WATER USE LICENCE APPLICATION SUMMARY REPORT

APPLICATION FOR A WATER USE LICENCE IN TERMS OF SECTION 21 (A) AND SECTION 21(C) AND (I) OF THE NATIONAL WATER ACT ON PORTION 77 OF FARM 794 SOMERSET WEST

DWS REF: WU49975

NAME OF APPLICANT:

HELDERBERG PROPERTY INVESTMENTS (PTY) LTD

COMPILED BY:
PHS CONSULTING

DATE: September 2026

PHS
CONSULTING
environmental, land-use, eco-tourism planning and management.

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Terms and Abbreviations

CMA – Catchment Management Agency

C&R – Comments and Responses report

CoCT – City of Cape Town

CVB Wetland - Channel Valley Bottom Wetland

CEMP- Construction Environmental Management Programme

DEA&DP – Department of Environmental Affairs and Development Planning (Western Cape)

DWS – Department of Water and Sanitation

EAP – Environmental Assessment Practitioner

ELU – Existing Lawful Use

GA – General Authorisation

GN – Government Notice

I&AP – Interested and Affected Party

NEMA - National Environmental Management Act, Act 108 of 1998

NWA – National Water Act, Act 36 of 1998

OEMP – Operational Environmental Management Programme

PAOI – Project Area of Influence

PES – Present Ecological State

REC – Recommended Ecological Category

RMO – Recommended Management Objective

SDP – Site Development Plan

SWMP – Stormwater Management Plan

UVB – Unchanneled Valley Bottom Wetland

WULA – Water Use Licence Application

ZoR – Zone of Regulation

1. Applicant details

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3. Background and purpose

3.1. Background

Helderberg Property Investments (Pty) Ltd owns and manages the Helderberg Centre, located on Portion 77 of Farm 794, Somerset West (Figure 1). The property is situated on the boundary between Somerset West and Strand within the City of Cape Town Metropolitan Municipality, immediately South of the N2. The property was developed as a regional shopping centre in 2013 and was acquired by Helderberg Property Investments (Pty) Ltd in 2021. The Centre currently accommodates a range of commercial tenants, including Checkers, Clicks, Pick n Pay Clothing, a café, doctors' offices and other retail and service businesses.

An existing borehole is located in the south-eastern corner of the property (Figure 2) but is currently not operational. The owners of the Helderberg Centre propose to utilise the borehole to abstract groundwater for centre operational and irrigation purposes, with the objective of meeting the Centre's overall water demand and reducing reliance on municipal water supply.

The Centre is located within Quaternary Catchment G22J, which historically formed part of the Berg and subsequently the Berg-Olifants Water Management Area (WMA) (WRC, 2017). The Berg-Olifants WMA was administered by the Department of Water and Sanitation (DWS). Since 2023, the Centre falls within the Breede-Olifants WMA and is administered by the Breede-Olifants Catchment Management Agency (BOCMA).

The owners propose to abstract approximately 16 810m³/a from the onsite borehole to meet the Centre’s operational water requirements. This exceeds the General Authorisation volume of 2 404 m³/a applicable to Quaternary Catchment G22J and therefore requires a Water Use Licence Application (WULA) in terms of Section 21(a) of the National Water Act (Act 36 of 1998) (NWA). The motivation for the proposed water use is to improve the Centre's water security and operational resilience and to reduce reliance on municipal water supply.

The borehole was yield tested and assessed by GEOSS in June 2026 in accordance with the relevant DWS standards. The borehole was confirmed to be approximately 40.2m deep. Yield testing determined a recommended abstraction rate of 2.2L/s, based on a pumping regime of 12 hours followed by a 12 hour recovery period. At this rate, the potential annual abstraction volume is approximately 34 689.6 m³/a, which is greater than the WULA application volume.

Groundwater samples were analysed by a SANAS-accredited laboratory in accordance with applicable SANS drinking water standards. The results indicated elevated concentrations of sodium, chloride and manganese, and treatment will therefore be required prior to potable use. Treatment will likely comprise a reverse osmosis (RO) system to treat the groundwater to the required water quality standards. The treatment process is expected to produce brine, with an estimated water loss of approximately 25%, which will be disposed of via the municipal system. The raw groundwater is

also considered unsuitable for direct irrigation due to its salinity and will therefore be treated prior to use for irrigation. Treatment losses were accounted for when determining the centre's abstraction requirements.

A desktop assessment and subsequent freshwater assessment (everWater, August 2026) confirmed that the borehole is located within the regulated area of the nearby Geelsloot Stream, a natural watercourse located within 100m of the borehole. A DWS Risk Assessment Matrix was completed to assess the potential impact of the proposed groundwater abstraction on the Geelsloot Stream.

The freshwater impact assessment identified the main potential impact of the proposed abstraction as the indirect alteration of the hydrological regime of the Geelsloot Stream through a possible reduction in groundwater supported baseflow. However, the accompanying geohydrological assessment (H2 cOnsulting, August 2026) concluded that the borehole abstracts water exclusively from the deeper secondary aquifer, which is separated from the shallow primary aquifer by a low-permeability clay aquitard. Consequently, hydraulic connectivity between the abstraction zone and the shallow groundwater system is expected to be minimal, substantially reducing the likelihood of any measurable impact on stream baseflow,

The freshwater assessment determined that the proposed water use presents a Low risk to the freshwater resources and therefore falls within the ambit of the General Authorisation in terms of Sections 21(c) and (i) of the NWA. However, the proposed abstraction volume under Section 21(a) exceeds the applicable General Authorisation threshold for Quaternary Catchment G22J and therefore requires authorisation through a WULA. Following consultation with DWS, it was confirmed that an integrated WULA process is therefore required for the proposed water use.

This WULA therefore relates to the following water uses in terms of Section 21 of the NWA:

- Section 21(a): taking water from a water resource;
- Section 21(c): impeding or diverting the flow of water in a watercourse; and
- Section 21(i): altering the bed, banks, course or characteristics of a watercourse.



Figure 1: Locality Map – Helderberg Centre (in red outline)



Figure 2: Locality Map – Helderberg Centre Borehole

3.2. Location of water uses

The proposed project site is located in the Western Cape Province within the Somerset West Magisterial District. The water uses will take place on Portion 77 of Farm 794 which is located in Quaternary Catchment G22J within the Breede Olifants Water Management Area. Please refer to Figure 1 which shows the general locality of the property and Figure 2 which shows the pin location of the borehole proposed for use.

It should be noted that the proposed development site is located in what used to be the Berg and later the Berg-Olifants Water Management Area (WMA) (WRC, 2017). The Berg-Olifants WMA was administered by the Department of Water and Sanitation (DWS). As of 2023 the site is now located within the Breede-Olifants WMA and is administered by BOCMA. BOCMA is the authorising agent on behalf of the Department of Water and Sanitation for this region.

Table 1: Property Details

Property description	Title Deed number	Owner	Applicant	SG Code	Geographic Location
Portion 77 of Farm 794	T47256/2021	Helderberg Property Investments (Pty) Ltd	Helderberg Property Investments (Pty) Ltd	C0670000000 0079400077	34° 5'14.06"S 18°49'52.53"E

4. Administrative documents and other technical reports submitted to support the WULA

4.1. Administrative documents

The following administrative documents will be submitted as part of the application:

- Proof of Payment of Water Use Licence Application Processing Fee
- Certified Copy of Identity Document of Applicant's representative.
- Copy of Helderberg Property Investments (Pty) Ltd company registration certificate
- Power of Attorney for PHS Consulting to lodge the WULA application on behalf of the applicant.
- Landowner information (title deed) for Portion 77 of Farm 794, Somerset West.

4.2. Reports and other technical documents

The reports and technical documents that will be submitted as part of the application are listed in Table 2 below.

Table 2: List of reports and other technical documents submitted

Number	Report Title	Compiled by	Date of report
1	Borehole Yield and Quality Report	GEOSS	June 2026
2	Freshwater Impact Assessment	everWater Freshwater Consulting Services	August 2026
3	Geohydrological Report	H2 cOnsulting (Pty) Ltd	August 2026
4	S27 Motivation report (included in Section 17 of this report)	PHS Consulting	September 2026
5	Coordinates for proposed S21 water uses being applied for (Refer Table 4 of this report)	PHS Consulting	September 2026

5. Project Description

The proposed water use comprises the abstraction of water from an existing borehole on Portion 77 of Farm 794, Somerset West to supply the onsite Helderberg Centre's operational and irrigation water requirements. The borehole has sufficient sustainable yield to meet the Centre's current demand, with capacity for future growth. Abstracted groundwater will be treated on site prior to use to ensure that the required water quality standards are met. This Helderberg Centre borehole is also located within the regulated area of a delineated watercourse, the Geelsloot stream, and therefore the proposed water use will also trigger Section 21(c) and (i) water uses in terms of the NWA. The proposed water use will enable the Centre to make beneficial and sustainable use of an existing groundwater resource while reducing its reliance on municipal water supply and improving its overall water security.

