROM</b>	<b>:</b>	<b>CHIEF FINANCIAL OFFICER</b>
<b>Re</b>	<b>:</b>	<b>RFI FROM EFF re I-SHACK</b>
<b>DATE</b>	<b>:</b>	<b>13 FEBRUARY 2017</b>

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### 1. PURPOSE

The purpose of this report is to provide information in response to a RFI received from the EFF with regards to the so-called I-Shack tender.

### 2. BACKGROUND

It is not always possible to provide residents of informal settlements with conventional electricity. As an alternative, it was decided to look at off-grid electricity so that families living in informal settlements could at least have some form of energy until conventional energy reticulation is implemented.

As a result, Council amended the Indigent Policy to cater for the possibility of appointing service providers to provide off-grid electricity to residents of informal settlements.

Another amendment made by Council to the Indigent Policy enables the municipality to pay the monetary equivalent of the indigent subsidy for Free Basic Electricity (FBE) directly to the provider of off-grid electricity, i.e. one subsidy per household that receives off-grid electricity.

After a complete competitive bidding process, a tender was awarded to the Sustainability Institute Innovation Laboratory (SIIL) to provide off-grid electricity to a maximum of 1500 households of Enkanini for the period 1 February 2015 – 30 June 2017.

This unique initiative has assisted an average of 900 households per month over the past 24 months. This has alleviated the need for paraffin or candles to be used as lighting which is no doubt, cheaper and safer in the long run.

The unique nature and success of the project was also recognized by the South African National Energy Association (SANEA) who issued the municipality with a Special Award during 2016.

Officials of the municipality have even given talks at SANEA workshops about the project that has been used as a case study by SANEA members.

Furthermore, representatives of several other municipalities have visited Stellenbosch on occasion to learn more about the project.

The current tender expires on 30 June 2017, but due to the success of the project a new bid will be advertised for similar services until June 2020 during February 2017.

### **3. RESPONSE SPECIFIC TO THE QUESTION RECEIVED FROM EFF**

The question raised merely asks what the total amount is that has been paid to date in respect of the I-Shack project. R1 091 488 from the Equitable Share has been paid in the 24 months of February 2015 to January 2017 to provide alternative safer energy to an average of 900 households per month in Enkaneni.

The motivation for the question however, contains several inaccuracies that should be rectified:

- There is no such thing as an Eskom indigent grant. Money received via Equitable Share is earmarked for Free Basic Services (FBS) and is used for this purpose. Eskom is not involved in any way whatsoever.

- The donor funding procured by SIIL was done without any involvement of the municipality. SIIL procured the grant on its own initiative. The municipality has no control over such funding or any conditions that might exist and cannot prescribe to SIIL in any way how the grant should be appropriated.
- References made to Eskom are irrelevant. Eskom is not involved in this particular project in any way whatsoever and is not even a factor anywhere in the process. In areas where Eskom does indeed provide electricity to residents of WC024, the municipality pays the indigent subsidy directly to Eskom where applicable.
- The contract does indeed have a termination date. The date of 30 June 2017 is clearly included in the minutes of the BAC when the appointment was made and is also clearly contained in the SLA that was signed between the two parties.

### 3. CONCLUSION

The I Shack project in Enkanini is a leading project and has proven to be very successful, showing great promise of scalability and expansion to other informal settlements in the municipal area until conventional electricity is installed.

It is believed that the back ground and information provided above will suffice to provide a comprehensive response to the RFI.

Marius Wüst  
Chief Financial Officer

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<b>10.4</b>	<b>MOTION BY COUNCILLOR F ADAMS: DRAFT DISCRIMINATORY BY-LAW</b>
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A Notice of a Motion, dated 2017-02-07, was received from Councillor F Adams regarding a Draft Discriminatory By-law.

The said Motion is attached as **APPENDIX 1**.

**FOR CONSIDERATION**

<b>Meeting:</b>	6 <sup>th</sup> Council: 2017-02-22	<b>Submitted by Directorate:</b>	Office of the Municipal Manager
<b>Ref No:</b>	3/4/1/4	<b>Author:</b>	MM: (Ms G Mettler)
<b>Collab:</b>		<b>Referred from:</b>	



CONTACT: [packcity2010@yahoo.com](mailto:packcity2010@yahoo.com)  
 P.O BOX 12445  
 DIE BOORD  
 7613

07 February 2017



Without Prejudice:

RE: Motion

I hereby submit the following Motion in terms of the Rules of Order to serve at the February 2017 Council Meeting.

**Motion: That Council agrees to formalize and adopt a draft Discriminatory By-Law.**

**Background:**

It is a fact that racial discrimination increased during the past twenty years of democracy and is currently the subject of continuous discussions, especially on social media.

During Apartheid it was clear who were the racist and their agendas, not that this change much at all today. Today, however there is this blame game between different race groups on the issue of racism.

Only a dishonest and naïf person can deny that racism is still relevant and very destructive. Let us rather not focus who are the victims and perpetrators. This won't help the cause to address and come up with solutions.

