



**STELLENBOSCH**  
STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

Ref no.3/4/2/5

2022-09-09

**MAYORAL COMMITTEE MEETING**  
**WEDNESDAY, 2022-09-14 AT 10:00**

**TO** The Executive Mayor, Ald G Van Deventer (Ms)  
The Deputy Executive Mayor, Cllr J Fasser

**COUNCILLORS** R Adams  
FJ Badenhorst  
Z Dalling (Ms)  
R du Toit (Ms)  
P Johnson  
J Joon  
  
L Nkamisa  
  
C van Wyk (Ms)  
  
J Williams

Notice is hereby given that a Mayoral Committee Meeting will be held via **MS Teams** on **Wednesday, 2022-09-14 at 10:00** to consider the attached agenda.

EXECUTIVE MAYOR, ALD GM VAN DEVENTER (MS)

**CHAIRPERSON**

**AGENDA**  
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**2022-09-14**  
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Minutes: Mayoral  
Committee:  
2022-08-16**



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNICIPALITY • UMASIPALA • MUNISIPALITEIT

Ref no.3/4/2/5

2022-08-16

## **MINUTES**

### **MAYORAL COMMITTEE MEETING:**

**2022-08-16 AT 10:00**

**MINUTES**  
**MAYORAL COMMITTEE MEETING**  
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**PRESENT:** Executive Mayor, Ald GM Van Deventer (Ms) (**Chairperson**)  
Deputy Mayor, Cllr J Fassler

**Councillors:** R Adams  
FJ Badenhorst  
Z Dalling (Ms)  
R du Toit (Ms)  
P Johnson  
J Joon  
L Nkamisa  
C van Wyk (Ms)  
J Williams

**Also Present:** Councillor P Crawley (Chief Whip)  
Speaker Q Smit  
W Petersen (MPAC Chairperson)

**Officials:** Municipal Manager (G Mettler (Ms))  
Director: Corporate Services (A de Beer (Ms))  
Acting Director: Community & Protection Services (A van Merwe)  
Director: Planning and Economic Development (A Barnes)  
Director : Infrastructure Services (S Chandaka)  
Chief Financial Officer (K Carolus)  
Senior Administration Officer (B Mgcushe (Ms))

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<b>1.</b>	<b>OPENING AND WELCOME</b>
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The Chairperson, Executive Mayor, welcomed everyone present to the Mayoral Committee Meeting.

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The Executive Mayor extended a warm welcome to the new Director of Infrastructure Services Mr Chandaka who recently joined Stellenbosch Municipality.

<b>2.</b>	<b>COMMUNICATION BY THE CHAIRPERSON</b>
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NONE

<b>3.</b>	<b>DISCLOSURE OF INTERESTS</b>
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NONE



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4.	<b>APPLICATIONS FOR LEAVE OF ABSENCE</b>
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The following application for leave of absence was approved in terms of the Rules and Order By-law of Council: -

Director: Protection Services (G Boshoff)

– 16 August 2022.

5.	<b>CONFIRMATION OF PREVIOUS MINUTES</b>
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The minutes of the Mayoral Committee Meeting held on 2022-07-20 and 2022-07-25 were **confirmed as correct subject to correction on the communication of the Executive Mayor with reference to the Chief Whip – all references must read “Council Whip “and on page 8 the reference to “of the ruling party “should be removed.**

<b>6.</b>	<b>STATUTORY MATTERS</b>
<b>6.1</b>	<b>SDF / IDP / BUDGET TIME SCHEDULE / PROCESS PLAN FOR 2023/24</b>

**Collaborator No:** 733856  
**IDP KPA Ref No:** Good Governance and Compliance  
**Meeting Date:** 16 August 2022

**1. SUBJECT: SDF / IDP / BUDGET TIME SCHEDULE / PROCESS PLAN FOR 2023/24**

**2. PURPOSE**

To table to Council for consideration and approval:

- (a) The SDF / IDP / Budget Time Schedule / Process Plan for 2023/24, attached as **ANNEXURE A.**

**3. DELEGATED AUTHORITY**

Council.

**4. EXECUTIVE SUMMARY**

Each municipality is legally required to adopt a time schedule listing the key activities and deadlines 10 months before the start of the new financial year.

The Spatial Development Framework (SDF) / Integrated Development Plan (IDP) / Budget Time Schedule / Process Plan for 2023/24 outlines the key strategic activities and consultative processes that will guide the planning, drafting and adoption of the First Review of the 5<sup>th</sup> Generation IDP 2022 – 2027 and the Medium – Term Revenue Expenditure Framework (Budget) to be implemented in the 2023/24 financial year.

The SDF / IDP / Budget Time Schedule / Process Plan for 2023/24 is, therefore, compiled in terms of Section 21(b) of the Local Government: Municipal Finance Management Act, 2003 (Act No.56 of 2003) (MFMA), which states that “the mayor of a municipality **must** –

at least 10 months before the start of the budget year, table in the municipal council a time schedule outlining key deadlines for –

- (i) the preparation, tabling and approval of the annual budget;
- (ii) the annual review of-
  - (aa) the integrated development plan in terms of section 34 of the Municipal Systems Act; and
  - (bb) the budget-related policies;
- (iii) the tabling and adoption of any amendments to the integrated development plan and budget-related policies; and
- (iv) any consultative processes forming part of the processes referred to in subparagraphs (i), (ii) and (iii)

The SDF / IDP / Budget Time Schedule / Process Plan for the 2023/24 financial year is also compiled in terms of Section 29 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) (MSA).

Section 29(1) of the MSA specifies that:

The process followed by a municipality to draft its integrated plan, including its consideration and adoption of the draft plan, must-

- (a) be in accordance with a predetermined programme specifying timeframes for the different steps;
- (b) through appropriate mechanisms, processes and procedures established in terms of Chapter 4, allow for:
- (i) the local community to be consulted on its development needs and priorities;
  - (ii) the local community to participate in the drafting of the integrated development plan; and
  - (iii) organs of state, including traditional authorities and other role players to be identified and consulted on the drafting of the integrated development plan;
- (c) provide for the identification of all plan and planning requirements binding on the municipality in terms of national and provincial legislation; and
- (d) be consistent with any other matters that may be prescribed by regulation.

The public participation process will comprise the period **07 – 28 September 2022**, to allow all members of the community and stakeholders to provide written inputs and oral representations which the municipality must consider in reviewing the IDP.

Public participation meetings are provisionally scheduled to be held from **19 – 22 September 2022**. The meeting schedule will be published in the local newspaper, on the municipality's website, on the notice boards of libraries and on social media platforms (Facebook, Twitter, Stellenbosch Citizens App, WhatsApp and Email).

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 6.1**

- (a) that Council adopts the SDF / IDP / Budget Time Schedule / Process Plan 2023/24 for the compilation of the annual budget in terms of Section 21(1) of the MFMA and Section 29 of the MSA, to guide the planning, drafting and adoption of the First Review of the 5<sup>th</sup> Generation IDP 2022 – 2027, attached as **ANNEXURE A**; and
- (b) that an advertisement is placed on the official website of the municipality and in the local newspaper notifying the public of the adopted SDF / IDP / Budget Time Schedule / Process Plan 2023/24.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Geraldine Mettler
<b>POSITION</b>	Municipal Manager
<b>DIRECTORATE</b>	Office of the Municipal Manager
<b>CONTACT NUMBERS</b>	021 808 8025
<b>E-MAIL ADDRESS</b>	geraldine.mettler@stellenbosch.gov.za
<b>REPORT DATE</b>	03 August 2022

<b>6.2</b>	<b>ADJUSTMENTS BUDGET (ROLL-OVER) 2022/2023</b>
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Collaborator No: 733857  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: ADJUSTMENTS BUDGET (ROLL-OVER) 2022/2023**

**2. PURPOSE**

Is to present the adjustments budget roll-over for the 2022/2023 financial year to Council for approval.

**3. DELEGATED AUTHORITY**

**FOR APPROVAL BY MUNICIPAL COUNCIL**

**4. EXECUTIVE SUMMARY**

Attached as **APPENDIX 1** is an executive summary by the Accounting Officer.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 6.2**

- (a) that the Adjustments Budget for 2022/2023 as set out in **APPENDIX 2**, be approved;
- (b) that the Adjustments Budget Tables as prescribed by the Budgeting and Reporting Regulations, as set out in **APPENDIX 3**, be approved; and
- (c) that the Service Delivery and Budget Implementation Plan be adjusted accordingly inclusive of the non-financial information (performance measurement).

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	<b>MONIQUE STEYL</b>
<b>POSITION</b>	<b>SENIOR ANAGER: FINANCIAL MANGEMENT SERVICES</b>
<b>DIRECTORATE</b>	<b>FINANCIAL SERVICES</b>
<b>CONTACT NUMBERS</b>	<b>021 808 8512</b>
<b>E-MAIL ADDRESS</b>	<b>Monique.Steyl@stellenbosch.gov.za</b>
<b>REPORT DATE</b>	<b>10 August 2022</b>

<b>6.3</b>	<b>MONTHLY FINANCIAL STATUTORY REPORTING: DEVIATIONS FOR JULY 2022</b>
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Collaborator No: 733857  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: MONTHLY FINANCIAL STATUTORY REPORTING: DEVIATIONS FOR JULY 2022**

**2. PURPOSE**

To comply with Regulation 36(2) of the Municipal Supply Chain Management Regulations and Section 36 of the Supply Chain Management Policy 2022/2023 to report the deviations to Council.

**3. DELEGATED AUTHORITY**

**Council**

FOR NOTING.

**4. EXECUTIVE SUMMARY**

Regulation 36(2) of the Municipal Supply Chain Management Regulations and Section 36 of the Supply Chain Management Policy (2022/2023) stipulate that SCM deviations be reported to Council. In compliance thereto, this report presents to Council the SCM deviations that occurred during July 2022.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 6.3**

that Council notes the deviations as listed for the month of July 2022.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Kevin Carolus
<b>POSITION</b>	<b>CFO</b>
<b>DIRECTORATE</b>	<b>Finance</b>
<b>CONTACT NUMBERS</b>	<b>021 808 8528</b>
<b>E-MAIL ADDRESS</b>	<b>Kevin.Carolus@ Stellenbosch.gov.za</b>
<b>REPORT DATE</b>	03 August 2022

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7.	CONSIDERATION OF ITEMS BY THE EXECUTIVE MAYOR: [ALD G VAN DEVENTER (MS)]
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7.1	PROTECTION SERVICES: (PC: CLLR R BADENHORST)
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NONE

7.2	YOUTH, SPORTS AND CULTURE: [PC: CLLR R ADAMS]
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NONE

7.3	<b>CORPORATE SERVICES: (PC: CLLR L NKAMISA)</b>
7.3.1	<b>RETURN ITEM: APPLICATION TO LEASE A PORTION OF MUNICIPAL OFFICES AT PNIEL FOR THE PURPOSE OF A SATELITE CLINIC: WESTERN CAPE GOVERNMENT: DEPARTMENT OF TRANSPORT AND PUBLIC WORKS</b>

Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance

16 August 2022

**1. SUBJECT: RETURN ITEM: APPLICATION TO LEASE A PORTION OF MUNICIPAL OFFICES AT PNIEL FOR THE PURPOSE OF A SATELITE CLINIC: WESTERN CAPE GOVERNMENT: DEPARTMENT OF TRANSPORT AND PUBLIC WORKS**

**2. PURPOSE**

Is to provide feedback on the public participation process that took place after the in-principle decision to approve the request from the Provincial Government of the Western Cape: Department of Transport and Public Works to use a portion of the Municipal Offices in Pniel for the purpose of a Satellite Clinic for the Dwarsrivier Area free of charge. A Final decision must be made.

**3. DELEGATED AUTHORITY**

In terms of the approved System of Delegations the Executive Mayor, in consultation with the Executive Mayoral Committee, has the delegated authority to consider applications to lease council-owned property for a period shorter than 10 years on a contract value of less than R5M (See delegation EM85).

**4. EXECUTIVE SUMMARY**

The Provincial Government of the Western Cape requested the use of a portion of the Municipal Office in Pniel to be used as a Satellite Clinic for the Dwarsrivier area. The only other clinic is situated in Kylemore. They want to lease the property free of charge for a period of 9 years and 11 months with the option to renew. The Property Management Policy allows for direct negotiations in specific circumstances, where a public competitive process would not serve any purpose.

The Executive Mayor in consultation with the Mayoral committee resolved on 23 March 2022 to in principle agree to the lease of the portion of the Pniel office to the Department of Public Works for a satellite clinic free of charge provided that a public participation process be followed to provide an opportunity for any inputs on the in-principle decision.

The advertisement was published and the date for comments closed on 5 August 2022 (copy as per **APPENDIX 1**). We have received no inputs.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.3.1**

- (a) that it be noted that no inputs were received during the public participation process;
- (b) that Council approves the lease of the portion of the Pniel municipal building used by the post office, be made available to the provincial department of public works for purpose of the satellite clinic;

- 
- (c) that the Department be responsible for any renovations and upgrades required at their own costs and without any future compensation from the Municipality;
- (d) that the department enters into a lease agreement with the Municipality and agrees to pay a pro rata amount for services based on the square meters used per month; and
- (e) that the portion be lease for a period of 9 years and 11 months.

**FOR FURTHER DETAILS CONTACT:**

<b><i>NAME</i></b>	<b>Annalene de Beer</b>
<b><i>POSITION</i></b>	<b><i>Director</i></b>
<b><i>DIRECTORATE</i></b>	<b><i>CORPORATE SERVICES</i></b>
<b><i>CONTACT NUMBERS</i></b>	<b><i>021-8088018</i></b>
<b><i>E-MAIL ADDRESS</i></b>	<b><i>Annalene.deBeer@stellenbosch.gov.za</i></b>
<b><i>REPORT DATE</i></b>	<b><i>11 August 2022</i></b>



7.4	<b>FINANCIAL SERVICES: (PC: CLLR P JOHNSON)</b>
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NONE

7.5	<b>HUMAN SETTLEMENTS: (PC: CLLR J FASSER)</b>
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NONE

7.6	<b>INFRASTRUCTURE SERVICES : (PC : CLLR Z DALLING (MS))</b>
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7.6.1	<b>APPROVAL OF THE MUNICIPALITY'S ROADS AND STREETS BYLAW – DELEGATIONS AND PROPOSED DRAFT ADMISSION OF GUILT FINES</b>
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Collaborator No: 733491  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: APPROVAL OF THE MUNICIPALITY'S ROADS AND STREETS BYLAW – DELEGATIONS AND PROPOSED DRAFT ADMISSION OF GUILT FINES**

**2. PURPOSE**

That Council considers and approves the Municipality's, Roads and Streets By-Law's, Delegations and Proposed Admission of Guilt Fines.

**3. DELEGATED AUTHORITY**

Municipal Council.

**4. EXECUTIVE SUMMARY**

Council had approved the Municipality's By-Law on Roads and Street, following a public participation process and all relevant processes, on the 24<sup>th</sup> August 2021 (**ANNEXURE A**).

As the Road Authority for Municipal Roads and Streets within the jurisdiction of the Municipality, the Council may define and regulate, activities and functions on roadways, walkways and other spaces within road reserves.

Under Section 59: Delegations of the Municipal Systems Act, Council is to approve the proposed delegations of powers in terms of this By Law to various key officials and incorporate these into the System of Delegations. A proposed set of delegations is shown under **ANNEXURE B**.

The issuing of fines will assist the Municipality with its aim to promote a safe environment allowing for penalties to be imposed for activities that are hazardous to users and damaging to roads and sidewalks to Municipal Infrastructure. The proposed Admission of Guilt Fines is attached as **ANNEXURE C**.

**EXECUTIVE MAYORAL COMMITTEE: 2022-08-16: ITEM 7.6.1****RESOLVED**

that this item be referred back to Administration for further refinement.

**FOR FURTHER DETAILS CONTACT:**

<b><i>NAME</i></b>	Deon Louw
<b><i>POSITION</i></b>	<b><i>Director</i></b>
<b><i>DIRECTORATE</i></b>	<b><i>Infrastructure Services</i></b>
<b><i>CONTACT NUMBERS</i></b>	<b><i>021 808 8213</i></b>
<b><i>E-MAIL ADDRESS</i></b>	<b><i><a href="mailto:Deon.louw@ Stellenbosch.gov.za">Deon.louw@ Stellenbosch.gov.za</a></i></b>
<b><i>REPORT DATE</i></b>	<b><i>21 July 2022</i></b>

7.6.2	<b>APPROVAL OF THE STELLENBOSCH MUNICIPALITY INTEGRATED WASTE MANAGEMENT BY-LAW DELEGATIONS AND ADMISSION OF GUILT FINES</b>
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Collaborator No: 733486  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: APPROVAL OF THE STELLENBOSCH MUNICIPALITY INTEGRATED WASTE MANAGEMENT BY-LAW DELEGATIONS AND ADMISSION OF GUILT FINES**

**2. PURPOSE**

To request approval from Council to finally approve the Integrated Waste Management By-Law Delegations and Admission of Guilt Fines.

**3. DELEGATED AUTHORITY**

The Stellenbosch Municipality By-Law relating to Integrated Waste Management was approved by Council. And published in the Provincial Gazette No. 8441 dated 4 June 2021 (**ANNEXURE A**).

**4. EXECUTIVE SUMMARY**

The Stellenbosch Municipality Integrated Waste Management By-Law (2020) regulates the avoidance, minimization, generation, collection, cleaning and disposal of waste; and matters related thereto.

Under Section 59: Delegations of the Municipal Systems Act, Council is to approve the proposed delegations of powers in terms of this By Law to various key officials and incorporate these into the System of Delegations. A proposed set of delegations is shown under **ANNEXURE B**.

Under the provisions of section 45 of the By-Law a person convicted of an offence in terms of section 44(1)(a), (b), (c) or (e) of the By-Law is liable to a fine. A set of proposed Admission of Guilt Fines (AGF) has been attached as **ANNEXURE C**.

**EXECUTIVE MAYORAL COMMITTEE: 2022-08-16: ITEM 7.6.2**

**RESOLVED**

that this item be referred back to Administration for further refinement.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Deon Louw
<b>POSITION</b>	<i>Director</i>
<b>DIRECTORATE</b>	<i>Infrastructure Services</i>
<b>CONTACT NUMBERS</b>	021 808 8213
<b>E-MAIL ADDRESS</b>	<a href="mailto:Deon.louw@ Stellenbosch.gov.za">Deon.louw@ Stellenbosch.gov.za</a>
<b>REPORT DATE</b>	20 July 2022

7.6.3	<b>APPROVAL OF THE MUNICIPALITY'S STORMWATER BYLAW – DELEGATIONS AND PROPOSED ADMISSION OF GUILT FINES</b>
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Collaborator No: 733490  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: APPROVAL OF THE MUNICIPALITY'S STORMWATER BYLAW – DELEGATIONS AND PROPOSED ADMISSION OF GUILT FINES**

**2. PURPOSE**

That Council considers and approves the Municipality's, Stormwater By-Law's, Delegations and Proposed Admission of Guilt Fines.

**3. DELEGATED AUTHORITY**

Municipal Council.

**4. EXECUTIVE SUMMARY**

Council had approved the Municipality's By-Law on Stormwater, following a public participation process and all relevant processes, on the 25<sup>th</sup> November 2020. **(ANNEXURE A)**

The By-Law on Stormwater enables the Municipality to manage its stormwater systems and regulate activities that have a detrimental effect on the development and operation of the stormwater system.

Under Section 59: Delegations of the Municipal Systems Act, Council is to approve the proposed delegations of powers in terms of this By Law to various key officials and incorporate these into the System of Delegations. A proposed set of delegations is shown under **ANNEXURE B**.

The fines schedule will assist the Municipality with the management and regulation of stormwater systems by allowing for penalties to be imposed for activities that are detrimental to the development and operation of the stormwater system. The proposed fines schedule is attached as **ANNEXURE C**.

**EXECUTIVE MAYORAL COMMITTEE: 2022-08-16: ITEM 7.6.3**

**RESOLVED**

that this item be referred back to Administration for further refinement.

7.6.4	<b>APPROVAL OF THE MUNICIPALITY'S PARKING BYLAW – DELEGATIONS AND PROPOSED ADMISSION OF GUILT FINES</b>
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Collaborator No: 733488  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: APPROVAL OF THE MUNICIPALITY'S PARKING BYLAW – DELEGATIONS AND PROPOSED ADMISSION OF GUILT FINES**

**2. PURPOSE**

That Council considers and approves the Municipality's, Parking By-Law's, Delegations and Proposed Admission of Guilt Fines.

**3. DELEGATED AUTHORITY**

Municipal Council.

**4. EXECUTIVE SUMMARY**

Council had approved the Municipality's By-Law on Parking, following a public participation process and all relevant processes, on the 28 April 2021 (**ANNEXURE A**).

Under Section 59: Delegations of the Municipal Systems Act, Council is to approve the proposed delegations of powers in terms of this By Law to various key officials and incorporate these into the System of Delegations. A proposed set of delegations is shown under **ANNEXURE B**.

The fines schedule will assist the Municipality with the management and regulation of parking systems by allowing for penalties to be imposed for parking violations. A set of proposed Admission of Guilt Fines is attached as **ANNEXURE C**.

**EXECUTIVE MAYORAL COMMITTEE: 2022-08-16: ITEM 7.6.4**

**RESOLVED**

that this item be referred back to Administration for further refinement.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Deon Louw
<b>POSITION</b>	<i>Director</i>
<b>DIRECTORATE</b>	<i>Infrastructure Services</i>
<b>CONTACT NUMBERS</b>	021 808 8213
<b>E-MAIL ADDRESS</b>	<a href="mailto:Deon.louw@ Stellenbosch.gov.za">Deon.louw@ Stellenbosch.gov.za</a>
<b>REPORT DATE</b>	20 July 2022

<b>7.6.5</b>	<b>DRAFT OUTDOOR ADVERTISING &amp; SIGNAGE BY-LAW 2ND DRAFT</b>
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Collaborator No: 733489  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 16 August 2022

**1. SUBJECT: DRAFT OUTDOOR ADVERTISING & SIGNAGE BY-LAW 2<sup>ND</sup> DRAFT**

**2. PURPOSE**

To obtain Council's acceptance of the attached 2<sup>nd</sup> Draft By-Law Relating to Outdoor Advertising and Signage.

**3. FOR DECISION BY**

Council

**4. EXECUTIVE SUMMARY**

This item deals with the accepting of a 2<sup>nd</sup> Draft By-Law Relating to Outdoor Advertising and Signage.

The purpose of this By-Law is to control, manage and regulate outdoor advertising and signage and to provide mechanisms and guidelines for the control, regulating and management thereof and for matters connected therewith.

This By-Law was published as a draft before but so many comments have been received, via the public participation processes, that it was resolved to republish the By Law for Public Communication for comment.

The participation process has ended and only comments from the Stellenbosch Interest Group (SIG) has been received. This has been debated and alterations has been made in the sections as indicated and amended as

**EXECUTIVE MAYORAL COMMITTEE: 2022-08-16: ITEM 7.6.1**

**RESOLVED**

that this item be referred back to Administration for further refinement.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	<b>J G LOUW</b>
<b>POSITION</b>	<b>Director: Infrastructure Services</b>
<b>DIRECTORATE</b>	<b>Infrastructure Services</b>
<b>CONTACT NUMBERS</b>	<b>021 808 4004</b>
<b>E-MAIL ADDRESS</b>	<b>deon.louw@stellenbosch.gov.za</b>
<b>REPORT DATE</b>	<b>21 July 2022</b>

<b>7.6.6</b>	<b>PARKING FEE IMPLEMENTATION ALONG THE MAIN ROAD IN THE CENTRAL BUSINESS DISTRICT AREA OF FRANSCHHOEK</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance and Compliance

16 August 2022

**1. SUBJECT: PARKING FEE IMPLEMENTATION ALONG THE MAIN ROAD IN THE CENTRAL BUSINESS DISTRICT AREA OF FRANSCHHOEK**

**2. PURPOSE**

To inform Council of the Municipality's intention to introduce parking management along the Main Road in the Central Business District (CBD) area of Franschhoek.

**3. DELEGATED AUTHORITY**

Municipal Council.

**4. EXECUTIVE SUMMARY**

Schedule 5B of the Constitution determines that Public Parking is a Local Government competence. Stellenbosch Municipality is therefore responsible for the supply, maintenance and management of public parking within its area of jurisdiction.

Parking Management is implemented where there is an increased demand for parking. Parking Management comprises the implementation of parking fees, collection of fees and other associated tasks. The municipality implemented parking management in the Stellenbosch CBD area in 2013.

Currently, parking in Franschhoek is not being managed in terms of the above, however with the recent increases in economic and commercial activities, the demand for parking has increased. With the increase in demand for parking, the Municipality intends to implement Parking Management on approximately 146 bays located in the Main Road.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.6.6**

- (a) that Council takes note of this report; and
- (b) that a notice be compiled for publication to obtain public inputs in regard to the Council intention to start with parking management along the main road in Franschhoek.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Shane Chandaka
<b>POSITION</b>	<i>Director</i>
<b>DIRECTORATE</b>	<i>Infrastructure Services</i>
<b>CONTACT NUMBERS</b>	021 808 8213
<b>E-MAIL ADDRESS</b>	<a href="mailto:Shane.Chandaka@stellenbosch.gov.za">Shane.Chandaka@stellenbosch.gov.za</a>
<b>REPORT DATE</b>	4 August 2022

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7.7	PARKS, OPEN SPACES AND ENVIRONMENT: (PC: J JOON)
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NONE

7.8	PLANNING :(PC: CLLR C VAN WYK (MS)
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NONE

7.9	LOCAL ECONOMIC DEVELOPMENT AND TOURISM:(PC: CLLR R DE TOIT (MS)
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NONE

7.10	RURAL MANAGEMENT: (PC: CLLR J WILLIAMS)
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NONE



<b>7.11</b>	<b>MUNICIPAL MANAGER</b>
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<b>7.11.1</b>	<b>SIGNED PERFORMANCE AGREEMENT 2022/23 OF THE DIRECTOR: INFRASTRUCTURE SERVICES</b>
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**Collaborator No:** 733855  
**IDP KPA Ref No:** Good Governance and Compliance  
**Meeting Date:** 16 August 2022

**1. SUBJECT: SIGNED PERFORMANCE AGREEMENT 2022/23 OF THE DIRECTOR: INFRASTRUCTURE SERVICES**

**2. PURPOSE**

To submit to Council, for notification, the following:

- (a) The signed Performance Agreement 2022/23 of the Director: Infrastructure Services.

**3. DELEGATED AUTHORITY**

Council.

**4. EXECUTIVE SUMMARY**

Regulation 4(4)(a) of the Local Government: Municipal Performance Regulations for Municipal Managers and Managers Directly Accountable to Municipal Managers, 2006, requires that a separate performance agreement be signed within ninety (90) calendar days after the assumption of duty and annually within one month after the commencement of the new financial year.

The Local Government: Municipal Finance Management Act, 2003 (Act No. 56 of 2003) (MFMA) further requires that the signed performance agreements be promptly submitted to the Council.

The Director: Infrastructure Services was appointed by Council and assumed office on Monday, 01 August 2022.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.11.1**

that the signed Performance Agreement 2022/23 of the Director: Infrastructure be noted.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Geraldine Mettler
<b>POSITION</b>	Municipal Manager
<b>DIRECTORATE</b>	Office of the Municipal Manager
<b>CONTACT NUMBERS</b>	021 808 8025
<b>E-MAIL ADDRESS</b>	mm@stellenbosch.gov.za
<b>REPORT DATE</b>	03 August 2022

7.11.2	<b>MEMORANDUM OF UNDERSTANDING (“MOU”) FOR THE ESTABLISHMENT OF THE ADAM TAS CORRIDOR (“ATC”) LANDOWNERS COLLECTIVE</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance and Compliance

16 August 2022

**1. SUBJECT: MEMORANDUM OF UNDERSTANDING (“MOU”) FOR THE ESTABLISHMENT OF THE ADAM TAS CORRIDOR (“ATC”) LANDOWNERS COLLECTIVE**

**2. PURPOSE**

Is to provide Council with a copy of the Memorandum of Understanding (“MOU”) for the establishment of the ATC Landowners Collective that is aimed at formulating an agreement with the landowners within the ATC Study Area, to work together in realising the objectives of the Adam Tas Project.

**3. DELEGATED AUTHORITY**

Council for noting and endorsement.

**4. EXECUTIVE SUMMARY**

The MOU was drafted in order to record the commitment of the landowners within the ATC, which include the municipality to the implementation of the project and to determine the manner in which the landowners will cooperate and work together to realise the implementation of the project. for the landowners within the ATC to agree.

The MOU aims to mediate the relationship between the various parties that are signatories to the Landowners Collective without any legal binding obligations.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.11.2**

- (a) that Council takes note that at the 27<sup>th</sup> Council Meeting dated 29 May 2019, the Municipal Manager was authorized by Council to explore a Public Private Partnership for the Adam Tas Project; and
- (b) that Council endorse that the Municipal Manager be a signatory to the Memorandum of Understanding (“MOU”) for the Establishment of the Adam Tas Corridor Landowners Collective, attached as **APPENDIX 1** to this report.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Craig Alexander Pr Pln
<b>POSITION</b>	Senior Manager: Development Planning
<b>DIRECTORATE</b>	Planning and Economic Development
<b>CONTACT NUMBERS</b>	021 808 8196
<b>E-MAIL ADDRESS</b>	Craig.alexander@stellenbosch.gov.za
<b>REPORT DATE</b>	12 August 2022

7.11.3	<b>CONSIDERATION ON APPLICATIONS RECEIVED: FUNDING OF EXTERNAL BODIES PERFORMING A MUNICIPAL FUNCTION AS PROVIDED BY THE POLICY FUNDING OF BODIES PERFORMING A MUNICIPAL FUNCTION, READ WITH SECTION 80(2) OF THE LOCAL GOVERNMENT MUNICIPAL SYSTEMS ACT, 32 OF 2000, FINANCIAL YEAR 2022 / 2023</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance and Compliance

16 August 2022

**1. SUBJECT: CONSIDERATION ON APPLICATIONS RECEIVED: FUNDING OF EXTERNAL BODIES PERFORMING A MUNICIPAL FUNCTION AS PROVIDED BY THE POLICY FUNDING OF BODIES PERFORMING A MUNICIPAL FUNCTION, READ WITH SECTION 80(2) OF THE LOCAL GOVERNMENT MUNICIPAL SYSTEMS ACT, 32 OF 2000, FINANCIAL YEAR 2022 / 2023**

**2. PURPOSE OF MEETING**

To discuss and consider the funding applications for the 2022 / 2023 financial year received from external bodies performing a Municipal function as provided by the Policy for the Funding of External Bodies Performing a municipal function, read with Section 80(2) of the Municipal Systems Act No. 32 of 2000.

**3. EXECUTIVE SUMMARY**

In terms of Section 7(2) of the Policy relating to External Bodies Performing a Municipal Function of which budget allocation are delegated to the Grants Committee to make recommendations to Council, as approved by Council.

The notices of the applications for the funding of bodies performing a municipal function were advertised in the Eikestadnuus dated 17 March 2022, attached as **APPENDIX 1** of which the closing date to submit such applications was at 12:00 midday on 18 April 2022.

The advertisement was also advertised on the Stellenbosch Municipal Website and notice boards (**APPENDIX 2**).

Stellenbosch Municipality invited external bodies performing a municipal function in accordance with the policy, for funding facilities for the accommodation and burial of animals.

The closing date for the applications was advertised as 18 April 2022. Thus, were sufficient time awarded for organizations to provide the requested information.

Submissions were received from the below bodies (**APPENDIX 3** – Franschoek SPCA) and (**APPENDIX 4** Stellenbosch Animal Welfare Society) to perform accommodation and burial of animals function for Council for the 2022/2023 financial year. A comparison was made with the funding granted for 2021/2022 financial year.

<b>Applicants</b>	<b>2022 / 2023 Funding Requested in Rand Value</b>
Franschhoek SPCA	R 689 900.00
Stellenbosch Animal Welfare Society	R2 895 891.31
<b>Total Funding Requested</b>	<b>R3 585 791.31</b>

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.11.3**

- (a) that the amount of R225 000.00 be allocated to Franschhoek SPCA for the 2022 / 2023 financial year; and
- (b) that the amount of R1 275 000.00 be allocated to Stellenbosch Animal Welfare Society for the 2022 / 2023 financial year.

**FOR FURTHER DETAILS, CONTACT:**

<b>NAME</b>	Mrs Joan Felix
<b>POSITION</b>	Manager: Law Enforcement & Traffic Service
<b>DIRECTORATE</b>	Law Enforcement
<b>CONTACT NUMBERS</b>	021 808 8497
<b>E-MAIL ADDRESS</b>	Joan.felix@stellenbosch.gov.za
<b>REPORT DATE</b>	9 June 2022

7.11.4	<b>ADMINISTRATIVE OVERSIGHTS ON THE APPROVED GRANT IN AID (GIA) SCHEDULE OF DONATIONS APPROVED FOR 2022-2023</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance and Compliance

16 August 2022

**1. SUBJECT: ADMINISTRATIVE OVERSIGHTS ON THE APPROVED GRANT IN AID (GIA) SCHEDULE OF DONATIONS APPROVED FOR 2022-2023**

**2. PURPOSE**

To consider and discuss the oversights picked up on the approved Grant in Aid schedule of donations as approved by Council on 25 May 2022.

**3. DELEGATED AUTHORITY**

GiA donations are approved by council as part of the budget documents.

**4. EXECUTIVE SUMMARY**

On completion of the 2022-2023 GiA Memorandums of Agreements with successful applicants a couple of administrative oversights were picked up in the approved schedule which requires rectification. The oversights have no financial implications for the municipality.

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.11.4**

- (a) that Council notes the administrative oversights in the donation schedule; and
- (b) that Council supports and approves the changes to rectify the inaccurate reflection on the appeals component of the Grant in Aid schedule.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Michelle Aalbers
<b>POSITION</b>	<i>Manager Community Development</i>
<b>DIRECTORATE</b>	<i>Community and Protection Services</i>
<b>CONTACT NUMBERS</b>	8408
<b>E-MAIL ADDRESS</b>	<u><i>Michelle.aalbers@ Stellenbosch.gov.za</i></u>
<b>REPORT DATE</b>	10-06-2022

7.11.5	<b>FEEDBACK REPORTS RECEIVED FROM THREE 2021-2022 GRANT IN AID (GIA) RECIPIENTS INDICATING CONTRAVENTIONS OF THE APPROVED GIA POLICY AND SIGNED MOA'S</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance and Compliance

16 August 2022

**1. SUBJECT: FEEDBACK REPORTS RECEIVED FROM THREE 2021-2022 GRANT IN AID (GIA) RECIPIENTS INDICATING CONTRAVENTIONS OF THE APPROVED GIA POLICY AND SIGNED MOA'S**

**2. PURPOSE**

To consider and discuss the feedback reports received from Smart Mission Entertainment, Franschoek Rugby Club and Ubuntu Hiking for funding received for the 2021-2022 financial year.

**3. DELEGATED AUTHORITY**

GiA donations are approved by Council as part of the budget documents.

**4. EXECUTIVE SUMMARY**

Three grant receiving organisations were found to be in contravention of the Grant in Aid policy and signed MOA as discovered from the feedback reports provided to the municipality. The discovery was documented and circulated to the Municipal Manger and Chief Financial Officer who both supported the recommendations of the investigation report and requested that the matter be brought under the attention of the Grant Committee (**ANNEXURE 1**).

**RECOMMENDATIONS FROM THE EXECUTIVE MAYOR, IN CONSULTATION WITH THE EXECUTIVE MAYORAL COMMITTEE, TO COUNCIL: 2022-08-16: ITEM 7.11.5**

- (a) that Council approves the blacklisting of Smart Mission Entertainment, Franschoek Rugby Club and Ubuntu Hiking for a period of 5 years (2022-2023 to 2027-2028) in accordance with section 8.5 of the approved GiA Policy; and
- (b) that Council mandates the department to inform the three organisations of the decision.

**FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Michelle Aalbers
<b>POSITION</b>	<i>Manager Community Development</i>
<b>DIRECTORATE</b>	<i>Community and Protection Services</i>
<b>CONTACT NUMBERS</b>	8408
<b>E-MAIL ADDRESS</b>	<i>Michelle.aalbers@stellenbosch.gov.za</i>
<b>REPORT DATE</b>	10-06-2022

8.	REPORTS SUBMITTED BY THE EXECUTIVE MAYOR
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NONE

9.	URGENT MATTERS
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10.	MATTERS TO BE CONSIDERED IN-COMMITTEE
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The meeting adjourned at 11:30

**CHAIRPERSON:** .....

**DATE:** .....

**Confirmed on** .....

6.	STATUTORY MATTERS
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NONE

7.	CONSIDERATION OF ITEMS BY THE EXECUTIVE MAYOR: [ALD G VAN DEVENTER (MS)]
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7.1	PROTECTION SERVICES: (PC: CLLR R BADENHORST)
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NONE

7.2	YOUTH, SPORTS AND CULTURE: [PC: CLLR R ADAMS]
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NONE



7.3	<b>CORPORATE SERVICES: (PC: CLLR L NKAMISA)</b>
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7.3.1	<b>REQUEST TO SECURE PROPERTY FOR AN AERONAUTICAL SCIENCES SCHOOL IN STELLENBOSCH</b>
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Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance

14 September 2022

**1. SUBJECT: REQUEST TO SECURE PROPERTY FOR AN AERONAUTICAL SCIENCES SCHOOL IN STELLENBOSCH**

**2. PURPOSE**

To consider a request from the Western Cape Government (Education Department) to acquire land to establish a high school within the Stellenbosch Municipality that specialises in Aeronautical Sciences.