Table 3: Project Details

Activity	Water use to be applied for (S21 of NWA)	Description
Abstraction of water from the Helderberg Centre Borehole (HBC_BH1)	(a), (c) & (i)	Abstraction of a total of ±16 810m^3/ annum from the Helderberg Centre Borehole (HBC_BH1) for operational use within the Helderberg Centre. This water will be used to supply the centre's operational needs as well as for irrigation purposes. The proposed abstraction volume exceeds the general authorisation limits for the quaternary catchment. As such a WULA is required. This borehole is located within 100m from the confirmed and delineated Geelsloot stream. A DWS Risk Assessment was conducted and the proposed water use was found to be of a low risk to the nearby Geelsloot stream. Nevertheless, given the fact that the proposed abstraction volume exceeds the GA limits, an integrated WULA is being undertaken.
Pipeline from the Helderberg Centre Borehole to the onsite treatment plant.	(c) & (i)	Water abstracted from the Helderberg Centre borehole will be piped to the onsite water treatment plant where it will be treated to potable standards. This borehole is located within 100m from the confirmed and delineated Geelsloot stream. A portion of this pipeline (±12.5m) will run outside the existing built footprint of the development, within the regulated area of the Geelsloot stream and will therefore be a S21(c) and (i) water use as part of this application.

6. Methods statement (only for 21 (c) and (i) activities)

6.1. Method Statement for S21(c) and (i) activities related to the current application

The proposed water use involves the operation of an existing borehole located in the south-eastern corner of Portion 77 of Farm 794. The borehole (HBC_BH1) is located within the regulated area of the Geelsloot Stream which runs along the south-eastern and southern boundaries of the property.

The following generalised guidelines apply to all works undertaken within the regulated area of a watercourse:

- Repairs and maintenance activities should, where practicable, be undertaken during the dry season, except where emergency maintenance is required.
- Existing access routes should be used wherever possible. Where no existing access is available, access should be established through the most degraded area while avoiding sensitive or indigenous vegetation.
- Pollutants and potentially contaminating materials should be appropriately managed, with their handling and storage undertaken away from the watercourse.
- Where machinery is required, it should be properly maintained and operated without leaking components. Machinery should be kept at a safe distance from the watercourse to minimise the risk of accidental spills and pollution.
- The flow of the watercourse must not be obstructed, and maintenance activities must not prevent the movement of aquatic or riparian biota, taking breeding periods into consideration.
- No new berms may be constructed.

The following method statements have been outlined for specific activities related to the S21 (c) and (i) water uses:

1. Operation of the existing Helderberg Centre borehole for abstraction of groundwater for use at the Helderberg Centre
2. Maintenance of the HBC_BH1, the abstraction pipeline and associated infrastructure

Method Statement 1: Operation of the existing Helderberg Centre borehole for abstraction of groundwater for use at the Helderberg Centre

Description of activity	**Abstraction of a total of ±16 810m^3/ annum from the Helderberg Centre Borehole (HBC_BH1) for operational use within the Helderberg Centre**
Actions	• Operate the existing borehole in accordance with the authorised abstraction volume and recommended pumping regime. • Limit abstraction to the recommended rate of 2.2L/s for a maximum of 12 hours per day, followed by a 12 hour recovery period. • Convey abstracted groundwater to the onsite treatment system for treatment prior to use. • Monitor groundwater levels and abstraction volumes during operation. • Ensure safe brine disposal via the municipal sewer system.
Impacts of actions	• Potential reduction in groundwater-supported baseflow to the Geelsloot Stream, resulting in alteration of the stream's hydrological regime. • Potential indirect effects on aquatic habitat and associated freshwater ecosystems.
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Negligible to None
Measures to mitigate the severity of the impacts	The freshwater impact assessment identified the principal potential impact as a possible reduction in groundwater-supported baseflow to the Geelsloot Stream. However, the borehole abstracts exclusively from the deeper Secondary aquifer, which is separated from the shallow Primary aquifer by a low-permeability clay aquitard. Hydraulic connectivity between the abstraction zone and the shallow groundwater system is therefore expected to be minimal, and the potential impact on stream hydrology and downstream flows is considered negligible to none. Nevertheless, the implementation of the following recommended groundwater monitoring and abstraction controls will further minimise the potential for indirect impacts on the Geelsloot Stream and associated freshwater ecosystems: - Maintain abstraction within the authorised volume and recommended pumping rate of up to 2.2L/s for 12 hours per day. - Implement a groundwater monitoring programme to monitor groundwater levels, groundwater quality, and abstraction volumes. ○ Equip the borehole with a slotted conduit pipe (35mm internal diameter Class 6 HDPE pipe) attached to the pump rising main and installed to approximately 1 m above the pump inlet to facilitate water level monitoring.

	○ Record groundwater levels and abstraction volumes at least monthly. Where feasible, automatic flow meters and water level loggers should be installed to record hourly measurements, thereby providing a more comprehensive monitoring dataset. ○ Appoint a SACNASP-registered hydrogeologist to review the monitoring data annually and compile quarterly groundwater monitoring report. The report should evaluate groundwater trends, assess the sustainability of the abstraction, and recommend corrective actions where necessary.
Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.
Methods of access	Existing access roads should be used as far as possible.
Period of activity	Operational Phase

Method Statement 2: Maintenance of HBC_BH1, the abstraction pipeline and associated infrastructure

Description of activity	**Routine maintenance of the existing HBC_BH1 borehole, the abstraction pipeline and associated infrastructure to ensure continued safe and sustainable operation.**
Actions	• Undertake routine inspection, servicing and maintenance of the borehole, pump, pipework, monitoring equipment and loggers, pipeline and associated infrastructure.
Impacts of actions	• Temporary disturbance around the borehole and pipeline. • Potential for minor spills or contamination if vehicles or machinery are used or maintenance materials are not appropriately managed.
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Negligible to None
Measures to mitigate the severity of the impacts	• Repairs and maintenance activities should, where practicable, be undertaken during the dry season, except where emergency maintenance is required. • Where at all possible, existing access routes should be used. In cases where none exist, a route should be created through the most degraded area avoiding sensitive/indigenous vegetation areas. • Pollutants and potentially contaminating materials should be appropriately managed, with their handling and storage undertaken away from the watercourse. • Where at all possible, maintenance works should be undertaken manually. • When machinery is involved, ensure effective operation with no leaking parts and at a safe distance from the watercourse to manage any accidental spillages and pose no threat of pollution. • In the event of a vehicle breakdown, maintenance of vehicles must take place with care, and the recollection of spillage should be practised near the surface area to prevent ingress of hydrocarbons into topsoil and subsequent environmental pollution. • All spills should they occur, should be immediately cleaned up and treated accordingly. • Vehicle re-fuelling should take place off site. • Remove all waste and surplus materials from the site following completion of maintenance. • Any trenches dug should be backfilled as soon as infrastructure has been maintained in any given section in order to reduce potential erosion of exposed soil. • Once maintenance activities are completed all related infrastructure and materials must be removed from the site. • Any disturbance resulting from maintenance activities must be rehabilitated to pre-disturbance condition (e.g. replating where required).

Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.
Methods of access	Existing access roads should be used as far as possible.
Period of activity	Operational Phase

7. Stormwater Management Plan

The Helderberg Centre is an established commercial development with an existing stormwater management system. The proposed water use is limited to groundwater abstraction from the existing HBC_BH1 borehole and will not require any new development or changes to existing stormwater infrastructure.

Existing stormwater infrastructure will be maintained to prevent blockages, uncontrolled flows, erosion and pollution, with stormwater kept separate from wastewater. The borehole is appropriately covered and secured to prevent the ingress of stormwater, debris and other potential contaminants.

The proposed abstraction will not involve the discharge of groundwater into the stormwater system and is not expected to result in additional stormwater, erosion or pollution impacts.

8. Rehabilitation Plan

The operation and maintenance of the HBC_BH1 borehole and associated infrastructure will not require any in-stream works, river crossings or disturbance of the Geelsloot Stream or other freshwater features. No rehabilitation of a water resource is therefore anticipated.

Any temporary disturbance to the area surrounding the borehole resulting from maintenance activities should be reinstated on completion of the works. All maintenance materials and waste should be removed from the site, and any spills will be cleaned up immediately.

