# **APPENDIX 11**

# SERVICE PROVISION LETTERS

JULY 2025

# WASTE SERVICES

Extract from a letter received from the CoCT Spatial Planning and Environment Directorate dated 13 May 2025:



CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD

#### SPATIAL PLANNING AND ENVIRONMENT DIRECTORATE ENVIRONMENTAL MANAGEMENT DEPARTMENT

Clarissa Fransman Environmental Professional

T: +27 21 444 1557 E: <u>clarissa.fransman@capetown.gov.za</u>

13 May 2025

PHS Consulting P.O Box 1752 Hermanus 7200

#### Attention: Ms. Amanda Fritz-Whyte

Email: amanda@phsconsulting.co.za

Dear Madam

PORTION 10 OF PAARL FARM 724, REMAINDER OF PAARL FARM 724, PORTION 23 OF PAARL FARM 724, PORTION 7 OF PAARL FARM 942, REMAINDER OF PAARL FARM 474, PORTION 3 OF PAARL FARM 474 AND PORTION 4 OF PAARL FARM 474, FISANTEKRAAL: DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT -PROPOSED EXPANSION OF CAPE WINELANDS AIRPORT (CWA) - DEA&DP Ref No: 16/3/3/2/A5/20/2046/24.

Your email correspondence and accompanying Notification Letter, dated 19 March 2025, and the Amended Draft Environmental Impact Assessment Report, dated March 2025, pertaining to the proposed expansion of the existing Cape Winelands Airport (CWA) on Portion 10 of Paarl Farm 724, Remainder of Paarl Farm 724, Portion 23 of Paarl Farm 724, Portion 7 of Paarl Farm 942, Remainder of Paarl Farm 474, Portion 3 of Paarl Farm 474 and Portion 4 of Paarl Farm 474, Fisantekraal, refer.

Record of previous City of Cape Town comments provided on the above project:

- Pre-Application Scoping Report comment dated 18 January 2024;
- Draft Scoping Report comment dated 23 August 2024; and
- Draft Environmental Impact Assessment Report comment dated 13 December 2024.

The following technical comment is provided by the relevant City of Cape Town Departments based on the information provided in the Amended Draft Environmental Impact Assessment Report (Amended DEIAR) and accompanying documentation:

#### 10. Urban Waste Management: Integrated Planning - Planning and Strategy Branch

#### Waste Services

- 10.1 It is confirmed that the Collections of the Waste Services Department as the service provider has sufficient unallocated capacity to accept, collect, and dispose of all types of waste to a designated licence landfill site.
- 10.2 A good waste management system must be in place in order to handle all waste generated by the on-site activities and mitigate any negative impact on the environment
- 10.3 The Draft Waste Management Plan (Annexure 8 to the Environmental Management Programme) must be corrected as follows:
  - 10.3.1 The referenced Vredenburg landfill site, as mentioned on page 388 of the Waste Management Plan, does not fall within the boundaries of the City of Cape Town.

#### Integrated Planning

10.4 It is reiterated that during the construction phase; the contractor must ensure compliance with the Integrated Waste Management By-Law (2009 as amended). All waste produced during the construction phase must be transported by an accredited service provider. It is acknowledged that this is reflected in the Draft Waste Management Plan.

# SUPPLY OF ELECTRICITY



Mr C Selkirk Director Cape Winelands Airport Ltd P O Box 12449 **GARDENS** 8110

Date: 04 March 2025

Enquiries : Miriam van der Heever Tel. +27 21 915 2371 vdheevm@eskom.co.za

Dear Mr Selkirk

## SUPPLY OF ELECTRICITY AVAILABILITY OF SUPPLY FOR NEW SUPPLY AT ERF PA724-10, PAARL FARMS, NO 66 MELLISH ROAD, FISANTEKRAAL

With reference to your ENQUIRY at Eskom, we advise that Eskom is the licensed Distributor to the proposed development.

- This letter is in support of the Environmental Impact Assessment (EIA) to continue to obtain the required Environmental Approval (EA) for the development, or Municipal development rights.
- The above premise falls within the Eskom supply area and is supplied from Fisantekraal 66/11kV substation.
- The Fisantekraal substation consist of 2 x 20 MVA 66/11 kV transformers. The is currently sufficient, surplus, unallocated capacity available to accommodate the requested 5000kVA supply.

The method of supplying the electricity will be determined once details are made available. The formal quote process will confirm spare capacity available and a proposal to supply such development. The execution of making supply available will only be initiated on acceptance of a formal quote. The date to make a point of supply available will be confirmed during this process.