**3. DELEGATED AUTHORITY**

Council

**4. EXECUTIVE SUMMARY**

The Western Cape Government has initially requested to sub-lease a portion of the Stellenbosch Flying Club's land for the purpose of establishing an aeronautical science school on the flying club's site.

At that time Council had not yet considered the Stellenbosch Flying Club's request for a new Lease Agreement, and for that reason the request for a sub-lease could not be considered. In the meantime, the Flying Club indicated that they would not be able to accommodate the building of a school on their site due to the aviation regulations and the size of the property they are leasing.

For this reason, the Western Cape Government has requested to acquire land from the municipality as close as possible to the flying club to accommodate the building of a school for the purpose of training young people in the aviation industry careers.

The item served at the Mayoral Committee and was referred back for further refinement, i.e., to allow for a public participation process in regard to the possible building of a high school specialising in aeronautical sciences and the impact that may have on noise levels due to a higher usage of planes landing and departing as part of the training sessions of the learners at the school. An advertisement was placed alerting the public to the intentions of the Municipality and the Department of education (attached as **Appendix 6**). The closing date for the comments/inputs/objections was 21 June 2021. Inputs were received from:

- De Zalze Wineland Golf Estate: attached as **APPENDIX 7**

- Graceland Wineyards: attached as **APPENDIX 8**.

A return item served at the May 2022 Mayco meeting and was referred to a combined meeting of section 80 committees for consideration and recommendations to the Executive Mayor. That meeting took place on 22 August 2022 and the recommendations from the committee to the Executive Mayor for consideration is indicated below.

**5. RECOMMENDATIONS FROM THE COMBINED SECTION 80 COMMITTEE: JOINT SITTING OF CORPORATE SERVICES, INFRASTRUCTURE AND PROTECTION SERVICES COMMITTEE: 2022-08-22: ITEM 5.1**

**RESOLVED**

For the following reasons, we as the joint section 80 committees, advise against the provision of land for the establishment of an Aeronautical School in the area around the airfield at any of the two sites identified.

- (a) **Spatial Development Framework:** The 2017 Airfield Precinct Plan refers to the non-suitability of the area as envisaged in Option 1 and 2 for intensive Urban Use and the Southern boundaries of De Zalze and future Jamestown extensions define the ideal urban edge for Stellenbosch which should be protected. The zoning of both properties is also agricultural.
- (b) **Environmental:** Further development in the area might trigger NEMA as the area is regarded as Swartland Renosterveld with a potential Wetland some 500 meters North of the proposed building sites. Correspondence with the Department of Water and Sanitation will also be required to establish the availability of water use rights.
- (c) **Traffic/Access:** Provincial Roads Authority has prohibited further development in and around the Airfield (Lease 502L) unless a suitable and safe alternative road is developed. Current access (R44) is too dangerous and will be closed.
- (d) **Noise:** The Western Cape Noise Regulations will have to have complied with something which historically has proven very difficult at similar airfields like Oudtshoorn, for example.

There are alternative sites that might be better suited for the type of School envisaged, for example, the Cape Winelands Airport north of Stellenbosch.

**6.1 DISCUSSION/CONTENTS**

**6.1 Background**

**6.1.1 Proposal to sublease from the Flying Club**

On 07 November 2019 a written request to sub-lease from the Stellenbosch Flying Club was submitted to the Municipal Manager, a copy of which is attached as **APPENDIX 1**.

In terms hereof, they would operate from the Flying Club's premises for a period of three (3) years and deal with the school in phases (Phases 1-2).

Phase 3 would involve the construction of a fully-fledged Aeronautical School on the property. The Lease Agreement of the Stellenbosch Flying Club expired on 31 March 2021, and Council subsequently resolved to lease the property to the Flying Club for a further 9 years and 11 months. The Flying Club was requested to comment on the application, as it would impact on their use of the site. Please find hereto attached as **APPENDIX 2** copy of a letter received from the Flying Club indicating that they would not be able to accommodate the school on their premises. They are, however, in favour of such a nature on adjacent, municipal owned land.

Council resolved on 24/8/2020 to lease the land the Flying school was leasing for a further 9 years and 11 months to the flying Club on condition (inter alia):

- (e) *that the lease agreement is subject to the Lessee reaching agreement with Working on Fire and Provincial Department of Education in regard to their*

*needs and may enter sub-lease agreements with both entities as well as other entities linked to providing services to the airfield;*

### 6.1.2 DISCUSSION

Following the inputs received from the Flying Club, a further request was submitted requesting by the Department of Education that Stellenbosch Municipality make available land to in close proximity to the Flying Club, for the purpose of development of an Aeronautical School, either by way of a lease agreement, but preferably by way of purchasing /acquiring of land. A copy of their request is attached as **APPENDIX 3**.

The following issues should be considered. Council to consider the request as well as Identify a piece of property that may be used. When the land is identified an Information statement will have to be drafted before any decision can be made to sell the property due to the value of the land involved.

There are several issues that should be considered:

- a) Council considers whether to dispose of one of the identified portions of land to the Provincial Government for the purpose of establishing an aeronautical school;
- b) Should Council decide to dispose of a property a decision be made if the disposal will be at market value or free of charge;
- c) The property that was identified to be sold, must be identified as land not needed to provide the minimum level of basic municipal services
- d) Should Council decide to dispose of one of the portions of land, Council's intention to dispose of the land be advertised for public comment/input through the publication of an information statement.
- e) Should the property be disposed of, it be subject thereto that:-
  - i) it be the responsibility of the Provincial Government to attend to the sub-division and rezoning thereof, at their risk and cost; and
  - ii) the Provincial Government be responsible for payment of BICL's (BICL is not in use this should be DCs (Development Contributions)).

### 6.2.1 Mayco Resolution

When the request served at the Mayoral Committee in November 2020, the item was referred back for further refinement, i.e., to first provide the public an opportunity to provide inputs/comments objections on the proposed transactions.

### 6.2.2 Public Notice

Following the above decision, a public notice was published, soliciting inputs from the public. A copy of the notice is attached as **APPENDIX 6**. The closing date for the comments/inputs/objections was 21 June 2021. Inputs were received from:

- De Zalze Wineland Golf Estate: See **APPENDIX 7**
- Graceland Wineyards: See **APPENDIX 8**

### 6.2.3 Identification of possible site(s) for an aeronautical school

Following the request from the Provincial Government for land for a school as close as possible to the Flying Club, in extent  $\pm 1$ ha, the following two options were identified:

**Option 1:** An area of approximately 10224m<sup>2</sup> in extent, situated next to the entrance to the airfield, as indication on Fig 1, below.



Fig 1:

**Option 2:** An area of approximately 10569 in extent situated adjacent to the airfield, as indicated on Fig 2, below.



Fig2:

### 6.2.4 Ownership

Ownership of Farm 502 vests with Stellenbosch Municipality by virtue of Title Deed STF 5-34/1885. See a copy of the Windeed record attached as **APPENDIX 4**.

### 6.2.5 Zoning

The current zoning of both the areas of the land identified above is Agricultural. Should Council indeed approve the disposal of any of these portions, it will have to be subject thereto that the land be sub-divided and rezoned at the cost and risk of the Western Cape Government.

### 6.2.6 Access to property

Although both options have access off the access road to the Airfield, ultimately access will be obtained from the R44. This might be an issue for the Provincial Road Engineer, as the intersection with the R44 is problematic. For more detail see page of 1 of the Precinct Plan, as discussed below.

### 6.2.7 Airfield precinct plan

Please find hereto attached as **APPENDIX 5** a copy of a Precinct Plan for the Airfield area.

This plan highlights the access of issue (alternative access from Annandale Road) for the area, as well as critical biodiversity areas (Louw se Bos), that might impact on the developability of the area.

The plan proposed that the precinct be retained and developed as an airfield precinct that accommodate the airfield, but also make provision for ancillary land uses, such as working on fire, etc.

The area should form a buffer between urban development (De Zalze) and the rural area and should not be used for urban expansion. This Department is of the view that the proposed Aeronautical School would indeed be in line with the proposals contained in the Precinct Plan.

The critical issue, however, would be the question of access.

## 6.3 Financial Implications

If Council does not make the land available as recommended there will be no financial implications at this stage.

## 6.4 Legal Implications

The recommendations in this report comply with the Council's policies and applicable legislation.

### 6.4.1 Municipal Finance Management Act (MFMA)

In terms of Section 14(2) of the MFMA a Municipality may dispose of a capital asset, but, only after the Municipal Council, in a meeting open to the public

- (a) has decided on reasonable grounds that **the asset is not needed to provide the minimum level of basic municipal services**; and
- (b) has considered the **fair market value** of the asset and the **economic and community value** to be received in exchange for the asset.

### 6.4.2 Municipal Supply Chain Management Regulations

In terms of Section 40 of the Municipal Supply Chain Management Regulations, a municipality's supply chain management policy must, *inter alia*, specify the ways in which assets may be disposed of to another organ of state at market related value or, whether free of charge.

Such policy must stipulate that **immovable property may be sold only at market related prices, except when the public interest or the plight of the poor demands otherwise.**

Stellenbosch Municipality's SCM Policy, however, is silent on ways in which assets may be transferred to another organ of state.

#### 6.4.3 Asset Transfer Regulations (R878/2008)

In terms of Chapter 3 of the Municipal Asset Transfer Regulations the transfer of certain assets to another organ of state may be **exempted** from the provisions of Section 14 of the MFMA.

Sub-regulation 20 (1) (a) to (e) of the Regulations define the circumstances in which such transfer is exempted. The property in question does not fall within these provisions.

In terms of sub-regulation 20 (f)(i), however, section 14 (1) to (5) of the MFMA does **not** apply if a municipality transfer a capital asset to an organ of state in any other circumstances not provided in (a) to (e), **provided** that –

- (i) the capital asset to be transferred is determined by resolution of the Council to be **not needed** for the provision of the minimum level of basic **municipal services** and to be surplus to the requirements of the Municipality; **and**
- (ii) **if the capital asset is to be transferred for less than fair market value**, the municipality has taken into account, *inter alia* the expected loss or gain that is to result from the proposed transfer.

Further, in terms of Section 29 of the Regulations, the value of a capital asset to be transferred to an organ of state (as contemplated in section 20) **must** be determined in accordance with the **accounting standards** that the Municipality is required by legislation to apply in preparing its annual financial statements.

In the absence of such guidelines, any of the following valuation method must be applied:

- (a) **Historical cost** of the asset\* .....
- (b) **Fair market value** of the asset;
- (c) Depreciated replacement cost of the asset; or
- (d) Realizable value of the asset.

From the above it is clear that, although the property under discussion does not fall in the categories described in section 20 (a) to (e) (exempted), Council can indeed regard it as being exempted, **provided** that the provisions of section 20 (f) (i) and (ii) have been considered, as indicated above.

#### 6.5 Staff Implications

This report has no additional staff implications to the Municipality.

**6.6 Previous / Relevant Council Resolutions**

Item served before Mayco and was referred back on both occasions.

**MAYORAL COMMITTEE: 2022-05-18: ITEM 7.3.1****RESOLVED**

that the item be referred to a joint section 80 committee with Protection Services, Infrastructure and Community services for discussion and advise.

**6.7 Risk Implications**

The risks have been addressed in the item content.

**6.8 Comments from Senior Management****6.8.1 Chief Financial Officer**

Municipal valuation of the areas will be provided at the Mayco meeting if required.

**6.8.2 Director: Community Services**

The department attended the combined committee meeting.

**6.8.3 Director: Planning and Economic Development**

Inputs from the Directorate were made during the combined committee meeting in relation to the zoning, traffic and related matters.

**6.8.4 Director: Infrastructure Services**

Care should be taken to determine if any underground services exist within the properties to be utilised and measure taken to reroute those services, if any at the cost of the Department of Education.

**6.8.5 Municipal Manager**

Supports the recommendations from the committee

**ANNEXURES:**

**APPENDIX 1:** Written request to sub-lease from the Stellenbosch Flying Club submitted to the Municipal Manager

**APPENDIX 2:** Letter from the Flying Club

**APPENDIX 3:** A copy of their request is attached as

**APPENDIX 4:** Windeed record

**APPENDIX 5:** Precinct Plan

**APPENDIX 6:** Public Notice

**APPENDIX 7:** De Zalze Winelands Golf Estate inputs

**APPENDIX 8:** Graceland Winery inputs

# APPENDIX 1





Reference:

Enquiries: Gerrit Coetzee (0844224334)

Ms G Mettler  
Municipal Manager  
Stellenbosch Municipality  
PO Box 17  
Stellenbosch  
7600

Dear Ms Mettler

**APPLICATION FOR THE LONG-TERM LEASE AGREEMENT BETWEEN STELLENBOSCH MUNICIPALITY AND THE STELLENBOSCH FLYING CLUB: PORTION L OF FARM 502, STELLENBOSCH; AND**

**PROPOSED SUB-LEASE FROM THE STELLENBOSCH FLYING CLUB**

The above-mentioned applications refer as well as the council decision of 26 February 2020 setting out the process for the long-term lease of the Stellenbosch Flying Club (SFC) and the subsequent decision to subject the application to a public participation process. The Western Cape Education Department (WCED), having an interest in the decisions that are being made, would like to submit the following comments for clarity in terms of our proposal to establish an Aeronautical School at the Stellenbosch Airfield.

In a letter dated 07 November 2019, the WCED requested Stellenbosch Municipality to grant permission to the SFC to sub-lease a portion of their leased property (a hanger) to the WCED for the establishment of an Aeronautical school. The decision to sub-lease is however not subject to a public participation process, but council indicated that the decision to sub-lease will only be made once the public participation process for the long-term lease agreement between the Stellenbosch Municipality and the SFC has been concluded and a decision is made in this regard by council.

Upon hearing the news that Stellenbosch Municipality is considering both applications (long-term lease and sub-lease) at the same time, the SFC submitted a letter dated 20 January 2020, with the intention of making their position in this regard known. The SFC does not object to the proposed high school but renders its *"firm support for this venture and intention to find a workable solution while maintaining an open mind to the complex constraints posed by our location."* Despite this support, the letter does highlight several reasons and concerns why the school cannot practically function on the airfield. Noise-pollution, increase traffic and the stringent requirements for the management of the safety and security of registered aerodromes are concerns raised by the SFC.

In light of these concerns the WCED would like to highlight the following to the Stellenbosch Municipality as comments related to the applications under consideration by council:

- The WCED have continued engagement with the SFC, following their letter to council. With the SFC planning the Stellenbosch Air Show and the Covid 19 lock-down, it has not been possible for the WCED and SFC to meet regarding these matters. These engagements will continue after the lock-down has ended.
- It is important to emphasise the intention of the WCED, that is for the establishment of a high school within the province that specialises in Aeronautical Sciences. The intention is to increase the technical skills base in the Western Cape, specifically Aviation and Aircraft practitioner skills.
- Not all students attending the school, will necessarily become pilots and follow the pathway of training for a pilot. Many of the students will follow career paths into aviation engineering and mechanics and will thus limit the impact in terms of actual flight training.
- The decision to locate the school in Stellenbosch is part of a targeted spatial intervention plan to respond to the education needs of communities in the district. Stellenbosch was decided upon, not only because of the availability of training facilities at the airfield, but also the proximity to the Stellenbosch University, their Engineering faculty and the academic/innovative ethos of the town.
- The school is planned in a phased approach. The first phase constitutes a multi-year pilot as 3 consecutive cohort intakes of up to a maximum of 20 Grade 10 learners are planned for the years 2020, 2021 and 2022. Each of those cohorts are to be progressed to Grade 12 examinations and the curriculum design will be tested and finalised during this phase. The school would not have more than 60 learners enrolled in total in any academic year during the first phase (considering maximum class sizes for Grade 10, 11 and 12).
- The second phase, should an evaluation of the pilot project recommend it does so, would be to expand to a fully-fledged technical education public high school, i.e. a school of specialisation under the authority of the minister for Education in the Western Cape that covers Grades 8 to 12, on a property that would ideally, but not necessarily, be located in close proximity to Aeronautical training facilities and that has suitable space for conducting practical exercises.
- The WCED would ideally like to secure the use of a hanger at the SFC and secure the use of aviation training facilities preferably through lease agreements or the acquisition of such facilities. The context for the requirement of a hanger at the SFC is primarily to find an adequate location for instruction and administration facilities, provided the appropriate authorisation could be obtained.
- Although the SFC does mention the clear and stringent requirements for the management of the safety and security of registered aerodromes as stipulated by the South African Civil Aviation Authority, it remains the intention of the WCED to

find practical ways of accommodating the proposed Aeronautical school on the leasehold area of the SFC, as a first phase of development. As explained above, the establishment of the school is planned in phases, with only the first phase (maximum 60 students) being accommodated at the Airfield. All necessary precautions and measures will be taken to ensure adherence to requirements for the management of safety and security of this registered aerodrome.

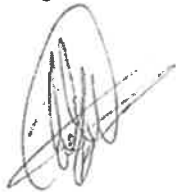
- As mentioned earlier, a key design principle for the curriculum for this school, is to minimise the proportion of learners of any cohort that would pursue Private Pilots training, as another school in the Province already caters for this. For this new school, the prospect of being co-located with drone training and other aeronautical research and development establishments is more exciting and a bigger drawcard. The intended development of the curriculum is focused on technical education, in which students will need to complete both rigorous vocational and academic programs, that provide excellent preparation for aviation-related careers as well as higher education.
- The target operating model of this new type of public school is intentionally that it will function as a "Collaboration school" – a first-of-its-kind, innovative new model being pioneered in the Western Cape and that was introduced legally as part of a reform to enhance school accountability and governance. A "Collaboration School" means an institutional mechanism that contractually partners schools with an external school operating partner committed to increasing the quality of the teaching and learning at that school in order to substantially improve the school's education outcomes. The operating partner for the target Aeronautical Sciences school, whether in Stellenbosch or elsewhere in the Province, has not been finalised as yet, but will require a background in Aviation and related experiences.
- The premise for the Collaboration School also includes a contributory governance role for "Donors", a group of private foundations that have indicated their intention to fund and work together with Government for the purpose of supporting the Collaboration School Pilot programme to develop a sustainable model for improved education outcomes for more learners.
- The design of the school and governance model will consider the situational context of this unique school of specialisation. Given its premise as a public school, it will first and foremost be managed and governed in accordance with the provisions of the applicable legal and regulatory frameworks governing education delivery.
- It is also important to point out that accommodating the school within the environment of the airfield will be temporary in nature. In fact, accommodating the school on the airfield would only be an option if compliance with applicable environmental and aviation authority regulations could be met and a full risk assessment was done that considers the safety of all stakeholders, particularly that of our young learners. Therefore, it should be noted clearly that there is no intent to locate a fully-fledged high school at the SFC or even on adjacent land, unless this

land was zoned for educational purposes and all conditions could be fulfilled. A long-term lease would not be required by the WCED; the sub-lease request to the SFC is for a pre-determined term only, while the project is in its initial phase (3 year contract).

The WCED would appreciate any **municipal support with regard to establishing a workable agreement with the SFC**, to the extent that the municipality include the successful agreement between the SFC and the WCED as a condition of approval in the renewal of the lease agreement of the SFC with Stellenbosch Municipality. It remains imperative that the SFC and the WCED find agreeable terms with regards to access to their facilities and services; otherwise the proposed aeronautic school remains a non-starter.

I trust that you will take the above-mentioned into account when considering the applications surrounding the SFC lease and sub-lease. Should council require any further information, the WCED is more than willing to present our proposal in person to council. We await your positive feedback in this regard. Please do not hesitate to contact Gerrit Coetzee on 0844224334 should you require further information.

Regards



**GERRIT COETZEE**  
**DIRECTOR: PHYSICAL RESOURCES PLANNING & PROPERTY MANAGEMENT**  
**DATE: 2020/04/20**

# **APPENDIX 2**



20 January 2020

The Director Corporate Services  
 Stellenbosch Municipality  
 P O Box 17  
 Stellenbosch  
 7600

Attention: Director Annalene De Beer  
 Cc: Mr Piet Smit  
 Councillor Rikus Badenhorst  
 Colonel Alan Nelson

Dear Director De Beer

#### **AVIATION THEMED HIGH SCHOOL, STELLENBOSCH**

The Stellenbosch Flying Club has been approached by a group who, in collaboration with the Western Cape Education Department, intend establishing an aviation themed private high school. They have as we understand considered a number of sites and have settled on Stellenbosch as the preferred location. As our landlord we have been advised and deemed it appropriate that we communicate our position in this regard to the Stellenbosch Municipality first and foremost, indicating our firm support for this venture and our intention to find a workable solution while maintaining an open mind to the complex constraints posed by our location.

The Project Group is seeking to secure a relationship with the Stellenbosch Flying Club for the provision of services and access to facilities to support their venture. The school will consist of a core, mainstream high school curriculum supplemented with an aviation component to address two streams namely those students who wish to learn to fly, and those who wish to follow a technical career. It has been indicated that those wishing to learn to fly would follow the Private Pilot Training Course with the objective being that they complete grade 12 with a PPL. This licence allows the holder to fly recreationally and can be a stepping stone to obtaining a Commercial Pilot's Licence or CPL. While the beginnings are indicated to be small with an initial group of 20 drawn from feeder high schools in the area, the vision that has been shared with us is for it to grow to the point where it accommodates around 100 students with the expectation being that roughly half will follow the pilot training and technical streams respectively. 43 Airschool, a large flight school in Port Alfred, has been referred to as a model that they would like to emulate.

Several meetings and discussions have been held in order to understand the needs of the school and how the Stellenbosch Flying Club is being asked to and is able to support and get involved. The group's initial request was for the Club to make space available in a hangar for the establishment of the school and alternatively to make available a site for the construction of a purpose built facility, although they indicated that their preference was for the use of an existing hangar. We have advised that this is not possible, since the club only owns a very small number of hangars at the field all of which are used for the storage of the club's own aircraft. The balance of the hangars belongs to members who in turn use them for the storage of their own aircraft. While some land remains open and has been earmarked for the construction of additional hangars, the current need for hangars among our members indicates that the demand will exceed the supply. In addition to considering the needs of our members, provision has also been made for the erection of a hangar by Kishugu Aviation, an aerial firefighting service provider to the Western Cape Government under the Working on Fire program. Leading Edge Aviation is a second aerial firefighting service provider based at the field who is contracted to the Winelands Municipality. Their needs for space are less than that of Kishugu Aviation and they recently purchased a hangar which had come onto the market.

Following discussions with the Municipality the Project Group requested a follow up meeting with the intention of signing a memorandum of understanding and a service level agreement between ourselves. At this meeting it was established that contrary to our understanding, the group had in fact requested from the Municipality the provision of premises within our leasehold area which we again advised was not possible. The reasons for our position in this regard are as follows:

1. Limited space available for additional hangars as described above. That space which is available is earmarked for limited additional hangars to service the needs of our members and to accommodate an established, essential emergency service. The needs of Kishugu Aviation have in fact been prioritised over those of our members as they provide a critical emergency service to the area. Stellenbosch Flying Club has accommodated the Working on Fire services for several years and the proximity of our airfield to the area that Working on Fire serves is critical to the local community. Kishugu Aviation has indicated that they wish to construct a facility at the field as they have been instructed by the South Africa Civil Aviation Authority to do so as there are legislated requirements for aircraft maintenance facilities. They are however not in a position to invest the significant amount of money such a facility would cost until the Club lease has been renewed.  
When one looks at the airfield one gets the impression of there being a lot of open space, however this open space is there to maintain minimum legal clearance and separation of buildings from taxiways and the runway both in terms of distance and height and the existing airfield layout has been constructed with this in mind. The space available for further development is therefore vastly less than what it may appear;
2. The South African Civil Aviation Authority has clear and stringent requirements for the management of the safety and security of registered aerodromes and the Stellenbosch Flying Club is audited annually against these requirements. If one

considers the requirements of a school, it would be more extensive than simply a place to present instruction and would require ablutions, administrative areas, outdoor recreation areas and drop off and pick up zones. This can simply not be accommodated within the footprint of the airfield without compromising our compliance with these requirements. Being an active airfield with aircraft coming and going during the day, free movement on the secure air side of the airfield where the hangars are located would have serious safety implications for the students, aircraft and other users. In addition to the above, given that some of the students are likely to come from quite far afield the possibility of a residential component has been discussed and this could certainly not be accommodated on the field. We are aware of a few portions of land adjacent to the airfield that belong to the municipality and it was with the above constraints in mind and the Club's earnest intention of finding a way in which we could assist and support this venture that we proposed that the Municipality be approached to secure a lease on one of these properties. This would provide a piece of land over which the school would have autonomous control and the ability to develop infrastructure specifically tailored to meet their requirements, while still having very convenient proximity to the Club for access to the services and facilities to be agreed. The most suitable portion of land which appears to be coming available is portion 502R to the south of the Airfield.

The Stellenbosch Flying Club operates in an area that is extremely noise sensitive and we have implemented a comprehensive noise abatement procedure in order to accommodate our neighbours and the local community by keeping the noise footprint of the airfield to the minimum possible.

When the Stellenbosch Flying Club was first established in the very early 1970's the location was relatively isolated and the club's activities very limited. With few members the noise produced was insignificant and therefore not a consideration in those early days. Things have however changed, the Club has grown, and development has encroached to the extent that we now have a very high value, upmarket development sharing part of our northern boundary in the form of De Zalze. This along with the general expansion of Stellenbosch as a town has demanded that we have had to adjust our activities, and this has impacted our training activities as well.

The flight training centre at the club was established to provide training to club members and was initially very small but has grown along with the club. The club's training activities are also impacted by our noise abatement procedures with an example being the fact that night circuit training, which involves repeated take-offs and landings is only conducted on one night of the week. Further measures include the moving of the airfield overhead circuit for all aircraft away from the residential areas with joining routines carried out to the over unoccupied land to the west. We are currently also developing an alternative joining routine for helicopters which will see them approaching directly from the west to land without following the fixed wing aircraft joining routine.



While our training centre could certainly accommodate the numbers projected for the early phase of the development of the school, the group's indicated growth ambition for the school is concerning in that it would increase traffic at the airfield significantly and it would certainly be met with resistance and objection from the local community. Other airfields around South Africa have faced serious opposition with training and other activities impacted and the risk to the future of the airfield would be significant. An example is Oudtshoorn where the local ratepayers association briefed the National Council of Provinces (NCOP) for assistance with concerns relating to the establishment of a commercial flight training school with their points including among others the following:

- Failure to take into consideration the conditions and regulations of the National Environmental Management Act and provincial environmental laws;
- Refusal by the Municipality to conduct a proper Environmental Impact Assessment (EIA), which residents were assured of by the Provincial Government and Oudtshoorn Municipality;
- Refusal by the Municipality to conduct a proper risk management analysis on safety issues, physical and mental health and safety study into the effects of repetitive low level flight training traffic over the residential environments;
- There was also a failure to apply the local by laws governing noise pollution and nuisance caused by the low level flight training.

The Stellenbosch Flying Club does not have the resources to counter such opposition and it would therefore most likely fall to the landlord as in the above case to manage such opposition. This would impact not only the Stellenbosch Flying Club but also the two firefighting service providers at the field, Stellair and the Stellenbosch Flying Academy both based at the field and all those who are employed, most of whom are from the local community with many drawn from Jamestown and Kayamandi. It is therefore critical to the future of the Stellenbosch Airfield as a whole and not only the Club, that we continue to manage our noise footprint extremely carefully, and a school that is intended to grow as indicated by the Project Group would represent significant risk.

I wish to reiterate that the Stellenbosch Flying Club supports this venture and sees the value of it in context with the current socio-economic and education climate in South Africa and a venture such as this promoting aviation among our youth is certainly to be applauded and supported. While the Club is supportive and happy to take our discussions forward, there are however as described above several factors that constrain our ability to support to the extent anticipated by the Project Group. Our very strong recommendation is that the group secures an agreement with the Stellenbosch Municipality to lease an adjacent piece of land after which the detail can be considered and recorded. This we believe to be key to progressing with their initiative in this location.

The scaling of the proposed development is also key to its future and while our flight training centre is able to absorb an additional twenty students, the increased traffic to accommodate the ultimate one hundred students as indicated would increase traffic and in turn our noise footprint to the extent that strong community objection is highly likely. Should this be the ultimate objective of the group then the consideration of an alternative location is strongly recommended.

AB.

Our ability to support this project in whatever way is of course also closely linked with the renewal of our lease which falls due in March 2021.

We would be happy to meet with you at your convenience should you wish to discuss our involvement in this project or other aspects of our tenancy.

Sincerely

A handwritten signature in black ink, appearing to read 'J. Steyn', written in a cursive style.

Dr Jurie Steyn

Chairman

# APPENDIX 3



Appendix 3

Be 110% Green. Read from the screen.

**From:** Limeez Joseph

**Sent:** 26 February 2020 11:39 AM

**To:** [mayor@stellenbosch.gov.za](mailto:mayor@stellenbosch.gov.za)

**Cc:** [mm@stellenbosch.gov.za](mailto:mm@stellenbosch.gov.za); [Donovan.Muller@stellenbosch.gov.za](mailto:Donovan.Muller@stellenbosch.gov.za); [Annalene.DeBeer@stellenbosch.gov.za](mailto:Annalene.DeBeer@stellenbosch.gov.za); [Piet.Smit@stellenbosch.gov.za](mailto:Piet.Smit@stellenbosch.gov.za); Lorika Elliott; Lucinda Boniface; Gerrit Coetzee; Cleopatra Van Rensburg

**Subject:** Request to secure property for new Aeronautical Sciences school in Stellenbosch

**Importance:** High

Dear Ms. Van Deventer

Please find attached correspondence for your attention and consideration.

If you require further information, you may contact Mr. Gerrit Coetzee on 021 467 9261.

Regards

Limeez Joseph

Branch: Education Planning

Western Cape Education Department

9th Floor

Room 901

Grand Central

Cape Town

8001

Tel: 021 467 2904

E-mail: [Limeez.Joseph@westerncape.gov.za](mailto:Limeez.Joseph@westerncape.gov.za)

Website: [wcedonline.westerncape.gov.za](http://wcedonline.westerncape.gov.za)



Be 110% Green. Read from the screen.

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If you are not the intended recipient you may not copy or deliver this message to anyone."



Reference: 20200226-4974

Enquiries: Gerrit Coetzee

Ms Gesie Van Deventer  
Executive Mayor  
Stellenbosch Municipality  
PO Box 17  
Stellenbosch  
7600

Dear Ms Van Deventer

### **REQUEST TO SECURE PROPERTY FOR NEW AERONAUTICAL SCIENCES SCHOOL IN STELLENBOSCH**

1. The purpose of the correspondence is to follow up on the proposal put forward by the Head of Department of the Western Cape Education Department (the "WCED", hereafter) in correspondence addressed to Municipality Manager Ms. Geraldine Mettler, dated 7 November 2019, and which to date has not yet been answered.
2. In that correspondence, the WCED notified of its intent to
  - a. establish a high school within the Stellenbosch municipality that specialises in Aeronautical Sciences. Increasing the skills base in the Western Cape, specifically Aviation and Aircraft practitioner skills, is part of a strategic plan to broaden access to quality learning opportunities for more learners to develop relevant skills and competencies in order to meet the challenges of the 21<sup>st</sup> Century world of work.
  - b. establish the school in a phased approach - the first three phases constitute a multi-year pilot as 3 consecutive cohort intakes of 20 Grade 10 learners are planned for the years 2020, 2021 and 2022. Each of those cohorts are to be progressed to Grade 12 examinations and the curriculum design will be

tested and finalised during these phases. The school would not have more than 60 learners enrolled in total in any academic year during the first three phases. The fourth phase involves the building and opening of a fully-fledged Focus high school, i.e. a school of specialisation covering Grades 8-12, on a property that would ideally be located in close proximity to Aeronautical training facilities and that has suitable space for conducting practical exercises.

- c. secure the use of a hangar at the Stellenbosch Flying Club (hereafter the "SFC") in which to locate classrooms and admin facilities, provided the appropriate authorisations could be obtained from the municipality. It has come to the attention of the WCED that the SFC has communicated to the Stellenbosch municipality its apparent inability to accommodate the school within the footprint of the land leased from the municipality, citing several constraints.
3. The decision to locate the school in Stellenbosch is part of a targeted spatial intervention plan to respond to the education needs of communities in the district. The industry focus and choice of skills specialisation complements the broadband and ICT being rolled out to schools in the Western Cape as well as the target expansion of subject choices and skills development programmes being offered to learners in the education district. Coding and Robotics are already being offered in the Klapmuts area and elsewhere across the Cape Winelands.
4. It is worth noting that a key design principle for the curriculum for this school is to minimise the proportion of learners of any cohort that would pursue Private Pilots training as another school in the Province already caters for this. For the new school, the prospect of being co-located with drone training and other aeronautical research and development establishments is more exciting and a bigger drawcard.
5. The updated WCED request then, in view of the SFC's position, is to urgently secure for lease and potential purchase land to the extent of 1Ha in close proximity to the

Stellenbosch Flying Club to enable the establishment of an Aeronautical school in the Cape Winelands district. Failing this, we would need to explore alternatives in George, Oudtshoorn or Beaufort West which have been shortlisted during the initial opportunity analysis. Land immediately adjacent to the SFC has been discussed, but we remain open to any appropriate land option that is available immediately.

I trust that you will consider the WCED's request favourably and look forward to being engaged further on this prospect. Please do not hesitate to contact the Infrastructure Planning director within the WCED, Mr. Gerrit Coetzee on 021 467 9261 should you require further information as regards the design and scope of this exciting initiative.

Regards



**SALIE ABRAHAMS**

**DEPUTY DIRECTOR-GENERAL: EDUCATION PLANNING**

**WESTERN CAPE EDUCATION DEPARTMENT**

**DATE:** 26 -- 02 -- 2020

Copy to: [municipal.manager@ Stellenbosch.gov.za](mailto:municipal.manager@ Stellenbosch.gov.za)  
[Donovan.Muller@ Stellenbosch.gov.za](mailto:Donovan.Muller@ Stellenbosch.gov.za)  
[Annalene.DeBeer@ Stellenbosch.gov.za](mailto:Annalene.DeBeer@ Stellenbosch.gov.za)  
[Piet.Smit@ Stellenbosch.gov.za](mailto:Piet.Smit@ Stellenbosch.gov.za)



# APPENDIX 4

## WinDeed Database Deeds Office Property

FARM 502, 502, 0 (REMAINING EXTENT) (CAPE TOWN)

## GENERAL INFORMATION

Date Requested 2020/08/26 12:11  
 Deeds Office CAPE TOWN  
 Information Source WINDEED DATABASE  
 Reference -



## PROPERTY INFORMATION

Property Type FARM  
 Farm Name FARM 502  
 Farm Number 502  
 Portion Number 0 (REMAINING EXTENT)  
 Local Authority STELLENBOSCH MUN  
 Registration Division STELLENBOSCH RD  
 Province WESTERN CAPE  
 Diagram Deed STF5-34/9/1883  
 Extent 9.9894H  
 Previous Description -  
 LPI Code C06700000000050200000

## OWNER INFORMATION

## Owner 1 of 2

Type LOCAL AUTHORITY  
 Name MUN STELLENBOSCH  
 ID / Reg. Number -  
 Title Deed STF5-34/1883  
 Registration Date -  
 Purchase Price (R) 0  
 Purchase Date -  
 Share 0.00  
 Microfilm 2006 1881 1465  
 Multiple Properties NO  
 Multiple Owners NO

## Owner 2 of 2

Type LOCAL AUTHORITY  
 Name MUN STELLENBOSCH  
 ID / Reg. Number -  
 Title Deed T36696/2006  
 Registration Date -  
 Purchase Price (R) TRANSFER BY ENDO  
 Purchase Date -  
 Share 0.00  
 Microfilm 2006 1869 1425  
 Multiple Properties NO  
 Multiple Owners NO

## ENDORSEMENTS (8)

#	Document	Institution	Amount (R)	Microfilm
1	I-1064/93LG	-	UNKNOWN	-
2	K211/1962S	-	UNKNOWN	-
3	VA5665/2006	MUN STELLENBOSCH	UNKNOWN	2006 1869 1399
4	FARM ST 502	-	UNKNOWN	1985 0072 0330
5	I-2562/2014LG	-	UNKNOWN	-
6	K925/1965S	-	UNKNOWN	-
7	K5211/2006S	-	UNKNOWN	2006 1869 1430
8	PTNS ST RD 502/1-3&6	-	UNKNOWN	-

# APPENDIX 5

## STELLENBOSCH AIRFIELD PRECINCT PLAN

(Draft Proposals for Discussion – 14 September 2017)

### 1. PURPOSE

The purpose of the report is to suggest a possible precinct plan for the future use of the area in the vicinity of the Stellenbosch Airfield.

### 2. DESCRIPTION OF THE AREA

The precinct is defined by the area south of De Zalze up to the Annandale road in the south and from the agricultural land to the east of the R44 up to the Spier Farm

### 3. CONSTRAINTS

The airfield precinct is situated on the watershed between the Blaauwklippen River to the north and the Bonte River in the South. In general the site slopes gently to the west and rises to the east. As a result the area to the west of the R44 (around the airfield) is less visible than the area to the east of the R44 as observed from the R44.