9. Water Uses applied for

The application includes the following water uses as detailed in Table 4.

Table 4: Water Uses Applied for

Water use(s) activities	Purpose	Capacity/ Volume (m^3, tonnes and/or m^3/annum)/ dimension (Area (ha) Length/depth, (m))	Property Description	Co-ordinates
Section 21(a)				
Abstraction of groundwater from the Helderberg Centre Borehole (HBC_BH1)	Water abstraction for operational use within the Helderberg Centre (operational and irrigation water)	±16 810m^3/annum	Portion 77 of Farm 794, Somerset West	34° 5'14.06"S 18°49'52.53"E
Section 21(b)				
N/A				
Section 21 (c & i)				
Operation of the Helderberg Centre Borehole (HBC_BH1) and associated infrastructure within the regulated area of the Geelsloot Stream	Water abstraction for operational use within the Helderberg Centre	±16 810m^3/annum	Portion 77 of Farm 794, Somerset West	34°05'14.06"S 18°49'52.53"E
Operation of water abstraction pipeline within the regulated area of the Geelsloot Stream.	Conveyance of water from the Helderberg Centre Borehole to the onsite water treatment plant.	±12.5m	Portion 77 of Farm 794, Somerset West	Start: 34°05'14.06"S 18°49'52.53"E End: 34°05'14.21"S 34°05'14.21"S
Section 21 (d)				
N/A				
Section 21 (e)				
N/A				
Section 21(f)				
N/A				
Section 21(g)				
N/A				
Section 21(h)				
N/A				
Section 21(j)				
N/A				

10. Description of the Environment

The Helderberg Centre Borehole (HBC_BH1) is located in the south-eastern corner of Portion 77 of Farm 794, Somerset West (refer Figure 2). Portion 77 of Farm 794 is located on the boundary between Somerset West and Strand, within the Breede-Olifants Water Management Area. The property has been developed as a regional shopping centre, comprising a large retail building and an extensive parking area to the south-west of the property. The shopping centre was constructed in 2013, prior to which the site consisted predominantly of agricultural land, presumably used for pastures.

The National Vegetation Map of 2024 identifies the vegetation associated with the property as Lourensford Alluvium Fynbos, which is classified as Critically Endangered. However, the property and surrounding developed areas have been extensively transformed through historical agricultural activities and subsequent urban development. The indigenous vegetation has been completely cleared, resulting in the loss and transformation of the original vegetation matrix. According to the 2023 WCBSP map (Figure 12), no terrestrial or aquatic Critical Biodiversity Areas (CBAs) occur on or in the immediate vicinity of the property.

The property falls within the Lourens River catchment and Quaternary Catchment G22J and is located within a Strategic Water Source Area (SWSA) for surface water. The regional setting is within the Southern Folded Mountains. The site is located within the winter-rainfall region of the Western Cape, which is characterised by a Mediterranean climate with warm, dry summers and mild, wet winters. The region receives a mean annual precipitation of 782mm (World Weather Online, 2026) (everWater, August 2026). Rainfall occurs predominantly between April and September, corresponding with the autumn and winter months. Mean annual evaporation is approximately 1 410mm/a (DWAF GRA-2, 2005) (H2 cOnsulting, August 2026). The mean annual temperature is 16.79°C.

Topographically, the site is located within a lowland setting with the Hottentots Holland Mountain range located to the far east / north-east of the site. The site has a gentle slope of between 0-3% from the north-east to the south-west of the site with the highest elevation occurring in the eastern corner at approximately 18 meters above sea level (H2 cOnsulting, August 2026).

Surface Water (everWater Freshwater Consulting Services, August 2026):

According to the National Freshwater Ecosystem Priority Areas (NFEPA) dataset, the broader catchment within which the project site is situated is not classified as a FEPA area. Furthermore, no FEPA wetlands are mapped on the property or within 500m of the proposed abstraction point (everWater, August 2026).

The National Wetland Map Version 5 (NWM5) identifies two seep wetlands on and within 500m of the property (Figure 3). Both are classified as Southwest Fynbos Wetland Seeps, with a conservation

status of Vulnerable and a protection level of Well Protected. One of these features is mapped immediately North of the proposed abstraction point, while the second is a larger seep mapped to the north-east of the property (everWater, August 2026) (Figure 3).

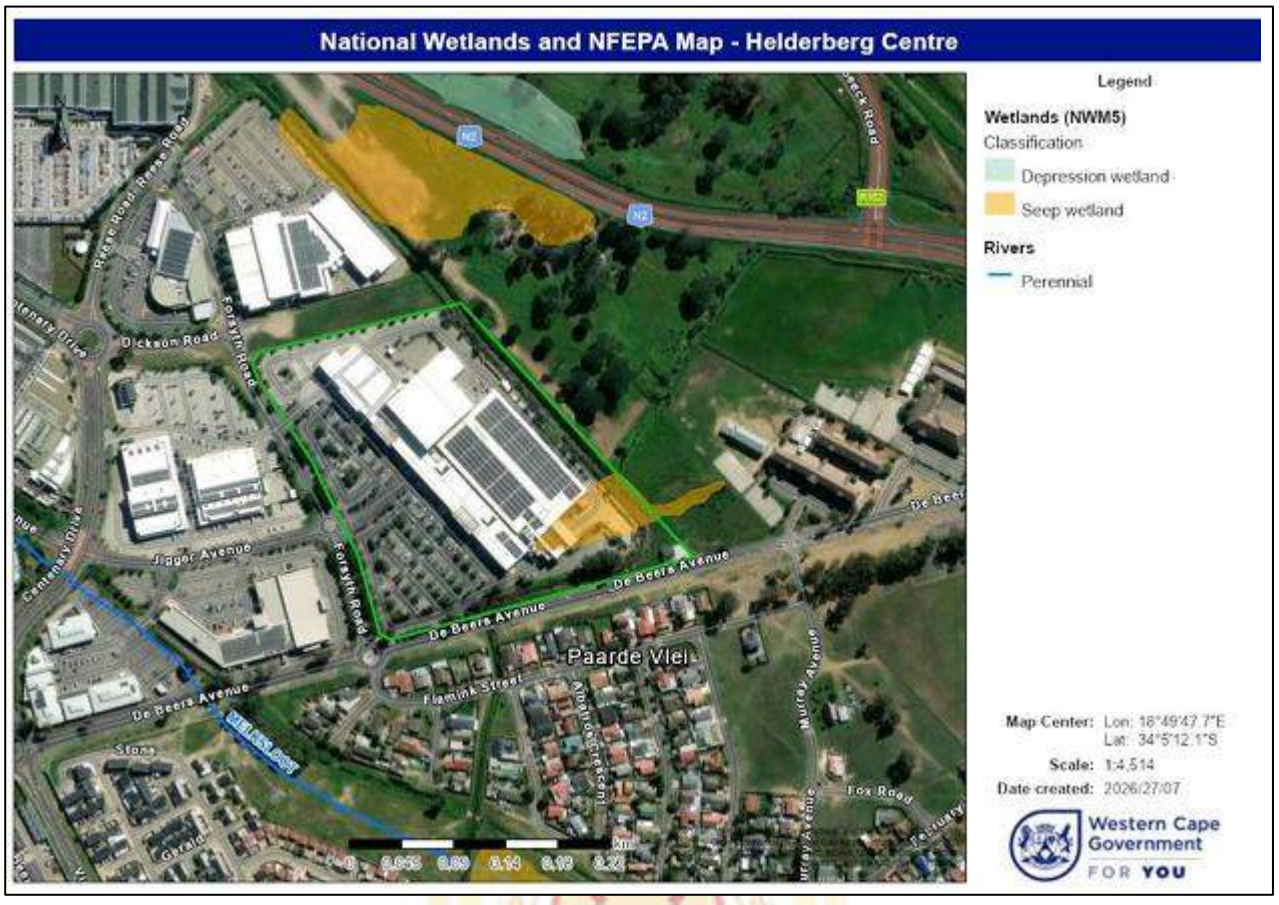


Figure 3: NFEPA and NWM5 map for the larger area surrounding the project site (green polygon) (SANBI GIS, 2026) (everWater, August 2026).

During the field assessment, no wetland characteristics were identified at the location of the larger seep mapped to the north-east of the site. The area showed no indicators of wetland hydrology or hydrophytic vegetation to support its classification as a natural wetland and is considered to be an erroneous desktop mapping artefact (everWater, August 2026) (Figure 4).



Figure 4: View over the area mapped as a seep to the northeast of the site, looking in a south-western direction from the N2 freeway. No wetland characteristics were found at this area and it is considered to be an erroneous desktop mapping artefact (everWater August 2026).