Please direct a formal application to our Group Customer Services for a quote:

Distribution Eskom PO Box 2100 Bellville, 7535

Yours faithfully

Sarita van Coller KEY CUSTOMER RELATIONS MANAGER Western Cape Province

60 Voortrekker Road, Bellville, 7535 P.O. Box 2100, Bellville, 7530 SA Tel +27 86 003 7566 <u>www.eskom.co.za</u>

Eskom Holdings SOC Limited Reg No 2002/015527/30

POTABLE WATER AND SEWAGE



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 Water & Sanitation Head Office

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Ref No: 20250526\_M

Date: 09 July 2025

Attention: Carshif Talip <sub>(Pr Eng)</sub> Company: Zutari Consulting Engineers Email: <u>Carshif.Talip@zutari.com</u>

# WATER AND SANITATION INFRASTRUCTURE CAPACITY AND DEVELOPMENT CONDITIONS FOR THE PROPOSED CAPE WINELANDS AIRPORT DEVELOPMENT

## **Background**

Zutari Consulting Engineers has been appointed determine civil engineering services requirements and to apply for the necessary capacities for the proposed Cape Winelands Airport development on portion 10 of Paarl Farm 724, Farm 724-RE, portion 23 of Farm 724, portion 7 of Farm 942, Farm 474-RE, portion 3 of Farm 474 and portion 4 of Farm 474, Fisantekraal.

The proposed development for the Cape Winelands Airport proposes a combination of office, retail, aircraft hangers of varying sizes, parking spaces, heliports, commercial buildings, hotels, a terminal building and administrative buildings with a total estimated building area of 350 000 m<sup>2</sup>.

This letter provides an overview of the existing water and sewer infrastructure near the development, the capacity of both complete systems to service it as well as associated conditions that would apply. The information provided is based on City of Cape Town master plan model as well as comments from relevant branches of the department.

| Description                   | Potable Water Demand <sup>1</sup>       |                      |                                  | Sewer Flow <sup>2</sup> |                      |                                                      |
|-------------------------------|-----------------------------------------|----------------------|----------------------------------|-------------------------|----------------------|------------------------------------------------------|
| Cape Winelands<br>Airport     | Quantity<br>(Units/Area/<br>No. people) | Total AADD<br>(kℓ/d) | Peak Flow<br>(ℓ/s)<br>(PF = 1.0) | Fire Flow<br>(୧/s)      | Total ADWF<br>(k୧/d) | Peak Flow<br>(Dry<br>weather)<br>(ℓ/s)<br>(PF = 2.0) |
| Business/Commercial           | 84 708 m²                               | 551.0                | 6.4                              | 50.0                    | 440.8                | 10.2                                                 |
| Yard Connection               | 92 493<br>connections                   | 12.0                 | 0.14                             |                         | 9.6                  | 0.22                                                 |
| Warehousing                   | 66 227 m²                               | 199.0                | 2.3                              |                         | 159.2                | 3.7                                                  |
| Hotel                         | 9 443 m²                                | 85.0                 | 1.0                              |                         | 68.0                 | 1.6                                                  |
| Park - Grounds Only           | n/a (area in<br>ha)                     | 276.0                | 3.2                              |                         | 0.0                  | 0.0                                                  |
| Industrial                    | 7 210 m²                                | 29.0                 | 0.34                             |                         | 23.2                 | 0.5                                                  |
| Garage and Filling<br>Station | 1 361 m²                                | 10.0                 | 0.12                             |                         | 8.0                  | 0.2                                                  |
| Terminal Building             | 88 557<br>passengers                    | 390.0                | 4.5                              |                         | 312.0                | 7.2                                                  |
| Total                         | 350 000 m <sup>2</sup>                  | 1552.0 kℓ/d          | 18.0 ℓ/s                         | 50.0 €/s                | 1020.8 kℓ/d          | 23.6 ℓ/s                                             |

#### Table 1: Estimated water demand and sewer flow anticipated for the proposed development

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#### Notes:

<sup>1</sup> Based on the water demand per landuse as indicated in the engineering services report

 $^2$  Based on 80 - 90 % of water demand that goes to sewer as per calculation provided

### Water Reticulation

#### Distribution zone

The development site falls within the Spes Bona Reservoir water distribution zone. Based on the latest GIS and hydraulic model information, there are no existing municipal potable pipelines in close proximity to the site.