An important ridgeline is prominent just south of Jamestown.

The heritage survey as approved by Heritage Western Cape identified the area west of the R44 as of "very high significance" in terms of landscape features largely because of the visual sensitivity of the area which can be identified as the foothills of the Helderberg. The area directly west of the R44 is classified as of moderate significance. The heritage survey does not intend to prevent any form of development or change to the landscape. Its intention is to ensure that whatever change is essential for the social, economic and environmental well-being of the greater community is effected with appropriate care and with cognisance of the relevant considerations.

Critical biodiversity areas (CBA) were identified to the west of the existing airfield stretching in a westerly direction and will have an impact on any development in this area. On-site verification of the CBA status is essential, as the mapping was done at very low resolution.

Currently access is obtained from the R44. The Provincial Roads Authority is on record that no further development will be approved in this precinct without an alternative access and the Roads Access Management Plan proposes that this (dangerous) access be closed permanently. The Department of Transport and Public Works indicated in comment on the rezoning of the property in 2008 that the existing access to Main Road 27 should be closed permanently. Access should be obtained from the Divisional Road 1050 (Annandale road) and that the position and the geometry of the design of the new access to the Annandale road should be negotiated with the Department. The Planning, Heritage and Environment Committee thus resolved that a new or alternative access roads should be investigated by the Municipality in conjunction with the Provincial Roads Engineer and the Stellenbosch Airfield Company to determine a suitable and safe access road to the airfield. This precinct plan now creates the appropriate opportunity.

The pine forest (Louw-se-Bos) was cleared recently. The CBA map identified it as a Critical Biodiversity area that was degraded. The residential suburb of De Zalze forms the northern boundary of the area and non-agriculturally viable small holdings the eastern boundary. The surrounding land uses and access will have to be taken into account should any development or change in status of the land be proposed. Effectively Louw-se-Bos (Remainder Farm 502, lease areas 502BM, M, N and W) is land-locked and an access to it through between small holdings Portions 8 and 15 of Stellenbosch Farm 528 from the R44 (opposite Mountain Breeze) would have to be considered.

#### 4. OPPORTUNITIES

The Stellenbosch Municipality is an important land owner and currently leases land to the Stellenbosch Flying Club (SFC) as well as farmers in the area. The lease with the SFC expires in 20121. Extensive infrastructure was developed by the SFC over the years and will be extremely expensive to replace.

The SFC has an important function as manager and operator of a local airfield in that it provides the infrastructure for local aviators, makes (albeit limited) provision for commercial aviation operators and contributes to tourism and local economic development. Extending the capacity of the existing runway will allow larger aircraft to make use of the facilities and will open the door for more services, such as medical emergency services and Working-on Fire. The latter functions will benefit the broader community of Stellenbosch. The new Medi-Clinic hospital is close by and accessible for emergency flights. Due to climate change and based on the previous fire season records, an increase in serious fires and thus aerial fire-fighting operations can be expected. The airport is closer and more accessible for fire fighting in the Boland Mountains than any other in the metropolitan area.

SFC can also play a prominent role in supporting tourism by providing various activities tied closely with a working airfield such as a home base for sight-seeing flights, flight science centre, restaurant and an aviation museum. The high tech Space Advisory Company and others have also shown interest in relocating to the airfield to undertake drone training, research and development and testing.

The SCF has indicated that they would like to build a second, longer runway to the west of the existing airfield to increase their offering.

Council has approved the planning of a regional cemetery in this precinct and various investigations and planning, including an environmental impact assessment were done or are in process. Should alternative access be obtained this would provide ample suitable land for the development of a cemetery designed as a "park" and as a buffer to any development around the airfield.

Agricultural activities within the precinct area are well established high intensity activities in the form of tunnel farming, predominantly for berries. The (now cleared) Louw-se-Bos can be used as a peri-urban area to accommodate more similar agricultural activities and parts thereof could be airfield related land for recreational use. Agricultural activities would be dependent on the supply of irrigation water, which is in very short supply. Any high intensity agricultural activity would have to be linked to the re-use of treated effluent from the Stellenbosch Waste Water Treatment Works.

The possible development of the Western By-pass to the west of the airfield has the benefit that it will provide alternative suitable and safe access possibly in the form of an off-ramp from the Annandale Road. This will be a prerequisite for any further development to take place including the proposed new cemetery. As stated above, an alternative access to the airfield was also identified by the Provincial Roads Authority as a pre-requisite for the continued use of the airfield. Alternative access may possibly be obtained directly from the R44 in the vicinity of the small holdings as set out above.

Containing development to the west of the R44 will preserve the landscape at the foothills of the Helderberg.

## 5. THREATS

No further development at or around the airfield (lease are 502L) will be entertained by the Provincial Roads Authority unless a suitable and safe alternative access road is developed. The current access is too dangerous and will be closed in due course. It is of critical importance that an alternative access be identified and approved by the relevant roads authority.

Critical biodiversity areas will act as a constraint to development. The presence of CBA's will require costly environmental impact assessments which may or may not lead to conditional approval of some development. This will impact on a possible cemetery site, a second runway for the SFC as well as the proposed Western By-pass.

Development adjacent to De Zalze may attract resistance particularly should the type of development be seen as "intrusive" or affecting property value. Although Council can decide on any land use application it may have an impact on the time it takes to obtain additional development rights. It should be noted that opposition to the formalising of the airfield in its current form was experienced previously and was only resolved after the flight path of aircraft was changed to direct aircraft away from the town.

Working-for-Fire and medical emergency services are dependent on a longer runway to accommodate the larger and heavier aircraft. Increasing the length of the current runway will provide that service but in order to manage the airfield better, a second runway will be preferred.

Climate change in general and limited raw water resources are a general threat to all development. Any development or land use activity requiring additional water supply would have to be considered in view of the existing shortages.

## 6. CONSULTATION

The directorate met with all internal directorates and departments to obtain their views and proposals for the airfield precinct. The minutes of the meeting is attached as APPENDIX 1. A meeting was also held with the management of the Stellenbosch Flying Club to obtain their views and input. The minutes of the meeting is attached as APPENDIX 2.

From the consultation process with internal departments the following general principles were agreed:

- a. The precinct is not suitable for nor is it desirable to be developed for intensive urban use i.e. residential, industrial, business use etc.

- b. The southern boundaries of De Zalze and the current southerly extension of Jamestown define the ideal urban edge for Stellenbosch town and it should be protected for the time being.
- c. It was agreed that the airfield plays an important role in the context of Stellenbosch and its community and should be retained and possibly improved to enhance the tourism and service delivery offerings of the municipality and the area in general.
- d. The current airfield is classified as a Grade III airfield and should not be upgraded to an airport with commercial status (Grade II). An alternative location for an airport should rather be identified, preferably in the vicinity of Klapmuts where it can fulfil a commercial function.
- e. The presence of Work-for-Fire is an asset of particular importance and value to Stellenbosch in light of the increase in wild fires. Additional support services in the form of medical emergency will also be seen as an asset and can be linked successfully with the new Medi-Clinic hospital that is currently under construction abutting the R44.
- f. A possible new regional cemetery will function as a buffer between agricultural land and urban development and is an urgent need as cemetery space is running low.
- g. All parties agreed that alternative access to the area is a critical requirement for any development and must be identified and confirmed prior to any development taking place. The opportunity created by a possible new road might resolve this issue permanently.
- h. Louw-se Bos can be used for non-urban uses to strengthen the buffer between the built up area and the rural area and can be used for farming, recreation, the extension of the new cemetery and possible small holdings. The current lease use of portions of the property is not satisfactory and the land could be put to better use.

The SFC expressed their desire to continue with their venture and interest in extending the leasehold in a westerly direction in order to be able to develop a second runway in due course. Some of their intentions are to:

- a. Provide facilities for working-for-Fire and medical emergency services;
- b. To develop the tourist potential of the airfield optimally by developing attractions such as an aircraft museum and to accommodate linked flights to other destinations such as to Gansbaai. This will enable tourist to stay in Stellenbosch but to visit other parts of the Western Cape for day trips.
- c. To develop a second runway in order to increase the potential for local economic development;
- d. To link up with existing and new cycle routes;
- e. To become a recreational area for the larger community of Stellenbosch; and
- f. To make provision for the Space Advisory Company and other aeronautical research and development establishments.

## 7. PROPOSAL

The proposed development of the airfield precinct is illustrated in the attached plan.

The plan proposes that this precinct be retained and developed as an airfield precinct that accommodates the airfield but also makes provision for ancillary land uses such as Working-for-Fire etc.

The area should form a buffer between urban development and the rural area and should not be used for urban expansion. As such opportunities for urban agriculture and recreation should be investigated further.

The current proposal for the development of a regional cemetery is supported and will link well with the proposed peri-urban use.

There is an opportunity to expand the tourist offering of the area by linking tourist activities with the airfield and associated uses.

The area to the east of the R44 should be preserved as it is significant cultural landscape that contributes to the unique sense of place of Stellenbosch. The existing small holdings along the R44 should be retained for the same purpose and to function as a peri-urban land use. No subdivision should be allowed.

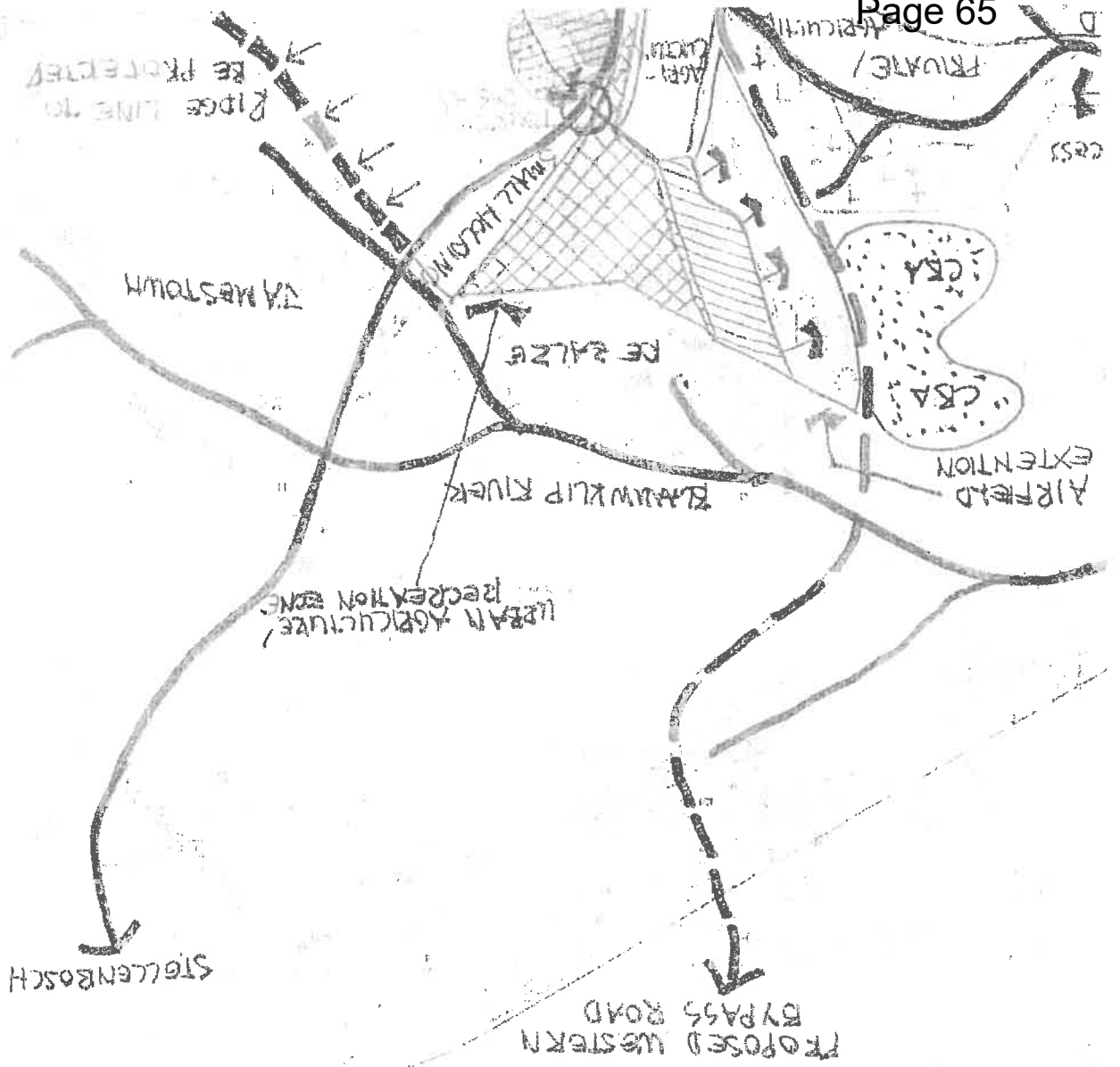
It is of critical importance that the alternative access, linked with the proposed Western Bypass, be clarified as soon as possible. In the event that the development of by-pass cannot be confirmed or that it will not be developed within the foreseeable future, then alternative access over private and/or municipal property from the Annandale Road be investigated and obtained.

## 8. CONCLUSION

The airfield precinct plays an important supportive role for the community of Stellenbosch and functions on a level that can benefit the broader community that is not involved with aviation. Opportunities to increase the tourist offering to the area will benefit all including the lessee of the Stellenbosch airfield.

The area does not have a pure agricultural character and has, over time, obtained a peri-urban character without degrading the rural quality of the site. It successfully fulfils a role to curb urban sprawl to the south of Stellenbosch despite the pressure for corridor development along the R44 up to Somerset-West. This function should not be underrated as it protects the sense of place of this all important access to the winelands which plays an important role as a scenic route. Limited development opportunities that do not detract from that value of function of the area will benefit the broader community of Stellenbosch and should be considered.





# APPENDIX 6



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHÖEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

## OFFICIAL NOTICE

### PUBLIC INPUT SOLICITED ON REQUEST OF THE WESTERN CAPE GOVERNMENT TO SECURE PROPERTY FOR AN AERONAUTICAL SCIENCES SCHOOL: CLOSE TO PORTION OF FARM 502, STELLENBOSCH

#### 1. Purpose

The purpose of this notice is to provide an opportunity to the public to comment/object/suggest alternative options to a proposed lease/sale of a portion of land close to the premises currently leased by the Flying club and where the local airstrip is situated. The Western Cape Government intends to establish an aeronautical science school on the land and must use the facilities available at the Flying club as part of the training required for the school.

#### 2. Background

The Western Cape Government has requested to sub-lease a portion of the land that the Stellenbosch Flying Club's currently lease from the Municipality on a 9 year and 11 month lease. This land also accommodates other businesses associated with the aviation and hosts equipment which aids with the training of pilots.

The flying club indicated that due to the aviation regulations there is not enough space to establish a facility that can host a aeronautical science school on the premises. They are however obliged in terms of the current lease to work with the Western Cape Government in sub-leasing and allowing the Aeronautical science school to use some facilities on the premises that will assist with the training of learner pilots.

#### Application to acquire land from the Municipality

For this reason, the Western Cape Government has subsequently requested to acquire land from the municipality as close as possible to the flying club to accommodate the building of a school for the purpose of training young people in the aviation industry careers.

#### 2.1 Identification of possible site

Two areas have been identified for this purpose (portions of Farm 502, each measuring ±1ha in extent), as indicated on Fig 1 and 2, below.



Fig 1: Location and context



Fig 2: Proposed area

The Executive Mayor in consultation with the Mayoral Committee requested that the input of the public first be solicited before an in principal decision is made on which property to identify for the school given that there will be additional noise pollution specifically due to the school's activities.

#### 3. Submission of inputs/comments/objections

Written submissions indicating objections/comments or alternative solutions may be submitted to the Manager: Property Management within 21 days from publication of this notice. Submissions can be hand delivered or emailed to the Manager: Property Management at the following address:

Email: [piet.smit@stellenbosch.gov.za](mailto:piet.smit@stellenbosch.gov.za)

Physical address: 3rd Floor, Oude Bloemhof (Absa) Building, corner of Rhyneveld and Plein Streets, Stellenbosch.

Cell phone: 084 506 5065

Landline: 021 808 8189

The closure date for submissions is: 21 June 2020

#### 4. Further Information

Further information is available at the office of the Manager: Property Management during office hours, including the agenda item that served before Mayco. The item is also available as part of the Mayco meeting agenda in November 2020 on our website.

#### 5. Persons with Disabilities

Notice is further given in accordance with Section 21 of the Local Government: Municipal Systems Act, No 32 of 2000 that anyone with disabilities or who is unable to write, but need to participate in the process, may present him/herself during office hours at the office of the Manager: Property Management, where a staff member of the Municipality will assist such person to transcribe that person's comments/inputs/objections.

STELLENBOSCH MUNICIPALITY

DATE: 20 MAY 2020

GERALDINE METTLER  
MUNICIPAL MANAGER:

# APPENDIX 7

From: Paul McNaughton <ram2@iafrica.com>  
Sent: Friday, 14 May 2021 12:09  
To: Piet Smit <Piet.Smit@stellenbosch.gov.za>  
Subject: [EX] Aeronautical school

Dear Piet

Please record that provided the noise is limited to normal working hours we have no objection.

This should be seen as positive for Stellenbosch and will create jobs and investment in the economy.

Why dont you also start a driving school as the large majority of our population need to learn how to drive properly.

See Attached video.

Regards

Paul McNaughton

Graceland Vineyards  
Stellenrust road  
Stellenbosch  
Tel 0824412717

# APPENDIX 8

The Manager: Property Management  
Stellenbosch Municipality

[piet.smit@Stellenbosch.gov.za](mailto:piet.smit@Stellenbosch.gov.za)

21 June 2021

Dear Sir



P O Box 338  
Stellenbosch 7599  
Tel +27 21 880 2708  
rec@dezalzeestate.com  
www.dezalzeestate.co.za  
Reg 2003/009588/08

## **PUBLIC INPUT: REQUEST OF THE WESTERN CAPE GOVERNMENT TO SECURE PROPERTY FOR AN AERONAUTICAL SCIENCES SCHOOL**

De Zalze Winelands Golf Estate's southern border abuts Erf 502, and the Stellenbosch Airfield. The properties which are proposed for the school is approximately 440m from the southern border of the Estate (fig 1 in notification). The Estate consists of a residential component of over 400 homes, a working farm, an award-winning winery with restaurant, an internationally recognized golf course as well as tourism accommodation, all of which are frequented by residents, the local community, and international tourists. The Kleine Zalze Group of Companies and the De Zalze Golf Club agrees to and support the comments below.

The Estate supports the province's efforts at establishing the innovative model being pioneered in the Western Cape as set out in the letter from the Western Cape Government to the Stellenbosch Municipality dated 20 April 2020.

However, the following concerns are noted by De Zalze and the parties we represent (as mentioned above), and should be thoroughly investigated by both the Municipality and the Provincial Government:

### 1. Environmental Constraints:

#### 1a. Noise pollution and current abatement measures

The Stellenbosch Flying Club operates in an area that is extremely noise sensitive and has implemented comprehensive noise abatement procedures to accommodate its neighbours and local community, by keeping the noise footprint of the airfield to the minimum possible (*Letter from the Stellenbosch Flying Club to the Stellenbosch Municipality, 20 January 2021*).

The increase in flight traffic, even with only 20 pupils initially, will affect the current noise abatement measures, and will only become worse once the school has grown as planned by the Provincial department.

#### 1b. Critical Biodiversity Area and Critical Biodiversity Area (degraded)

Both properties identified for the proposed school have been delineated as CBA & CBA (degraded). CBA's require safeguarding to ensure the continued existence and functioning of species and ecosystems, including the delivery of ecosystem services, across terrestrial and freshwater realms. These spatial priorities are used to inform sustainable development in the Western Cape Province.

A school, with its associated buildings required, will affect the delivery of ecosystem services.

In addition, *Lampranthus scaber*, a species of conservation concern has been observed in the Louw's Bos area (Boucher, 2019: *Botanical Examination of Stellenbosch Municipal Erf portions 502M&W*). Similar species may also be found at either of the 2 properties identified for the proposed school.

## 2. Health, Safety & Privacy

As stated above, the Estate consists of a residential component, a winery and restaurant, golf course and tourist accommodation facilities. Additional flying taking place in the close vicinity of the Estate will increase safety risks.

Furthermore, the motivation from the Provincial Government advises that courses such as drone training will form part of the curriculum. As the Estate border is situated only a few hundred meters from the proposed site(s), the privacy of residents and visitors alike may be affected, should drones be flown over or near the Estate. The privacy of our homeowners and visitors are of utmost importance and, apart from complying with legislative requirements, this factor will be most vigorously enforced by the Estate.

## 3. Access

It is clear from the documentation that no further development will be allowed in the area identified before access is established from Annandale Rd and the current access road is closed. The Estate has been informed that the proposed Western Bypass, which will provide access, will not be developed soon. It therefore may be many years before this development may take place.

In conclusion, careful consideration of the proposed development is required at this early stage, as the obstacles already identified may not be worth the cost of the requirements of a formal legislative process.

Best Regards

Elke Watson

Environmental Manager



7.3.2	<b>REQUEST TO LEASE/BUY ERF 11713, CLOETESVILLE, STELLENBOSCH: HANNA CHARITY &amp; EMPOWERMENT FOUNDATION</b>
-------	---

Collaborator No:

IDP KPA Ref No:

Meeting Date:

Good Governance

14 September 2022

**1. SUBJECT: REQUEST TO LEASE/BUY ERF 11713, CLOETESVILLE, STELLENBOSCH: HANNA CHARITY & EMPOWERMENT FOUNDATION**

**2. PURPOSE**

To resubmit the request from Hanna Charity & Empowerment Foundation to buy or lease erf 11713 for the purposes of an ECD.

**3. DELEGATED AUTHORITY**

In terms of Delegation EM85 the Executive Mayor, in consultation with the Executive Mayoral Committee, has the delegated authority to “*Approve Lease Agreements on Council properties for a period shorter than 10 years and a contract value of less than R5M*”.

Should the disposal of the site be considered as the preferred option then Council must consider the matter.

**4. EXECUTIVE SUMMARY**

The Hanna Charity & Empowerment Foundation has applied for a long-term lease agreement or to buy erf 11713, Cloetesville to enable them to construct and operate an ECD Centre. A copy of the request is attached as **APPENDIX 1**. The request was sent in 2020, but have not served before Council due to Covid (where no formal council meetings took place during hard lock down) and the subsequent property framework process. The ownership of Erf 11713 vests with the Municipality.

The policy on the Management of Council-owned properties allows for direct negotiations (private treaty) in specific circumstances, *inter alia* for the purpose of social care purposes. The new Children’s Act put an obligation on Council to make land available for this purpose and even to support the ECD’s and maintain such facilities. The need for ECD facilities is high and there may be more such requests. It is therefore not recommended that the erf is dealt with under the private treaty provisions of the policy. The land is zoned as utility service zone and was not earmarked up to now for an ECD facility. There must be a public participation process during which the public’s inputs/comments/other alternatives should be taken into account before a final decision is made. The departments have also not indicated whether this land may not be needed for municipal services and council can only decide to lease or sell the land should it not be needed for municipal services. Given the zoning this may not be the ideal land for an ECD.

The item served before Mayco on 20 July 2022 and was referred back to provide an opportunity to directorates to give input. The inputs from the different Directorates have now been obtained.

Council must decide that the land is not needed for the provision of municipal services as required in the Asset transfer regulations before any long-term rights can be assigned on the land to a third party. A public participation process will also be required to provide an opportunity to anybody to indicate if they have any objections or alternative proposals for the land in question. Availability for ECD facilities is in big demand with very little available land if any.

---

## 5. RECOMMENDATION

For consideration

## 6. DISCUSSION / CONTENT

### 6.1 Background

#### 6.1.1 Ownership of Erf 11713, Cloetesville

Ownership of erf 11713, Cloetesville vests with Stellenbosch Municipality by virtue of Title Deed T55573/1995. See a copy of Deed Search attached as **APPENDIX 2**.

### 6.2 Discussion

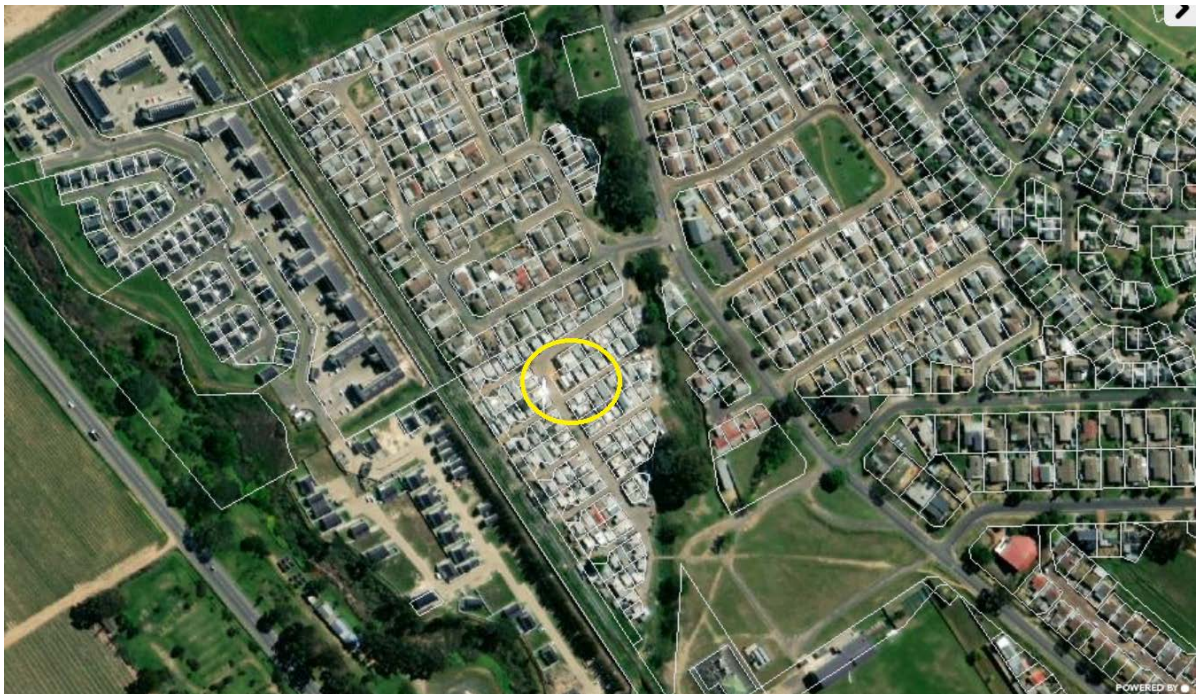
#### 6.2.1 Application for long term lease

Hereto attached as **APPENDIX 1** is a self-explanatory letter/application received from Hanna Charity & Empowerment Foundation, a registered NPO.

They intend to construct and run an ECD Centre from the site, aimed at children from the local community. They have as an alternative requested to buy the property.

#### 6.2.2 Location and context

The property is situated on Erf 11713, Cloetesville, Stellenbosch, as shown on Fig 1 and 2, below.



**Fig 1: Location and context**



**Fig 2: Extent of site**

### 6.2.3 Property description

Erf 11713, measuring 243m<sup>2</sup> in size, is zoned as utility service zone.

If the application is approved by Council, it will be subject to the property being rezoned to Institutional Use 1, at the cost of the applicant.

### 6.2.4 Municipal Valuation report

Please find hereto attached as **APPENDIX 3**, a copy of the municipal valuation report, valuing the property at R30 000.00.

### 6.2.5 Legal requirements

#### 6.2.5.1 Asset Transfer Regulation

In terms of Section 34 (1) of the ATR a Municipality may grant a right to use, control or manage a capital asset only after-

- a) The Accounting officer has concluded a public participation process\*; and
- b) The municipal council has approved in principle that the right may be granted. \*Sub regulation (1) (a) (public participation process), however, must be complied with only if-
  - The capital asset in respect of which the right is to be granted has a value in excess of R10M\*; and
  - A long-term right is proposed to be granted (i.e., longer than 10 years).

None of the assets has a value in excess of R10M.

In terms of Regulation 36, the municipal council must, when considering such approval, take into account:

- a) whether such asset may be required for the municipality's **own** use or to provide basic services during the period for which such right is to be granted;
- b) the extent to which any compensation to be received will result in a significant economic or financial benefit to the municipality;
- c) the risks and rewards associated with such right to use; and
- d) the interest of the local community

In terms of Regulation 41, if an approval in principle has been given in terms of regulation 34 (1)(b), the municipality may grant the right only in accordance with the disposal management system\* of the municipality, irrespective of:-

- a) the value of the asset; or
- b) the period for which the right is granted

\*The policy on the Management of Council owned property is deemed to be Stellenbosch Municipality's disposal management System.

#### **6.2.5.2 Policy on the Management of Council owned property**

In terms of paragraph 9.3.2 of the Policy, the Municipal Council reserves the right to entertain unsolicited bids for the lease of viable immovable property for **social care uses**. Social care is defined as services provided by registered welfare, charitable, non-profit cultural and religious organisations and include ECD/centres.

In terms of par 22.1.1 the Municipality shall be entitled to adopt below market-related tariffs for properties leased to non-profit organisations.

In terms of paragraph 22.1.4 the fair market rentals will be determined by the average of the valuations from service providers, unless determined otherwise by the Municipal Manager taking into account the estimated rental(s) *vis-à-vis* the cost of obtaining such valuations.

### **6.3 Financial Implications**

The new Children's Act places obligations on the municipality to avail land for ECD's and also to maintain such properties when it is erected. This has huge implications to the extend which is not known and not budgeted for. Council should therefore consider the longer-term implications such requests and the existing ECD's will bring.

### **6.4 Legal Implications**

The content of the report explains the legal requirements that is invoked by this request.

### **6.5 Staff Implications**

There are no additional staff implications.

## 6.6 Previous / Relevant Council Resolutions

**MAYORAL COMMITTEE CONTINUATION: 2022-07-25: ITEM 7.3.3**

### RESOLVED

that this item be referred back to the Administration for refinement.

## 6.7 Risk Implications

The risks have been pointed out in the content of the report.

## 6.8 Comments from Senior Management.

### 6.8.1 Comments from Director Infrastructure:

Roads, Elec, and Solid Waste has no objection to the proposal.

Water Services has the following comment: there is a sewer Line running through the property and that no building may be constructed within 3 meters of this sewer line.

The application can therefore be supported, but with the condition that no building may be constructed within 3 meters of this sewer line (approximate position indicated below).



### 6.8.2 Comments from Director Community and Protection services

The department Community Development has no objection to the utilisation of the land for the provision of much-needed ECD services to the community of Cloeteville.

### 6.8.3 Comments from Director Planning and Economic Development

The zoning of the subject property is “Utility Services Zone”. Utility Services Zone is defined as municipal services. A “day care centre” is however not allowed in this zone and the property will have to be rezoned, if the application is approved, to the appropriate

zoning to accommodate the proposed use (i.e Community Zone). Subdivision map attached as **APPENDIX 4**.

It is sound planning practice to locate community facilities (i.e churches, schools, crèches, clinics, etc) within residential neighbourhoods as they are compatible with one another. However, a rezoning application will also undergo a public participation process and all relevant internal departments will also have to comment (i.e impact on municipal services, etc) before a decision will be made.

#### 6.8.4 Comments from the CFO

No comments received.

#### 6.8.5 Comments from the Municipal Manager.

The services on the property must be taken into account when considering the request.

**ANNEXURES:**

- Appendix 1: Application**
- Appendix 2: Windeed search**
- Appendix 3: Valuation certificate**
- Appendix 4: Subdivision map**

#### FOR FURTHER DETAILS CONTACT:

<b>NAME</b>	<b>Annalene de Beer</b>
<b>POSITION</b>	<b>Director</b>
<b>DIRECTORATE</b>	<b>Corporate Services</b>
<b>CONTACT NUMBERS</b>	<b>021-8088018</b>
<b>E-MAIL ADDRESS</b>	<b>Annalene.deBeer@ Stellenbosch.gov.za</b>
<b>REPORT DATE</b>	<b>09.09.2022</b>

# APPENDIX 1



ABSA BANKCHEQUE ACCOUNT  
BRANCH CODE 632005  
ACCOUNT NUMBER 4074927773

PBO NO: 930026831  
NPO NO: 061-590-NPO  
SARS INCOME TAX REF: 9508/262/16/0

141 Lynnwood Rd  
Die Wilgers  
0081  
Tel.No. 012-3483534  
Cellphone: 083 571 3299

2020/07/27

Dear Deputy Executive Mayor (Wilhelmina)

The Hanna Charity and Empowerment foundation was registered in 2008 at the Department of Social Development as a NPO and PBO .We identify poor communities and support them with basic services like soup kitchens, playgroups, libraries and many more. We operate in Wendy houses which we erect in the local community.

We have seven Hanna Stations across South Africa, from Mpumalanga, Gauteng and here in the Western Cape: Stellenbosch, Smartie Town in Cloetesville.

We run quite a few programs, one of them is a playgroup which we call the Pikanini Educare centre. This program is designed to provide a safe and friendly environment for the children of Smartie Town, aged 2 to 5 years old.

We offer this program free of charge to the parents, as some do not have money to send their children to a creche. Through our sponsors and public donations we provide 20 to 25 children with a healthy breakfast, snack, lunch and basic education on a weekly basis. We have three adults who assist in the classes, two teachers and an assistant who helps with basic sanitation and meal preparation. These three ladies get a monthly honorarium from the organisation for their support.

At the moment the playgroup shares a communal space with the library (The space being a small Wendy house we provided in Smartie Town). This space is located at the corner of Hoek Street and Beta Street. The Hanna Charity is bound by Government Rules. In order for us to register the playgroup as an ECD, we must provide running water and electricity. The current climate of Covid 19 requirements for ECD's and playgroups are out of reach for the Charity and we have decided to close the playgroup for the remainder of 2020. We intend to use this time, either to search for a suitable venue or to use the current space and prepare it according to the requirements needed to register as an ECD. If all goes according to plan, the program should re-open in January 2021.

Currently the wendy that we use as a Library, is situated on the spot where we would like to erect a structure for our playgroup. The estimate size of the space we want to use is 15m by 8m. (Please see image attached to email). This spot is an ideal place to run our program. It's physical location is also close to the homes of the children that will be attending the program which makes it more accessible for the participants. We would also like to install electricity and add two bathrooms to the structure.





ABSA BANKCHEQUE ACCOUNT  
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The Playgroup starts at 7h30 in the mornings and ends at 14h30. The curriculum we follow prescribes lessons to be done in an outside environment therefore we want to erect palisades to provide the safe space we need for our children.

The Hanna Charity and Empowerment Foundation, specifically the Cloetesville branch, would like to apply for authorisation to use this space. We will maintain the area well and would like to ask your favourable consideration to rent/ buy or occupy this space and use it for the playgroup program, which in it's turn supports the community.

Thank you for giving us the opportunity to provide you with our information. We would really appreciate your feedback and once again ask for your positive consideration of our request.

Kindest regards

**Johan de Jager**  
**Area Manager (Western Cape, Stellenbosch)**  
**Hanna Charity and Empowerment Foundation**  
*Tel: +27 76 711 8032*  
*E-mail: [johan@hannacharity.org](mailto:johan@hannacharity.org)*



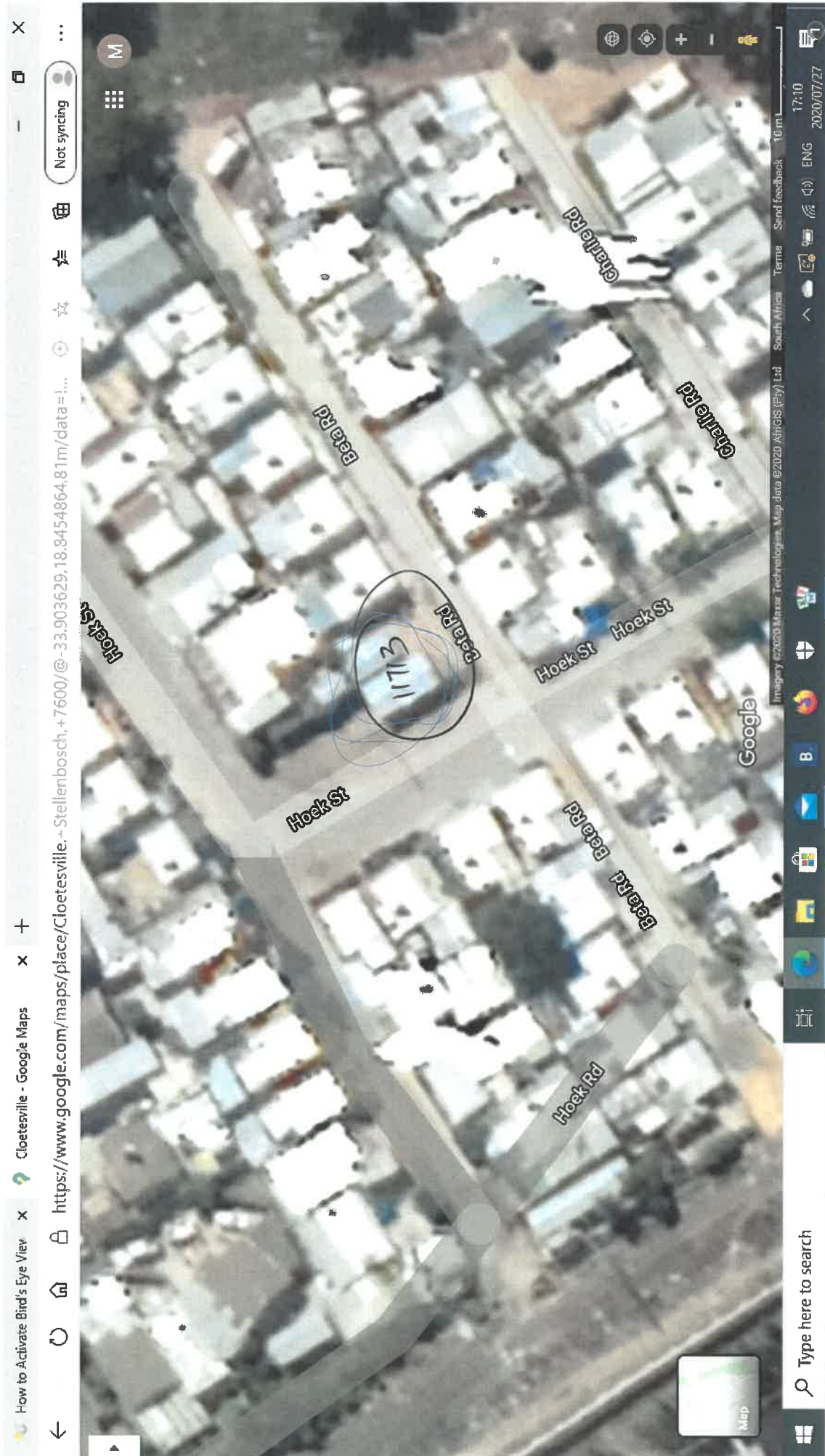


ABSA BANKCHEQUE ACCOUNT  
BRANCH CODE 632005  
ACCOUNT NUMBER 4074927773

PBO NO: 930026831  
NPO NO: 061-590-NPO  
SARS INCOME TAX REF: 9508/262/16/0

## Pikanini Educare Playgroup Centre







ABSA BANKCHEQUE ACCOUNT  
BRANCH CODE 632005  
ACCOUNT NUMBER 4074927773

PBO NO: 930026831  
NPO NO: 061-590-NPO  
SARS INCOME TAX REF: 9508/262/16/0

141 Lynnwood Glen  
Die Wilgers  
0081  
TEL.NO. 012 - 348 3534  
Cell.No: 083 571 3299  
074 558 6935

## INFORMATION SHEET

Hanna Charity and Empowerment Foundation was registered as a Non-Profitable Organization in 2008. We believe in the potential of people living in poverty.