The seep mapped immediately North of the proposed abstraction point was found to be associated with a poorly maintained stormwater channel that periodically overtops towards De Beers Avenue, creating a localised area of artificial inundation to the East of the proposed abstraction point (refer Figure 7). The feature was confirmed to be artificial in origin, resulting from modified stormwater drainage patterns rather than natural freshwater processes (everWater, August 2026). Vegetation within the channel is dominated by *Typha capensis* (bulrush), while *Cenchrus macrourus* (African feather grass) and *Zantedeschia aethiopica* (arum lily) occur along the seasonally wet margins. The surrounding area is predominantly covered by the alien invasive *Cenchrus clandestinus* (kikuyu grass), with scattered *Acacia saligna* (Port Jackson) trees (everWater, August 2026) (Figure 5).



Figure 5: View over the smaller mapped Wetland seep to the east of the centre, looking in a north-eastern direction from the corner of the property. This feature was confirmed to be artificial (everWater, August 2026).

According to the Freshwater Impact Assessment, neither of the mapped seep features represents a natural freshwater ecosystem requiring assessment in terms of Sections 21(c) and (i) of the National Water Act (everWater, August 2026). Both features were therefore excluded from the freshwater impact assessment (everWater, August 2026).

According to the Freshwater Impact Assessment, the only natural freshwater feature that could potentially be affected by the proposed abstraction from the existing borehole is the Geelsloot Stream, which runs along the south-eastern and southern boundaries of the property (Figure 6 & Figure 7).



Figure 6: Satellite imagery indicating the project site and abstraction point (yellow pin) in relation to the surrounding features (everWater, August 2026)



Figure 7: Satellite imagery indicating the project site and abstraction point (yellow pin) in relation to the two mapped wetland areas (orange polygons) and the actual extent of the current artificially wet area (green polygon) (everWater, August 2026).

The Geelsloot Stream is a seasonal stream that drains the south-western slopes of the Helderberg Mountain and has become extensively modified and canalised through the upstream urban environment. The stream has been progressively incorporated into the City of Cape Town's broader stormwater management system, with sections diverted through a network of highly modified stormwater canals and channels associated with the existing and former sections of the Somerset West Golf Course. From there, the primary stream channel flows westwards towards the Helderberg Centre, where it is diverted around the property boundary. Downstream of the site, the stream converges with several stormwater channels which have been formalised to discharge into the Geelsloot Stream. Further downstream from the Helderberg Centre, the canalised stream passes through an urban area and the Strand Golf Club before discharging into the Lourens River which is located approximately 850m South of the property. The Lourens River subsequently discharges into False Bay just North of Melkbaai.

The section of the Geelsloot Stream flowing around the property is classified as being in a seriously to critically modified condition with a Present Ecological Status within category E/F. It consists of an earthen canal with no remaining natural features. The banks are lined with gabions and limited pioneer vegetation occurs along the channel margins (Figure 8). Field observations indicated that the vegetation associated with the artificial channel linked to the Geelsloot Stream along the south-eastern boundary of the property is dominated by the pioneer species *Typha capensis* (bulrush), together with the introduced garden escapee *Tropaeolum majus* (nasturtium). The channel is periodically cleared as part of the City of Cape Town's maintenance activities. Flow was very low at the time of the field assessment, and the channel contained accumulated rubbish washed down from

upstream areas (Figure 8). No significant fauna dependent on this section of the stream was observed.



Figure 8: The portion of the Geelsloot Stream to the South of the proposed abstraction point (everWater, August 2026).

Ground Water (H2 cOnsulting, August 2026):

According to the Geohydrological Report prepared by H2 cOnsulting in August 2026, the wider study area is underlain by Quaternary-age sediments overlying basement rocks of the Malmesbury Group (Figure 9). The Quaternary sediments comprise sandy loam soil. The underlying geology includes a quartz porphyry intrusion and the Tygerberg Formation of the Malmesbury Group, which comprises greywacke, phyllite and quartzitic sandstone with volcanic intercalations (H2 cOnsulting, August 2026).

Tertiary to Recent deposits surrounding the property consist mainly of sandy loam soil, underlain by rocks of the Malmesbury Group (H2 cOnsulting, August 2026). The sand thickness at the site is expected to be less than 5m. The basement rocks comprise the Tygerberg Formation of the Malmesbury Group, consisting mainly of alternating layers of grey to green phyllitic shale, siltstone and medium- to fine-grained impure sandstone (greywacke). The transition between the sands and the Malmesbury Group rocks is characterised by a clay layer formed through shale weathering, with the degree and depth of weathering varying over relatively short distances (H2 cOnsulting, August 2026).



Figure 9: Map of the regional geology surrounding the proposed abstraction site (H2 cOnsulting, August 2026).

The area surrounding the Centre is underlain by two aquifer systems: a primary sand aquifer and a secondary bedrock aquifer. These aquifers are separated by a clay layer of variable thickness (H2 cOnsulting, August 2026). According to the DWAF 1:500 000 hydrogeological map, expected borehole yields for both the primary sand aquifer, and the secondary Tygerberg Formation aquifer range from 0.5 to 2L/s (Figure 10). This range is generally consistent with the yield recorded for HBC_BH1 (H2 cOnsulting, August 2026).



Figure 10: Expected borehole yields in the area surrounding the proposed abstraction site (H2 cOnsulting, August 2026). Helderberg Centre indicated in green outline.

The hydrogeological map indicates that groundwater salinity in the area ranges from 70 to 150mS/m. This Electrical Conductivity is lower than the values measured in the existing hydrocensus boreholes. Surrounding groundwater data also indicate elevated salinity values. Newly drilled boreholes in the area are therefore expected to have similarly elevated EC values (H2 cOnsulting, August 2026).

According to the DWAF 1:500 000 hydrogeological map, the aquifer is classified as a major aquifer. According to the DWAF Aquifer Vulnerability Map (DWAF, 2013), the site has a vulnerability rating of 'Most' while the secondary aquifer, into which HBC_BH1 was drilled, has a vulnerability rating of 'Moderate' (H2 cOnsulting, August 2026). Aquifer vulnerability refers to the likelihood of contamination reaching a specified position within the groundwater system following its introduction at a point above the uppermost aquifer.

Groundwater levels in the area surrounding the Helderberg Centre range from 1.56 to 25.9mbgl. The groundwater level measured at HBC_BH1 was 3.56mbgl. Groundwater flow is expected to broadly follow the local topography, with flow directed towards the south-west (H2 cOnsulting, August 2026).

A desktop assessment of boreholes recorded in the DWS National Groundwater Archive identified borehole yields ranging from 0.05 to 2.2L/s within the surrounding area (Table 5). Salinity values range from 14 to 69mS/m for boreholes located closer to the recharge zone, while higher salinity values, typically ranging from 300 to 400mS/m, are recorded in the vicinity of the Centre. Borehole depths range from 13.34 to 90m, with an average depth of 41m (Table 5). Boreholes are predominantly drilled into the semi-weathered shales and are generally less than 60m deep (H2 cOnsulting, August 2026).

Table 5: Summary of Borehole Details Recorded in the DWS National Groundwater Archive (H2 cOnsulting, August 2026).

	Water Level (mbgl)	Abstraction Rate (L/s)	EC (mS/m)	Borehole Depth (m)
AVG	10.34	0.91	41.00	41.38
MAX	25.91	2.27	69.00	90.00
MIN	1.52	0.05	14.00	13.34

Table 6 presents details of boreholes located within a 2km radius of the Helderberg Centre. These boreholes are generally slightly deeper than those recorded in the DWS National Groundwater Archive but have yields comparable to that recorded for HBC_BH1.

Table 6: Details of boreholes located within a 2km radius from the Helderberg Centre (H2 cOnsulting, August 2026).

BH ID	Latitude	Longitude	Water Level (mbgl)	EC (mS/m)	Blow Yield (L/s)
SB BH1	-34.07062	18.81667	0.99	106	1.7
SB BH2	-34.07085	18.81703	0.94	91.7	7.2
SB BH3	-34.07203	18.81898	1.47	101	6.1
SB BH4	-34.07234	18.82079	4.09	97.8	5.56
22128635	-34.08490	18.82590	-	-	-



Figure 11: Map of the boreholes within the vicinity of the Helderberg Centre (H2 cOnsulting, August 2026).

Helderberg Centre Borehole Yield Testing (GEOSS, June 2026)

The Helderberg Centre Borehole (HBC_BH1) is located in the south-eastern corner of Portion 77 of Farm 794, Somerset West. The borehole was measured to a depth of 40.20m below ground level (mbgl).