#### **Present situation**

The Cape Winelands Airport (CWA) development is currently not serviced by a municipal water connection; instead, the existing buildings on site are serviced through boreholes. The nearest accessible existing municipal water main is a 450 mmØ main along Lichtenburg Road as shown in figure 1 attached. Under current operating conditions, this main has a peak flow and velocity of 78.1  $\ell$ /s at 0.65 m/s respectively. The average peak and static pressure in this main is 110 m and 122 m respectively.

Based on the results of a modelling exercise completed to determine if connection to the 450 mmØ water main was able to supply the proposed development whilst taking into consideration the existing area demand growth and other major developments which has already been approved. The results concluded that at best the 450 mmØ main only had the capacity to supply approximately **5.63 ℓ/s** without compromising existing developments.

The proposed development is projected to require a total Average Annual Daily Demand (AADD) of 1 552 kl/d. This demand is composed of both potable and non-potable water uses. Domestic water use alone accounts for approximately 1 299 kl/d. A significant portion of the total demand, approximatley 691 kl/d, is allocated to non-potable uses. These include irrigation (253 kl/d), outdoor use (151 kl/d), and toilet flushing (287 kl/d). All non-potable water requirements are expected to be met through Treated Sewage Effluent (TSE) supplied by an on-site Wastewater Treatment Plant (WWTP), which supports the development's sustainability goals by reducing reliance on potable water sources.

The remaining **861 kl/d** is designated for potable use. This includes indoor use, which constitutes 25% of the **total indoor demand (287.25 kl/d)**, and is also partially supplied by TSE. The balance of the potable water requirement is sourced from two primary supplies: **399.0 kl/d** from the City of Cape Town (CoCT) and **462.0 kl/d** from an on-site borehole.

| Category                           | Volume (kℓ/d) | Source             |  |
|------------------------------------|---------------|--------------------|--|
| Average Annual Daily Demand (AADD) | 1552.0        | -                  |  |
| Domestic Use                       | 1299.0        | -                  |  |
| Non-Potable Use                    | 691.0         | On-site WWTP (TSE) |  |
| - Irrigation                       | 253.0         | On-site WWTP (TSE) |  |
| - Outdoor Use                      | 151.0         | On-site WWTP (TSE) |  |
| - Toilet Flushing                  | 287.0         | On-site WWTP (TSE) |  |
| Potable Use                        | 861.0         | CoCT and Borehole  |  |
| - Indoor Use (25% of 1,149)        | 287.25        | On-site WWTP (TSE) |  |
| - City of Cape Town (CoCT)         | 399.0         | City of Cape Town  |  |
| - Borehole                         | 462.0         | Borehole           |  |

#### Table 2: Water Demand Summary Table

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Based on the detailed breakdown of water demand and the identified sources of supply, it is evident that there is sufficient infrastructure capacity to support the proposed development. The integration of treated sewage effluent (TSE) from the on-site wastewater treatment plant for all non-potable uses significantly reduces the burden on potable water resources. Furthermore, the combined potable supply from the City of Cape Town and the on-site borehole adequately meets the projected daily demand.

Refer to figure 1 attached for existing water network overview.

#### **Bulk Water**

No infrastructure under the control of the City of Cape Town's Bulk Water Branch exists in the immediate vicinity of the proposed development shown in the application.

The City of Cape Town's bulk supply system has sufficient water resource, treatment, bulk storage and conveyance capacity to supply the estimated average daily demand of **399.0 kl/day** respectively of the proposed development.

The connection will have to be connected to a nearby reticulation network.

The are no Bulk Water ground water schemes located in the vicinity of the development. The applicant is therefore required to obtain the necessary authorisations to abstract groundwater from the National Department of Water and Sanitation (DWS).

#### **Sewer Reticulation**

#### Drainage area

The proposed development at present does not fall within an existing catchment area, but any new sanitation infrastructure that is installed will drain to the Fisantekraal Wastewater Treatment Works (WwTW).

#### **Present situation**

The proposed development is located on the urban edge, where municipal sewer infrastructure is currently limited. The nearest existing services are situated in Fisantekraal. To ensure adequate wastewater management, the development will implement a dual approach: the construction of a pump station and associated rising main to convey sewage directly to the Fisantekraal Wastewater Treatment Works (WWTW), as well as the installation of an on-site wastewater treatment package plant.

Both proposed options are considered feasible since Fisantekraal WwTW has sufficient capacity to treat the proposed effluent produced from the development. Further coordination with the City's Water and Sanitation Department, particularly the Water Pollution Control unit, will be required to register the package plant and confirm discharge protocols.

Refer to figure 2 attached for existing sewer network overview.