**Our Foundation's mission is to take hands with the poor and marginalized people of South Africa.**

We provide personal attention and direct benefits to children, youth, the ageing and their families so they may live with dignity, achieve their desired potential and participate fully in society.

Hanna Charity & Empowerment Foundation supports communities with all the basic services such as playgroups, soup kitchens, skills development, job creation, clothing banks, social and psychological support, libraries etc. We start all these projects in a Wendy House, because we want to help the poorest of the poor and most of these people live in RDP houses or squat in somebody's backyard. We use the little space we have as effective as possible and hire the space from the community which in turn, results into a small income for these people. The community then starts working from the Wendy Houses. This is where our Job Creation then takes off for those involved. Someone will run the soup kitchen or clothing bank and somebody else will become an assistant to the teacher or librarian. As soon as a sponsor kindly invests in a more permanent structure we can move our projects out of the Wendy houses. We provide a place of safety to several children (from these communities) and we have now founded our Hanna House of Safety. We have a housefather and mother which are contributing a great deal in providing the structure needed for these children to develop into worthy adults.

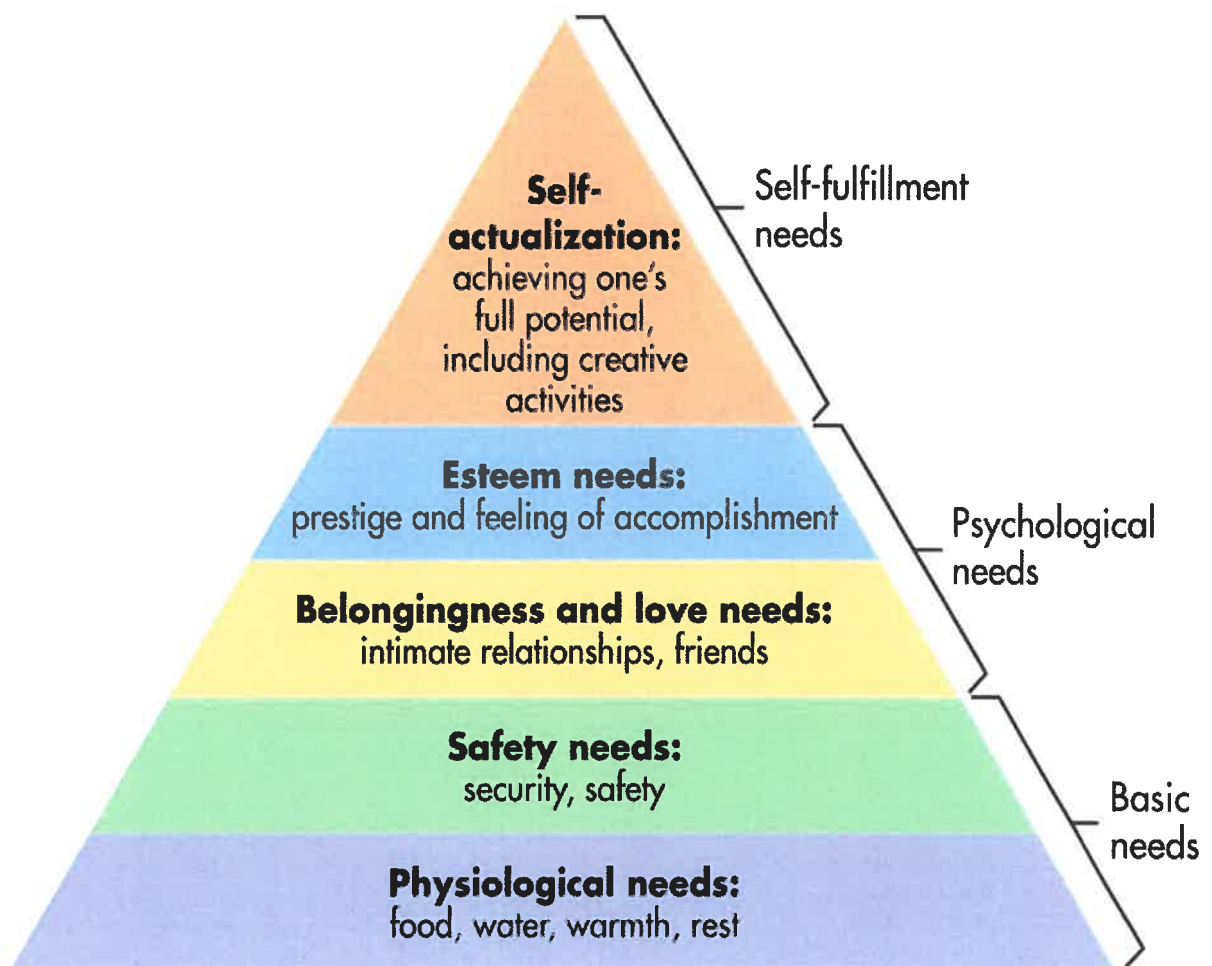
Relationships of mutual respect require acceptance of the equality of all persons. Equality of all persons comes from their essential dignity and is reflected in relationships that are without religious or other prejudice, that are multicultural, reciprocal and empowering.

Sponsorship of children, youth and the ageing is the highest priority of the Hanna Charity and Empowerment Foundation. We receive no support from the Government. Our primary means of support comes from individual sponsors and Companies. Our approach to managing administrative expenses and reserves is one of balanced austerity. The organisation seeks to maximize the amount

sent to the field for sponsored members and projects while allowing for adequate investment so that we have sufficient resources to respond to the urgent needs of sponsored members and their families.

Hanna Charity and Empowerment Foundation is registered with the Department of Social Development as a non-profit organization (NPO) and is a SARS approved organization (PBO) for purposes of section 18A(1)(a) of the Act and donations to the organization will be tax deductible in the hands of the donors in terms of and subject to the limitations prescribed in section 18A of the Act, and donations by or to the organization are exempt from donations tax in terms of section 56(1)(h) of the Act.

**We use Maslow's Hierarchy of needs in our community development programmes:**



## **PROJECTS:**

### **Soup Kitchens**

We start in a community with a soup kitchen to earn the people's trust and to get to know the families and their specific needs. We provide the whole family with a cooked meal as well as a food parcel depending on sponsorships for that specific soup kitchen. We have permanent staff at our office who cook for all the different communities / schools.

### **Clothing Bank**

We open a clothing bank in a Wendy house where families can come and collect second hand clothing on a monthly basis to meet their specific needs. We also hand out clothes when we have our soup kitchens, depending on the donations we receive.

### **Pikanini**

We start an early childhood development program in each community where parents can bring their little ones to play and to receive two meals a day for free. The kids learn basic skills at our playgroups and receive the love and care they need. We use people from the communities to assist the teacher and this forms part of our job creation program.

### **Womanhood / Sisterhood**

Women come together on a weekly basis to discuss any personal problems they may have with a professional councillor or psychologist. They also learn new skills such as needlework or crafts which they then continue to do during the week. Womanhood is a lot of fun and the ladies sometimes go on outings outside of their community.

With Sisterhood, we support our teenage girls. We teach them very important life skills. Our councillor listens to their problems and specific needs and give guidance where needed. They also receive toiletries and special gifts depending on donations received from our sponsors. We assist them in becoming ladies and aspire to break the cycle of poverty they were born into by building on their dreams.

### **Prayer Groups**

Some of the ladies from the communities get together once a week to pray for that specific community and their families. This changes the mindset of the ladies and instead of fighting, they grow spiritually and support each other to become better wives and mothers to their children.

### **Libraries**

In each community we start a library in a Wendy. Our librarian is usually one of the older ladies from the community who has great people skills and desperately needs an income. The Library has developed into a place where, not only the children can do homework and / or their projects, but the whole family is being motivated to start reading books to empower themselves with knowledge, open up new world and realize new opportunities.

### **Exercise**

With our area managers, we encourage people from our communities to become more active. As a result of not having the equipment, the Area Managers occasionally take them out to run through the streets of their specific community. Before a race like, the SPAR women's race or Sisters for Blisters, the community will get together and prepare themselves for the race. Needless to say, our people love these races!! For some of the people from the different communities the day out at the SPAR RACE is their only outing for the year.

### **Skills Development**

We have different programs in our communities where we teach people new skills. The skills taught depends wholly on that of the Volunteers available to assist. Families learn new skills, like paper art, karate, sport pottery, acting, crochet etc. We endeavour to teach them special skills which they can apply to earn a little bit of extra money. Most of our people own only a few cents as they only sell newspapers for a living.

### **Job Creation**

We employ people from the community to help their own community. In every area we only have one Area Manager and Social Worker. The rest of the people working at all the services we provide are people from that community that can now earn money to make a better living for their families.

**PROJECTS PER AREA**

PROJECTS	BENONI	EAST LYNNE	ELANDSPOORT	WOLMER	CLOETESVILLE
SOUP KITCHENS	X	X	X	X	X
CLOTHING BANK	X	X	X	X	X
PIKANINI	X	X	X	X	X
WOMANHOOD	X	X	X	X	X
PRAYER GROUPS	X	X	X	X	
LIBRARIES	X	X	X	X	X
SISTERHOOD			X		
EXERCISE	X	X	X	X	
SKILLS DEVELOPMENT		X	X	X	X
JOB CREATION	X	X	X	X	X

Kindest regards

*June Du Toit*

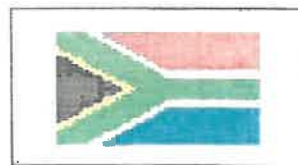
OFFICE MANAGER

HANNA CHARITY AND EMPOWERMENT FOUNDATION

CEL.NO. 083 571 3299 / 074 558 6935



G.P.-S. 012-0123



### CERTIFICATE OF REGISTRATION OF NONPROFIT ORGANIZATION

In terms of the Nonprofit Organisation Act, 1997, I am satisfied that .....

**Hanna Charity and Empowerment Foundation**

*(name of the nonprofit organization)*

meets the requirements for registration.

**27 March 2008**

The organisation's name was entered into the register on .....

*(date)*

Registration number

**061-590-NPO**

Director's signature

Date

**27 March 2008**



Department of Social

Development

Ek bevestig hierdie dokument 'n ware afskrif/afskrif te van die  
 I certify that this document is a true reproduction/copy of the  
 oorspronklike versie. Daar my persoonlike besigtig is en dat volgens my  
 original which was examined by me and that from my observation  
 waarnaar, die oorspronklike nie op enige wyse gewysig is nie.  
 the original has not been altered in any manner.

*14/9/2016*

Date: 14/9/2016 Handlinging Signature

**TIELMESH TSIANANG ROOY**  
 Commissioner of Oaths, Rep. of SA  
 Ex-Officio: Financial Planner  
 Private Wealth Management  
 721 Dundas St. West, Pretoria, 0001  
 Gauteng

**Piet Smit**

---

**From:** Johan de Jager <johan@hannacharity.org>  
**Sent:** Tuesday, 23 March 2021 18:03  
**To:** Piet Smit  
**Subject:** [EX] FW: Versoek na spatie in Smartie Town vir Speelgroep  
**Attachments:** INLIGTINGSBLAD 2020.pdf; Johan Pikanini brief vir Wilhelmina.pdf; Location of Library in Smartie Town.pdf; Hanna Charity NPO Certificate.jpeg

Beste Piet Smit

Hier is die inligting soos versoek. Dit is wat ek verlede jaar na Wilhelmina toe gestuur het en later ook na jou toe. As die spesifieke area n probleem is, is daar twee ander oop spasies waarvan ek ook weet.

Baie dankie.

Groete

**Johan de Jager**  
**Managing Director (Western Cape)**  
**Hanna Charity and Empowerment Foundation**  
*Tel: +27 76 711 8032*  
*E-mail: johan@hannacharity.org*



---

**From:** Johan de Jager [mailto:johan@hannacharity.org]  
**Sent:** 24 November 2020 04:11 PM  
**To:** 'Piet Smit'  
**Subject:** FW: Versoek na spatie in Smartie Town vir Speelgroep

Beste Piet Smit

Baie dankie vir jou oproep. Hier is die inligting en versoek wat ek aan Wilhelmina gestuur het. Weet nie of jy dit ontvang het nie.

Groete en baie dankie

**Johan de Jager**  
**Managing Director (Western Cape)**  
**Hanna Charity and Empowerment Foundation**  
*Tel: +27 76 711 8032*  
*E-mail: johan@hannacharity.org*



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**From:** Johan de Jager [mailto:johan@hannacharity.org]  
**Sent:** 27 July 2020 05:32 PM  
**To:** 'wilhelmina.petersen@stellenbosch.gov.za'

**Cc:** 'jan.hendriks@stellenbosch.gov.za'; 'jankarelhendriks@gmail.com'; 'James.Williams@stellenbosch.gov.za'  
**Subject:** Versoek na spasio in Smartie Town vir Speelgroep

Beste Uitvoerende Onderburgemeester (Wilhelmina)

Ek het vroer met U gesels in verband met die moontlikheid van ons speelgroep wat ons wil registreer as ecd, maar ons benodig spasio/grond in Smartie Town. Sien asseblief versoek brief aangeheg. Ek heg ook Hanna Charity inligting aan, area waar die biblioteek staan en dan ook ons bewys van registrasie

Ons ondersteun die gemeenskap van Smartie Town al van 2016 af met die volgende projekte:

Sopkombuis  
Speelgroep  
Biblioteek  
Na-Skoolprogram  
Klerebank  
Womanhood

Jan Hendrik en James is ge cc net sodat hulle bewus is.

Baie dankie vir hierdie geleentheid.

Vriendelike Groete

**Johan de Jager**  
**Managing Director (Western Cape)**  
**Hanna Charity and Empowerment Foundation**  
*Tel: +27 76 711 8032*  
*E-mail: johan@hannacharity.org*



# APPENDIX 2

# Deeds Office Property



STELLENBOSCH, 11713, 0 (CAPE TOWN)

## GENERAL INFORMATION

Deeds Office	CAPE TOWN
Date Requested	2021/03/24 08:24
Information Source	DEEDS OFFICE
Reference	-



## PROPERTY INFORMATION

Property Type	ERF
Erf Number	11713
Portion Number	0
Township	STELLENBOSCH
Local Authority	STELLENBOSCH MUN
Registration Division	STELLENBOSCH RD
Province	WESTERN CAPE
Diagram Deed	DU 1000/800
Extent	243.0000SQM
Previous Description	PTN OF 11702-GP7472/91
LPI Code	C06700220001171300000

## OWNER INFORMATION

### Owner 1 of 1

Company Type	LOCAL AUTHORITY
Name	MUN STELLENBOSCH
Registration Number	
Title Deed	T55573/1995
Registration Date	1995/07/27
Purchase Price (R)	T/T
Purchase Date	-
Share	
Microfilm Reference	2002 0572 0803
Multiple Properties	NO
Multiple Owners	NO

## ENDORSEMENTS

No documents to display

## HISTORIC DOCUMENTS

No documents to display

## DISCLAIMER

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# APPENDIX 3



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

2020/11/03

Munisipaliteit Stellenbosch  
Posbus 17  
STELLENBOSCH  
7599

## GENERAL VALUATION 2021 - 2025 ALGEMENE WAARDASIE

ERF/ERF: **SB11713**

AREA/GROOTTE (m<sup>2</sup>): **243**

SITUATED AT/GELEë TE: **Hoek**

COMPONENT/KOMPONENT	CATEGORY/KATEGORIE	Tariff/Tarief	VALUATION/WAARDASIE
<b>Primary</b>	<b>Business</b>	<b>POS</b>	Current Total/Huidige Totaal: R 25 000 New Total/Nuwe Totaal: R 30 000

Notice is hereby given in terms of Section 49(1)(a)(i) of the Local Government: Municipal Property Rates Act, 2004 (Act 6 of 2004), hereinafter referred to as the "Act", that the Valuation Roll for the financial years 2021-07-01 to 2025-06-30 is open for public inspection at the various Municipal offices or at the council's website [www.stellenbosch.gov.za](http://www.stellenbosch.gov.za) from 2020-11-05 to 2021-01-15.

An invitation is hereby made in terms of Section 49(1)(a)(ii) of the Act that any owner of property or other person who so desires should lodge an objection with the Municipal Manager in respect of any matter reflected in, or omitted from, the Valuation roll within the above-mentioned period.

Attention is specifically drawn to the fact that in terms of Section 50(2) of the Act an objection must be in relation to a specific individual property and not against the Valuation Roll as such. The prescribed forms for the lodging of an objection is obtainable from the website [www.stellenbosch.gov.za](http://www.stellenbosch.gov.za) or at the following Municipal offices:

Municipal Offices: Plein Street, Stellenbosch :: Hugenote Road, Franschhoek :: Main Road, Pniel

Kennis geskied hiermee kragtens die bepalings van Artikel 49(1)(a)(i) van die Plaaslike Owerhede: Munisipale Eiendomsbelasting Wet, 2004 (Wet 6 van 2004) hierna verwys as die "Wet" dat die Waardasierol vir die boekjare 2021-07-01 tot 2025-06-30 ter insae lê vir openbare inspeksie by die onderskeie Munisipale kantore sowel as die raad se webwerf by [www.stellenbosch.gov.za](http://www.stellenbosch.gov.za) vanaf 2020-11-05 tot 2021-01-15.

Geliewe kennis te neem dat enige eienaar van vaste eiendom of enige ander persoon kragtens die bepalings van Artikel 49(1)(a)(ii) van die Wet 'n beswaar binne bovermelde tydperk kan indien by die Munisipale Bestuurder ten opsigte van enige aangeleentheid of uitsluitel rakende die Waardasierol.

U aandag word spesifiek gevestig op die bepalings van Artikel 50(2) van die Wet wat bepaal dat 'n beswaar na 'n spesifieke eiendom moet verwys en nie na die Waardasierol sodanig nie. Die voorgeskrewe beswaarvorms is verkrygbaar vanaf die webwerf [www.stellenbosch.gov.za](http://www.stellenbosch.gov.za) of by die onderskeie Munisipale kantore:

Munisipale Kantore: Pleinstraat, Stellenbosch :: Hugenotestraat, Franschhoek :: Hoofstraat, Pniel

Period to lodge an objection / Periode vir die indien van 'n beswaar:  
Office hours for enquiries / Kantoorure vir navrae: 08h00-16h00

2020-11-05 to/tot 2021-01-15  
Elleniece Standaar Tel: 021 808 8515  
Marinda Blaauw Tel: 021 808 8662

The completed forms must be returned to / Die voltooide vorms moet gestuur word aan  
[valuations@stellenbosch.gov.za](mailto:valuations@stellenbosch.gov.za) or/of Fax to mail : 086 451 5011

Alternatively send forms to / Alternatiewelik stuur vorms na : Valuation Section , P O Box 17, STELLENBOSCH, 7599  
Waardsie Afdeling , Posbus 17, STELLENBOSCH, 7599

G METTLER  
MUNICIPAL MANAGER  
MUNISIPALE BESTUURDER

# APPENDIX 4



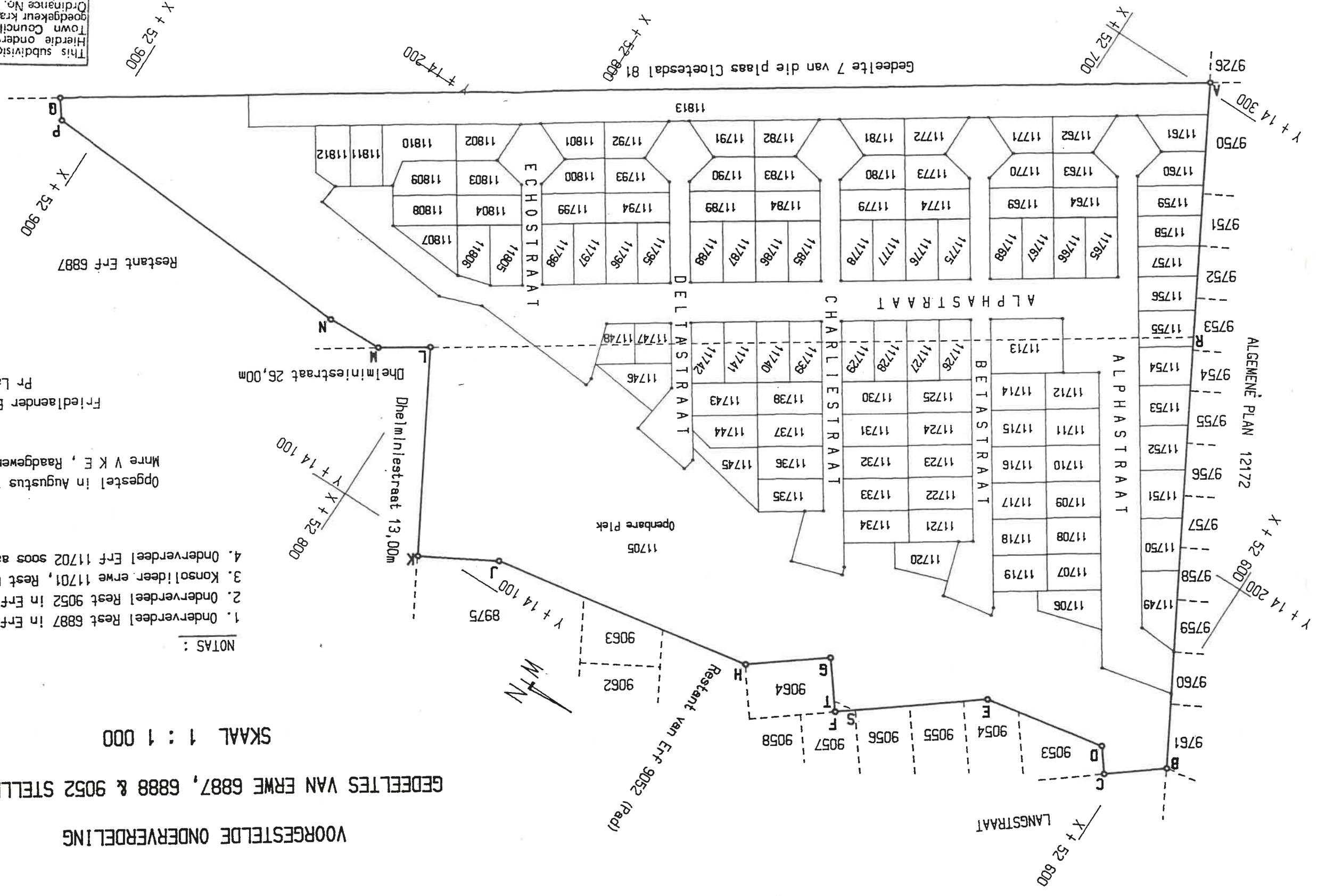
KOMPLASIE: BHSZ-1132 (M 3212)  
 BHSZ-1134 (M 3214)

This subdivision has been approved by the Town Council in terms of section 25 of Ordinance No. 15 of 1985 subject to conditions as per annexure. No. 15 van 1985 onderworpe aan voorwaardes goedgekeurde artikel 25 van Ordinance Municipaliteit Stellenbosch Municipality  
 Datum/Date: 26/8/1991  
 ~ Town Clerk/Stadsdiener: [Signature]

Alle erwe behalwe 11713, 11813 en 11705: Groepbehuising  
 Streets: 2m  
 syboulyn: 1,5m  
 order syboulyn: 0m  
 dekking 55% vloerplaat 975  
 Erwe 11713 en 11813: Praktiese Ouerwagingsplan  
 Erf 11705: publieke oopruimte

NOTAS:  
 1. Onderverdeel Rest 6887 in Erf 11701 (ARMNPQ) en Restant  
 2. Onderverdeel Rest 9052 in Erf 11184 (FT) en Restant  
 3. Konsolideer erwe 11701, Rest 6888 en 11184 : Erf 11702  
 4. Onderverdeel Erf 11702 soos aangedui.  
 Opgestel in Augustus 1991 volgens planne deur Mre V K E, Raadgewende Ingenieurs, voorbereit.  
 Friedlaender Burger & Volkmann  
 Pr Landmeters  
 Something  
 Die erwe behalwe 11713, 11813 en 11705: Groepbehuising  
 Streets: 2m  
 syboulyn: 1,5m  
 order syboulyn: 0m  
 dekking 55% vloerplaat 975  
 Erwe 11713 en 11813: Praktiese Ouerwagingsplan  
 Erf 11705: publieke oopruimte

VOORGESTELDE ONDERVERDELING  
 GEDeeltes van Erwe 6887, 6888 & 9052 Stellenbosch  
 SKAAL 1 : 1 000



ALGEMENE PLAN 12172

Gedeelte 7 van die plaas Cloetesdal 81

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7.4	FINANCIAL SERVICES: (PC: CLLR P JOHNSON)
-----	--

NONE

7.5	HUMAN SETTLEMENTS: (PC: CLLR J FASSER)
-----	--

NONE

<b>7.6</b>	<b>INFRASTRUCTURE SERVICES : (PC : CLLR Z DALLING (MS))</b>
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<b>7.6.1</b>	<b>STATUS REPORT ON THE INFRASTRUCTURE SERVICES' BY-LAWS &amp; POLICIES</b>
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**Collaborator No:** 733494  
**IDP KPA Ref No:** Good Governance and Compliance  
**Meeting Date:** 14 September 2022

**1. SUBJECT: STATUS REPORT ON THE INFRASTRUCTURE SERVICES' BY-LAWS & POLICIES**

**2. PURPOSE**

To inform Council on the status of the Directorate: Infrastructure Services By-Laws and Policies

**3. DELEGATED AUTHORITY**

For notification by the Municipal Council

**4. EXECUTIVE SUMMARY**

The Directorate: Infrastructure Services is responsible to ensure that all relevant and associated By-Laws and Policies are developed and maintained within a five-year period. This report serves to indicate to Council the current state of each of these By-Laws and Policies

**5. RECOMMENDATION**

that the status on the Directorate Infrastructure Services By-Laws and Policies be noted

**6. DISCUSSION**

**6.1 Background**

The Directorate: Infrastructure Services is responsible to create appropriate By-Laws and Policies pertaining to all the services rendered by the Directorate and to maintain the documents once in five years.

The Services rendered are:

1. Electricity
2. Water
3. Sanitation
4. Waste Management Services
5. Project Management, Asset Management and Planning
6. Roads, Transport and Stormwater Management

All of these services have By-Laws and Policies that need to be maintained and/or established. The table below indicates all of the By-Laws and Policies and shows at what state these By-Laws and Policies find themselves in.

<b>BY-LAW</b>	<b>STATUS</b>	<b>Council Approved</b>	<b>Promulgated</b>	<b>Fines and Delegations approved</b>
<b>Title of by-law and year it was promulgated</b>				
Roads & Streets By-Law	Final Approved	Yes	No	No
Stormwater By-Law	Final Approved	Yes	Yes	No
Parking By-Law	Final Approved	Yes	Yes	No
Poster By-law	Completed, to be tabled at Section 80	–	–	–
Electrical Services By-law	Final approved	Yes	No	No To be approved by Magistrate
Water Services By-law	Final Approved	Yes	Yes	Yes
<b>STRATEGIC PLANS</b>	<b>STATUS</b>			
CITP	Currently being updated	–	–	–
NMT	Draft Council Approved	Draft Approved	n/a	n/a
Stormwater Master Plan	Final Approved	Yes	n/a	n/a
Roads Master Plan	Draft Council Approval	Draft Approved	n/a	n/a
Road Safety Plan	Currently being updated	–	–	–
INTEGRATED WASTE MANAGEMENT PLAN	Final Approved	Yes	Yes	No
WATER CONSERVATION & WATER DEMAND MANAGEMENT	Consultant appointed to update in 2022/23 financial year			
WATER SERVICES DEVELOPMENT PLAN WSDP	Consultant appointed to update in 2022/23 financial year			
WATER SERVICES DEVELOPMENT PERFORMANCE & AUDIT 2019/20 & 2020/21	Consultant appointed to update in 2022/23 financial year			

WATER SERVICES MASTER PLAN	Consultant appointed to update in 2022/23 financial year			
WATER SERVICES PRIORITIZATION MODEL/PIPE REPLACEMENT PROGRAMME	Consultant appointed to update in 2022/23 financial year			
ELECTRICAL SERVICES MASTER PLAN	Currently being reviewed			
ORGANIC WASTE DIVERSION PLAN	Draft Council Approval	Draft Approved		
<b>POLICIES</b>  <b>Title of Policy and year it was approved by Council</b>	<b>STATUS</b>  <b>(Approved by council, currently under review, busy with public participation)</b>	<b>Council Approved</b>		
Traffic Calming Policy	Final Council Approved	Yes	n/a	n/a
Irrigation (Leiwater) Policy	To be compiled			
Sidewalk Policy	Currently being updated.	-	-	-
Development Charges Policy	Final Council Approved			
Wayleave Policy (2021-03- 31)	Final Council approved			
Electrical Services Maintenance Policy	Pending approval by Director			
Electrical Services – SSEG (Small Scale Embedded Generation) Policy	Pending approval by Director			

<b>DIRECTIVES</b>				
Electrical Services-Directive	Pending. This needs to be updated in line with the new By-law and SSEG changes. It was never taken to Council before, so after these changes, it will have to be taken to Council.			

## 6.2 Financial Implications

Filling of vacancies to monitor and implement by-laws.

## 6.3 Legal Implications

Complies with the legal requirements in applicable legislation.

## 6.4. Staff Implications

Additional staff will be required to monitor and implement By-laws and Policies. Staff will require training to implement the by-laws and to issue fines for transgressions.

## 6.5. Previous / Relevant Council Resolutions

Not Applicable

## RECOMMENDATIONS FROM INFRASTRUCURE SERVICES COMMITTEE MEETING TO THE EXECUTIVE MAYOR: 2022-08-04: ITEM 5.1.1

that the status on the Directorate Infrastructure Services By-Laws and Policies, be noted.

### FOR FURTHER DETAILS CONTACT:

<b>NAME</b>	Deon Louw
<b>POSITION</b>	Director Infrastructure Services
<b>DIRECTORATE</b>	Infrastructure Services
<b>CONTACT NUMBERS</b>	021 808 8213
<b>E-MAIL ADDRESS</b>	<a href="mailto:deon.louw@ Stellenbosch.gov.za">deon.louw@ Stellenbosch.gov.za</a>
<b>REPORT DATE</b>	25 July 2022

<b>7.6.2</b>	<b>THE ORGANIC WASTE DIVERSION PLAN FOR STELLENBOSCH MUNICIPALITY</b>
--------------	---

Collaborator No: 733494  
 IDP KPA Ref No: Good Governance and Compliance  
 Meeting Date: 14 September 2022

**1. SUBJECT: THE ORGANIC WASTE DIVERSION PLAN FOR STELLENBOSCH MUNICIPALITY**

**2. PURPOSE**

to obtain Council's approval of the Organic Waste Diversion Plan for Stellenbosch Municipality (**APPENDIX 1**).

**3. DELEGATED AUTHORITY**

Municipal Council, however, the Mayor may request the Portfolio Committee to render assistance in terms of Section 80 of the Local Government Municipal Structures Act, Act 117 of 1998, as amended.

**4. EXECUTIVE SUMMARY**

The Department of Environmental Affairs and Development Planning (DEA&DP) took a policy decision to implement a 50% restriction on organic waste being disposed to landfill by 2022 and a full prohibition of organic waste disposed to landfill by 2027. The Western Cape Integrated Waste Management Plan (IWMP) (2017- 2022) puts an obligation on municipalities to divert organic waste streams away from landfill sites by 2022 (50%) and a complete ban on organic waste disposed at landfill sites by 2027.

DEA&DP have amended the conditions of authorisations (Permits/Licences) for Waste Disposal Facilities (WDFs) in the Western Cape to make diversion of organic waste a legal requirement. The Municipality has therefore compiled an Organic Waste Diversion Plan (OWDP) to reach these organic diversion targets. This OWDP will form part of the approved IWMP.

The OWDP has been internally reviewed and was circulated for public comment. All comments received has been incorporated in the final OWDP.

**5. RECOMMENDATIONS**

- (a) that Council approve and adopts the OWDP; and
- (b) that the OWDP is seen as part of the Municipality's Integrated Waste Management Plan

**6. DISCUSSION / CONTENTS**

**6.1. Background**

JG Afrika was appointed to compile an Organic Waste Diversion Plan (OWDP) for the Stellenbosch Municipality. Organic waste currently makes up approximately 30% of the waste stream in the Western Cape and should be regarded as a resource that has intrinsic economic value if separated properly and used either for compost, nutrient extraction or as an energy source. In addition, diverting organic waste from landfills will save landfill airspace and reduce the greenhouse gas emissions from landfills.

The Department of Environmental Affairs and Development Planning (DEA&DP) took a policy decision to implement a 50% restriction on organic waste being disposed to landfill by 2022 and a full prohibition of organic waste disposed to landfill by 2027. The Western Cape Integrated Waste Management Plan (IWMP) (2017- 2022) puts an obligation on municipalities to divert organic waste streams away from landfill sites by 2022 (50%) and a complete ban on organic waste disposed at landfill sites by 2027.

DEA&DP have amended the conditions of authorizations (Permits/Licenses) for Waste Disposal Facilities (WDFs) in the Western Cape to make diversion of organic waste a legal requirement. These conditions require a 50% reduction in the amount of organic waste that is disposed of to WDFs by 2022, followed by a complete ban of organics to WDFs by the year 2027.

DEA&DP state that the information within the OWDP is required to provide a status quo of current organic waste sources, and volumes disposed of and current rates and procedures for the diversion of organic waste from landfill. The OWDP is also required to set annual targets and identify procedures that will be implemented to meet these targets for the diversion of organic waste from municipal landfill.

A draft OWDP was circulated for public comment on 3 March – 3 April 2022. All comments received were incorporated.

## **6.2. Financial Implications**

The Municipality's Waste Management Department estimates the cost of implementation to be in the region of R 14 million for year 1 and then the cost increases by inflation.

To enable organic waste diversion, an organic waste diversion facility is required with an estimated value of R20 million.

Funding for staff to implement the OWDP will be in the region of R930 105 for year 1 and then increases as per salary negotiations.

## **6.3 Legal Implications**

The approval and implementation of the OWDP will enable the Municipality to remain legally compliant with the National Environmental Management: Waste Act, 2008. The approval and implementation of the OWDP will ensure that the Municipality is in line with the Western Cape Provincial Integrated Waste Management Plan.

## **6.4 Staff Implications**

2x Technical staff will be required for the implementation and monitoring of the OWDP.

## **6.5 Previous / Relevant Council Resolutions:**

None

## **6.6 Risk implications**

Not implementing an organic diversion plan will result in the Municipality not being compliant with its Waste Management Licence and result in possible legal action against the Municipality.



**6.7. Comments from Senior Management:****6.7.1 Municipal Manager**

I support the item and that budget be made available in the adjustment budget process for this purpose. Posts required to be prioritized.

**6.7.2 Chief Financial Officer**

No provision has been made in the budget to include Organic Waste Diversion Plan.

**6.7.3 Director: Infrastructure Services**

Propose that budget provision be made available during adjustment budget

**6.7.4 Director: Corporate Services:**

I support that we start with a plan, but I am not sure that the financial implications means that it is viable.