The HBC_BH1 was yield tested in accordance with the South African National Standard SANS 10299-4:2003 (Part 4 – Test pumping of water boreholes). The yield test comprised a Step Test, Constant Discharge Test (CDT) and recovery monitoring. The test data were analysed by a SACNASP-accredited professional hydrogeologist. Details of the Helderberg Centre Borehole (HBC_BH1) are presented in Table 7 below. Abstraction from the HBC_BH1 is recommended at a rate of up to 2.20L/s for 12 hours per day, with a suitable pump installed at a depth of 35.00mbgl. At

the recommended pumping rate HBC_BH1 is expected to yield approximately ±95m^3/day, equivalent to ±34 689.6m^3/annum.

Table 7: Helderberg Centre Borehole (HBC_BH1) details (GEOSS, June 2026)

HBC_BH1 Borehole Details				
Borehole Name	Latitude (DD, WGS84)	Longitude (DD, WGS84)	Borehole Depth (m)	Inner Diameter (mm)
HBC_BH1	-34.08724	18.83125	40.20	110
Abstraction Recommendations				
Borehole Name	Abstraction rate (L/s)	Abstraction Duration (hrs)	Recovery Duration (hrs)	Possible Volume Abstracted (L/d)
HBC_BH1	2.70	8	16	77 760
	2.20	12	12	95 040
	1.56	24	0	134 784
Pump Installation Details				
Borehole Name	Recommended Pump Installation Depth (mbgl)	Critical Water Level (mbgl)	Dynamic Water Level (mbgl)*	Rest Water Level (mbgl)
HBC_BH1	35.00	25.34	19.59	3.56

**Typical water level expected during long-term production (pump duty point)*

11. Impacts and mitigation measures

11.1 Potential Freshwater Impacts

everWater Freshwater Consulting Services was appointed to undertake a Freshwater Impact Assessment as part of the WULA for the proposed abstraction of groundwater from the Helderberg Centre Borehole (HBC_BH1). The significance of potential impacts on the receiving freshwater environment was assessed using both the Impact Assessment Method and the DWS Risk Assessment Matrix (RAM).

The Freshwater Impact Assessment found only one natural watercourse, the Geelsloot Stream located within the regulated are of the proposed abstraction point. As such the impact assessment outlined that the only potential impact on freshwater systems that could result from the proposed water use is an indirect alteration of the hydrological regime of the Geelsloot Stream, which could subsequently affect aquatic biodiversity, habitat and ecological structure (everWater, August 2026) (Table 8).

The freshwater impact assessment outlined that a geohydrological assessment had been undertaken by H2 cOnsulting (Pty) Ltd in August 2026. The geohydrological assessment identified two distinct aquifer systems underlying the site namely a shallow primary aquifer and a deeper secondary aquifer (everWater, August 2026). These systems are separated by a clay layer that acts as an aquitard and significantly limits hydraulic connectivity between them (H2 cOnsulting, August 2026). The geohydrological assessment noted that HBC_BH1 was constructed to target the secondary aquifer and the geohydrological assessment found that abstraction from HBC_BH1 is not expected to induce drawdown within the shallow primary aquifer that supports near-surface hydrological processes (H2 cOnsulting, August 2026).

Based on these findings, the geohydrological assessment concluded that groundwater abstraction from HBC_BH1 is unlikely to adversely affect the Geelsloot Stream, as abstraction will occur from the hydraulically isolated secondary aquifer. As such, given the limited hydraulic connectivity between the secondary aquifer and the surface water system, as well as the contributions from several stormwater channels to the downstream reaches of the Geelsloot Stream, the freshwater impact assessment concluded that any potential reduction in downstream flows resulting from the proposed abstraction is expected to be negligible (everWater, August 2026).

A summary of the expected freshwater impacts relating to the operation phase of the Helderberg Centre Borehole is presented in Table 8 below.

Table 8: Summary of the expected freshwater impacts relating to the operation phase of the Helderberg Centre Borehole (everWater, August 2026).

OPERATIONAL PHASE		
	Preferred Alternative	
Nature of impact:	Operation of the borehole on site.	
Description and consequence of impact or risk:	The most significant impact during the operational phase is expected to be the possibility of a change in groundwater contribution to the Geelsloot stream's baseflow.	
Indirect impacts:	Resulting of indirect loss of biodiversity, aquatic habitat and ecological structure.	
	Without mitigation	**With mitigation**
MAGNITUDE of impact:	**Low to negligible (-)** This impact could result in minimal alteration of the aquatic function and processes within the Geelsloot stream.	**Negligible to none (-)** Natural functioning of the current environment is left undisturbed.
DURATION:	**Long term**	
OPERATIONAL PHASE		
	Preferred Alternative	
	This impact would persist for the duration of the operational life of the borehole.	
EXTENT (special scale/ influence of impact):	**Local** Impacted area extends to the site and its immediate surrounding area.	
IRREPLACEABLE loss of resources:	**Low potential** No irreplaceable resources will be impacted.	
INTENSITY and degree to which the impact can be REVERSED:	**Low to Negligible** Natural functioning of the environment is minimally affected. Natural processes can be reversed to their pre-operation state.	
PROBABILITY of occurrence:	**Low probability** There is a low probability that the impact will occur	**Low to very low probability** There is a low to very low probability that the impact will occur
Significance rating of impact without and with mitigation:	**Low to negligible(-)** The overall significance of the above potential impact is predicted to be Low to negligible, without mitigation. Impacts fall within an acceptable range and no further mitigation measures are required to reduce the negative impacts.	**Negligible to None (-)** This impact would result in a very limited change in the aquatic function within affected freshwater features.
Cumulative impact:	**Negligible negative impact on the downstream freshwater system**	

Although the potential impact on the hydrological regime of the Geelsloot Stream is considered low to negligible prior to mitigation, the freshwater impact assessment outlined the following measures to minimise drawdown within the secondary aquifer and support sustainable management of the groundwater resource (everWater, August 2026):

- Restrict groundwater abstraction to the recommended pumping rate of 2.2L/s for 12 hours per day (approximately 95m³/day) from the recommended pump intake depth of 35m below ground level (mbgl).
- Implement a groundwater monitoring programme to monitor groundwater levels, groundwater quality, and abstraction volumes.

- Equip the borehole with a slotted conduit pipe (35mm internal diameter Class 6 HDPE pipe) attached to the pump rising main and installed to approximately 1m above the pump inlet to facilitate water level monitoring.
- Record groundwater levels and abstraction volumes at least monthly. Where feasible, automatic flow meters and water level loggers should be installed to record hourly measurements, thereby providing a more comprehensive monitoring dataset.
- Appoint a SACNASP-registered hydrogeologist to review the monitoring data annually and compile a quarterly groundwater monitoring report. The report should evaluate groundwater trends, assess the sustainability of the abstraction, and recommend corrective actions where necessary.

The implementation of these measures will reduce the likelihood of any indirect impacts on the Geelsloot Stream and associated freshwater ecosystems (everWater, August 2026).

11.2. Potential Groundwater Impacts (H2 cOnsutling, August 2026)

H2 cOnsulting was appointed to undertake a Geohydrological Report as part of the WULA for the proposed abstraction of groundwater from the Helderberg Centre Borehole (HBC_BH1). The Geohydrological Report identified the following potential impacts on groundwater quantity:

- Abstraction from the borehole may result in drawdown within the local fractured-rock aquifer and may potentially influence other groundwater users; and
- Abstraction from the borehole will result in a decline in the water level within the abstraction borehole.

Modelling indicates that pumping at the maximum recommended abstraction rate of 95m^3/day could cause approximately 1.1 m additional drawdown over two years in a 1 km radius. However pumping at the required 73m^3/day rate would result in a 0.87 m drawdown over two years within a 1 km radius from the borehole. The closest known borehole to the HBC Borehole is BH 22128635 which is located approximately 560 m west of the Centre within the Somerset West Mall property (Figure 11). Based on the above equation the water level in BH 22128635 will drop by an additional 1.4 m if the HBC Borehole is pumped at the maximum rate of 73 m^3/day (H2 cOnsulting, August 2026). This impact is seen as minimal due to the fact that the aquifer is not homogenous, and the borehole will not be pumped for 24h per day over the two years (H2 cOnsulting, August 2026). It is nevertheless recommended that BH 22128635 be included in the monitoring network.