**International day for the Elimination of Racial Discrimination:**

I refer you to the above mention day instituted by the united Nation on 21 March, also Human rights Day.

NB: This draft by-law will be in line with the current National process against racist practices and hate speech. Let us be pro-active and be the first Council who illustrate to the country, that Stellenbosch is not racist and is a Town for All.

ALUTA CONTINUA



CONTACT: [packcity2010@yahoo.com](mailto:packcity2010@yahoo.com)  
P.O BOX 12445  
DIE BOORD  
7613

**Recommendations:**

1. That Council agrees to adopt a process to formalize and draft a Discriminatory By-Law and mandate the Municipal Manager to submit a draft by August 2017.
2. That the Council mandate the Mayor to contribute to the annual STAR- Stellenbosch against Racism as part of the funding approved by the previous Mayor, Ald. Conrad Sidego. This was the amount R100 000 for social cohesion. The Human Rights Day celebration on 21 March 2017 would be ideal.

Clr. Franklin Adams

A handwritten signature in black ink, appearing to be 'F. Adams', written over a horizontal dashed line.

Secunder.

A handwritten signature in black ink, appearing to be 'Secunder', written over a horizontal dashed line.

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<b>10.5</b>	<b>MOTION BY COUNCILLOR F ADAMS: JAMESTOWN HOUSING PROJECT</b>
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A Notice of a Motion, dated 2017-02-07, was received from Councillor F Adams regarding the Jamestown Housing Project.

The said Motion is attached as **APPENDIX 1**.

**FOR CONSIDERATION**

<b>Meeting:</b>	6 <sup>th</sup> Council: 2017-02-22	<b>Submitted by Directorate:</b>	Office of the Municipal Manager
<b>Ref No:</b>	3/4/1/4	<b>Author:</b>	MM: (Ms G Mettler)
<b>Collab:</b>		<b>Referred from:</b>	



CONTACT: [oackcity2010@yahoo.com](mailto:oackcity2010@yahoo.com)  
 P.O BOX 12445  
 DIE BOORD  
 7613

07 February 2017

Without Prejudice:

RE: Motion



I hereby submit the following Motion in terms of the Rules of Order to serve at the February 2017 Council Meeting.

**Motion:** That Council agrees to submit all relevant information regarding agreements between Blaauwklippen Estate and Stellenbosch Municipality on the Jamestown Housing Project and Sewende Laan.

**Background:**

I refer the Council to the matter between Blaauwklippen and the Stellenbosch Municipality with regard the residents of Sewende laan in Jamestown.

I am aware, that Blaauwklippen bought the land on an unfair manner from a previously disadvantage person, who was alleged unstable. This land also had already people residing on it and also paid rental to the previous owner. Some even stayed there for more than twenty years.

The motivation to buy the land was basically with the understanding, that already in 2008, that affordable housing will be provided.

Another reason is the economic prospects, created by white monopoly capital.

Subsequently, the houses never materialized and there were already various attempts to evict people. It was this an blessing in disguise, obviously for Blaawklippen, when half of the people structures was destroyed by a fire in January 2015.

This is where all possible attempts came into place to fast tract their attempts to remove people.

This was also the time, where there were some questionable agreements between Blaauwklippen, some of the residents, some councilors and officials.





CONTACT: [oackcity2010@yahoo.com](mailto:oackcity2010@yahoo.com)  
P.O BOX 12445  
DIE BOORD  
7613

I also refer the Council to the Council resolution of 26 April 2015 and still no feedback on what was the results. Why, the lack of transparency and accountability. What is there to hide?

P.S. There are also no court judgments, but rather the endorsement of a settlement agreement.

It was quite obvious, that even the court processes were taken advantage off to pursue some devious, unfair and corrupt practices. This is to justify the illegal purchase of houses by the Blaauwklippen to benefit people, who didn't qualify according housing legislation.

**Recommendations:**

1. That Council mandated the Municipal Manager to submit an report with prove off all agreements between the various parties ( Blaauwklippen, Municipality and residents)
2. That the MM submit a list of all the people who originally was on the final beneficiary list and was taken off to accommodate the people who didn't qualify.
3. That the MM submit an detail list of all the people that benefitted from the so called donation of R3,9 million from Blaauwklippen and their respective income.

Clr. Franklin Adams

Secunder.

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11.	<b>URGENT MATTERS SUBMITTED BY THE MUNICIPAL MANAGER</b>
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12.	<b>CONSIDERATION OF MOTION OF EXIGENCY</b>
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13.	<b>CONSIDERATION OF REPORTS</b>
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13.1	<b>CONSIDERATION OF REPORTS SUBMITTED BY THE SPEAKER</b>
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NONE

13.2	<b>CONSIDERATION OF REPORTS SUBMITTED BY THE EXECUTIVE MAYOR</b>
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NONE

14.	<b>MATTERS TO BE CONSIDERED IN-COMMITTEE</b>
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(SEE PINK DOCUMENTATION)