**6.7.5 Director: Planning and Development**

I support the item for the approval of the Organic Waste Diversion Plan

**6.7.6 Community and Protection Services**

I support the item for the approval of the Organic Waste Diversion Plan

**RECOMMENDATIONS FROM INFRASTRUCURE SERVICES COMMITTEE MEETING TO THE EXECUTIVE MAYOR: 2022-09-01: ITEM 5.1.1**

- (a) that Council approve and adopts the OWDP; and
- (b) that the OWDP is seen as part of the Municipality's Integrated Waste Management Plan.

**ANNEXURES****APPENDIX 1: Final Organic Waste Diversion Plan****FOR FURTHER DETAILS CONTACT:**

<b>NAME</b>	Preshane Chandaka
<b>POSITION</b>	<b>DIRECTOR: INFRASTRUCTURE SERVICES</b>
<b>DIRECTORATE</b>	<b>INFRASTRUCTURE SERVICES</b>
<b>CONTACT NUMBERS</b>	<b>021 -808 8213</b>
<b>E-MAIL ADDRESS</b>	<b>Shane.chandaka@ Stellenbosch.gov.za</b>
<b>REPORT DATE</b>	<b>19 August 2022</b>

**DIRECTOR: INFRASTRUCTURE SERVICES**

# APPENDIX 1



# STELLENBOSCH MUNICIPALITY ORGANIC WASTE DIVERSION PLAN

NOVEMBER 2021

**FINAL**



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

Prepared by:

**JG AFRIKA (PTY) LTD**

Cape Town


14 Central Square, Pinelands  
7405

Telephone: +27 21 530 1800

Email: [edwardsb@jgafrika.com](mailto:edwardsb@jgafrika.com)

Project Manager: Bonté Edwards

<b>VERIFICATION PAGE</b>	Qual-frm-026
	Rev 14

<b>TITLE:</b> STELLENBOSCH MUNICIPALITY ORGANIC WASTE DIVERSION PLAN				
<b>JG AFRIKA REF. NO.</b> 5556	<b>DATE:</b> 12/11/2021	<b>REPORT STATUS</b> <i>FINAL</i>		
<b>CARRIED OUT BY:</b> <b>JG AFRIKA (PTY) LTD</b> <b>Cape Town</b> P O Box 38561 PINELANDS 7430  Tel: +27 21 530 1800 e-mail: edwardsb@jgafrika.com		<b>COMMISSIONED BY:</b> <b>STELLENBOSCH MUNICIPALITY</b> 1 Plein Street Stellenbosch 7600  Tel: +27 21 808 8224/ 8228 e-mail: Clayton.Hendricks@stellenbosch.gov.za		
<b>AUTHOR</b> Bonte Edwards and Boipelo Madonsela		<b>CLIENT CONTACT PERSON</b> Mr Clayton Hendricks		
<b>SYNOPSIS</b> The project entails the development of an organic waste diversion plan for the Stellenbosch Municipality				
<b>KEY WORDS:</b> Waste characterisation, Stellenbosch Municipality, Organic Waste, diversion.				
© COPYRIGHT: JG Afrika (Pty) Ltd.				
<b>QUALITY VERIFICATION</b>				
This report has been prepared under the controls established by a quality management system that meets the requirements of ISO 9001: 2015 which has been independently certified by DEKRA Certification.				
<b>Verification</b>	<b>Capacity</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
By Author	Associate	B Edwards		12/11/2021
Checked by:	Senior Environmental Scientist	T Heydenrych		12/11/2021
Authorised by:	Associate	B Edwards		12/11/2021

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## ABBREVIATIONS & DEFINITIONS

<b>AD</b>	Anaerobic Digestion
<b>AISWM</b>	Advanced Integrated Solid Waste Management
<b>CBD</b>	Central Business District
<b>CCT</b>	City of Cape Town
<b>DALRRD</b>	Department of Agriculture, Land Reform and Rural Development
<b>DEA&amp;DP</b>	Department of Environmental Affairs and Development Planning
<b>DFFE</b>	Department of Forestry, Fisheries and the Environment
<b>EA</b>	Environmental Authorisation
<b>EPR</b>	Extended Producer Responsibility
<b>EPWP</b>	Expanded Public Works Programme
<b>GHG</b>	Greenhouse Gas
<b>GN</b>	Government Notice
<b>IVC</b>	In-vessel composting
<b>ISWM</b>	Integrated Solid Waste Management
<b>IWMP</b>	Integrated Waste Management Plan
<b>LFG</b>	Landfill Gas
<b>MBT</b>	Mechanical Biological Treatment
<b>MRF</b>	Materials Recovery Facility
<b>MSA</b>	Municipal Systems Act
<b>MSW</b>	Municipal Solid Waste
<b>NEMA</b>	National Environmental Management Act (No. 107 of 1998)
<b>NEMWA</b>	National Environmental Management: Waste Act (No. 59 of 2008)
<b>NOWCS</b>	National Organic Waste Composting Strategy
<b>NWMS</b>	National Waste Management Strategy
<b>ORASA</b>	Organic Recycling Association of South Africa
<b>ORTS</b>	Organic Refuse Transfer Station
<b>OWDP</b>	Organic Waste Diversion Plan
<b>OZCF</b>	Oranjezicht City Farm
<b>RFQ</b>	Request for Quotation
<b>RTS</b>	Refuse Transfer Station
<b>SAWIS</b>	South African Waste Information System
<b>SDG</b>	Sustainable Development Goals
<b>SM</b>	Stellenbosch Municipality
<b>SU</b>	Stellenbosch University
<b>UK</b>	United Kingdom
<b>UN</b>	United Nations
<b>WAAI</b>	Wellington Association Against the Incinerator
<b>WDF</b>	Waste Disposal Facility
<b>WFD</b>	Waste Framework Directive
<b>WM</b>	Witzenberg Municipality
<b>WMO</b>	Waste Management Officer
<b>ZTL</b>	Zero To Landfill

## 1 INTRODUCTION AND BACKGROUND

JG Afrika were appointed to compile an Organic Waste Diversion Plan (OWDP) for the Stellenbosch Municipality (SM).

Organic waste currently makes up approximately 30% of the waste stream in the Western Cape and should be regarded as a resource that has intrinsic economic value if separated properly and used either for compost, nutrient extraction or as an energy source. In addition, diverting organic waste from landfills will save landfill airspace and reduce the greenhouse gas emissions from landfills.

The Department of Environmental Affairs and Development Planning (DEA&DP) took a policy decision to implement a 50% restriction on organic waste being disposed to landfill by 2022 and a full prohibition of organic waste disposed to landfill by 2027. The Western Cape Integrated Waste Management Plan (IWMP) (2017- 2022) puts an obligation on municipalities to divert 50% of organic waste streams away from landfill sites by 2022 and a complete ban on organic waste disposed at landfill sites by 2027.

DEA&DP subsequently amended the conditions of authorisations (Permits/Licences) for Waste Disposal Facilities (WDFs) in the Western Cape during 2017/2018 to insert up to date conditions in all licences for all waste facilities that receive waste for disposal. This condition requires a 50% reduction in the amount of organic waste that is disposed of to WDFs by 2022, followed by a complete ban of organics to WDFs by the year 2027.

DEA&DP required an OWDP to have been submitted by SM by 12 December 2018, and annually thereafter for the Devon Valley WDF in SM.

The Department extended the submission date to 31 March 2021, as requested by SM. JG Afrika were appointed in April 2021. The Department included the requirement that budget must be made available within the 2021 financial year to implement the OWDP, to accomplish the **50% diversion goal by 2022**.

DEA&DP state that the information within the OWDP is required to provide a status quo of current organic waste sources, and volumes disposed of and current rates and procedures for the diversion of organic waste from landfill. The OWDP is also required to set annual targets and identify procedures from 2018 that will be implemented to meet these targets for the diversion of organic waste from municipal WDF, to reach a 50% diversion by the year 2022, and 100% diversion of organic waste by 2027. Please see **Annexure A** for an extract of the organic waste diversion requirement in the Devon Valley WDF licence and letter addressed to SM, as well as the extension letter from DEA&DP.

## 2 WHAT IS ORGANIC WASTE?

Organic Waste is generally defined as garden waste/greens, food waste and wood waste.

The SM By-law relating to Integrated Waste Management provides the following definition for garden waste:

- organic waste, including but not limited to, soil, grass cuttings, leaves and branches; and
- any biodegradable material, which emanates from gardening, landscaping, or other types of activities at residential, business, or industrial properties; but
- excludes waste products of animal origin.

The Norms and Standards for Organic Waste Composting provide the following definitions:

- Organic waste: means waste of biological origin which can be broken down, in a reasonable amount of time, into its base compounds by micro-organisms and other living things.
- Organics: means both processed and unprocessed compostable organic waste.



National Environmental Management: Waste Act (Act No. 59 of 2008) (NEMWA): GNR 625, National Waste Information Regulations provide waste categories in order to regulate the collection and reporting of waste data and information to the South African Waste Information System (SAWIS).

The following table provides the categories/types of organic waste that should be reported to the SAWIS, under General Waste (Level 1).

Level 1 –General Waste			
Level 2 - Major Waste Type		Level 3 – Specific Waste Type	
GW20	Organic waste	01	Garden waste
		02	Food waste

*Note that amendments to the National Waste Information Regulations have been proposed which include 03 – Wood Waste under Organic waste, however, these changes have not been promulgated.*

For the purpose of this Plan, “*organic waste*” is regarded as waste which is produced by all waste generators served by municipal collection services for general municipal waste. The main categories of organic waste would include:

- **Food waste:** mix of cooked and raw leftovers after the preparation and consumption of human food originating from households/residential areas as well as from commercial activities, such as restaurants, canteens, bars, etc.
- **Greens or garden waste:** waste coming from maintaining private residential areas/gardens (households) as well as from Municipal public areas, such as parks, playgrounds, verges etc.
- **Industrial waste:** the mixture of different types of residues of raw vegetables/food waste and woody materials such as packaging. This can include organic waste streams from agro-industries, such as food and animal feed processing or the processing of agricultural products for other purposes.

### 3 MOTIVATION FOR ORGANIC WASTE DIVERSION

The benefits of organic waste diversion are discussed in detail as part of the Literature Review, however the following are the overarching benefits of diverting organic waste from landfill:

- Reduced cost of landfill disposal.
- Landfill air space savings.
- Reduction in greenhouse gas emissions.
- Reduced possibility of environmental pollution from landfill management i.e., leachate generation and improved air quality impacts.
- Long term/future avoided costs and savings as a result of saved landfill airspace.
- Positive impact as a result of recovering a valuable resource (organics) and processing these to produce beneficial soil amendments (i.e., compost) or used for electricity generation (i.e., biogas)
- Practical application of a circular economy strategy to waste management which keeps organic materials in circulation at their highest value.

### 4 STATUS QUO

The status quo of organic waste management systems and related infrastructure in SM is presented in this section. It should be noted that this information focuses specifically on organic waste and aims to supplement the more general and overarching Status Quo information provided in the SM IWMP.

#### 4.1 Brief overview of waste management services and infrastructure

The SM IWMP, dated September 2020, was reviewed, and used to obtain the following summary information and overview of waste management infrastructure.

SM operate one landfill site in Devon Valley, however, since August 2019 the Municipality have made use of the Vissershok Private Landfill (Vissershok Waste Management Facility (Pty) Ltd) in the City of Cape Town (CCT) which is operated by Enviroserv and Averda, as Devon Valley has reached capacity and while approval for a new cell is underway.

General waste from the Stellenbosch municipal area is therefore transported to the Klapmuts Refuse Transfer Station (RTS), where it is transferred into skips and taken to Vissershok by truck.

SM provides approximately 38 500 households with solid waste management services as follows:

- 28 751 collection points spread across the 22 wards of the Municipality.
- This is approximately 20 000 wheelie bins and 4 000 standard refuse bags as of 2019.
- The Municipality utilises 11 refuse collection trucks, operated by more than 60 crew members in a 30-hour working week.
- 100% of urban households receive kerb side collection once per week.
- All the urban and informal areas of SM have access to at least a basic refuse removal service.
- Some refuse removal services exist in the rural areas and farming communities.
- All rural areas have access to drop-off facilities.

The Municipality provides a two-bag collection system in middle to high income areas where black bags and clear bags (containing recyclables) are collected once a week. Households are required to separate and sort waste at source into two streams, namely general landfill waste (black bags) and recyclable waste (clear bags). The recyclables were previously transported to a mini materials recovery facility (MRF) situated adjacent to the Devon Valley landfill site, however from August 2019 to 31 March 2021, these were taken directly to the Kraaifontein MRF in the CCT for sorting.

The following areas are currently included in the two-bag collection programme:

- |  |                                    |
|--|------------------------------------|
| - Uniepark, Karindal, Aanhou Wen, Rozendal                           | - Dorp/Stasie street               |
| - Mostertsdrift  | - Franschhoek                      |
| - Simonswyk  | - Idas Valley, Lindida, Arbeidslus |
| - Universiteits Oord   | - Raithby                          |
| - Technopark   | - Agape Retirement Village         |
| - Die Boord, Fairways, Die Wingerd, Harringtons Place                | - Blaauwklippen Road               |
| - Paradyskloof, Schuilplaats, Lieberheim, Anesta, Eden, La Pastorale | - Jamestown                        |
| - Brandwacht   | - Cloetesville                     |
| - Dalsig, Bo-Dalsig  | - Brandwacht-aan-rivier            |
| - Krigeville   | - Parmalat                         |
| - Onder Papegaaiberg, Devon Vallei, Devon Park, Kleinvallei          | - Jonkershoek                      |
| - La Colline/Die Rand  | - Welgevonden                      |
| - Die Laan   |                                    |

The recently constructed MRF adjacent to the landfill started operations on 1 April 2021. Clear bags collected in the Municipality are taken to this new facility for sorting and recycling. The MRF has the capacity to process 450 tons of incoming material per month and can employ up to 40 people.<sup>1</sup> Currently 19 people are employed at the MRF and 8 people are collecting recyclables. The Municipality plans to expand the separation at source programme to include more households in the initiative. Recyclable material that is

<sup>1</sup> <https://stellenbosch.gov.za/2021/03/25/stellenbosch-launches-new-waste-material-recovery-facility/>

accepted includes paper, newspapers, magazines, cardboard, glass, plastic bottles and containers, food tins, cooldrink tins, juice boxes and milk containers.

The Municipality also opened a public drop-off, located at the MRF in April 2021. Residents may bring clean recyclable materials to the facility during operating hours and are also allowed to bring garage waste for free disposal in vehicles with a maximum carry capacity of 1.5 tons. This is to allow residents to dispose of their waste responsibly.

The Municipality currently diverts organic waste from landfill by means of chipping and composting garden waste that is received at the landfill site. Garden waste is dropped off by residents and businesses at the landfill. This has continued on site despite the closure of the landfill site. Chipping takes place at the landfill site under a private contract (tender), that will end on 30 June 2022, at the Devon Valley Landfill Site. Franschhoek residents may drop their garden waste off at the Franschhoek drop off facility, and Klapmuts residents at the Klapmuts RTS.

SM does not currently have a dedicated garden waste collection service, or collection drop-off points, only the drop off facilities. SM has however implemented a tariff for green waste collection, which commenced in July 2021.

The SM currently only has one fully operational licensed RTS at Klapmuts with one mini public drop off located in Franschhoek. The IWMP states that the Klapmuts drop-off does not require licensing due to its size/thresholds and therefore falls under the Norms and Standards. The Klapmuts RTS is currently operating at full capacity, however this is only since the closure of the Devon Valley landfill site.

The IWMP states that there is a need for the development of a larger transfer station in the Franschhoek area. The SM recently underwent a Section 78(3) process as required by the Municipal Systems Act (MSA) in order for the Municipality to outsource municipal waste management functions to private parties. The process has been approved by Council and the approval allows for all municipal waste management services to be outsourced to private companies, with the exception of waste collection, transportation as well as fleet and storage management, which will stay a Municipal function.

The Municipality is planning the construction of an organic waste RTS (ORTS) at the Devon Valley MRF to collect and divert pre and mixed organic waste. The Basic Assessment process has been completed and an Environmental Authorisation (EA) was issued on 28 April 2021. Construction is expected to commence in the 2022/23 Financial Year.

The ORTS is expected to consist of a facility building of approximately 1 200m<sup>2</sup> in area with the capacity to store one day's waste and will comprise of:

- a container handling/skip handling area;
- a tipping hall/drop-off area and area for future conveyer/compaction loading hall and system;
- ablution facilities;
- mess/kitchen facilities;
- site offices;
- pure-organic waste storage and transfer station;
- organic mixed waste storage and transfer station; and
- space for an additional transfer bay.

The SM are currently undertaking a Landfill Gas (LFG) Feasibility Study for Devon Valley LFS to understand the amount of gas being generated and if investment into the capture of the gas is feasible, this is expected to be completed by the end of 2021.

## 4.2 Current Organic Waste Diversion practices

### 4.2.1 Green waste chipping

Green (garden) waste is accepted at the Devon Valley Landfill Site under a contract with Landfill Consult. Green waste is chipped on site and taken to a licensed composting facility by Landfill Consult. The municipality keeps a record of the incoming volumes of green waste, as well as chipped material leaving the site.

### 4.2.2 Stellenbosch Municipality home composting trial

Stellenbosch Municipality has a tender in place since 1 July 2021 for the procurement of household compost bins for a home composting trial. The home composting bins will be provided to selected residents in Franschoek, where the volume and weight of the waste / compost generated by each trial participant will be monitored by the SM.

### 4.2.3 Organic waste management at Stellenbosch University

Stellenbosch University (SU) has implemented a campus-wide three-bin system aimed at separating organic, recyclable and non-recyclable waste.

Garden waste from the University is taken to a composting facility run by a service provider on land owned by SU. The windrows at the facility are turned monthly and compost takes 3-4 months to be ready.

Food waste from kitchens and cafeterias is disposed of in waste food containers/bins and is collected in the food containers. This is collected by SU's waste service provider as part of their contract and was being taken to a waste-to-nutrient plant located in Philippi, Cape Town.

The University was also trialling a Bio-bin (forced aeration in-vessel composting pre-treatment process) on campus prior to the Covid-19 Pandemic.

The University is also considering either of the following for food/organic waste generated on campus:

1. Food waste, including compostable packaging to be taken to a compost facility for composting.
2. The SU waste service provider to transport organic waste generated at the University to an Anaerobic Digester (AD) facility located in Elgin.

In addition to the three-bin system, the SU has implemented a strategy to complement their organic waste strategy and ensure that packaging sold and used on campus that is associated with food served or sold is compostable.

## 4.3 Stellenbosch Municipality's Waste Characterisation Studies

SM conducted waste characterization studies in 2012 and 2017 to determine the composition of waste being disposed of to landfill within the Municipal area.

The consolidated data provides an overall broad characterisation of the waste sampled (by weight) for all the areas sampled within SM and is presented in **Figure 1**. The following should be noted with regards to the categories illustrated:

- Packaging/Recycling is a broad category where data has been combined to include glass, metal, plastic, paper and board, Tetrapak and multilayer.
- Organic waste and garden waste have been kept as separate items.
- Household Hazardous Waste (HHW) included batteries, fluorescent bulbs, cleaning chemicals, medical waste, nappies and sanitary products.

The report indicated that by diverting recyclables, i.e. plastic, paper and cardboard, glass and metal waste streams along with organic and garden waste, waste being disposed of to landfill can be drastically reduced by at least 50% and potentially up to 80% in certain areas. However, this would depend on the level of contamination and quality of recyclables and would probably require the implementation of a three-bag system for separation at household level of recyclable, non-recyclable and organic waste. Certain areas could also be provided with a targeted garden waste collection system.

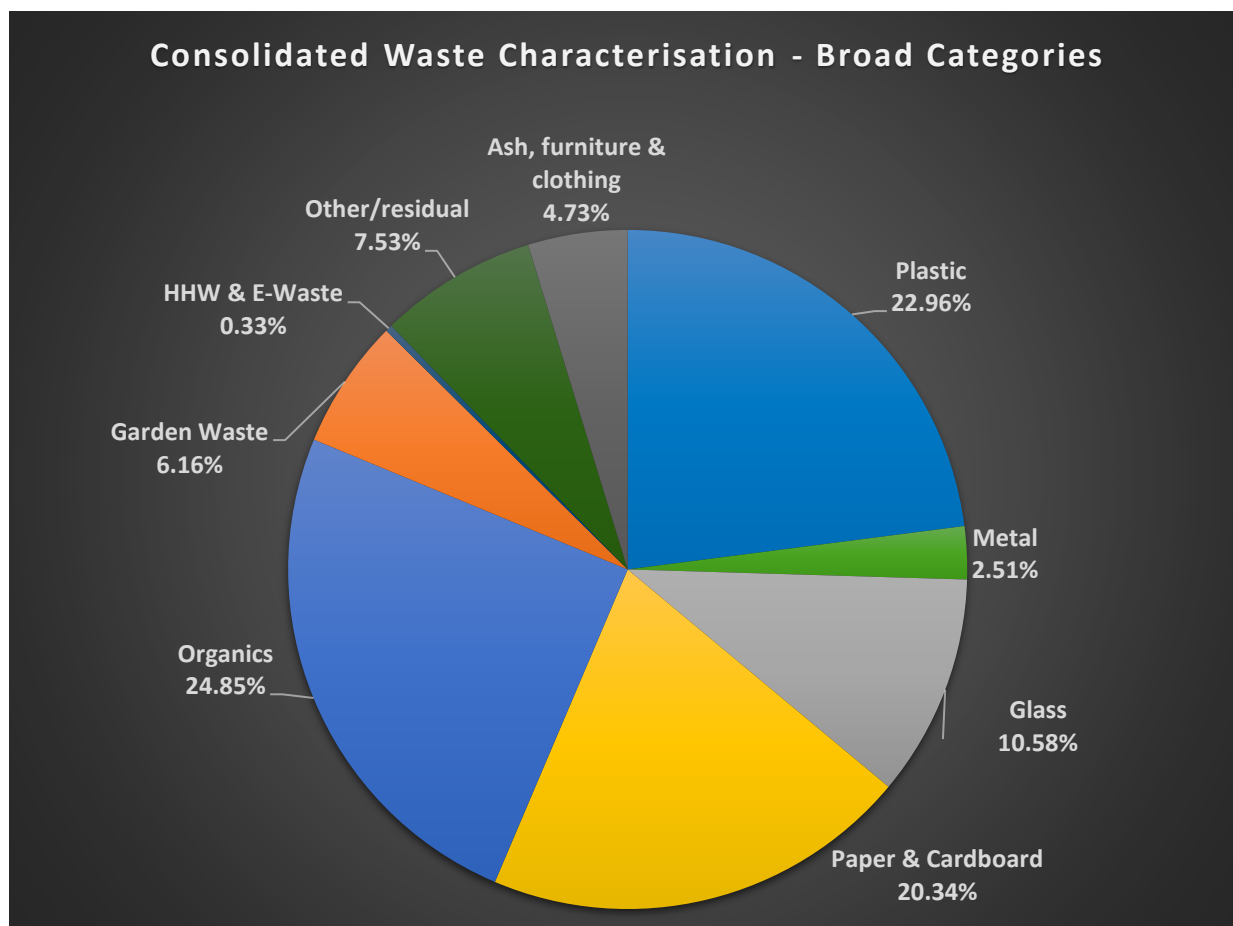


Figure 1: Consolidated Waste Characterisation Data showing the categories for all areas

Figure 2 provides broader categories which have been consolidated as follows, with the aim of providing a simpler visual comparison of the diversion potential per area:

- **Recyclable** (glass, metal, plastic, paper & cardboard);
- **Organic** (household organic & garden waste); and
- **Non-recyclable** (residual, other and HHW).

The orange section of the bar chart indicates the non-recyclable component of waste which cannot readily be diverted from landfill. This data has also been presented in tabulated format in **Table 1**. This has not been compared to income level due to the wide range of income levels per area.

*Table 1: Waste Characterisation Data consolidated into recyclable, organic and non-recyclable streams*

Area Name	Ward No	Recyclable % <sup>2</sup>	Organic % <sup>3</sup>	Non-recyclable % <sup>4</sup>
Franschhoek (incl Groendal)	1	58.5	31.6	9.9
Langrug	2	46.2	2.2	51.6
Wemmershoek and La Motte	3	60.2	22.5	17.2
Kylemore and Farms	4	54.4	31.3	14.3
Pniel	4	56.6	31.5	11.9
Idas Valley	5	56.6	31.6	11.7
Jonkershoek	5	69.3	17.3	13.4
Uniepark and Mostertsdrift	7	59.5	32.9	7.6
Simonswyk	7	43.6	47.1	9.2
Uniepark	7	37.8	55.1	7.2
Mostertsdrift	7	46.7	41.4	11.9
Noordwal and Die Laan	8	58.6	35.5	5.9
Stellenbosch CBD	9	60.5	26.6	12.9
La Colline	10	57.2	34.8	8.0
Onder Papegaaiberg	11	66.6	22.2	11.2
Devon Valley	11	75.8	18.7	5.5
Plankenbrug	12	63.9	23.0	13.0
Kayamandi	12, 13, 14, 15	52.7	32.0	15.3
Cloetesville Industrial	16	52.7	35.4	12.0
Cloetesville	16	51.9	34.5	13.6
Welgevonden	17	62.9	27.1	10.0
Klapmuts	18	55.9	19.6	24.4
Koelenhof	19	57.7	32.7	9.6
Raithby	20	60.1	25.3	14.6
Technopark	21	64.9	33.8	1.2
Paradyskloof	21	50.1	37.1	12.8
Jamestown	21	56.7	36.2	7.1
Die Boord	22	52.0	40.3	7.7
Brandwacht	22	46.9	46.6	6.5

What is notable is that the ward of Langrug appears to generate a much lower percentage of organic waste compared to other wards and areas of similar demographics. One of the factors that may account for this is that Langrug has been part of the Genius of Space project, which has focussed on sustainability in the area amongst other issues.

<sup>2</sup> glass, metal, plastic, paper & cardboard

<sup>3</sup> household organic & garden waste

<sup>4</sup> residual, other & HHW

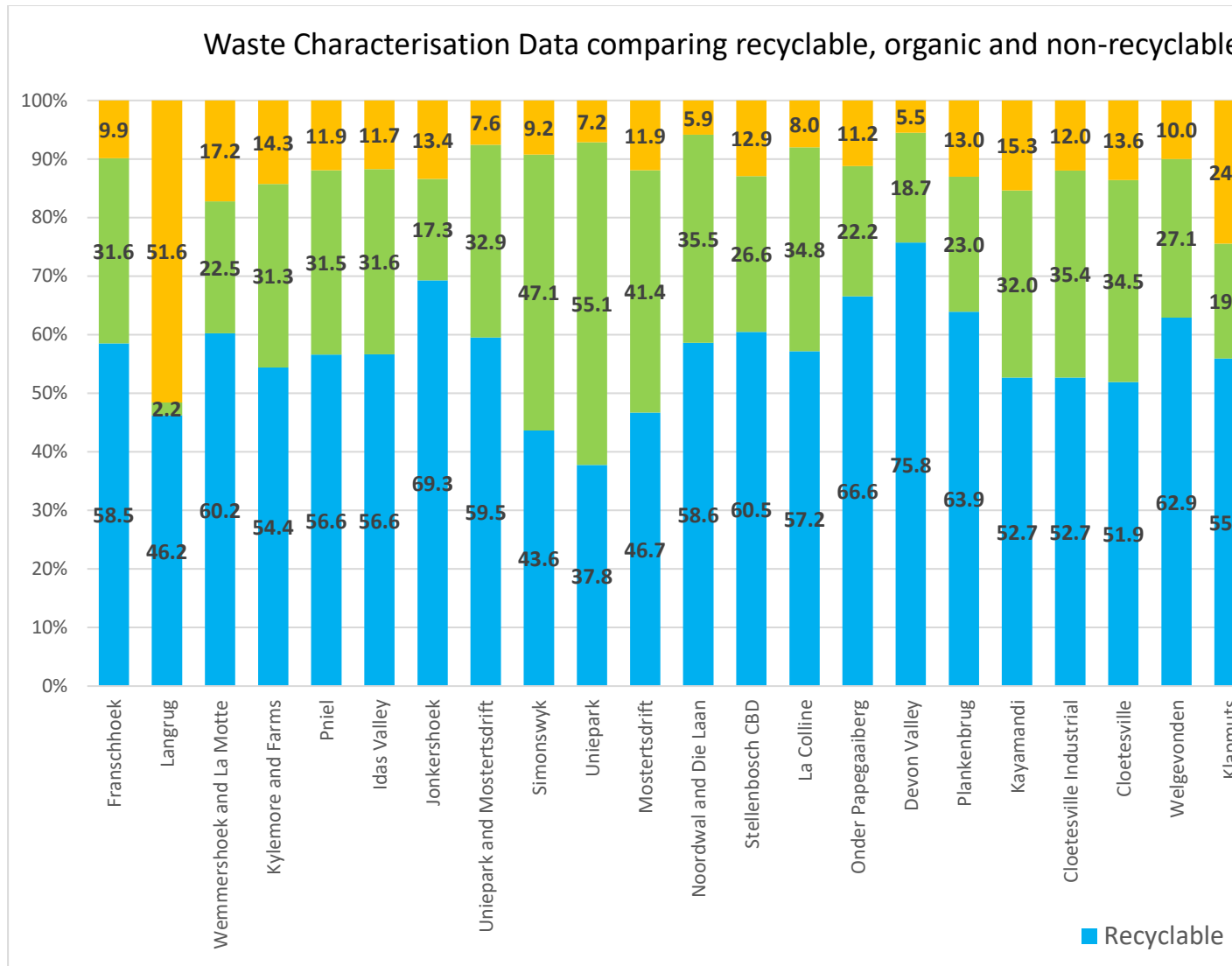
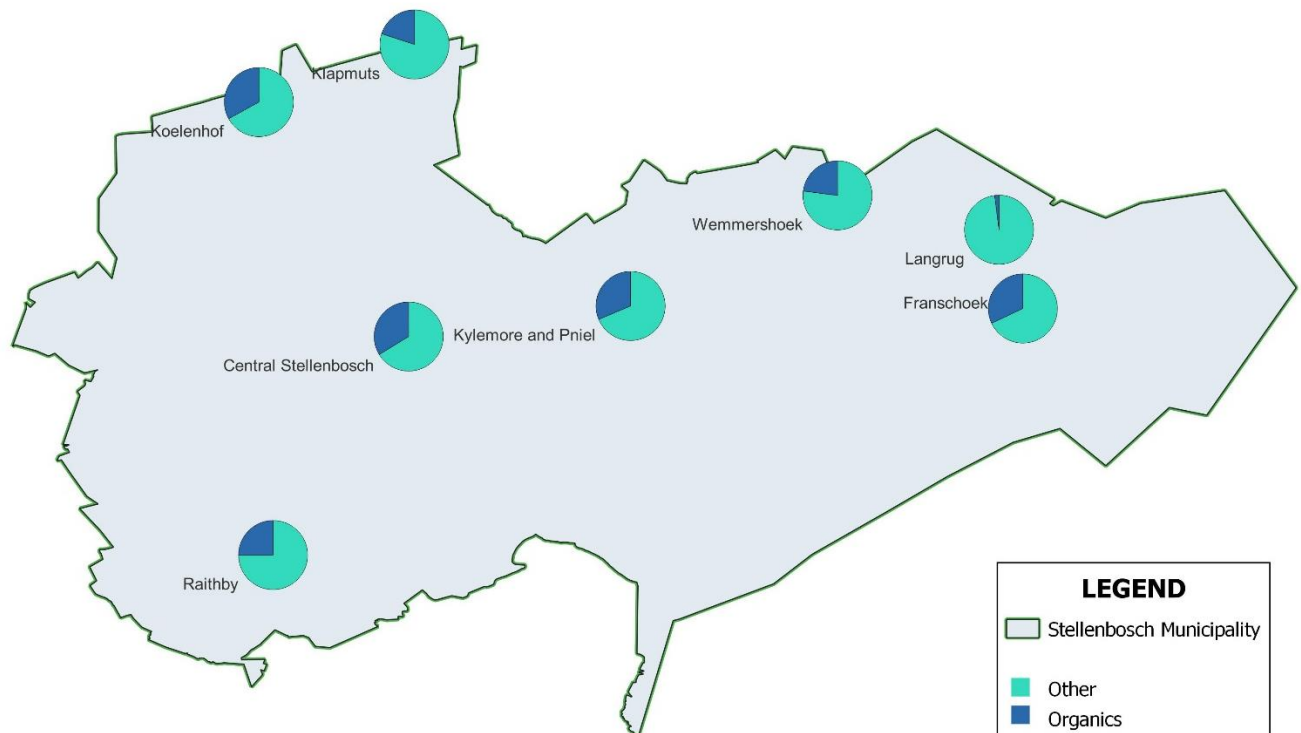


Figure 2: Waste Characterisation Data with data consolidated into recyclable, organic and non-recyclable waste streams

**Table 1 Table 1.** The recyclable and non-recyclable waste fractions are combined and represented as ‘Other’ on the map. **Figure 3** illustrates that the largest proportions of the organic waste within SM are generated in Central Stellenbosch, Kylemore and Pniel, Franschoek and Koelenhof, while the organic waste fraction generated in Langrug is the least.



*Figure 3: Spatial distribution of SM organic waste<sup>5</sup>*

#### 4.3.1 Waste Characterisation Findings from Stellenbosch University

The University was included separately from the rest of the municipality. The characterisation sorted waste data into different categories to the characterisation undertaken for the Municipal waste stream, this data is therefore represented separately, see **Figure 4**.

The characterisation does not appear to represent the entire University’s buildings but is likely to provide a good indication of the character of the waste. **Figure 5** provides an indication of the waste characterisation per building facility i.e., Men’s and Ladies Residences, the faculty buildings and the Neelsie<sup>6</sup>. The Neelsie and Ladies Residences appear to generate the most organic waste.

It is recommended that the SM engage with the SU to understand the potential for collaboration on waste minimisation and waste diversion efforts.

<sup>5</sup> Central Stellenbosch includes the following areas: Welgevonden, Cloetsville, Kayamandi, Plankenberg, Onder Papegaaiberg, Die Boord, Brandwacht, Devon Valley, Paradyskloof, Techno Park, Jonkershoek, Mostertsdrift, Uniepark, Idas Valley, Simonswyk, Jamestown.

<sup>6</sup> The Neelsie is the main and largest cafeteria area on campus.