To minimise the identified impacts, the Geohydrological Report recommends that the pumping rate and duration should be kept to the minimum required. Recommended abstraction is up to 2.2L/s for 12 hours per day, equivalent to approximately 95m³/day which exceeds the current maximum demand of 73m³/day for the centre's operational use (H2 cOnsulting, August 2026). Reduced pumping hours will allow the groundwater level to recover and are likely to reduce the significance

of the impact from Low to Very Low (H2 cOnsulting, August 2026). The impact rating is provided in Table 9.

Table 9: Impact rating assessment Groundwater Quantity – Operational Phase (H2 cOnsulting, August 2026).

Mitigation	Impact no	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without	1	Local 1	Medium 2	Long-term 3	**Medium** 6	Possible	**Low**	–	Low
Essential mitigation measures: • Implement proposed pumping rates and regimes. • Pumping rates are below the sustainable pumping rates. **Best practise measures:** • Implement a groundwater monitoring system to monitor groundwater quality, volumes abstracted and water levels. **Natural mitigation:** • High annual recharge and high storage potential of the aquifers naturally mitigate the negative effects of abstraction on the aquifers of this area.									
With	1	Local 1	Low 1	Long-term 3	**Low** 5	Improbabl e	**Very Low**	–	Low

The Geohydrological Report did not identify any potential impacts on groundwater quality applicable to the proposed water use.

In addition to the essential mitigation measures outlined in Table 9, the following groundwater management measures are recommended:

- For borehole HBC_BH1 it is recommended that abstraction can occur at a rate of up to 2.20L/s for 12 hours per day.
- A pump suitable to deliver the recommended rate should be installed at a depth of 35.00mbgl.
- It is anticipated that abstraction at the recommended rate will cause the water level to drop to a depth of approximately 19.59mbgl – this is referred to as the dynamic water level. During abstraction, a maximum level cut-off switch should be installed at 25.34mbgl to ensure the groundwater level does not drop to below the critical water level.
- Include the borehole in a groundwater monitoring programme which should include:
    - The borehole must be equipped with a slotted conduit pipe (35mm ID class 6 HDPE pipe) attached to the pump's rising pipes and installed to c.1m above the pump inlet.
    - The water level and volumes abstracted must be recorded on at least a monthly basis. Best results are obtained if automatic flow meters and water level recorders set to take hourly readings are installed; and
    - A SACNASP registered hydrogeologist should evaluate the monitoring data on a quarterly basis and compile a monitoring report.

<u>Groundwater Monitoring System (H2 cOnsulting, August 2026):</u>

A groundwater monitoring programme is recommended as part of the management measures for the onsite borehole. Monitoring should include groundwater levels, abstraction volumes, water quality, temperature, and electrical conductivity. Monitoring should begin as soon as possible, ideally with automatic flow meters and water level loggers with the results used to inform the ongoing implementation and development of the water management strategy and the management of potential impacts within the site area and on downstream or down-gradient water users (H2 cOnsulting, August 2026).

A SACNASP-registered hydrogeologist should review monitoring data quarterly and compile monitoring reports. Monitoring frequency should be weekly and reviewed every three months. Water levels in the borehole should be measured preferably daily, but at a minimum weekly. Best practise would be to install an automatic recorder (logger) in the borehole to measure the water level, temperature and electrical conductivity (salinity) hourly. Monitoring results should be stored electronically in a format that facilitates review and identification of anomalies.

The monitoring results, together with any changes to the water management strategy, should be reported to centre management and DWS in accordance with the requirements of the WULA. A quarterly monitoring report should be submitted to the DWS. The report should serve to notify DWS of areas of reduction in water supply and the actions implemented, in progress or planned to address the identified impacts including source identification and control.

It is recommended that BH 22128635 be included in the monitoring network.

Monitoring Equipment (GEOS, June 2026):

To facilitate monitoring and informed management of the borehole, it is recommended to equip the borehole with the following monitoring infrastructure and equipment:

- Install a 32mm (inner diameter, class 10) observation pipe from the pump depth to the surface, closed at the bottom and slotted for the bottom 5 – 10m.
- Install an electronic water level logger (for automated water level monitoring).
- Install a sampling tap (to monitor water quality).
- Install a flow volume meter (to monitor abstraction rates and volumes)

12. Water demand and water supply Analysis

12.1. Water Demand

The proposed water use comprises the abstraction of groundwater from an existing borehole on Portion 77 of Farm 794, Somerset West, to supply the Helderberg Centre's operational and irrigation water requirements. The Centre's water demand has been determined based on water-use data recorded over a previous 12-month period. The abstracted groundwater will be used within the Helderberg Centre for various purposes associated with its tenants, including retail stores, cafés and ablution facilities.

The Helderberg Centre's water use over a 12-month period is presented in Table 10, while the overall water demand, including the anticipated treatment losses, is presented in Table 11.

Table 10: Helderberg Centre Water Usage over a 12 month period

Month	Centre Water Demand (m^3)	Irrigation Water Demand (m^3)	Total (m^3)
January	1 304	139	1 443
February	1 085	100	1 185
March	967	80	1 047
April	905	55	960
May	990	0	990
June	1 274	29	1 303
July	917	1	918
August	1191	0	1 191
September	1 069	0	1 069
October	1 151	0	1 151
November	955	84	1 039
December	1 047	98	1 145
Total (m^3 / annum)	**12 855**	**586**	**13 441**

Table 11: Overall annual water demand for the Helderberg Centre

Water Use	m^3 / annum
Centre Water Demand	12 855.00
Irrigation Water Demand	586.00
Estimated treatment losses (25%)	3 360.25

Total Annual Demand	**16 801.25**

The values in Table 11 indicate the post treatment water demand volumes. The Centre stores approximately 750 000 litres of water in its onsite fire tanks. This water is periodically emptied and replenished. The associated demand has not been included in the above calculations, as the fire tanks will continue to be supplied from the municipal water supply.

12.2. Water supply analysis

A borehole is located in the southeastern corner of Portion 77 of Farm 794, Somerset West. This borehole was yield tested in June 2026 according to the South African National Standards (SANS 10299-4:2003, Part 4 - Test pumping of water boreholes) (GEOSS, June 2026). The yield test consisted of a Step Test, Constant Discharge Test (CDT) and recovery monitoring. A SACNASP-accredited professional hydrogeologist analysed the data.

Several methods were used to assess the yield test data as presented in Table 12 below. It is recommended that groundwater be abstracted at a rate of up to 2.20L/s (7 920L/h) for up to 12 hours per day. The assessments were based on an available drawdown (AD) of 21.75 meters below the RWL, which equates to 11.84mbgl. Based on this result the onsite borehole has the potential to sustainably yield approximately 34 689.6m^3 per annum (GEOSS, June 2026) (refer Table 7).

Table 12: Yield determination - Helderberg Centre Borehole (HBC_BH1) (GEOSS, June 2026)

HBC_BH1			
Method	**Sustainable Yield (L/s)**	**Late *T (m^2/d)**	****AD used (m)**
Basic FC	1.65	11.8	21.75
Cooper-Jacob	1.56	11.3	21.75
Barker	1.46		21.75
Average Q_sust (L/s)	**1.56**		
Recommended Abstraction			
Abstraction Rate (L/s)	**Abstraction Duration (hours)**		**Recovery Duration (hours)**
2.70	**8**		**16**
2.20	**12**		**12**
1.56	**24**		**0**

***AD- Available Drawdown*

** T – Transmissivity*

A pump suitable to deliver the recommended rate should be installed at a depth of 35.00mbgl (GEOSS, June 2026). It is anticipated that abstraction at the recommended rate will cause the water level to drop to a depth of approximately 19.59mbgl – this is referred to as the dynamic

water level. During abstraction, a maximum level cut-off switch should be installed at 25.34mbgl to ensure the groundwater level does not drop to below the critical water level (GEOSS, June 2026).

13. Water Balance

Table 13: Overall Water Balance

Water In		**Water Out**		**Balance**	**Comment**
Water Stream	**Quantity (m^3)**	**Water Stream**	**Quantity**		
Helderberg Centre Borehole (HBC_BH1)	34689,6	**Water In**		**34 689,6m^3**	
		Centre Use	12855,00m^3	21 834,6 m^3	
		Irrigation	586,00 m^3	21 248,6 m^3	
		Treatment Loss	3369,00 m^3	17 879,6 m^3	
Total	**34689,6**	**Total**	**16810 m^3**	**17879,6 m^3**	**Adequate**

14. Water quality

A groundwater sample was collected from the Helderberg Centre borehole (HBC_BH1) at the completion of the yield test and submitted to Vinlab H20, a SANAS-accredited laboratory in Stellenbosch, for inorganic and microbial chemical analyses. The analytical results were assessed against the SANS 241-1:2015 standards for drinking water. The water chemistry results are presented in Table 15 and are colour coded according to the applicable SANS 241-1:2015 drinking water assessment standards. Table 14 provides the classification of the applicable limits.