#### Water Pollution Control

Should the applicant discharge to the Fisantekraal WWTW the following will be applicable:

Any company producing industrial effluent (laundry, restaurant; butcher etc.) should comply with the Wastewater and industrial effluent bylaw (2014) and the Bylaw relating to Storm water management: Companies should pay special attention to the following points with regards to the Wastewater Bylaw:

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- They will need to apply for an Industrial Effluent Permit
- They need to have a sampling chamber where the final industrial effluent can be sampled before it mixes with domestic waste
- Industrial Effluent needs to pass through a suitable treatment facility before it is allowed to be discharged to the sewer
- No cross connections between storm water and wastewater

Should the development discharge industrial effluent into the sewer system our Water Pollution Control unit will have to be contacted in this regard. The development falls under the Oostenberg Region. The contact person for this is Thembakazi Gobodo. She may be reached via email address: <u>Thembakazi.gobodo@capetown.gov.za</u> and telephone number 021 400 3320.

#### Wastewater Treatment

The anticipated wastewater flow from this proposed development has been calculated to be **1020.8** k**ℓ/d**.

This proposed development is situated within the catchment of the Fisantekraal Wastewater Treatment Works (WwTW). This treatment works has sufficient unallocated capacity to accommodate additional influent. Given the magnitude of the proposed development, a phasing plan with associated sewer flows and anticipated first flush dates are to be provided to the Wastewater Branch - <u>Sven.Sotemann@capetown.gov.za</u>.

Approval for the package plant and the required process that needs to be followed can be discussed with Caashief Adams (<u>Caashief.Adams@capetown.gov.za</u>) – Head: Water Demand Regulation.

#### **Conclusion**

Based on the comprehensive assessment of existing infrastructure, projected demands, and proposed supply strategies, the Cape Winelands Airport development is considered feasible from a water and sanitation perspective. The total projected water demand of 1 552 kl/day will be met through a combination of potable and non-potable sources, including treated sewage effluent (TSE) from an on-site wastewater treatment plant, municipal supply from the City of Cape Town, and groundwater abstraction via boreholes. The use of TSE for all non-potable applications significantly reduces reliance on municipal potable water, enhancing sustainability.

On the sanitation side, the development will implement both a pump station and rising main to convey sewage to the Fisantekraal Wastewater Treatment Works (WwTW), as well as an on-site wastewater treatment package plant. This dual approach ensures operational flexibility and compliance with municipal standards. Subject to adherence to the outlined technical conditions and regulatory approvals, the existing and planned infrastructure is sufficient to support the proposed development.

#### **Conditions**

The Water and Sanitation Department supports the proposed application subject to the following conditions:

- 1. The developer/owner at his cost provides all internal services and link services required for the extension of the proposed development.
- 2. Detailed Civil Engineering services plans be submitted to the Department of Water & Sanitation for approval, showing how the new proposed development will be serviced with new water and sewer connections.

- 3. Before commencement of construction, all way leave applications should be in place and approved.
- 4. All new service connections to be constructed and inspected by Council, on completion, a certificate of completion to be issued by the Consulting Engineer, before section 137 for transfer will be approved.
- 5. The developer be responsible for the payment of the development contributions for bulk civil engineering services, if any, as determined annually by Council and contained in the attached signed Acknowledgement of Debt.
- 6. All internal services are private and will not be taken over by The City of Cape Town.
- 7. A civils layout must be submitted to <u>Tiaan.Wright@capetown.gov.za</u> for approval. The design is to be completed and signed off by a registered civil engineer.

## Additional Technical Requirements

- 1. The water and sewer capacities allocated according to this document shall not be reserved if not taken up before the lesser of 5 years or the approved development period.
- 2. Water and Sanitation municipal service designs to be designed according to Departmental Service Standards and be approved prior to construction. These standards can be obtained on the City of Cape Town Website.
- 3. The applicant must advise this Directorate when all conditions have been complied with, in order to have the work inspected.

## General/Disclaimer

Information provided is based on best available data. The infrastructure as-built information referred to and used in the analysis is based on the GIS asset records, while modelled pressures, flows, velocities, capacities and volumes are based on hydraulic models of the current land use and demands. Where appropriate, future land use and demands are considered. The flows and pressures provided are theoretical and not measured. All levels provided to be verified on site.

Yours faithfully

Digitally signed by McKavlin Adonis Date: 2025.07.10 11:15:21 +02'00'

On behalf of Zolile Basholo DIRECTOR: TECHNICAL SERVICES, WATER & SANITATION DIRECTORATE