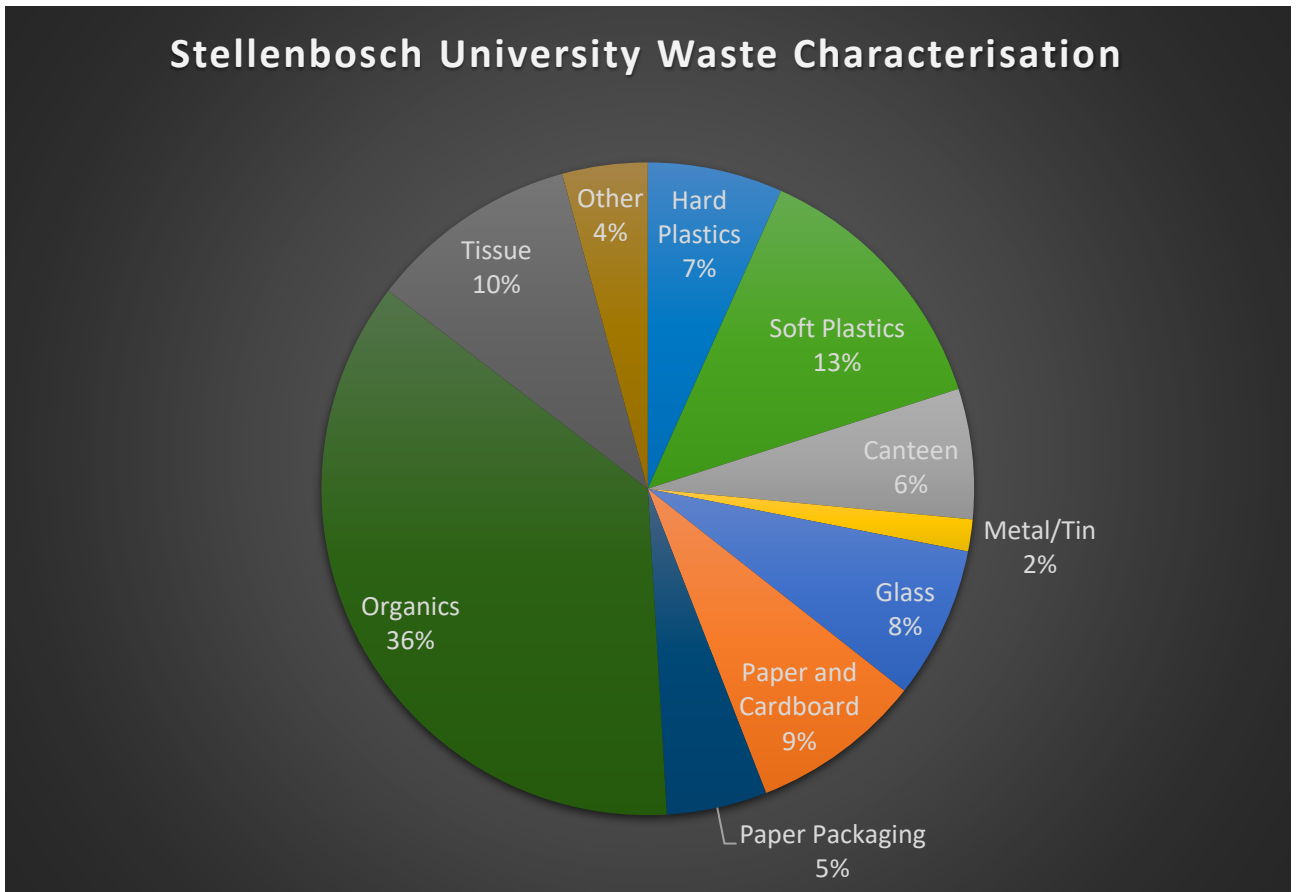
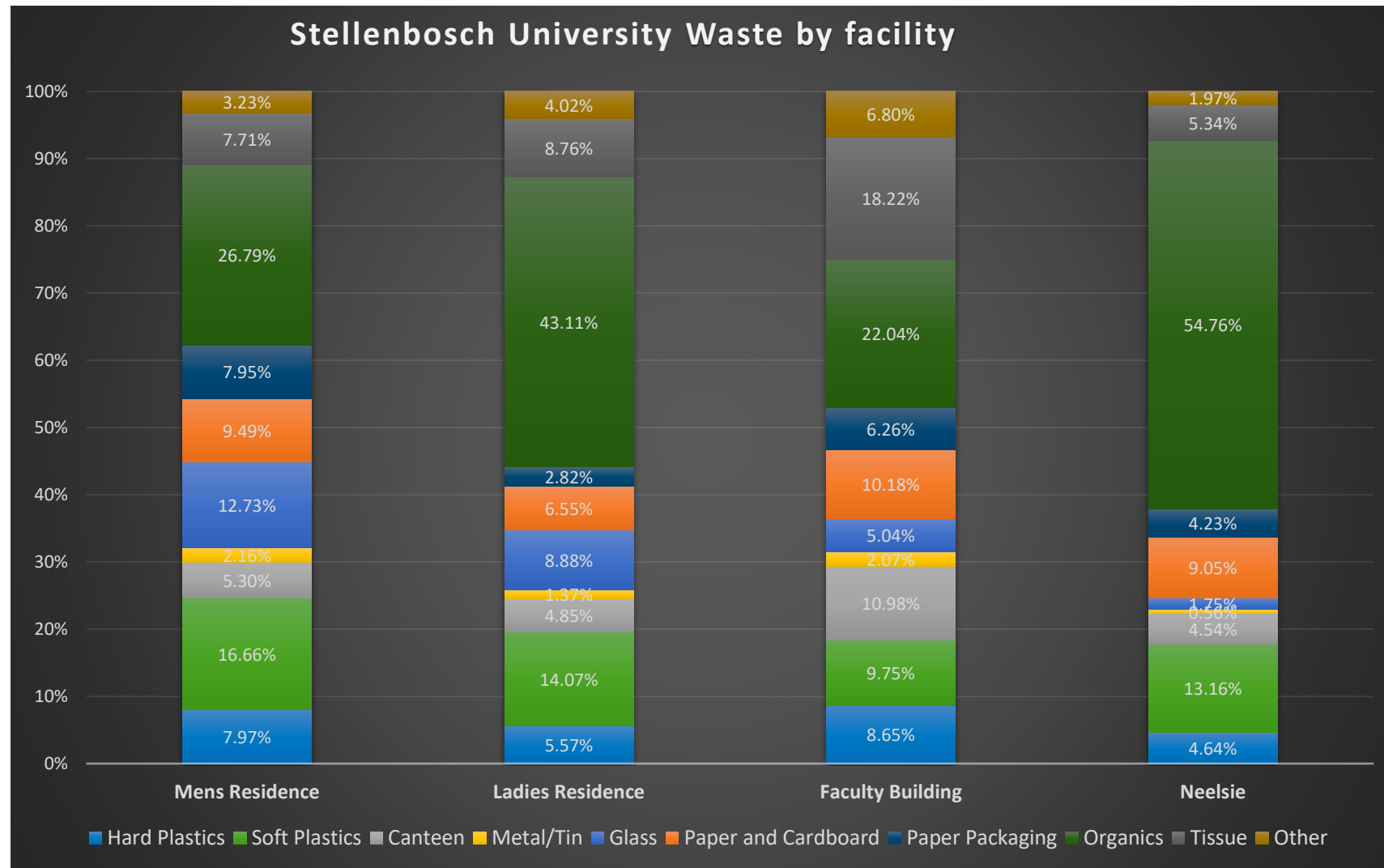


Figure 4: Stellenbosch University Waste Characterisation

Figure 5: Stellenbosch University Waste Characterisation (%) by facility type



#### 4.3.2 SM Waste Characterisation Report Conclusion

The following conclusion was provided by the SM Waste Characterisation Report.

The graphical representation of the waste characterisation data indicates the following:

- As there is a variation in waste character per area, the solutions to divert waste from landfill do not have to be a “one size fits all” solution or approach and that different solutions in different areas may be more appropriate.
- A multi-pronged approach will be required to effectively divert and remove the recyclable, organic and garden waste fractions in different areas from landfill.
- As a minimum, a three-bag household separation at source programme should be implemented for:
  - organics (excluding garden waste),
  - recyclables/packaging, and
  - general waste.
- A system for diversion of garden waste should be considered, either separate household bin and collection or potentially provision of composting bins, where appropriate.
- It is recommended that the Municipality engage with the University and offer input into waste minimisation and waste diversion efforts.
- It is also recommended that the Municipality engage with existing collectors and recyclers to understand that challenges and collaboratively come up with potential solutions to bring about greater diversion of waste from landfill.

It is recommended that a collaborative approach is undertaken in order to allow the growth of the recycling industry, the Municipality could work with businesses in the area to support development of a recycling industry and secondary markets and potentially for a collective approach to organic waste management.

## 5 LITERATURE AND LEGISLATIVE REVIEW

This section presents current legislation that is applicable to organic waste management, and a literature review.

### 5.1 Legislative review

The Western Cape Government Department of Environmental Affairs and Development Planning (DEA&DP) has taken a policy decision to institute a 50% restriction on organic waste being disposed to landfill by 2022 and a full (100%) prohibition of organic waste disposed to landfill by 2027.

This is due to the following<sup>7</sup>:

- A large proportion of organic waste within the waste stream. Approximately 30% of the waste stream in the Western Cape is made up of organic waste. Therefore, it recognised that the large volumes of organic waste are taking up scarce landfill space.
- The negative environmental, social, and economic impacts of disposal of organic waste to landfill. For instance, the disposal of organic waste to landfill results in the increased generation of leachate, which has the potential to contaminate groundwater. Leachate requires expensive landfill containment barriers to mitigate against surface and groundwater contamination.
- The anaerobic decomposition of organic waste disposed of to landfill results in the generation of methane gas, which is a greenhouse gas (GHG). Methane is a potent GHG, with approximately 25

<sup>7</sup> DEA&DP letter to the Organics Recycling Association of South Africa. RE: Diversion targets for organic waste in the Western Cape (2018).

times the global warming potential of carbon dioxide (CO<sub>2</sub>), making landfills a significant contributor to GHG emissions<sup>8</sup>.

- Organic waste disposal to landfill is also associated with health risks such as smells and vectors.

The diversion of organic waste from landfill would assist with<sup>9</sup>:

- Extension of the lifespan of landfill sites within the Western Cape.
- Financial savings associated with infrastructure elements for leachate and landfill gas (LFG) management.
- Reduction in methane gas generation, which will assist with meeting the national GHG reduction targets and obligations.
- Converting organic waste into beneficial products will contribute towards the green economy and therefore helping to create direct and indirect employment opportunities.

#### National Norms and Standards for Disposal of Waste to Landfill (GN 636 of 2013)

The National Norms and Standards for Disposal of Waste to Landfill (GN 636 of 2013) require a 25% reduction of garden waste to landfill by 2018 and a 50% diversion by 2023.

#### National Medium Term Strategic Framework (2019 – 2024)

The National Medium Term Strategic Framework requires a 50% diversion of waste from landfill sites. The interventions identified to meet the targets include the implementation of waste management programmes across all spheres of government and the private sector.

#### National Waste Management Strategy 2020 (GN 44116 of 2021)

The National Waste Management Strategy 2020 (NWMS) gives effect to the DFFE's national mandate for waste management, which is derived from Section 24 of the National Constitution. The NWMS therefore provides a coherent framework and strategy for the implementation of the Waste Act and outlines government's policy and strategic approach to waste management within the South African government's context and agenda of socio-economic development that is "equitable, inclusive, sustainable and environmentally sound".

The NWMS 2020 also responds to the National Development Plan: Vision 2030 directive of "implementing a waste management system through the rapid expansion of recycling infrastructure and encouraging the composting of organic domestic waste to bolster economic activity in poor urban communities" and to the need to "cut down on solid waste disposal".

Metropolitan (Metro), district and local municipalities are critical to the implementation of the NWMS as they are responsible for the planning and delivery of waste collection and disposal services and infrastructure. As part of the implementation of the NWMS 2020, local government needs to shift the focus of waste collection services to enable and promote diversion of waste from landfills through reuse, recycling, and recovery.

The State of Waste Report (2018) shows that organic waste contributes to more than 50% of the total of general waste disposed in South Africa and has a comparative recycling rate of 49%. Based on these statistics, the NWMS recognises that the organic waste stream should be prioritised for waste prevention and diversion from landfill.

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<sup>8</sup> Environmental Canada, Technical Document on Municipal Solid Waste Organics Processing.

<sup>9</sup> DEA&DP letter to the Organics Recycling Association of South Africa. RE: Diversion targets for organic waste in the Western Cape (2018).

The organic waste priorities of the NWMS are further supported by the fact that the South African government is signatory to the United Nations Sustainable Development Goals (SDG). SDG 12.3 seeks to halve per capita global food waste at the retail and consumer level, including the reduction food losses along production and supply chains, as well as post-harvest losses by 2030. This goal forms the basis of a number of key agreements being discussed in South Africa, as well as internal targets for large and multinational brands.

The NWMS is premised on three pillars which will see a future South Africa with zero waste in landfills; cleaner communities, well managed and financially stable waste services, and a culture of zero tolerance of pollution, litter and illegal dumping. The Government priorities will be achieved through three (3) supporting pillars, namely Waste Minimisation; Effective and Sustainable Waste Services; Compliance, Enforcement and Awareness.

**Table 2** presents the key interventions and actions, specific to organic waste management within municipalities, which are linked to each strategic pillar of the NWMS.

*Table 2: Key interventions and actions of the three strategic pillars of the NWMS*

Key Intervention/s	Actions/Outcomes
<b>PILLAR 1: WASTE MINIMISATION</b>	
Divert organic waste from landfill through composting and energy recovery	<p>The long term expected outcome is "Zero Waste going to Landfill".</p> <ul style="list-style-type: none"> <li>40% of waste from diverted from landfill within 5 years; 55% within 10 years; and at least 70% within 15 years leading to Zero Waste going to landfill.</li> </ul> <p>Include and implement organic waste technologies in local government IWMPs.</p>
<b>PILLAR 2: EFFECTIVE AND SUSTAINABLE WASTE SERVICES</b>	
Separate waste at source	<p>Integration of waste pickers into the waste management system.</p> <p>Public online and annually updated guidelines, case studies and planning tools on separation at source for municipal managers.</p> <p>National Awareness campaign on recycling and waste management.</p>
Effective integrated waste management planning	<p>Development and implementation of 5 -year provincial and municipal IWMPs.</p> <p>Improve collection, reporting and dissemination of information on SAWIS.</p> <p>Building capacity in integrated waste management planning and provide revised IWMP guidelines.</p> <p>Municipalities include provisions for recycling drop-off/by back/storage centres in their IWMPs, supported by fiscal mechanisms/ Extended Producer Responsibility (EPR)<sup>10</sup> schemes.</p>
<b>PILLAR 3: COMPLIANCE ENFORCEMENT AND AWARENESS</b>	
Ensure municipal landfill sites and waste management facilities comply with licensing requirements	Develop financial mechanisms to enforce compliance to license conditions.

#### National Organic Waste Composting Strategy (2013)

The Final National Organic Waste Composting Strategy (NOWCS) Report was published by the DEA (now DFFE) in 2013, with the aim to promote the diversion of organic waste from landfill through organic waste composting for soil beneficiation and other uses through composting.

<sup>10</sup> The EPR Regulations define EPR as follows: "extended producer responsibility" means that a producer's responsibility for an identified product is extended to the post-consumer stage of an identified product's life cycle.

The NOWCS is based on five goals which seek to drive viable and sustainable change in response to legislation change, responsible waste handling and enhancing the use of organics in a circular system. The five goals and associated objectives are detailed in the NOWCS, including actions to be undertaken in order to realise each of these goals. **Table 3** provides a summary of the five goals and associated objectives of the NOWCS.

*Table 3: Summary of the five goals and associated objectives of the NOWCS*

Goals	Objectives
<b>1. Review legal and regulatory requirements.</b>	The objective of Goal 1 is to identify legislation and regulations that require modification in order to facilitate the legal registration of composting activities and facilities.
<b>2. Understand and facilitate feedstock sources and opportunities.</b>	Improving the monitoring of organic waste generation, disposal, and treatment, as well as identifying both feedstock and product market opportunities.
<b>3. Provide the necessary support structure and functions to implementing composting.</b>	The objective of Goal 3 is to consider necessary support structures and functions that would assist in the creation of opportunities, promoted and facilitated by legal enabling frameworks, and financial support and incentivisation. Governmental synergies with the private sector and regionalisation are also identified as necessary aspects requiring consideration.
<b>4. Undertake education, skills transfer and awareness.</b>	Enhancing public awareness and education campaigns and programmes regarding certain waste types is required in order to assist with not only separation at source, but diversion of organic waste from landfill, by means of potential home composting in urban / residential areas, as well as possible communal composting within the informal, lower-income areas.
<b>5. Incorporate composting into municipal planning, responsibilities and create roles for the private sector.</b>	This goal is about adapting the existing municipal structures to suit roles and responsibilities, including the use of IWMPs and Integrated Development Plans and identification of private involvement, where necessary. <u>Waste Management Officers will play a key role in planning and achieving the objectives of the NOWCS.</u>

#### National Norms and Standards for Organic Waste Composting (GN 44762 of 2021)

On 25 June 2021, the Minister of Forestry, Fisheries and the Environment promulgated the **National Norms and Standards for Organic Waste Composting** under the NEMWA. An objective of the Norms and Standards is that organic waste composting will no longer require a waste management licence under NEMWA.

The Norms and Standards seek to provide a national uniform approach relating to controlling the composting of organic waste at any facility that falls within the threshold, thereby ensuring that best practice is always followed. The Norms and Standards are applicable to compostable organic waste and to organic composting facilities with the capacity to process in excess of 10 tonnes per day.

#### National Norms and Standards for the treatment of Organic Waste (GN 44340 of 2021)

On 29 March 2021, the Minister of Forestry, Fisheries and the Environment published the **Draft National Norms and Standards for the Treatment of Organic Waste** under the NEMWA for comment. The Norms and Standards were released for a 30-day commenting period on 29 March 2021, which was subsequently extended. These had not been promulgated at the time of writing this plan.

The objective of the Norms and Standards will be to control the processing of organic waste material at any facility that falls within the prescribed thresholds in order to avoid, prevent or minimise potential negative impacts on the biophysical environment.

The Norms and Standards are applicable to the following activities:

1. Recycling of organic waste at a facility that has an operational area in excess of 500m<sup>2</sup>;

2. Recovery of organic waste including the refining, utilisation or co-processing of organic waste in excess of 10 tons but less than 100 tons per day;
3. Construction and operation of any organic waste treatment facility that has the capacity to process in excess of 10 ton but less than 100 tons of organic waste material per day;
4. Construction of any organic waste facility where the capacity of the facility is able to process in excess of 10 tonnes but less than 100 tonnes of organic material per day;
5. Construction and operation of any organic waste facility processing animal matter not intended for human consumption for installation handling in excess of 1 ton of raw material per day; and
6. Construction and operation of any organic waste facility using applied heat (thermal treatment) in the treatment of general waste exceeding 10kg per day.

#### Western Cape Provincial Integrated Waste Management Plan (IWMP) (2017 – 2022)

Objective 3 of Goal 3 (Effective and efficient utilisation of resources) of the IWMP is to increase waste diversion through reuse, recovery and recycling. **The targets set to achieve this objective for the organic waste stream are: 50% diversion of organic waste by 2022 and 100% diversion rate by 2027.**

#### Stellenbosch Municipality: By-law relating to Integrated Waste Management (2021)

In order to give effect to the right contained in Section 24 of the National Constitution, 1996 and to regulate the avoidance, minimisation, generation, collection, cleaning and disposal of waste, Stellenbosch Municipality: Directorate Infrastructure Service drafted the By-law Relating to Integrated Waste Management, which was subsequently published by Provincial Gazette No. 8441 dated 4 June 2021.

The By-law makes the following provisions in relation to organic waste management:

#### Separation at source

1. A waste generator must:
  - a. Separate waste with the aim to:
    - i. Minimise its impacts on the environment; and
    - ii. Store the recyclable waste separately from non-recyclable waste.

#### Garden waste

1. Garden waste generated at properties being used mainly for residential purposes may be:
  - a. Composted on the property;
  - b. Stored in a compost heap or suitable bags as per the Municipality's requirements; and
  - c. Kept on the property until collection or taken to a licenced waste disposal facility.
2. The Municipality may, from time to time:
  - a. Stipulate maximum quantities of garden waste to be collected in respect for rural and urban areas; and
  - b. Impose conditions regarding the disposal of garden waste over a specified mass, and for this purpose call upon a waste generator of garden waste to present a weighbridge ticket as proof of proper disposal of such garden waste.

#### Organic waste

1. The occupant of premises on which organic waste is generated:
  - a. May compost the waste on the premises, provided that the composting does not cause a nuisance or harm to human health or damage the environment;
  - b. But not composted, must ensure that the waste is collected and treated or disposed of within a reasonable period after its generation.
2. The Municipal Manager may issue a directive to:
  - a. An organic waste generator to:
    - i. Develop an integrated refuse management plan indicating measures to minimise and recover such waste; and

- ii. Transport the waste to designated facilities for treatment or disposal; and
- b. A transporter of garden waste or a person providing garden maintenance services to transport any garden waste to a facility designated by the Municipality for disposal.
3. The Municipality or an accredited services provider may:
  - a. Upon written request of the occupant of premises on which organic waste is generated; and on payment of a tariff as per the Municipality's Tariff-By-Law and Tariff Policy, deliver an appropriate receptacle for the purposes of storing organic waste, in addition to any receptacle already provided by the Municipality for general waste.

## 5.2 Literature Review

The benefits of diverting organic waste from landfill are well documented and include the following in addition to saving landfill airspace:<sup>11</sup>:

- Organic matter is an essential component of soils and plays a fundamental role in soil conservation, crop production, and fertility maintenance. Treated organic waste can be transformed into valuable products such as compost, soil amendment, and fertilizer. These products can be applied to various commercial activities such as agriculture, landscaping, horticulture, erosion control, topsoil replacement etc.
- The production of compost and other products emanating from the treatment of organic waste could help to reduce the demand and use of chemical fertilisers.
- Compost can also be used for reforestation, wetland restoration and habitat revitalisation to reverse the impacts of urbanisation / industrialisation.
- The anaerobic decomposition of organic waste (i.e. in landfill) results in the generation of methane gas. As an alternative, if decomposition takes place separately in an Anaerobic Digester (AD), the gas can be collected and transformed into energy. This can be valuable in an energy scarce country like South Africa, where mainly fossil fuels are relied on for electricity generation.
- Plays a key role in circular economy thinking.

The following section presents the opportunities, drivers/enablers, and risks/barriers to organic waste diversion from landfill as presented in the GreenCape Market Waste Market Intelligence Report <sup>12</sup>.

### Opportunities

In 2019, the Western Cape Province generated approximately 533 745 tonnes of MSW organics, and approximately 326 935 tonnes of commercial and industrial organics in 2019. Combined, the market value of MSW and commercial and industrial organics is estimated between R86 million and R162 million.

The Cape Winelands District Municipality, of which Stellenbosch Municipality is a part of, is estimated to generate ~67 900 tons of MSW organics by 2023.

### Drivers

- Due to the opportunities related to organic waste, new and changing national and provincial legislation and regulations are set to unlock a number of key waste streams such as organics. Changes in legislation such as the above-mentioned Western Cape organic waste restrictions and the National Norms and Standards for Composting and Organic Waste Treatment will help to simplify requirements and procedures for alternative waste treatment technologies and activities; as well as unlock funds and feedstocks for, among others, the private sector.

<sup>11</sup> Environmental Canada, Technical Document on Municipal Solid Waste Organics Processing

<sup>12</sup> GreenCape Market Waste Market Intelligence Report (2020 p.16 – 19; p.38 – p.43)



- The initiatives identified by the national government's fast results delivery programme, Operation Phakisa<sup>13</sup>, also aims to increase access to feedstock and stimulate growth in market demand. Operation Phakisa resulted in 20 initiatives aimed at job creation potential, potential GDP contribution, and waste diversion potential as calculated in 2017.
- The rising management costs of landfill operations are resulting in an increase in the price of landfilling in the Western Cape. This increases demand from waste generators for alternative waste treatment solutions, which in turn improves the business case for solutions.
- Most of the Western Cape province, including Stellenbosch Municipality, is experiencing a landfill airspace crisis.

#### Risks

- It is difficult to extract value from municipal solid waste (MSW) due to its complex nature of being a mix of general household articles, which include general and hazardous waste, all of which come in various quantities and ratios, and all of which can be substantially contaminated.
- In order to realise the benefits of producing good quality compost and successful waste to energy, an important aspect of organic waste diversion is ensuring that the organic feedstock/input is of good quality and is not contaminated.
- Organics contaminated by non-organic waste streams such as glass, metal, plastic etc, compromises the quality and value of organic waste treatment by-products and end products.
- **Separation at source** is therefore an important aspect of overcoming the hurdle of contamination of organic waste. However, it is noted that for the most part South Africa, in general does not have a culture of separating waste at source. The risk of low participation rates in separation at source programmes can also make extracting value difficult and costly.
- Although Municipal waste management by-laws, such the Stellenbosch Municipality By-Law Relating to Integrated Waste Management (2021), require mandatory separation at source, municipalities do not always have the capacity to enforce this.

**Table 4** presents a summary of the opportunities, drivers, enablers and risks related to organic waste beneficiation in South Africa.

*Table 4: Summary of the opportunities, drivers and enablers for organic waste beneficiation as per the GreenCape Market Intelligence Report (2020 p.33 - 34)*

Opportunities	Drivers	Enablers	Barrier/Risk	Macro-Environment
Value-add to cleaner / pre-processed organics Stellenbosch local municipality	<ul style="list-style-type: none"> <li>• Organic waste 2027 landfill restrictions</li> <li>• Decreasing municipal landfill airspace</li> <li>• Increasing cost of landfilling</li> <li>• Market demand for clean dry recyclable feedstocks</li> </ul>	<ul style="list-style-type: none"> <li>• Easing of composting regulations</li> <li>• Increasing cost of electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate source separation</li> <li>• Composting registration regulations</li> <li>• Difficult procurement / tender process</li> <li>• Sensitive / lack of market for by-products</li> <li>• Lack of electricity grid feed-in</li> </ul>	<ul style="list-style-type: none"> <li>• Operation Phakisa focus on organic waste</li> <li>• Greenhouse gas reduction commitments / ambitions</li> <li>• Consumer awareness of food waste and its impact on the environment</li> </ul>

<sup>13</sup> The Department of Environmental Affairs together with the Department of Planning, Monitoring and Evaluation initiated a Chemicals and Waste Phakisa programme from 24 July to 24 August 2017. Chemicals and Waste Phakisa was aimed at engaging on opportunities that call lead to reduction of impact on the environment, while growing the GDP contribution and creating jobs.

Other drivers to be considered are as follows:

The 'Circular Economy' sees waste as a resource as follows:

- Organics are materials which can be reclaimed and reused or recycled as secondary raw materials for new products i.e. compost.
- Organic waste converted to compost is a source of soil nutrients.

Legislative and infrastructural drivers:

- The zero-meat production waste to landfill by 2023 Operation Phakisa initiative, which will focus on driving the diversion of the meat production waste to value-add solutions.
- The 50% household organic separation at source by 2023 Operation Phakisa initiative will focus on enforcing separation at source requirements on municipalities.
- As previously mentioned, since August 2019 the SM have made use of the Vissershok Private Landfill (Vissershok Waste Management Facility (Pty) Ltd) in Cape Town owing to loss of airspace at the Stellenbosch Municipal Landfill Site. The loss of landfill airspace, in conjunction with provincial policy directives, is a driving factor for SM to diversify their waste management models.

Financial drivers:

- Availability and cost of landfill
  - Reducing waste results in avoided costs/savings in landfill cost.
  - Future avoided costs which are the long-term savings that are realised when the life of an existing landfill is extended or a new landfill can be designed and constructed on a smaller scale or with a longer lifespan.
- Cost of transport of waste to a landfill site outside the municipality's boundaries.

Barriers:

- Green and garden waste collection and processing is most effective when combined with bylaws prohibiting this waste to be mixed or disposed of with normal household waste.
- Composting garden and green waste is easier to control and produces a cleaner more uniform product with fewer contaminants, and the final product can be certified as organic compost. Compost derived from general mixed waste can be more difficult to control.
- Costs associated with waste transport are high.
- There is a perception that the diversion of waste from landfill should be cheaper than a landfill gate fee as this does not take into account the life-cycle costs of a landfill site.
- Treatment or processing of organics results in by-products and end products that require disposal or further management e.g. digestate from AD is not regarded as a revenue generating by-product from AD operations but usually attracts a "disposal" cost although it can be used as a soil enhancer and composting requires the sale of the final product.
- Compost needs to meet certain quality requirements to be registered with the Department of Agriculture, Land Reform and Rural Development (DALRRD) in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (No. 972 of 2017).
- AD as an energy generation solution for municipalities can be complicated by the requirement in terms of the Constitution that Municipalities are obliged by to buy electricity from the most reliable and inexpensive source.

### 5.3 Motivation for Separation at Source and Waste Diversion

Municipal solid waste management in South Africa is typically one dimensional, with waste being collected and disposed of at landfills, as illustrated in **Figure 6**. Municipalities have however been encouraged to adopt an integrated multi-dimensional approach to their waste management by applying the principles of the waste management hierarchy, as shown in **Figure 6** along with the desirability. As waste is not being separated at

source in most municipalities it results in a reduced market value as the extracted recyclable and organics from a mixed municipal waste stream are highly contaminated.

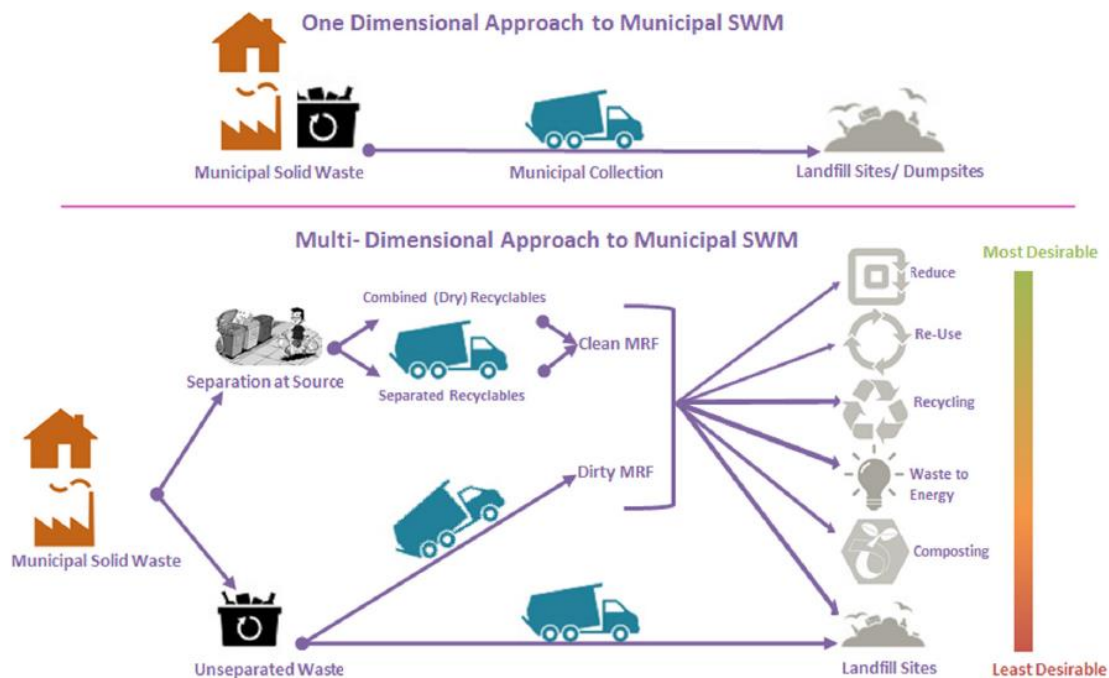


Figure 6: One-dimensional vs multi-dimensional approach to municipal waste management<sup>14</sup>

The South African government in partnership with the German Development Cooperation embarked upon the implementation of an advanced integrated solid waste management (AISWM) Programme for the Republic of South Africa. AISWM is a term used to describe integrated solid waste management (ISWM) making use of systems and technologies, within a framework of policies, legislation and practices, that reduce dependency on landfill for disposal of waste. The Programme defines AISWM as “the coherent and sustainable application of approaches and solutions that have the effect of reducing the amount of waste that needs to be landfilled.”

AISWM aims to advance waste management practices up the hierarchy away from landfill and towards creating energy, recycling, composting, reuse and reduction. This does not necessarily require the use of sophisticated and expensive technology; but a blend of management systems and multi-dimensional use of appropriate technologies that succeed in sustainably diverting waste away from landfill.

AISWM is generally more expensive than landfilling when only considering the financial costs. However, when considering the wider economic costs and benefits from a societal standpoint and the long term cost savings, advanced treatment options become more favourable than landfilling.

When comparing financial performance, costs and revenues of one-dimensional systems against multi-dimensional systems it can only be undertaken with a view of the long-term economic implications. It is however important to note that in order for multi-dimensional and AISWM systems to be effective, separation at source is a key component.

<sup>14</sup> Source: Knowledge Product 4: Financial Implications of Advanced Waste Treatment. [https://www.dffe.gov.za/sites/default/files/reports/advancedwastetreatment\\_chapter1.pdf](https://www.dffe.gov.za/sites/default/files/reports/advancedwastetreatment_chapter1.pdf)

## 5.4 International Case Studies and Examples of Organic Waste Diversion

This section provides a brief summary and overview of various and selected international organic waste diversion strategies and drivers. The Report, *Bio-waste generation in the EU: Current capture levels and future potential*, published in 2020 and commissioned by the Bio-based Industries Consortium (BIC) provides more specific details in terms of collection rates and tonnages as well as systems in each EU Member State, the UK and Norway.

### 5.4.1 European Union Directives

According to the Directive 1999/31/EC on landfill of waste, Member States must reduce the amount of biodegradable municipal waste going to landfill

- to 75 % of the total amount of biodegradable municipal waste generated in 1995 by 2006;
- to 50 % of 1995 levels by 2009; and
- to 35 % of 1995 levels by 2016.

European Directive (EU) 2018/851, commonly known as the New Waste Framework Directive (WFD), included in the 'Circular Economy Package', mandates the introduction of separate collection of bio-waste as of 1 Jan 2024. Updating art. 22 of the WFD, it stipulates an obligation at the EU level to implement bio-waste collection.

### 5.4.2 United Nations' Sustainable Development Goal 12.3

The United Nations (UN) Sustainable Development Goal (SDG) 12 seeks to "ensure sustainable consumption and production patterns." The third target under this goal (Target 12.3) calls for cutting in half per capita global food waste at the retail and consumer level, and reducing food losses along production and supply chains (including post-harvest losses) by 2030.

### 5.4.3 Milan <sup>15</sup>

The City of Milan, Italy started a door-to-door collection of organic waste in 2012. By June of 2014, the program reached 100% citywide participation and has one of the highest organic waste collection rates in Europe and has surpassed the European Union target of diverting 50% of food waste by 2020.

The high participation rates by citizens is said to be one of the main reasons for the rapid success of this programme. The residents of Milan were already accustomed to waste separation at household level and therefore there was little resistance to the organic waste separation programme.

The municipality provides a countertop caddy, compostable bags and a 120 litre wheelie bins on loan to its citizens for free, for kerbside for collection twice a week from households and daily from businesses (e.g. bars and restaurants).

The bags are made of biodegradable, compostable plastic which are waterproof, hygienic, breathable and can be processed by composting and anaerobic digestion plants. The use of compostable bags has been said to be crucial to the success of separate organic waste collection system. Novamont provided the bags to AMSA (the Milanese environmental services company) who manages the city's waste collection. AMSA gave each resident of Milan (and ten surrounding municipalities) a starter kit with 25 bags for free. In addition, Novamont supported AMSA and Milan with information outreach campaigns aimed at encouraging consumers to use their compostable grocery bags to collect organic waste at home.

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<sup>15</sup> [https://pocacito.eu/sites/default/files/FoodWasteRecycling\\_Milan.pdf](https://pocacito.eu/sites/default/files/FoodWasteRecycling_Milan.pdf)

#### 5.4.4 *Sweden*

In Sweden approximately 73 % of municipalities offer some form of collection system for food waste and in most municipalities, it is voluntary for households to source separate food waste. Most of the food waste is treated by means of anaerobic digestion.

#### 5.4.5 *Sao Paulo, Brazil*

São Paulo's strategy for organic waste diversion, including collection treatment and recycling and their challenges for São Paulo. It builds on an assessment of São Paulo's waste management by the City Assistance Project under the Climate and Clean Air Coalition Municipal Solid Waste Initiative, and a 2014-2033 Action Plan for organic waste in line with the city's goals for integrated solid waste management.

The Action Plan sets out a target to divert 70% of organic waste from landfill by:

- Reducing it at source (for instance through home composting).
- Separate collection from large producers and households.
- Treatment of separated organic waste using composting and anaerobic digestion.
- Pre-treatment of residual waste through mechanical biological treatment (MBT).

This strategy sets out the roadmap to achieve the goals and targets. It begins by outlining the relevant targets and inputs relating to waste production, collection, treatment, composting and climate policy. The strategy is broken into four components:

- **Separate collection and transport of organic waste.** This sets out the advantages of separate collection compared to mechanical sorting, in terms of contamination and impurities, and how São Paulo can begin and optimise organic waste collection.
- **Treatment and recycling of organic waste.** This explains the different treatment options and strategy for gradually increasing treatment capacity.
- **Communication on organic waste.** This recommends that an annual budget and permanent working is created for communication activities.
- **Economic instruments.** This looks at approaches for incentivising diversion and treatment through landfill disposal fees, and local revenue raising options such as a household waste fee.

#### 5.4.6 *The Courtauld Commitment 2030*

The Courtauld Commitment 2030 is a voluntary agreement that enables collaborative action across the entire food chain in the United Kingdom (UK) to deliver farm-to-fork reductions in food waste, greenhouse gas (GHG) emissions and water stress that will help the UK food and drink sector achieve global environmental goals.

The target for Food Waste is to deliver against UN SDG Goal 12.3 with a 50% per capita reduction in food waste by 2030 vs the UK 2007 baseline (which includes manufacture, retail, hospitality and food service, and household).

The Commitment include a target for GHG emission reduction to deliver a 50% absolute reduction in GHG emissions associated with food and drink consumed in the UK by 2030 (against a 2015 baseline).

#### 5.4.7 *Pacific Coast Collaborative*

The Pacific Coast of North America West Coast Voluntary Agreement is an ambitious public-private partnership that aims to reduce food waste in the region across the supply chain. The aims of the voluntary agreement are to reduce food waste in the region by at least 50% by 2030.

#### 5.4.8 *Tacloban, Philippines*

Tacloban, a large city in the Philippines has a population of 242,089 (2015) and a waste generation rate of 175 tonnes per day. The city has a decentralised collection system for household waste in 64 *barangays* or communities.

The diversion rate for 64 *barangays* rose from 10 per cent in 2017, to 55 per cent by the end of 2018. This was possible due to the joint collaboration between city authorities with Mother Earth Foundation (MEF) and took on a multi-pronged approach, using policy instruments; information, education and communication campaign, as well as enforcement mechanisms for the city.

In October 2016, the city launched phase 1 of the Ecological Solid Waste Management (ESWM) Programme for the city. This was followed by the ordinance on Integrated Ecological Solid Waste Management in 2017; which mandates residents to segregate waste at source and sets out *barangay*-specific mechanics of waste collection, segregation, and Materials Recovery Facilities (MRFs). It also authorises *barangays* to levy user fees to cover the costs of collection and MRF operations.

The City distributed 52 pedicabs (bicycles with a sidecar attached) and plastic drums and provided cash assistance to *barangays* to help with the initial set-up and construction of their MRFs. Committees monitored whether households were sorting their waste properly while newly trained environmental police enforced the ordinances. *Barangay tanods* (village officials) vigilantly patrolled their areas of jurisdiction and had the power to fine residents who refused to sort their waste.

By 2019, the City recovered 384 tonnes of organic waste and 23 tonnes of recyclables annually from 64 *barangays* as a result of implementing the decentralised collection model. The compliance rate of waste segregation by households in participating *barangays* also rose to 63%.



Figure 7: Pedicabs used for waste collection on Tacloban.