The SANS 241:2015 limits and associated risks for drinking water are classified as follows:

- **Health risks:** Parameters falling outside the specified limits may result in acute or chronic health effects.
- **Aesthetic risks:** Parameters falling outside the specified limits may result in water that is visually, aromatically or palatably unacceptable.
- **Operational risks:** Parameters falling outside the specified limits may indicate that operational procedures required to maintain the applicable water quality standards have not been adequately implemented.

Table 14: Classification of water quality limits (GEOSS, June 2026)

Acute Health	Aesthetic	Chronic Health	Operational	Acceptable

Table 15: Production borehole results classified according to SANS241-1:2015 (GEOSS, June 2026)

Analyses	HBC_BH1	SANS 241-1:2015
Date and Time Sampled	6-June-2026 08:00	
pH (at 25 °C)	6.60	5.0 ≤ Operational ≤ 9.7
Conductivity (mS/m) (at 25 °C)	358.00	Aesthetic ≤170
Total Dissolved Solids (mg/L)	2427.24	Aesthetic ≤1200
Turbidity (NTU)	8.06	Operational ≤1 Aesthetic ≤5
Colour (mg/L as Pt)	<15	Aesthetic ≤15
Sodium (mg/L as Na)	519.00	Aesthetic ≤200
Potassium (mg/L as K)	11.00	N/A
Magnesium (mg/L as Mg)	68.00	N/A
Calcium (mg/L as Ca)	105.00	N/A
Chloride (mg/L as Cl)	1049.81	Aesthetic ≤300
Sulphate (mg/L as SO_4)	69.92	Aesthetic ≤250 Acute ≤500
Combined Nitrate & Nitrite Nitrogen (as a ratio)	0.08	≤1 Acute Health
Nitrate Nitrogen (mg/L as N)	<0.70	Acute Health ≤11
Nitrite Nitrogen (mg/L as N)	<0.05	Acute Health ≤0.9
Ammonia Nitrogen (mg/L as N)	<0.15	Aesthetic ≤1.5
Total Hardness (mg/L as $CaCO_3$)	541.30	N/A
Fluoride (mg/L as F)	1.06	Chronic Health ≤1.5
Aluminium (mg/L as Al)	<0.05	Operational ≤0.3
Total Chromium (mg/L as Cr)	<0.01	Chronic Health ≤0.05
Manganese (mg/L as Mn)	0.294	Aesthetic ≤0.1 Chronic ≤0.4
Iron (mg/L as Fe)	0.273	Aesthetic ≤0.3 Chronic ≤2
Nickel (mg/L as Ni)	<0.05	Chronic Health ≤0.07
Copper (mg/L as Cu)	<0.05	Chronic Health ≤2
Zinc (mg/L as Zn)	<0.05	Aesthetic ≤5
Arsenic (mg/L as As)	<0.01	Chronic Health ≤0.01
Selenium (mg/L as Se)	<0.01	Chronic Health ≤0.04
Cadmium (mg/L as Cd)	<0.003	Chronic Health ≤0.003
Antimony (mg/L as Sb)	<0.013	Chronic Health ≤0.02
Mercury (mg/L as Hg)	<0.001	Chronic Health ≤0.006
Lead (mg/L as Pb)	<0.01	Chronic Health ≤0.01
Uranium (mg/L as U)	<0.028	Chronic Health ≤0.03
Cyanide (mg/L as CN-)	<0.01	Acute Health ≤0.2
Total Organic Carbon (mg/L as C)	1.10	N/A
E.coli (count per 100 ml)	0	Not Det. Acute Health-1
Total Coliform Bacteria (count per 100 ml)	1	Not Det.≤10 Operational
Heterotrophic Plate Count (count per ml)	4600	≤1000 Operational
Charge Balance Error %	0.50	≥-5 - ≤5 Acceptable

The analysis indicates that the raw groundwater from HBC_BH1 requires treatment before it can be used for potable purposes, as several parameters do not meet the SANS 241-1:2015 drinking water requirements. Electrical conductivity was measured at 358.00mS/m and total

dissolved solids at 2 427.24mg/L, both above the applicable aesthetic limits of 170mS/m and 1 200mg/L, respectively. The elevated salinity is associated with sodium and chloride concentrations of 519.00mg/L and 1 049.81mg/L, respectively, which exceed the corresponding aesthetic limits of 200mg/L and 300mg/L. These parameters do not present a direct health risk but may affect the taste of the water, resulting in a salty taste.

Turbidity was recorded at 8.06 NTU and manganese at 0.294mg/L, exceeding their applicable operational and aesthetic limits, respectively, and may result in a cloudy appearance of the water. The microbiological analysis recorded a heterotrophic plate count of 4 600cfu/mL, which exceeds the operational limit specified by SANS 241. Although *E. coli* was not detected, the elevated heterotrophic plate count indicates possible ingress of contaminated water and supports the need for disinfection prior to use. The groundwater is therefore not suitable for human consumption in its untreated state.

The groundwater also has limited suitability for irrigation due to its elevated salinity. The measured electrical conductivity of 358.00mS/m and TDS concentration of 2 427.24mg/L indicate that the water is brackish and generally unsuitable for irrigation under normal conditions. Use for irrigation would present a high risk of soil salinisation and crop toxicity and would be limited to highly salt-tolerant crops on well-drained soils. Such use would require intensive leaching, specialised management and continuous monitoring of soil conditions.

15. Public participation

As per Regulation 267 published on 24 March 2017 (Government Gazette 40713) public participation must be conducted as part of the water use licence application process. The technical documentation and specialist reports will be placed out for comment for a period of 60 days, from 7 October 2026 up to an including 7 December 2026. PPP process will include the following:

- Interested and Affected Parties (I&APs) were identified throughout the process
- Notification letters will be emailed to identified I&APs on 7 October 2026 informing them of the activity and the opportunity to comment. Landowners and managing bodies were requested to inform all those residing on or operating from their properties of the application and the opportunity to comment.
- An English advertisement will be placed in a Local Newspaper – the DistrictMail & Helderberg Gazette on 7 October 2026.
- Site notices in English will be placed at each of the two entrances to the Helderberg Centre as well as on centre notice boards on 7 October 2026
- Site notices in English will also be placed across the road to the south of the Centre, where they will be visible to nearby private residential property owners.
- The WULA Summary Report and associated technical documentation will be made available on the PHS website for the full duration of the commenting period (7 October 2026 – 7 December 2026).
- A comments and response report will be compiled. This report will include copies of the comments submitted on the application as well as detailed responses.

Table 16: Outcome of the public participation

Person who commented	Comments (support/ object/ concerns)	Reasons for objections / concerns	Applicant's response to the objection/concerns
To be compiled upon completion of PPP			

16. Inputs/Authorisations from other Departments /Stakeholders

- A Water Services Intermediary Application will be made to the City of Cape Town Metropolitan Municipality to supply potable water to the property.
- A Brine disposal permit application will be submitted to CoCT for authorisation prior to operation of the treatment plant.

17. Section 27 Motivation

The requirements contained in Section 27(1) of the National Water Act, 1998 (Act 36 of 1998) have been considered and are discussed further below.

a) Existing lawful water uses

An existing lawful water use (ELU) is a water use that lawfully took place in the period two years before the commencement of the NWA. This allows any water use that lawfully took place to continue until such time as it can be converted into a Licence.

There is currently no registered ELU water uses or any existing water use authorisations on the property (Portion 77 of Farm 794, Somerset West).

b) Need to redress the results of past racial and gender discrimination

The landowner is Helderberg Property Inv (Pty) Ltd, a South African registered private company with one white male director, Steven Herring. The proposed water use relates to the abstraction and use of groundwater to support the ongoing operation of an established commercial shopping centre.

While the proposed water use does not directly contribute to the redress of historical racial or gender inequities through ownership or profit-sharing, it will facilitate the sustainable and resilient operation of the Helderberg Centre. The Centre is an important retail establishment that supports local economic activity and provides significant employment opportunities, including for Historically Disadvantaged Individuals (HDIs) and women.

The Centre accommodates a range of commercial tenants, including Checkers, Pick n Pay Clothing, Crazy Plastics and other retail and service businesses, and supports direct and indirect employment through centre management, security, cleaning, maintenance and tenant operations.

The use of the existing on-site borehole to meet the Centre's water requirements, including irrigation of landscaped areas, will reduce reliance on municipal water supply and improve the

Centre's resilience to potential future drought and water-supply constraints in the Western Cape. This will assist in safeguarding the continued operation of the Centre and the associated employment and economic activity during periods of water stress.