#### 5.4.9 UN-Habitat Waste Wise Cities

The UN-Habitat “Waste Wise Cities” programme was launched to address the increasing global waste management crisis. It allows cities to deal with their waste management issues in their context, while also learning from the experience of other cities. UN-Habitat invites cities to become Waste Wise by promoting and incorporating the following 12 key principles in their solid waste management strategy:

- Assess quantity and type of waste generated - Assess quantity and type of waste generated by residents, establishments and businesses.
- Improve collection and transportation of waste. - Improve collection and transportation of waste.
- Ensure environmentally safe disposal of waste.
- Promote the 5 Rs –Rethink, Reduce, Reuse, Recycle and Refuse the use of single-use items, to derive maximum value from waste.
- Empower and work with all waste stakeholders and work with civil society, NGOs, private and informal sectors.
- Establish better working conditions for waste workers, whether in formal or informal employment.
- Implement innovative technological alternatives, while carefully evaluating and implementing innovative technological alternatives, e.g. waste-to-energy schemes, and learn from other cities.

- Make long-term urban strategic plans considering waste, for urbanisation, which fully consider solid waste generation and treatment.
- Design incentives promoting a circular economy, considering financial and other incentives, promoting a transition to a more circular economy and reducing waste.
- Encourage “Rethinking on waste” through public education and awareness efforts to change public attitudes towards waste.
- Regularly review progress on Municipal Solid Waste Management in the city and provide achievements and success stories annually on the Waste Wise Cities website.
- Strive towards achieving the Sustainable Development Goals, as well as the goals of the Paris Agreement and the New Urban Agenda.

UN-Habitat will support cities that want to become Waste Wise in the following action areas:

- Waste Data & Monitoring (e.g. feedback on available data, support in collection of data with Waste Wise Cities Tool)
- Knowledge & Good Practices Sharing (e.g. Newsletter, City-to-city Partnerships, Waste Wise Academy)
- Advocacy & Education (e.g. educational toolkit, awareness raising material)
- Project Finance & Bankability Support (e.g. for drafting project proposals, marketplace)

Any city that is committed to its key principles can join. A city official or representative is required to submit a “letter of intent” addressed to the Executive Director of UN-Habitat ([WasteWiseCities@un.org](mailto:WasteWiseCities@un.org)). A sample letter is provided on the website (<https://unhabitat.org/waste-wise-cities>).

The programme provides a tool, the Waste Wise Cities Tool (WaCT) which provides guidance through 7 steps to collect data on municipal solid waste (MSW) generated, collected, and managed in controlled facilities. The tool also provides household survey guide for total MSW generation, a questionnaire to identify the MSW recovery chain and criteria to check the environmental control level of waste management facilities in a city.

## 5.5 Examples of South African organic waste diversion programmes

### 5.5.1 *Witzenberg Zero Waste to Landfill Pilot project*

JG Afrika and Circular-Vision were approached by the Wellington Association Against the Incinerator (WAAI) to assist in the undertaking of a Zero Waste Pilot to Landfill Strategy Pilot Project in Tulbagh, Witzenberg Municipality (WM).

Households in Tulbagh were selected by the WM to participate in the pilot project which entailed household at-source separation of waste into the four categories of food waste, garden waste, recyclables and landfill waste. The Zero Waste Pilot Project ran from 2 October 2019 to 4 December 2019. The aim of the pilot project was to test the at-source separation and collection method for food, garden and recyclable waste for future replication within the Municipality.

Participating households were requested to separate their waste according to the following:

- Educational leaflets on how to separate waste at source
- Clear Bag for recyclables
- Compostable bags with a countertop caddy for food waste
- Green Bag for garden clippings (in accordance with the existing system in WM)
- Black bag for other waste (to be landfilled / dumped) (in accordance with the existing system in WM)

Once weighed, the bags were collected with the compostable and garden waste and taken to a compost facility, the recyclables were taken to an existing recycler, operating from the landfill site and black bags were disposed of at the landfill.

The following are the project learnings related to participation and separation of waste:

- Initially participation levels were low as residents were not showing interest in the pilot. Participation increased as the pilot progressed. Residents were more enthusiastic about the recycling aspect than the organic/food waste component.
- Some residents did not separate waste into different colour bags as per the pilot project instructions and information provided. Continuous education and awareness is critical in ensuring that separation at source is undertaken correctly.
- Several residents stated that they were already composting food waste at home and therefore only put recyclable bags out for collection. Home composting should be encouraged by municipalities as the first choice and solution to diverting organic waste from landfill.

It should be noted that this project won a special mention at the “The AfriSam Innovation Award for Sustainable Construction” at the 2021 Construction World Best Projects competition and was placed third 3 at the IMESA/CESA Excellence Awards.

#### 5.5.2 *City of Cape Town organic waste drop-off pilot project*

The current food waste diversion project operating from four CCT drop-off sites and four additional pop-up sites that have been created in various Central Business Districts (CBD) in Cape Town, including the City Centre, Claremont, Durbanville and Somerset West.

The food waste that is collected at the sites is taken to a CCT solid waste facility where it is weighed and composted.

How the trial works:

- Participants are issued with a 5L bucket (with an explanatory leaflet), which they take home to fill with their food waste, temporarily storing it in the fridge.
- When the bucket is full, they are then required to return it to their designated site at which they received the bucket.
- The bucket will be decanted, cleaned and reissued to the participant.
- The project duration is 15 February 2021 until the 30 June 2021.
- The trial is limited to 200 residential participants per site and is taking place at the eight sites identified below.
- The CCT drop-offs are established sites, already visited by residents to drop off recyclables, garden waste or garage waste and the CBD sites were chosen as convenient drop-off points for residents working in or frequenting these areas.

Acceptable organic waste to be put into buckets:

- Fruit and vegetable scraps and peels
- Egg shells, egg trays and tea bags
- All food scraps such as starch (rice, pasta, pap), sauce, meat, bones
- Paper plates and serviettes
- Compostable food containers

#### 5.5.3 *City of Cape Town home composting (green genie) project*

In April 2016, the CCT embarked on a phased initiative to provide free home composting containers to residents. In the first phase of the programme the CCT issued more than 5 000 free home composting containers. The second phase, from February 2017 to June 2017, ensured that around 5 100 more residents received a free composting container. The CCT has rolled out home composters to over 22 000 households.



#### 5.5.4 Oranjezicht City Farm organic waste drop-off initiative

The OZCF provides an easily accessible eco-system where households and local business can bring their kitchen waste, layered with Bokashi (available for purchase from the Farm), to the Farm to be used as fertiliser for the soil. Bokashi composting uses a selected group of micro-organisms to anaerobically ferment organic waste. The OZCF provides its customers the option to purchase Bokashi bran produced by the OZCF. To recover costs associated with brand manufacturing, OZCF charges R110 per 1kg bag. Each bag lasts a family of four a month.

Initially the service of receiving food waste was offered for free. However, to recover labour costs associated with composting, the OZCF introduced a clip card payment system. Each clip of a ten-clip-card equates to a single 20L bucket of food waste. Households are charged R100 per clip card (R10 per clip/bucket) whilst businesses are charged R200 per clip card (R20 per clip/bucket).

The Oranjezicht City Farm (OZCF) receives an estimated 100 buckets per week of food waste. At 15 to 20kgs per bucket, this equates to roughly 1.5 – 2 tonnes week or 78-100 tonnes per annum. The OZCF generates between 11.7 – 15 tonnes of nutrient rich compost per year at its onsite composting operation. This compost is subsequently bagged and sold to its community members at R30/10kg. These funds are fed back into the operation of the garden.

#### 5.5.5 The Ladles of Love Feed The Soil Sustainability programme

The Ladles of Love **Feed The Soil** Sustainability programme was launched on 16 October 2021, and is partnering with ZTL (Zero To Landfill) Organics to help develop urban farming in Cape Town while diverting organic waste. ZTL are experts in and passionate about recycling organic waste and will assist by turning the waste from suburban households into nutrient-rich compost. This organic compost will then be delivered to a network of urban farmers around Cape Town.



Figure 8: Feed the Soil Organic Waste Tool Kit and project pictogram

Residents purchase a Feed The Soil Organic Waste Tool Kit for R200 which will includes:

- 1 x 5 litre Organic Waste Bin
- 1 x 25 litre Storage Bin
- 1 x bag of Sawdust
- 1 x bag of Bokashi

The bucket is then taken to a drop off and swapped for a clean bucket on a weekly basis. ZTL collect full buckets from the drop-off and take the organic waste for composting. Initially the drop-off point is planned to be a pop-up exchange which is planned to become a more permanent location/facility with an adjoining veggie shop to be added. There is a weekly cost of R25 for this service which is payable by card or SnapScan.

#### 5.5.6 The Compost Kitchen

The Compost Kitchen charge R190/month to collect organic kitchen waste on a weekly basis. Each client is provided with an organic waste bin and the waste is treated by means of a vermicomposting process. The household receives 2kg of high quality vermicompost back on a monthly basis.

The compost kitchen provide training and sell various organic and food waste composting products/solutions, such as the Doggy Doo Doo bin.

The Doggy Doo Doo bin is a safe, neat, hygienic and sustainable way to dispose of pet waste and consists of a box which is buried in the ground and open to the soil at the bottom. Pet waste is dropped inside, and a microorganism treatment, which is used in the Waste Water Treatment industry, is added to break down the waste naturally along with composting earthworms which help to break down the waste.



Figure 9: The Compost Kitchen's Doggy Doo Doo bins

#### 5.6 Organic Waste Treatment Options

In broad terms, the technology options for the treatment of municipal organic waste include the following types of processes:

- Composting
- Anaerobic Digestion (AD)
- Mechanical Biological Treatment (MBT)

It is important to note these technologies are generally regarded as intermediate processes and markets are required for the end-products. This section provides brief high-level summary of these options.

### 5.6.1 Composting

There are a number of different composting technologies that are used for organic waste treatment:

- Open Windrow Composting - takes place in the open air in large, elongated, uniform prism shaped 'piles' of organic waste known as windrows. The waste feedstock is usually mechanically shredded or chipped and placed into windrows on an impermeable surface. Water is added, depending on the moisture content of the waste. Windrows are turned regularly, either with a loader or by a specialist windrow turner machine or can be turned by hand, several times during the compost process, which takes approximately twelve to sixteen weeks.
- In-vessel composting - In-vessel composting (IVC) is an accelerated composting process in an enclosed and controlled environment. Waste is screened and oversize items removed, then waste is shredded or chipped to increase the surface area and reduce the average material size. The composting process can take place in a building (bays, beds) or in composting vessels (tunnels, drums, towers).

Composting can take place on a small scale, and in a localised manner at household level for example or on an industrial or agricultural scale. It can also take place as a static or dynamic systems where dynamic refers to the periodic mixing or turning as the main way of aerating the compost where systems which rely on forced or passive ventilation of the piles are known as static systems.

Composting is regarded as a promising technology (i.e. relatively inexpensive, accessible with market demand and labour intensive) that can be implemented in the short-term at municipal level and is regarded as comparative to the cost of landfill<sup>16</sup>.

### 5.6.2 Anaerobic digestion

Anaerobic digestion (AD) is a biological process that takes place in an anaerobic environment (without oxygen) and produces a gas which is mainly composed of methane and carbon dioxide, otherwise known as biogas. The broad ranges of organic feedstock have resulted in different AD technologies with the main distinction in the process types to deal with dry matter content of the substrate, temperature profile of the fermentation process, Loading system for the substrate (continuous vs batch), the number of reactors and type of reactor (i.e. vertical vs horizontal with different mixing technologies).

The cost for AD is above the full cost of landfill, but where there is a secure and stable local demand for the outputs, the business case over the long term may be viable.

### 5.6.3 Mechanical Biological Treatment

Mechanical biological treatment (MBT) combines mechanical treatment with a biological treatment method (i.e. open windrow composting, materials recycling facilities, anaerobic digestion and in-vessel composting). An MBT plant would contain a mechanical section focusing on the "dry" fractions (sorting, homogenizing, shredding, pressing, etc.) and a biological section focusing on the fraction containing and richer in organic matter, aiming at reducing and stabilising the putrescible organic fraction. It is usually supported by a combination of pre-treatment and sorting techniques at the beginning of the process, and a selection of emissions control and quality control techniques at the end of the process. Typical mechanical treatments will include a range of sorting technologies, from simple sieve / trommel separation techniques to more advanced positive selection techniques like near infrared segregation.

MBT is generally used for mixed municipal waste and not separated organics.

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<sup>16</sup> [https://www.dffe.gov.za/sites/default/files/reports/advancedwastetreatment\\_chapter8.pdf](https://www.dffe.gov.za/sites/default/files/reports/advancedwastetreatment_chapter8.pdf)

There are various options for the each of these aspects and these will depend on the source of the waste (household vs business/commercial), the quality and the volumes (i.e. economies of scale) as well as whether there are off-take opportunities.

#### 5.6.4 Technology Comparison

**Table 5** provides a high-level summary and comparison of the various technologies listing a summary of the advantages, disadvantages and risk that SM will need to consider when selecting possible solutions.

*Table 5: Organic Waste Treatment Technology Comparison*

Treatment/Technology	Advantages	Disadvantages and/or Risks for SM
<b>Home composting</b>	<ul style="list-style-type: none"> <li>• No collection or separation costs or considerations for the municipality</li> <li>• Sufficient for treatment of food waste</li> <li>• Cost of providing a compost bin to a resident is considerably less than regular collections</li> <li>• Good option to include in an overall waste diversion strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Limited to willing households and households with gardens or space to use their own compost</li> <li>• Cannot ensure 0% organic waste in waste stream</li> <li>• Costs associated with provision of a composting bin</li> <li>• Perception that it attracts pests and odours</li> <li>• May be problematic for animal waste products</li> <li>• Diversion rate not as easy to measure externally</li> </ul>
<b>Open-windrow composting of garden waste</b>	<ul style="list-style-type: none"> <li>• Relatively low capital waste treatment process</li> <li>• Produces a saleable product</li> <li>• Not technology intensive</li> <li>• Can be scaled up easily and quickly provided the land/space is available</li> <li>• Norms and Standards apply to composting and therefore a waste management licence may not be required</li> </ul>	<ul style="list-style-type: none"> <li>• Requires chipping of garden waste.</li> <li>• Food waste needs to be carefully managed and mixed with garden waste so that it does not present a health risk, cause odour and cannot be scavenged or attract pests.</li> <li>• Weather conditions can impact duration of process</li> <li>• Collection infrastructure must be designed to accommodate waste types to be collected/received</li> <li>• Bio aerosols can be created by turning of compost, and some odour issues can arise</li> <li>• High use of water</li> <li>• Stricter controls and better management required when including food waste and not only garden waste</li> </ul>
<b>In-Vessel Composting Plant</b>	<ul style="list-style-type: none"> <li>• Faster process than open windrows, resulting in product stabilisation / sanitation in 3 to 4 days</li> <li>• Relatively small footprint allows entire process to take place in a controlled environment (inside a building)</li> <li>• Maintain a rapid decomposition process year-round regardless of external ambient conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a curing process</li> <li>• Requires active management to ensure a good mix of materials is processed,</li> <li>• Potential for odour issues</li> <li>• High use of water</li> <li>• More capital intensive in terms of equipment than open windrow systems</li> </ul>
<b>Small scale anaerobic digestion facility (gas to electricity).</b>	<ul style="list-style-type: none"> <li>• AD has potential for treating a variety of organic waste streams</li> <li>• Greenhouse gas and harmful gases are captured for use</li> <li>• AD has the potential for energy production</li> </ul>	<ul style="list-style-type: none"> <li>• Capital intensive</li> <li>• Requires on-going management</li> <li>• Requires an intensive monitoring and control over conditions to maintain the digestion process</li> <li>• Can be sensitive to imbalances in feedstock (e.g. high quantities of food versus garden waste or vice versa)</li> <li>• Produces digestate as a by-product</li> <li>• Health and safety issues can arise at AD plants</li> <li>• Significant odour issues</li> </ul>

Treatment/Technology	Advantages	Disadvantages and/or Risks for SM
<b>Mechanical biological treatment</b>  Note -this is not an ideal process to divert organics from landfill	<ul style="list-style-type: none"> <li>Does not require implementation of separation at source</li> <li>Reduces volume of waste landfilled</li> <li>Can be used to remove hazardous contaminants and prevent them from reaching landfill due to sorting of prior to treatment</li> </ul>	<ul style="list-style-type: none"> <li>Quality is often insufficient for the digestate to be used as soil enhancer</li> <li>Potential for odour issues</li> <li>A variety of occupational health and safety issues</li> <li>Dry recyclables separated out during the process will be of poor quality</li> <li>Demand fixed tonnages of waste</li> <li><b>Large volume of tailings and contamination of recyclables compared to separation at source systems</b></li> </ul>

The DFFE Alternative Waste Treatment Guide provides a table (Table 6)<sup>17</sup> which gives an indication of waste volumes needed in order to pursue specific technology options with the organic waste treatment options discussed in this report highlighted in red.

Table 6: Waste volumes required to pursue specific technology options

Volumes: tonnes per annum	Short term			Medium term			Long term				
	Open Windrow Composting	Clean MRF	Dirty MRF	Incineration	Aerobic Digestion	In-Vessel Composting	Mechanical Biological Treatment	Gasification	Plasma Gasification	Pyrolysis	Mechanical Heat Treatment
to 10 000	X	X	X	X	X	X	X	X	X	X	X
10 000 to 50 000	X	X	X	X	X	X	X	X	X	X	X
50 000 to 70 000	X	X	X	X	X	X	X	X	X	X	X
70 000 to 90 000	X	X	X	X	X	X	X	X	X	X	X
90 000 to 130 000	X	X	X	X	X	X	X	X	X	X	X
130 000 to 170 000	X	X	X	X	X	X	X	X	X	X	X
170 000 to 190 000	X	X	X	X	X	X	X	X	X	X	X
190 000 to 230 000	X	X	X	X	X	X	X	X	X	X	X
230 000 to 290 000	X	X	X	X	X	X	X	X	X	X	X
290 000 to 490 000	X	X	X	X	X	X	X	X	X	X	X
Inputs	A	B	C	D	A	D	E	D	F	D	G

Key: X Yes    X Maybe    X No

### 5.7 Organic waste separation at source

In addition to the type of technology for organic waste treatment or processing, the diversion system/strategy will require a number of other components/aspects that the SM need to consider, these are:

1. Access to the organic waste i.e. separating it from the general waste stream.
2. Collection and transport of organic waste, this would include containers/bags, etc., as well as frequency.
3. Possible pre-treatment technologies/options
4. Markets for by and end-products.

As discussed in the Waste Roadmap, various separation at source systems are used internationally, these vary as follows:

<sup>17</sup> <http://awtguide.environment.gov.za/content/technologies-required-waste-volumes>

- The number of fractions being separated and this ranges from simple 2-bin (dry recyclables and residual waste) to 3-bin system (dry recyclables, organics and residuals) to more sophisticated and complex systems with multiple separate fractions (such as separate containers for paper, glass, metal, plastics, organics and residual waste)
- The type of collection system being used i.e. multiple vehicles, split-compartment vehicles, or integration of the informal sector (using trolleys or bicycles);
- The type of sorting and treatment facilities used to deal with the various separated fractions.

The Waste Roadmap also notes that in a number of European countries, the focus of S@S systems is on organic waste, rather than on dry recyclables (European Bioplastics, 2016). The argument for this approach is three-fold:

- Organic waste tends to make up a large proportion of total waste generation and therefore the diversion of organic waste is critical to achieving overall targets for diversion of waste from landfill.
- The bulk of the waste sector's contribution to climate change arises from the decomposition of organic waste at landfill.
- The waste (including recyclables) remaining after organic waste has been separated is cleaner and less contaminated, facilitating recovery and recycling. Separation of organic waste at source is therefore essential to enable a 'win-win-win' solution.

The ideal approach to divert organic waste from landfill would be a three-bag household separation at source programme for organics (excluding garden waste), packaging and general waste which should be aimed at minimising the packaging included with the organic waste and reducing the amount of organic waste in the general and residual waste stream.

The advantages of separate collection of organics compared to mechanical sorting is that the quality of feedstock is not compromised in terms of impurities and contamination. Quality "feedstock" is required for producing products to be marketed and used<sup>18</sup>. Poor quality feedstock i.e. contaminated feedstock makes it more expensive to process the material, due to the increased need for sorting and the increase in the amount of rejects generated.

Household separation of food waste should be convenient and manageable. This can be achieved by equipping households with a small kitchen-caddy and a set of compostable bags to be used as a liner.

The small bin size helps to prevent the delivery of impurities (e.g. bottles, cans). The use of the bags makes it possible to collect even meat and fish scraps along with vegetables and fruit residues, avoiding nuisance generally related to delivery of "loose" material inside the bin.

In addition, it prevents pest attraction (insects) and production of leachate, whilst keeping the bins as clean as possible. A minimum set of bags for the kitchen-caddies should be provided to each household, at least in the starting phase of the new collection scheme. This will support the participation of households in the source separation of all organic kitchen waste. Newspaper and paper bags may also be used to collect food waste. Wheeled bins (240 litres) can be used where the type of dwelling is mainly of flats in multi-storey buildings.

See **Plate 1 – Plate 6** for examples of organic waste separation receptacles and customer guidelines.

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<sup>18</sup> Ricci et al. Technical guidance on the operation of organic waste treatment plants (2016)

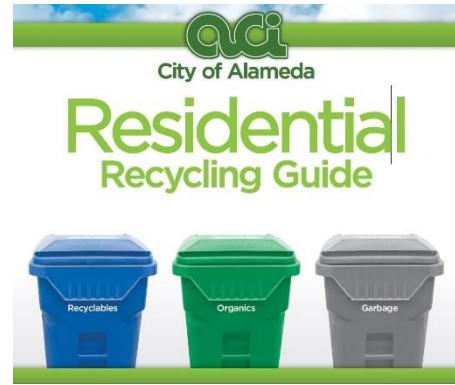


Plate 1: Examples of 3-bin household collection programmes



Plate 2: Examples of countertop organic waste collection bins with compostable bag liners



**1**

Place your food waste in the **BAG TO EARTH®** Food Waste Bag.



**2**

Seal the bag to keep it odor-free.



**3**

Place the full **BAG TO EARTH®** Food Waste Bag in your municipal bin.

Plate 3: Municipal organic fraction household collection guideline



Plate 4: Examples of organic fraction collection bags

# How to separate your waste at home



JOIN US ON OUR JOURNEY TO ZERO WASTE IN WITZENBERG



## FOOD WASTE

Compostable bag provided

- ✓ Leftover food
- ✓ Food preparation waste
- ✓ Vegetables and fruits
- ✓ Tea bags and coffee grounds
- ✓ Dairy products
- ✓ Bones and meat, fish, egg, etc
- ✓ Paper towel and tissues
- ✓ Bread, cake, rice and pasta
- ✗ No nappies, cigarette butts, sugar sachets, wet wipes, plastic food wrap e.g. cucumber sleeves and bread bag.
- ✗ No plastic, metal or glass

- Please use the compostable bag provided or a paper bag – no other plastic please
- Compostable bags with organic waste to be placed on top of the garden waste inside the green bags on the scheduled day for collection
- This bag will be collected by the Municipality with the garden waste and taken to a compost facility



## GARDEN WASTE

Green bag

- ✓ Garden waste e.g. leaves, small cut branches and wood
- ✓ Weeds, small plant cuttings, grass
- ✓ Dog and cat poo (wrapped in newspaper or in a paper bag)
- ✗ No bricks, stones, plastic plant pots, plastic, metal, glass or cigarette butts
- ✗ No large branches or tree stumps

- Garden waste to be placed in green bags provided by the Municipality
- This bag will be collected by the Municipality with the food waste, on the scheduled day for collection and taken to a compost facility



## RECYCLABLES

Clear bag

- ✓ Clean plastic, paper, glass and metals
- ✓ Plastic containers
- ✓ Glass bottles
- ✓ Dry paper / Cartons / Cardboard
- ✓ Metal cans
- ✓ Plastic bags
- ✓ Tetrapak cartons / Plastic cups
- ✓ Food packets
- ✓ Styrofoam / Polystyrene
- ✗ No nappies, cigarette butts, tissues, garden waste, food waste or pet waste

- Recyclables to be placed in a clear plastic bag provided by the municipality
- Please remember clean recycling is important for those who have to sort it – remove all food
- Please ensure the recyclables are dry
- The Municipality will collect the recyclables and transport it to the recycling service providers



## OTHER WASTE

Black bag

- ✓ Nappies
- ✓ Sanitary products,
- ✓ Toothpaste tubes
- ✓ Other tubes
- ✓ Cigarette butts etc.
- ✗ No food waste, garden waste or recyclable plastic, paper, glass or metals

- These are materials and products which cannot be re-used, recycled or composted and will be sent to the landfill
- The Municipality will collect the waste as usual and dispose of it at the Tulbagh Landfill Site

Plate 5: Example of brochure used to provide residents with separation at source guidelines (WAAI, 2019)



Plate 6: Example of organic waste countertop caddy used with compostable bags as liners (WAAI, 2019)



### 5.7.1 Collection systems<sup>19</sup>

Waste collection systems are an important aspect of achieving waste diversion. The following are collection schemes which can be utilised:

#### 5.7.1.1 Drop-offs or bringing schemes

The waste-producers (i.e. families and others) deliver the organic waste to communal containers located in public areas spaces or to an ORTS.

Bringing schemes usually use bigger containers available for a large number of waste producers. Garden waste drop-off sites can be located at other existing municipal facilities.

Bringing schemes might work well for complexes and estates and as a phased approach to allow participation for residents from areas which do not have kerbside collection.

Drop-off facilities should be monitored to ensure that they remain in compliance with the Norms and Standards in terms of NEM:WA.

#### 5.7.1.2 Kerbside collection (or door-to-door) schemes

The waste-producers place their organic waste on their kerb where the collection is provided according to a fixed calendar.

Door-to-door schemes may require a specialised container/bin and usually adapt the volume of each bin or container to the production volumes for each specific waste producers (i.e. household vs business vs hospitality establishment). Depending on the container/bin being used, these schemes may allow for a basic quality inspection before the collection and transportation to the recycling facilities.

As food waste is highly putrescible and has a high moisture content, specific collection tools must be provided to the households to ensure that the system is clean, convenient and user-friendly. Once households feel comfortable with a system, the overall participation is enhanced.

A combination of a bringing scheme/drop-off and kerbside collection may be beneficial, as both options have their advantages and disadvantages as summarised in **Table 7**.

*Table 7: Advantages and disadvantages of bringing schemes and kerbside collection schemes*

	Advantages	Disadvantages
<b>Drop-off</b>	<ul style="list-style-type: none"> <li>Least costly alternative as it does not require collection resources such as vehicles, collection staff etc.</li> <li>Provides for optimised collection and transport</li> <li>-Suitable for oversize materials</li> <li>Suitable to combine with the collection and temporary storage of other separately collected materials, like green waste, recyclables; household hazardous waste, bulky waste, etc)</li> </ul>	<ul style="list-style-type: none"> <li>Potential for low diversion rate due to low participation due to potential distance to residents Not as convenient as kerbside collection schemes and may therefore result in low participation rates.</li> </ul>
<b>Kerbside collection</b>	<ul style="list-style-type: none"> <li>Suitable for green waste and food waste.</li> <li>Facilitates higher participation rates as it is more convenient.</li> </ul>	<ul style="list-style-type: none"> <li>Substantially higher cost than maintaining and operating a network of drop-off sites.</li> <li>Costly to acquire non-compactor trucks for organic waste collection.</li> </ul>

<sup>19</sup> Ricci et al. Strategy for organic waste diversion – collection, treatment, recycling and their challenges and opportunities for the City of Sao Paulo (2016)

	Advantages	Disadvantages
	<ul style="list-style-type: none"> <li>• Collection services could be sub-contracted to avoid the purchase of collection vehicles and paying of collection staff etc.</li> <li>• Convenient for households.</li> <li>• May result in higher participation rate.</li> <li>• May result in less contamination and therefore higher value recyclable stream.</li> <li>• If organics are separated at source, the cleaner recyclable fraction could be collected every-two weeks.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequency of collection may need to change / increase according to seasonality.</li> <li>• Difficult to verify the quality of the waste collected.</li> <li>• Public concern due to perception that it will attract nuisances/pests and be a health risk to the neighbourhood.</li> <li>• Health risk if salvaging of organic waste takes place.</li> <li>• Garden waste should be placed in a reusable container (e.g. drum) or in a bag (compostable).</li> <li>• Necessitates weekly scheduled collection service.</li> </ul>

### 5.7.2 Collection infrastructure<sup>20</sup>

#### Collection vehicles for food waste

Food waste is a moist and low volume material with a bulk density (0,45 to 0,65 kg/l) that enables the use of much simpler vehicles such as trucks with skips / containers, since there is no need for a compaction mechanism.

Standard compactors used to collect mixed MSW are normally not water-tight and hence are likely to leach if loaded with food waste. The separate collection of food waste necessitates for an appropriate fleet of vehicles to perform separate collection of food waste correctly. These vehicles need to be water-tight to avoid leaching during collection and transport.

#### Collection vehicles for garden waste

Green waste is bulky and rich in structure due to bush and tree cuttings and thus has a very low bulk density (0,15 to 0,25 kg/l). For efficient collection, it is suggested to make use of compacting vehicles or bush and tree cuttings to be shredded directly at the site of collection and then transported with container vehicles.

#### 5.7.2.1 Frequency of collection

The different types of organic waste have different properties and therefore require the adoption of different management, including collection frequency.

**Food waste** is highly putrescible and has a high moisture content; hence fermentation processes, when stored in a bin, starts rapidly. This requires the adoption of specific frequencies in order to ensure the system performs as cleanly, conveniently as possible in a user-friendly manner.

**Green waste** has a lower moisture content, a lower density due to large amounts of wood or bulky, or dry organics, and hence does not require such intensive collection patterns as food waste because it does not smell, does not lead to rapid production of leachate and it does not attract flies and other worms.

According to experiences in hot and humid climate, that can be found in Mediterranean countries such as Italy, Spain or others similar to Stellenbosch, the following frequencies are recommended for food waste collection<sup>21</sup>:

- Kerbside collection for households should have a minimum of one to two collections per week.

<sup>20</sup> Ricci et al. Strategy for organic waste diversion – collection, treatment, recycling and their challenges and opportunities for the City of Sao Paulo (2016)

<sup>21</sup> Ricci et al. Technical guidance on the operation of organic waste treatment plants (2016 p.27)

- Kerbside collection for commercial activities should have a minimum three collections per week or more.

### 5.8 Examples of Organic Waste Pre-Treatment Technology

Pre-treatment methods or systems for organic waste can be used to stabilise organic waste during temporary storage as well as to reduce the volume prior to transport. Organic waste can consist of up to 60% moisture.

Some mechanical pre-treatments may also include actions such as:

- Bag opening or de-packaging of waste – emptying of organic waste from collection containers as well as de-packaging condemned or expired food waste.
- Shredding of waste – garden waste as well as items such as compostable paper cups, bagasse food containers, egg boxes.

These would take place at the processing or treatment facility or newly constructed ORTS.

Examples of biological pre-treatment technologies are provided below. These systems that could be placed at shopping malls or large buildings/complexes where large volumes of organic waste are generated and the bin could reduce collection frequency as well as volumes to be transported. These systems are modular and could also be placed at drop-off points or the ORTS to reduce volumes prior to transport to the selected treatment facility.

#### 5.8.1 Biobin

The Biobin is a compost vessel that is used for organics recycling. It is a patented technology which provides an aeration system which initiates the composting process and reduces odours, bacteria and other pathogens.

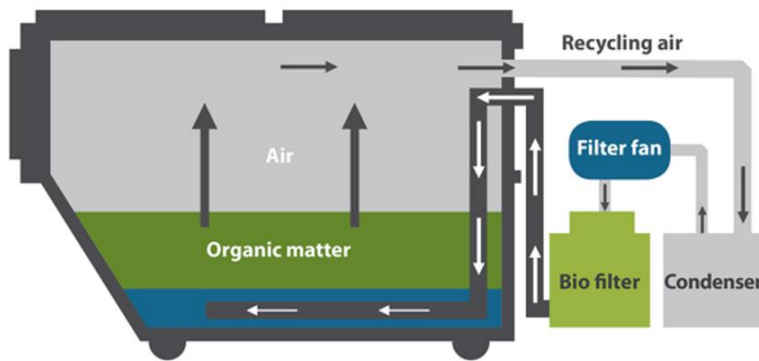


Figure 10: Image of how the Biobin works.

#### 5.8.2 The Heron In-Vessel Composter

The Heron IVC took over three years to develop and is produced in South Africa. It is capable of processing over 1 000kg of food waste per day and is targeted at industrial food manufactures, large malls and produce markets. The Heron IVC employs mechanical aeration to ensure the food waste receives adequate oxygen and the mechanical system also mixes the waste as it composts and moves through the vessel.



Figure 11: The Heron IVC

The Heron IVC has been tested at Tshwane Fresh Produce market on a trial basis and the project was independently assessed by GCS Environmental Engineers (Pty) Ltd<sup>22</sup>. During the test the Heron IVC processed an average of 826kg of food and waste cardboard per day. GCS's analysis indicated that on a larger roll out, the economic benefit accruing to the Tshwane Municipality of R271 000 excluding CO<sub>2</sub>e saving and potential compost sales. The compost produced was tested by the Agricultural Research Council and indicated high potential for the compost produced.

The GreenCape 2021 Waste Market Intelligence Report states that Canal Walk shopping centre has installed a 40 tonnes per month Heron IVC composter at its newly constructed waste recovery yard and that in-vessel composters are gaining traction for onsite treatment for large facilities. Largely to reduce the organic waste volume and transport logistics.

### 5.9 Lessons learnt and pitfalls to be avoided

Municipalities in South Africa regularly receive offers from waste treatment technology suppliers and it is crucial that appropriate due diligence is undertaken on any alternative waste management system and technologies prior to making a decision to implement. Deciding which approach fits the particular situation, and what the best method is to divert organic waste from landfill, requires a holistic approach and study to guide the waste diversion decision. The following are some general lessons that have been learnt and pitfalls that can be avoided<sup>23</sup> by undertaking holistic analysis and an informed approach to the whole waste management system:

- Failure to properly understand the waste flows – quality and quantity
- Failure to recognise that the waste is variable and will change significantly over time
- Failure to match waste feedstock (including variability) with technology
- Failure to select technology that is proven - and therefore 'bankable'
- Failure to understand the character of the process outputs
- Failure to have established, sustainable and commercially viable markets for all process outputs
- Failure to recognise that market demands can, and will change over time

<sup>22</sup> <https://greenhome.co.za/blog/industrial-composting/>

<sup>23</sup> The Role of Anaerobic Digestion Technology in Treating Organic Waste – UK Experience Presentation to GreenCape Networking event, 23rd August 2016. Andrew Street Director, SLR Consulting

Other key factors that are critical lessons to be understood for a successful system according to the research undertaken by the JG Afrika project team and documented in the Market Study are<sup>24</sup>:

- **Source separation is key:** physical availability of feedstock is rarely an issue for a facility, however, access to feedstock could be prevented by lack of participation, contractual arrangements or inability to reach agreement about gate fees and quality requirements. Therefore, the key issue is achieving clean and accessible material streams through source separation.
- **Awareness raising in the communities:** General public awareness and their willingness to cooperate are key factors for a successful separation at source strategy.
- **Feedstock is a local issue and needs to be checked for each facility:** The transport cost for organic material is high (as it is for all waste material) and imposes a financial limitation on the feasible distance for transport to a treatment facility of roughly 40 to 60 kms. To be economically feasible, compost or compost-like outputs from organic waste treatment processes should only be transported an equal distance from generation point. Therefore, not only feedstock availability must be considered but a local market for final products needs to be confirmed locally for each facility. This applies to municipalities who need to consider the distance between towns in the municipal area, and where treatment or collection facilities should be located.
- **Competition for feedstock must be considered:** As treatment facilities grow in number it is likely that competition between the different treatment options may arise. Awareness of these market forces must be kept in mind in ongoing planning and management of facilities to ensure feedstock security.
- **Contracts must be screened for potential conflict of interest:** projects implemented in joint venture arrangements, which include feedstock providers and off-takers may not lead to the desired outcomes if the main interests could jeopardise the viability of a treatment facility and diversion from landfill targets.
- **Foster relationships in the value chains:** fostering good relationships between feedstock providers and off-takers of outputs is central to the ongoing success of organic waste treatment, especially as a result of the limitations imposed by the costs of transport for feedstock, by and end-products as well as digestate for example.
- **Consistency and variability of feedstock supply and composition must be considered:** for example, green/garden waste generation follows seasonal trends as does organic waste generated by the hospitality industry, particularly in towns such as Stellenbosch with a distinct tourism season.
- **Contamination/quality of feedstock must be considered:** Quality “feedstock” is required for producing products to be marketed and used<sup>25</sup>. Poor quality feedstock i.e. contaminated feedstock makes it more expensive to process the material, due to the increased need for sorting and the increase in the amount of rejects generated. The better quality and leaner the feedstock the better the quality of the end product will be.

The *Bio-waste generation in the EU Report, 2020* states that all separate collection systems aim to maximise collection of materials but practically will never achieve or reflect 100% of the targeted material as it depends on:

- **Errors/confusion in behaviour of households and waste producers:** this should be continuously targeted with information and communication, building on and expanding knowledge by providing feedback to inform participants what materials are most often wrongly sorted (e.g. bones or shells, meat, food still attached to packaging, dog faeces).

<sup>24</sup> Waste Management Flagship Programme. Development of a Funding Proposal to the GCF for the MSW Programme including, a Feasibility Study, ESIA, GIA and Detailed Designs for the Target Municipalities. Market Research Study. June 2020. JG Afrika Project Team.

<sup>25</sup> Ricci et al. Technical guidance on the operation of organic waste treatment plants (2016)

- **Collection scheme timing:** some households may be on holiday or temporary residents and cannot wait until the next collection round. This can be addressed by actions such as providing and communicating effectively about drop-off sites etc.
- **Adoption of practices such as home composting:** Although this will still result in the targets being met but cannot be measured by a Municipality, a more sensible goal would be to define a targeted 'operational potential' in line with best practices, based on existing data and studies. It is estimated that this could be set at approximately 85% of the theoretical potential. This kitchen waste cannot be taken care of completely through home composting schemes, especially in urban areas, which is why we set the 85% collection target

The basic assumption is that if households generate garden waste, at least some of it can be managed in their own gardens by home composting, which should be encouraged by specific campaigns. Meanwhile,

## 6 STELLENBOSCH MUNICIPALITY'S ORGANIC WASTE TONNAGES

### 6.1 Organic Waste Tonnages

The SM is currently diverting a large proportion of organic waste in the form of the garden waste (greens) which is chipped on site at Devon Valley Landfill Site and removed for composting. This is provided in **Table 8** along with the waste being generated and disposed of to Landfill (excluding construction waste/builder's rubble) from 2018 to 2020. Although overall waste tonnages have dropped the green waste have remained reasonably consistent over these three years.

*Table 8: Waste disposed to landfill and green waste diverted from 2018 to 2020*

	2018	2019	2020
<b>Waste disposed to Landfill (excl builder's rubble) (tonnes)</b>	78 964	56 426	47 767
<b>Green Waste diverted (tonnes)</b>	5 571	5 272	6 937

Note: The accuracy of the green waste diverted is dependent on the accuracy of the information provided by SM and there are a number of months where the garden waste tonnages were extremely high and have been questioned. In 2020, the SM switched to the use of weighbridge data rather than manually captured data which could account for discrepancies.

Based on the Waste Characterisation, the fraction of organic waste produced at household and business (excluding industrial waste) is 24% for organic/food waste and 6% for garden waste. This waste is being disposed of to landfill and is where organic waste diversion opportunities lie for Stellenbosch Municipality. **Table 9** provides the green and organic waste tonnages calculated using the percentages from the waste characterisation data for 2018 to 2020.

*Table 9: Green and organic waste tonnages calculated using the waste characterisation data.*

	2018	2019	2020
<b>Waste disposed to Landfill (excl builder's rubble) (tonnes)</b>	78 964	56 426	47 767
<b>Estimated Organic Waste tonnes (based on 24%)</b>	18 951	13 542	11 654
<b>Green Waste tonnes (based on 6%)</b>	4 738	3 386	2 866
<b>Total Organic waste (30%)</b>	<b>23 689</b>	<b>16 928</b>	<b>14 330</b>
<b>Existing Organic Waste Diversion %</b>	<b>24%</b>	<b>31%</b>	<b>48%</b>

The Devon Valley Landfill Site's waste management licence requires a 50% reduction in the amount of organic waste that is disposed of to municipal WDFs by 2022, followed by a complete ban of organics to WDFs by the year 2027.

## 6.2 Organic Waste Diversion Limitations

It should be noted that a 100% organic waste diversion target is practically not possible to meet and the residual fraction may always contain some organic waste. SM will endeavour to make organic waste diversion opportunities available to all residents in the municipal area.

It should be noted that the Devon Valley landfill site is currently not operational and only expected to begin accepting waste in a new cell during the course of 2024. As SM dispose of their municipal waste at a private landfill site and not a municipal facility, it is unclear how the targets can be applied or enforced, however SM endeavour to take the necessary steps to meet the diversion targets in the spirit of the requirements and are working towards meeting the targets when disposal commences at the municipal landfill site once again.

## 6.3 Conclusion and Recommendations

Based on the calculated tonnages of organic waste produced per annum (**Table 9**) compared against the information presented in

**Table 6** it appears that the most feasible organic waste diversion and treatment strategy is open windrow composting. However various investigations and studies will be required to confirm the best approach and these are recommended and detailed in the organic waste diversion Implementation Plan to confirm this.

Consideration of the inclusion of food waste with garden waste for composting will need to be taken into account when selecting a treatment technology. The outsourcing of organic waste treatment is therefore recommended while the Municipality put the systems to support treatment in place i.e., separation at source, collection mechanisms etc.

The Organic Waste Diversion Implementation Plan provides a phased approach until 2027 to fully understand the existing system with various feasibility studies and plans to be developed in parallel. This will allow SM to plan a system on a step-by-step basis that aims to meet the set diversion targets.

## 7 ORGANIC WASTE DIVERSION PLAN

It is recommended that the SM pursue a multi-pronged approach to organic waste diversion which favours and encourages separation at source, identifies a treatment option and creates an enabling environment. Certain activities will need to run in parallel as a number of studies are required to inform decision-making and planning before the final Organic Waste Diversion System is put in place. The recommended approach is detailed in this section.

### 7.1 Separation at source roll out Strategy for a phased 3-bag separation at source programme

#### 7.1.1 Separation at Source Strategy

The phased implementation of a three- bag separation system in selected households/areas, with continued roll out of the programme until 2027 to include all residential areas.

The Strategy should include a pipeline plan with the plan of which areas to follow on from the existing two bag collection areas and rolling out to a set plan of new areas on an annual basis (see **Annexure B** which indicates the Organic Waste percentage of waste in the two-bag system areas, providing an indication of diversion that can be achieved). It is recommended that the three-bag collection system is piloted in the existing two-bag collection areas to inform pipeline planning.

The Strategy needs to take into consideration the different needs of residential vs business/commercial customers as well as how the logistics and volumes collected will impact on the collection, transport and treatment required. The identification of Organic Waste Drop-off areas/points to service areas not included in 3-bag system to be included in the strategy. These should be developed on a small scale and below any legislative triggers for a WML and should be in compliance with the Norms and Standards.

The establishment of drop-offs can also be undertaken in a phased approach:

- Allow food waste to be collected at existing drop-offs.
  - Collection receptacles to be made available at drop-offs.
  - Contractor collecting from households and businesses to collect from drop-offs on a daily basis.
- Establish additional new drop-off areas on an ongoing basis.
- Drop-offs may include pre-treatment facilities, if appropriate as per the feasibility studies.

#### Residential Areas

In residential areas where kerbside collection will take place, the following is recommended:

- Black bag (landfill waste) – weekly
- Clear bag (recyclables) – every 2nd week
- Food waste container & green waste bag– weekly (to be collected separately)

A food waste container accompanying bags should be provided at organic waste drop-offs with a replacement bag being provided with each drop-off.

Ultimately, all residential areas to be covered by either participating in a three-bin/bag collection system or have easy and close access to a drop-off facility by June 2027. Participation should not be voluntary, it should be mandatory, however, the tariff should be less than black bag collection to incentivise participation.

Residents to be signed up with a visit from Municipality and accompanying explanatory brochure. The Municipality to provide ongoing support and communication as part of the Communication and Awareness strategy.



In addition to the three-bag system, the provision of home composting bins to all households willing to participate should be rolled out based on lessons learnt from current pilot project.

#### Commercial/Business Areas

All commercial and business areas should be required to participate as follows:

- Black bag (landfill waste) – daily or every 3 days
- Clear bag (recyclables) – weekly or every 3 days
- Food waste – daily or every 3 days

Commercial/Business Areas producing large volumes of organic waste should be identified and targeted as the first step in initiating separation at source in these areas. All business and commercial areas to be participating in a three-bag system with all areas covered to commence from 1 July 2026 with ongoing maintenance of existing systems.

In some Commercial/Business Areas, e.g., malls and the university, pre-treatment facilities may be considered. This will be informed by the feasibility study. These may also be considered for use as drop-off areas for residents, depending on the outcome of the study.

SM should consider alignment with other programmes in the municipal areas, such as the reuse strategy, 3-bin system and zero waste to landfill targets being implemented by SU for roll-out in the municipal commercial and business areas. These discussions and investigations should take place as part of developing the strategy.

#### *7.1.2 Implement Mandatory Separation at Source*

Included in the Separation at Source Strategy should be the steps needed to implement mandatory separation at source in terms of the by-law. The Strategy should include communication and awareness raising to obtain buy-in and incentivised cooperation rather than enforcement. This should also include the mandatory separation of green/garden waste.

#### *7.1.3 Collection*

A feasibility study for collection fleet upgrade / diversification / replacement should be undertaken should waste collection be undertaken by SM. The outcomes of the feasibility study should feed into the three-bag household collection plan. Consideration should be given to whether food waste and garden waste can or should be collected with the same vehicle or trip or if these should remain separate. The decision around bags, caddies and drums vs bags for food vs garden waste will also need to be a consideration.

It should be noted that once separation at source commences, this will need to include kerbside collection at participating households and businesses, etc., and removal for treatment. The following should be noted:

- Once the ORTS becomes operational<sup>26</sup> the off-take contract may shift to the collection from the ORTS.
- For collection from the organic waste transfer station as an initial step in the phased 3-bag separation at source programme.
- This could ultimately be undertaken by the SM or an external party/contractor and would be informed by the various feasibility studies that will be conducted.

These waste collection/transportation options to be guided by the Fleet Upgrade Feasibility Study to be undertaken in parallel to the Separation at Source Strategy as these are interlinked.

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<sup>26</sup> In terms of the ORTS construction, an Environmental Authorisation (EA) was issued on 28 April 2021 and construction is planned to commence in July 2022 with completion in 2023.

The aim would be to collect organic waste and transport to the ORTS in the long term, although the feasibility of this from areas such as Franschhoek will need to be determined and included in the study. As part of the initial phase, SM to appoint collection service providers for food waste to transport to their own RTS facility or who can take it directly to a treatment facility. This contract should end on 31 June 2023 and updated/renewed to allow food waste to be taken to ORTS (when construction is completed). The collection contract could allow for the inclusion of the removal of the organic waste for treatment, however this would be informed by the feasibility studies.

## 7.2 Green/Garden Waste

SM should implement and encourage/incentivise separation of green (garden) waste along with enforcement of the by-law as a last resort. Aspects for consideration include:

- Communication and awareness for residents.
- Monitor and evaluate uptake amongst residents.
- Target areas where volumes are more significant than individual residents e.g., complexes, estates.
- Roll out to continue into all residential areas.
- Implement by-law and enforce mandatory garden waste separation.

SM to continue with green waste chipping as per the current system, as it is successful and runs well on an outsourced basis. However:

- Increase scope to include chipping in Franschhoek and at the Klampmuts RTS.
- Aim to divert the remaining 6% of garden waste that is disposed of with municipal waste (as per the Waste Characterisation) to separate all garden waste from waste being disposed of to landfill.

## 7.3 Treatment of the Organic Waste

It is recommended that SM undertake a Waste Characterisation Study to update existing information and feed into feasibility studies. The Request for Quotation (RFQ) for a Waste Characterisation study should be advertised to update the 2017 data/information. The Waste Characterisation Study should focus specifically on organic waste fraction as well as calorific values. (It is, however, also recommended to include the characterisation into specific recyclable fractions to provide additional information for MRF operations).

SM is currently undertaking a Feasibility Study for Landfill Gas Capture and generation of electricity. It is therefore recommended that this study is followed by a Feasibility Study for the construction of an AD to treat organic waste and generate biogas as follows:

- If the LFG feasibility determines LFG capture is a feasible option.
  - Supplementing the LFG being captured with biogas to generate electricity if LFG feasibility determines LFG capture is feasible.
- Alternatively, if the LFG feasibility determines LFG capture is not a feasible option -
  - a feasibility study could be undertaken to determine if AD is feasible for only treating municipal organic waste.
  - Identification of other AD facilities in the municipal area that have capacity/willingness to accept municipal food waste and determine what the contractual arrangements would be to foster this as an option which should be included in the study.
  - Identification of other organic waste treatment facilities within the SM should be identified with capacity to accept municipal organic waste i.e., leveraging existing infrastructure. This may require a public-private partnership agreement which should be included in the study.
  - Alternative off-take or treatment options could be investigated.
    - Consider pre-treatment of organics at organic waste transfer station.
    - Consider partnering and providing pre-treatment facilities or infrastructure for organics at various facilities/areas not within close proximity to the ORTS or where the volumes would justify it e.g. malls, university, schools, etc.

- Potential to combine organic waste with other waste types in the municipal area, leveraging existing treatment infrastructure.
- To be determined by the outcome of feasibility studies and decision of treatment options.

The final destination/treatment for organic waste to be determined by 30 June 2023 and budget made available to proceed with selected option from 1 July 2023 (construction of ORTS should be nearing completion).

#### 7.4 Off-take for Organic waste

A phased approach to the off-take and treatment of organic waste will be required as follows:

- Identify an off-take for food waste:
  - External contractor that collects to remove for treatment at a licenced facility (if applicable).
  - External contractor with expanded collection footprint to remove for treatment at a licenced facility (if applicable).
  - External contractor to collect with temporary storage at the ORTS.
  - Final destination to be determined by outcome of feasibility studies and decision for treatment.

#### 7.5 Tariff update

- Incentivise commercial/business organic waste separation, provide bags or bins and collect daily or 3 days per week as a minimum, in business areas, CBD areas including the University with enforcement of the by-law as a last resort.
- Update the municipal tariffs with a Separation at Source tariff that is lower than the black bag collection tariff as a financial incentive to participants.
  - Combined Tariff for three-bag collection to be less than black bag collection for residential and commercial/businesses.
  - Include separate tariff for food waste only collection for businesses.

#### 7.6 Training, Education and Awareness Campaign

SM will need to develop a training system for collection crews and waste staff with regard to the collection of organics and changes to the existing system. This should be ongoing as the various phases are implemented. Feedback from staff should also be included in decision making and evaluating the roll-out.

In terms of Education and Awareness, as SM introduces changes to municipal areas this should be accompanied by the development of a general communication and awareness campaign as well as specific targeted campaigns for areas where programmes will commence. This should include:

- Direct communication to residents and businesses in Separation-at-Source areas.
- Education and awareness around home composting bin roll-out.
- Ongoing communication and awareness to be undertaken.

The education and awareness plan to be updated as roll out continues according to feedback from participants, staff and any changes resulting from studies etc.

#### 7.7 Monitoring and Measuring

SM should develop and implement an improved monitoring and measuring system for all waste data and interrogate information on a regular basis. The system will need to include all waste as well as organic waste that is:

- Collected
- Home composted as part of Municipal trials/projects
- Treated

This data is critical as it will allow SM to communicate progress against targets to DEA&DP. The development of an online system or mobile app to allow participation should be investigated, with an incentive built in for residents/business to report their data.

This information can also be used to report on the municipal carbon footprint.

### 7.8 Summary of Expected Outcomes

The outcome of the implementation of the Organic Waste Diversion Plan is expected to include:

- Organic Waste Drop-off sites;
- Three bag separation at source in all residential areas within the Stellenbosch Municipal area;
- Organic Waste separation and collection for all business and commercial areas;
- Partnership with Stellenbosch University to ensure the waste management systems are aligned;
- Transport system to collect organic waste and transport to the ORTS;
- A long term off-take solution for organic waste;
- Improved waste data capturing and reporting; and
- Communication and awareness strategy focussed on Separation at Source and organic waste.

### 7.9 Waste Diversion Targets

The estimated waste tonnages that will be produced in the Municipality have been calculated from 2022 (the first year with a target of 50% diversion which needs to be met) using an annual 2.2% increase in tonnages based on a 2.2% population growth rate and is presented in **Table 10**. The tonnages to be diverted have been calculated using the waste characterisation percentages for organic and green waste.

*Table 10: Estimated waste tonnages for the period 2022 to 2027 with estimated diversion tonnage targets*

	Estimated Tonnages					
	2022	2023	2024	2025	2026	2027
Waste generated for disposal to Landfill (excl builder's rubble) (tonnes)	57 667	58 936	60 233	61 558	62 912	64 296
Estimated Organic Waste tonnages (24%) (tonnes)	13840	14145	14456	14774	15099	15431
Estimated Green Waste tonnages (6%) (tonnes)	3460	3536	3614	3693	3775	3858
<b>TOTAL Organic waste (30% of waste generated) (tonnes)</b>	<b>17 300</b>	<b>17 681</b>	<b>18 070</b>	<b>18 467</b>	<b>18 874</b>	<b>19 289</b>
Target (% diversion of organic waste)	50%	60%	70%	80%	90%	100%
<b>Diversion Target (tonnes) per year</b>	<b>8 650</b>	<b>10 608</b>	<b>12 649</b>	<b>14 774</b>	<b>16 986</b>	<b>19 289</b>

#### Assumptions:

- The tonnages provided by SM are accurate and without error.
- 2.2% population growth rate has been used and applied to 2019's annual waste disposed to Landfill (as per the IWMP). 2019 is regarded as a better representation of typical waste volumes generated due to the Covid-19 Pandemic in 2020.
- Waste disposed of to landfill has been estimated using an average of 2018-2020 tonnages to obtain tonnages for 2022.
- Subsequent total tonnages have been calculated using the same average less the volume of organic waste diverted the previous year, with a 2.2 % growth rate.
- Waste character remains the same i.e.
  - Estimated Organic Waste volume (24%) of waste disposed of to landfill.
  - Green Waste (6%) of Waste disposed of to landfill.

- Recyclables diversion from landfill is expected to increase from 5 November 2021 with the implementation of the EPR Regulations.
- Achievable interim targets for 2023 to 2026 and are not legislated.
- Targets of 50% organic waste diversion for Western Cape municipalities by 2022 and 100% organic waste diversion by 2027 are legislated.

The information provided in **Table 10** is graphically illustrated in **Figure 12**.

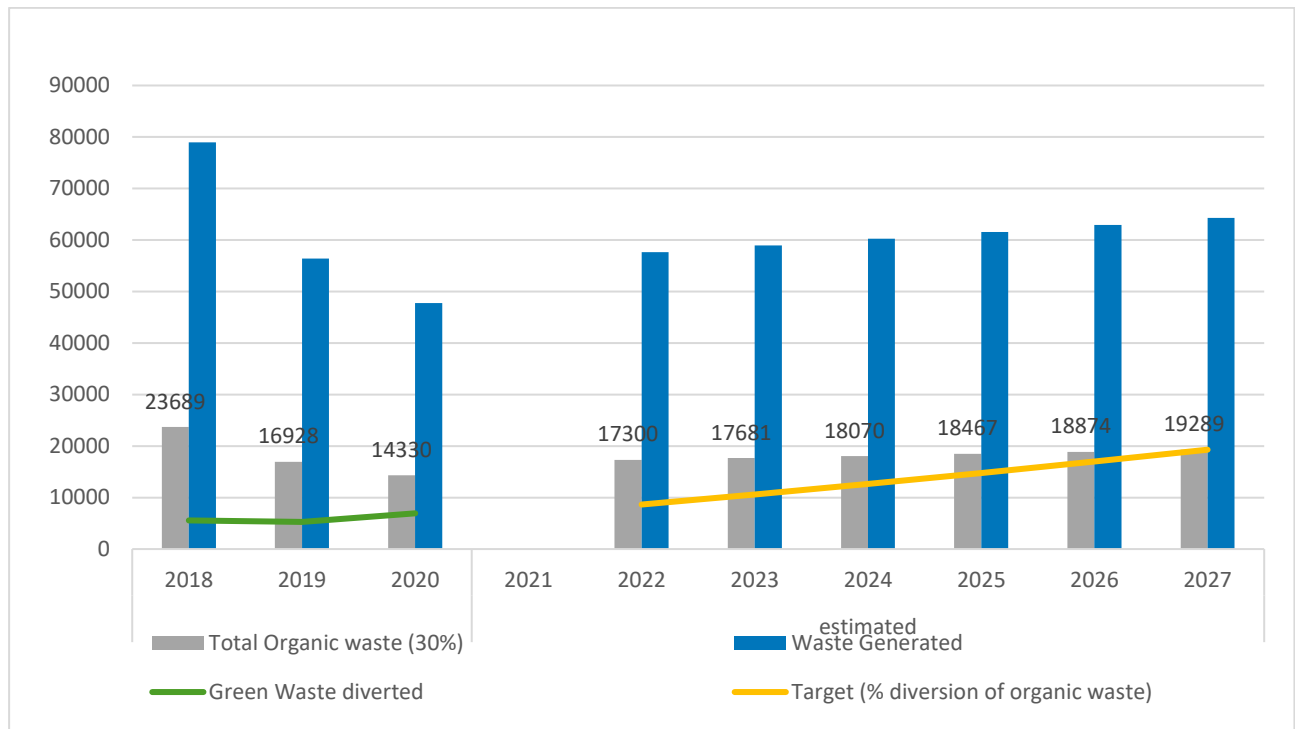


Figure 12: Estimated waste generation and organic waste diversion targets.

The estimated tonnages indicate that the SM need to maintain their current diversion of organic (green) waste volumes of 2020 to meet their 2022 target of 50%, however, it is important to note that this is just an estimate and may change depending on the actual volume of waste disposed of to landfill.

Planning for waste diversion will need to take place in 2021 and 2022 as well as implementation of diversion measures by the end of 2022 to ensure increased diversion percentages are reached by 2023. The steps to be taken to ensure waste diversion targets are met are set out in the Implementation Plan.

The timeframes of the Implementation Plan have been set in 6-month intervals and aligned with the municipal financial year and are set out as follows:

- **Phase 1:** 2021/22 Financial Year
  - Jan 2022 – June 2022
- **Phase 2:** 2022/23 Financial Year
  - a - July 2022 – Dec 2022
  - b – Jan 2023 – June 2023
- **Phase 3:** 2023/24 Financial Year
  - a - July 2023 – Dec 2023
  - b – Jan 2024 – June 2024
- **Phase 4:** 2024/25 Financial Year
  - a - July 2024 – Dec 2024
  - b – Jan 2025 – June 2025

- **Phase 5:** 2025/26 Financial Year
  - a - July 2025 – Dec 2025
  - b – Jan 2026 – June 2026
- **Phase 6:** 2026/27 Financial Year
  - a - July 2026 – Dec 2026
  - b – Jan 2027 – June 2027

### 7.10 Implementation Plan

**Table 11** provides a summary of the proposed implementation plan with the associated timeframes.

*Table 11: Summary table of the Implementation plan with proposed timeframes*

Aspect	Actions	Timeframe										
		Jan 2022 – June 2022	July 2022 - Dec 2022	Jan 2023 - June 2023	July 2023 - Dec 2023	Jan 2024 - June 2024	July 2024 - Dec 2024	Jan 2025 - June 2025	July 2025 - Dec 2025	Jan 2026 - June 2026	July 2026 - Dec 2026	Jan 2027 - June 2027
		Phase 1	Phase 2 a	Phase 2 b	Phase 3 a	Phase 3 b	Phase 4 a	Phase 4 b	Phase 5 a	Phase 5 b	Phase 6 a	Phase 6 b
<b>1. Separation at Source Strategy</b>												
<b>Develop Strategy:</b>	Pipeline plan for areas to follow on from the existing two bag collection areas, with roll out to new areas on an annual basis	x	x									
<b>Implement Strategy:</b>	<u>Residential Areas:</u> Start in existing Two Bag Areas			x								
	Continue to expand into other areas as per plan				x	x	x	x	x	x	x	x
	Identify & establish Organic Waste Drop-off Areas				x		x		x		x	
	Home Composting Bins Roll-out		x		x		x		x		x	
	Mandatory Garden Waste separation implemented				x							
	Additional Garden Waste drop-off areas				x		x		x		x	
	<u>Commercial/Business Areas</u> Identify target areas = large volume producers	x										
	Implement 3-bag system or separate organic waste		x		x		x		x		x	
	Identify possible Collection points & areas for Pre-treatment technology placement e.g. Malls, University				x				x			
<b>Mandatory Separation at Source:</b>	Communication Awareness campaigns		x	x	x	x	x	x	x	x	x	x
	Tie in with Communication Strategy			x	x	x	x	x	x	x	x	x
<b>Collection Fleet Feasibility Study:</b>	Outcomes to feed into the Separation at Source Strategy	x	x									

Aspect	Actions	Timeframe										
		Jan 2022 – June 2022	July 2022 - Dec 2022	Jan 2023 - June 2023	July 2023 - Dec 2023	Jan 2024 - June 2024	July 2024 - Dec 2024	Jan 2025 - June 2025	July 2025 - Dec 2025	Jan 2026 - June 2026	July 2026 - Dec 2026	Jan 2027 - June 2027
		Phase 1	Phase 2 a	Phase 2 b	Phase 3 a	Phase 3 b	Phase 4 a	Phase 4 b	Phase 5 a	Phase 5 b	Phase 6 a	Phase 6 b
<b>2.Treatment of the Organic Waste</b>												
	Feasibility Study for Landfill Gas Capture (completed)	x										
	Waste Characterisation (to inform all studies)	x										
<i>If LFG is feasible</i>	Feasibility Study to include Organic Waste only	x	x									
	<b>OR</b>											
<i>If LFG capture is not feasible</i>	Feasibility Study for AD for Organic Waste only		x	x								
	Identification of other AD facilities in the municipal area		x	x								
	Identification of other organic waste treatment facilities		x	x								
	Alternative off-take or treatment options		x	x								
	<b>ORTS Construction Completed &amp; Treatment Solution confirmed</b>					<b>X</b>						
<b>3.Collection &amp; Off-take for Organics</b>												
	External contractor to collect & remove for treatment		x									
	External contractor to continue, expanded collection footprint			x	x	x						
	External contractor to collect; transport to ORTS				x	x	x	x				
	Collection, transport & treatment (as per outcome of feasibility studies)								x	x	x	x
<b>4.Tariff update</b>												
Residential Areas & Commercial/Business areas	Combined Tariff for 3-bag collection less than black bag			x								
Commercial/Business Areas only	Separate tariff for food waste only collection for businesses			x								



Aspect	Actions	Timeframe										
		Jan 2022 – June 2022	July 2022 - Dec 2022	Jan 2023 - June 2023	July 2023 - Dec 2023	Jan 2024 - June 2024	July 2024 - Dec 2024	Jan 2025 - June 2025	July 2025 - Dec 2025	Jan 2026 - June 2026	July 2026 - Dec 2026	Jan 2027 - June 2027
		Phase 1	Phase 2 a	Phase 2 b	Phase 3 a	Phase 3 b	Phase 4 a	Phase 4 b	Phase 5 a	Phase 5 b	Phase 6 a	Phase 6 b
<b>5. Training, Education and Awareness Campaign</b>												
<b>Training</b>	Training system for collection crews and waste staff			x			x			x		
<b>Develop communication &amp; awareness campaign</b>	General communication and awareness campaign		x	x			x			x		
	Direct communication to Separation-at-Source areas		x	x	x	x	x	x	x	x	x	x
	Provide feedback to community (ongoing)			x	x	x	x	x	x	x	x	x
	Education and awareness around home composting bin roll-out		x		x		x		x		x	
	Engage with stakeholders/partners to align	Identify stakeholders or partnership e.g. University				x						
	Engage and align strategies & solutions					x						
<b>6. Monitoring and Measuring</b>												
<b>Develop monitoring and measuring system</b>	Waste <i>Collected</i>		x									
	Home <i>composted</i> waste as part of Municipal trials/projects		x									
	Waste <i>Diverted</i>		x									
	Waste <i>Treated</i>		x									
<b>Revise &amp; update accordingly</b>	Informed by studies and final strategies/solutions/decisions					x						x

### 7.11 Indicative costs

Indicative investment costs for some of the technologies and implementation of the OWDP are provided in **Table 12** and **Table 11**. This information is based on research undertaken by JG Afrika and is not site specific and excludes operational costs as well as transports costs.

*Table 12: Approximate costs for interventions*

Technology/Aspect	Estimated Investment Cost/ Approximate Cost
AD – 2 500 tonne per annum system	R 22 500 000
AD – 20 000 tonne per annum system	R 190 000 000
Open Windrow Composting 5 000t/yr	R 9 000 0000
Open Windrow Composting 10 000t/yr	R12 000 000
Open Windrow Composting 10 000t/yr	R 18 000 000
In Vessel Composting 5 000t/yr pre-treatment system	R16 400 000
In Vessel Composting 15 000t/yr pre-treatment system	R19 100 000
Modular containerised composting system 10 000t/yr	R34 960 000
High level costs to collect co-mingled recyclables (Metro)	R15.00 per household per month
Estimated Transport cost of Waste	Average of R700/ton
S@S Cost model - implementation cost of separation at source	R9.64 – R59.65/household/month
Separate collection cost <sup>27</sup> - over and above normal “black bag” collection	R350 to R500 per tonne
Municipality pays contractor to collect and recover recyclables and calculated cost	R840 per tonne

*Table 13: Approximate costs for implementation of the OWDP*

Aspect	Actions	Approximate Cost	Notes
<b>1.Separation at Source Strategy</b>			
<b>Develop Strategy:</b>	Pipeline plan for areas to follow on from the existing two bag collection areas, with roll out to new areas on an annual basis	R 180 000	Outsourced – in parallel with feasibility studies
<b>Implement Strategy:</b>			
<u>Residential Areas:</u>	Start in existing Two Bag Areas Continue to expand into other areas as per plan Identify & establish Organic Waste Drop-off Areas Home Composting Bins Roll-out Mandatory Garden Waste separation implemented Additional Garden Waste drop-off areas	Costs in line with existing collection services.  Savings to be determined in development of the strategy.	Inhouse implementation based on Strategy
<u>Commercial/Business Areas</u>	Identify target areas = large volume producers Implement 3-bag system or separate organic waste Identify possible Collection points & areas for Pre-treatment technology placement e.g. Malls, University	-  -	Outsourced (part of strategy development)  Inhouse  Outsourced (part of strategy development)

<sup>27</sup> [https://iwmsa.co.za/sites/all/themes/corporateclean/Landfill%20Conference%20Papers/Day%201%20-%20LAWTIG%20-%20R%20Pienaar\\_JPCE%20Read-Only.pdf](https://iwmsa.co.za/sites/all/themes/corporateclean/Landfill%20Conference%20Papers/Day%201%20-%20LAWTIG%20-%20R%20Pienaar_JPCE%20Read-Only.pdf)

Aspect	Actions	Approximate Cost	Notes
<b>Mandatory Separation at Source</b>	Communication Awareness campaigns	R80 000	Outsourced – once-off development of material/content
	Tie in with Communication Strategy	-	Inhouse
<b>Collection Fleet Feasibility Study</b>	Outcomes to feed into the Separation at Source Strategy	R 180 000	Outsourced
<b>2.Treatment of the Organic Waste</b>			
	Feasibility Study for Landfill Gas Capture	n/a (completed)	Outsourced
	Waste Characterisation (to inform all studies)	R 85 000	Outsourced
<i>If LFG is <u>feasible</u></i>	Feasibility Study to include Organic Waste only	R 200 000	Outsourced
<b>OR</b>			
<i>If LFG capture is <u>not feasible</u></i>	<b>Feasibility Study for AD for Organic Waste only</b>	R 200 000	Outsourced
	Identification of other AD facilities in the municipal area	Included within above	
	Identification of other organic waste treatment facilities		
	Alternative off-take or treatment options		
<b>ORTS Construction Completed &amp; Treatment Solution confirmed</b>			
<b>3.Collection &amp; Off-take for Organics</b>			
	External contractor to collect & remove for treatment	±R125 per household per month	Outsourced – includes treatment and clear bag collection for recyclables
	External contractor to continue, expanded collection footprint	±R90 per household per month	Outsourced – lower cost per household due to economy of scale
	External contractor to collect; transport to ORTS	TBC	Depends on selected treatment technology
	Collection, transport & treatment (as per outcome of feasibility studies)	TBC	Depends on selected treatment technology
<b>4.Tariff update</b>			
Residential Areas & Commercial/Business areas	Combined Tariff for 3-bag collection less than black bag	-	Inhouse
Commercial/Business Areas only	Separate tariff for food waste only collection for businesses	-	Inhouse
<b>5.Training, Education and Awareness Campaign</b>			
<b>Training</b>	Training system for collection crews and waste staff	-	Inhouse (Training material to be included in studies/outsourced aspects)
<b>Develop communication &amp; awareness campaign</b>	General communication and awareness campaign	R120 000	Outsourced
	Direct communication to Separation-at-Source areas	-	Inhouse
	Provide feedback to community (ongoing)	-	Inhouse

Aspect	Actions	Approximate Cost	Notes
<b>Engage with stakeholders/partners to align</b>	Education and awareness around home composting bin roll-out	-	Inhouse
	Identify stakeholders or partnership e.g. University	-	Inhouse
	Engage and align strategies & solutions	-	Inhouse
<b>6. Monitoring and Measuring</b>			
<b>Develop monitoring and measuring system</b>	Waste <i>Collected</i>	Cost included in projects above	Inhouse/outsourced-systems developed as part of projects with an inhouse implementation component
	Home <i>composted</i> waste as part of Municipal trials/projects		
	Waste <i>Diverted</i>		
<b>Revise &amp; update accordingly</b>	Waste <i>Treated</i>	-	Inhouse
	Informed by studies and final strategies/solutions/decisions		

For comparison purposes it is worth noting that the cost for disposal and transport of 43 636.03 tons of waste from SM for the year from September 2020 to September 2021 was R32 465 615.38 excluding VAT. This is approximately R744/ton of waste. This excludes the operating costs of the Landfill site or Klapmuts RTS.

## 8 STAKEHOLDER ENGAGEMENT

In terms of DEA&DP's guideline for organic waste diversion plans the following stakeholder engagement is required:

- Obtain internal approval for draft plan
- Workshop plan with key stakeholders and role-players
- Get public buy-in to these systems
- Get buy-in from the Council & budget approval
- Review and finalise plan against public participation process

## 9 REVIEW OF THE ORGANIC WASTE DIVERSION PLAN AND IMPLEMENTATION PLAN

An annual review of the OWDP is required. This will need to commence at least 3 months prior to the annual submission to DEA&DP.

The review needs to include an update of the waste volumes, an assessment of targets and if they are being met to ascertain the system and projects being implemented are effective and where areas for improvement may lie.

If new projects, technology or systems are implemented they need to be evaluated to ensure the system stays efficient and targets will be met.

It is important to note that only reasonable changes to the proposed project should be granted approval for amendment. Risks in the form of contractual matters, financial implications, institutional, market, and Human Resources must be identified, and remedial actions put in place and included in the OWDP.

The Waste Management Officer and/or the Municipal Manager will jointly grant final approval for major adjustments that were not foreseen.

The OWDP should be regarded as an annexure to the IWMP, and IWMP's are required to be integrated into Integrated Development Plans (IDPs), as stipulated by the National Waste Act. This is to ensure that the waste related needs, as identified in the IWMP and OWDP, are integrated in the municipal planning and that budget is allocated.

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(Accessed 2021)

Extract from Stellenbosch Waste Disposal Facility WML, Ref 19/2/5/1/B4/46/WL0118/14, dated 13/09/2018.

- 15.7. The Licence Holder must submit an Organic Waste Diversion Plan to the Director 90 (ninety) days after the signature of this Licence and annually thereafter.
- 15.8. The information within the Organic Waste Diversion Plan must:
  - 15.8.1. provide a status quo of current organic waste sources and volumes disposed at municipal WDFs, and current rates and procedures of organic waste diversion from WDFs; and
  - 15.8.2. set annual targets and identify procedures from 2018 that will be implemented to meet these targets for the diversion of organic waste from municipal WDFs, in order to reach a 50% diversion by the year 2022 and 100% diversion by the year 2027.



Two Bag System Area		Organic Waste %
-	Uniepark, Karindal, Aanhou Wen, Rozendal	55.1
-	Mostertsdrift	41.4
-	Simonswyk	47.1
-	Universiteits Oord	-
-	Technopark	33.8
-	Die Boord, Fairways, Die Wingerd, Harringtons Place	40.3
-	Paradyskloof, Schuilplaats, Lieberheim, Anesta, Eden, La Pastorale	37.1
-	Brandwacht	46.6
-	Dalsig, Bo-Dalsig	-
-	Krigeville	-
	Onder Papegaaiberg	22.2
	Devon Vallei, Devon Park, Kleinvallei	18.7
-	La Colline/Die Rand	34.8
-	Die Laan	-
-	Dorp/Stasie street	-
-	Franschhoek	31.6
-	Idas Valley, Lindida, Arbeidslus	31.6
-	Raithby	25.3
-	Agape Retirement Village	-
-	Blaauwklippen Road	-
-	Jamestown	36.2
-	Cloetesville	34.5
-	Brandwacht-aan-rivier	-
-	Parmalat	-
-	Jonkershoek	17.3
-	Welgevonden	27.1

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7.7	PARKS, OPEN SPACES AND ENVIRONMENT: (PC: J JOON)
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NONE

7.8	PLANNING :(PC: CLLR C VAN WYK (MS)
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NONE

7.9	LOCAL ECONOMIC DEVELOPMENT AND TOURISM:(PC: CLLR R DE TOIT (MS)
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NONE

7.10	RURAL MANAGEMENT: (PC: CLLR J WILLIAMS)
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NONE

7.11	MUNICIPAL MANAGER
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NONE

8.	REPORTS SUBMITTED BY THE EXECUTIVE MAYOR
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NONE

9.	URGENT MATTERS
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10.	MATTERS TO BE CONSIDERED IN-COMMITTEE
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