Although no direct HDI or female profit-sharing mechanism is associated with the proposed water use, the continued operation of the Centre will provide indirect socio-economic benefits through employment, tenant activity, services and expenditure within the local economy. The proposed abstraction is therefore considered to make a positive indirect socio-economic contribution, primarily through supporting employment, local economic activity and the long-term water security and operational resilience of an established commercial centre.

c) Efficient and beneficial use of water in the public interest

The proposed WULA relates to the S21(a) abstraction of water from an onsite borehole. This existing borehole is also within the regulated area of a delineated watercourse, the Geelsloot stream, and therefore the proposed water use will also trigger Section 21(c) and (i) water uses in terms of the NWA. The proposed water use will enable the efficient and beneficial utilisation of an existing on-site groundwater resource to meet the Helderberg Centre's operational and irrigation water requirements. The borehole has sufficient sustainable yield to meet the Centre's current demand, with capacity for future growth. The abstracted groundwater will be treated onsite prior to use, allowing the Centre to reduce its reliance on the municipal water supply.

The Helderberg Centre is an established commercial node serving approximately 300,000 visitors per month and supporting a range of retail and service businesses. Reliable water availability is essential to the continued functioning of the Centre and its tenants. The Centre itself supports over 30 permanent employees onsite daily through management personnel, contracted security, cleaning, gardening and car guard services, in addition to five trainee cleaning staff. This employment footprint is further significantly expanded by the numerous individuals employed directly by the Centre's various tenants.

Helderberg Centre forms part of the broader Heriot property portfolio, and its operations are guided by the Group-wide sustainability strategy of Heriot REIT Limited (JSE-listed), as set out in the 2025 Integrated Annual Report (“IAR”) – Sustainability Review. The Group's sustainability strategy promotes water conservation, responsible resource use and reduced reliance on municipal water supplies, with measures across its retail portfolio including groundwater harvesting, water-wise landscaping, water-efficient fittings and air-conditioning condensate recovery. The proposed use of the existing on-site borehole directly supports these objectives by providing a sustainable alternative water source for the Centre's water and irrigation requirements. Abstracted groundwater will be treated on site prior to use, while irrigation of the landscaped areas will be managed according to the requirements of the

landscaping to avoid unnecessary water consumption. Given that the Centre's water demand is substantially below the sustainable yield of the borehole, the proposed abstraction can be undertaken without placing undue pressure on the groundwater resource.

The use of the borehole will strengthen the Centre's water security and resilience to potential future drought and municipal supply constraints in the Western Cape. The ability to maintain operations during periods of water stress provides a broader public benefit by safeguarding the continued provision of retail services and associated employment and economic activity.

The proposed abstraction is not expected to adversely affect aquatic or associated ecosystems. The borehole abstracts from the secondary aquifer, and the freshwater and geohydrological assessments concluded that the abstraction is not expected to result in significant impacts to the Geelsloot Stream or surrounding freshwater ecosystems. The freshwater assessment assigned a Low-risk rating, subject to implementation of the recommended mitigation and groundwater monitoring measures.

Overall, the proposed water use represents an efficient and beneficial use of water in the public interest. It makes sustainable use of an existing groundwater resource, strengthens the Centre's resilience to drought and municipal water-supply constraints, supports the continued operation of an important local commercial node and its associated employment opportunities and economic activity, and ensures that environmental risks are effectively managed, mitigated and kept to a low level.

d) Socio-economic impact –

i) Of water use or uses if authorised:

The proposed water use will support the continued operation and economic sustainability of the Helderberg Centre by providing a reliable alternative source of water for the Centre's operational and irrigation requirements. The borehole has sufficient sustainable capacity to meet the Centre's demand, thereby improving water security without placing undue pressure on the groundwater resource.

The Centre receives approximately 300 000 visitors per month and accommodates numerous retail and service businesses, including major tenants such as Checkers, Pick n Pay Clothing and Crazy Plastics. The Centre directly employs two permanent staff members, with a further approximately 30 security, cleaning, gardening and car guard personnel present onsite daily through contracted service providers, as well as five trainee cleaning staff. In addition, the various tenants operating from the Centre employ a substantially larger workforce. The continued availability of a reliable water supply is therefore important in maintaining the Centre's operations and the significant employment and economic activity associated with it.

At a regional level, the proposed water use will contribute to the resilience of an established commercial facility within Somerset West and the broader Helderberg area. Reducing reliance on municipal water supply will improve the Centre's ability to maintain operations during periods of drought or municipal water restrictions, thereby safeguarding the economic activity and employment associated with the Centre.

At a national level, the socio-economic benefits are more limited but align with broader planning objectives relating to economic activity, employment and sustainable water-resource management. The proposal supports the beneficial use of an available groundwater resource while reducing demand on municipal water resources and improving the resilience of an established commercial enterprise.

The proposed water use is therefore expected to have a positive socio-economic impact, primarily through safeguarding existing employment and economic activity and strengthening the Centre's long-term water security.

Table 17: Direct and indirect Job opportunities

Job Opportunities	Number of Job Opportunities	Type of employment	Affected sectors of the economy
Direct	±37	*Permanent*	*Operational*
Indirect	*Not estimated at this time*	*Permanent*	
TOTAL	**>40**		

ii) Of the failure to authorise water use or uses:

Should the licence not be granted, the socio-economic benefits associated with the proposed water use would not materialise, particularly the improved water security, reduced reliance on municipal water supply and the economic benefits of using an existing on-site groundwater resource. While refusal of the licence is not expected to result in the immediate loss of existing employment, it would limit the Helderberg Centre's ability to secure a reliable and more economical alternative source of water for its ongoing operations and irrigation requirements.

The Helderberg Centre is an established commercial facility receiving approximately 300 000 visitors per month and accommodating numerous retail and service businesses. The Centre directly employs two permanent staff members and supports approximately 30 additional onsite personnel through contracted service providers, as well as five trainee cleaning staff. A substantially larger workforce is employed directly by the Centre's tenants. The continued operation of these businesses and the associated employment are dependent, in part, on the availability of a reliable water supply.

Should the licence be refused, the Centre would remain reliant on municipal water supply and would therefore be more vulnerable to future drought conditions, water restrictions or

interruptions to municipal supply. Continued reliance on municipal water would also result in higher water costs compared to the proposed use of the existing groundwater resource. Increased water costs and reduced water security could affect the long-term operational resilience of the Centre and its tenants, with potential knock-on effects on employment, local expenditure and economic activity.

The proposed groundwater abstraction provides a sustainable and more economical water source with sufficient capacity to meet the Centre's current and future requirements. Failure to authorise the water use would forgo the opportunity to reduce municipal water dependence, lower operational water costs and improve the Centre's resilience to future water-supply constraints. Authorisation is therefore important for maintaining the Centre's long-term operational sustainability and contribution to the local economy.

e) Any catchment management strategy applicable to the relevant water resource

The Department of Water and Sanitation (DWS) previously divided the country into 19 Water Management Areas (WMAs), each containing a large river system. The proposed development is located in what used to be the Berg and later the Berg-Olifants Water Management Area (WMA) (WRC, 2012). The Berg-Olifants WMA was administered by the Department of Water and Sanitation (DWS). As of 2023 the site is now located within the Breede-Olifants WMA and is administered by proto-CMA officials.

In 2017 the GreenCape Sector Development Agency prepared a report for the Water Research Commission and the Western Cape Government on “Managing Water as a Constraint to Development with Decision-Support Tools That Promote Integrated Planning: The Case of the Berg Water Management Area”. The report emphasises the growing pressures on water resources arising from climate change, population growth, and urbanisation, while recognising that economic growth remains essential for reducing poverty and inequality (WRC, 2017). The report highlights the need to allocate and manage water optimally to meet human needs, sustain ecological systems, and support economic growth. (WRC, 2017). The WRC report highlights the interdependency between economic development and water resources, which must be carefully considered in planning and management decisions.

The proposed water use is aligned with the principles of catchment management as identified in the GreenCape report. The Helderberg Centre forms part of the broader Heriot property portfolio, and its operations are guided by the Group-wide sustainability strategy of Heriot REIT Limited (JSE-listed), as set out in the 2025 Integrated Annual Report (“IAR”) – Sustainability Review. The Group's sustainability strategy promotes clean energy and water conservation, responsible use of energy, water and materials, and sustainable practices focused on reducing, reusing and recycling resources. In line with these objectives, the Group's retail

portfolio implements water stewardship measures including groundwater harvesting to reduce reliance on municipal water supply and the national water grid, water-wise landscaping, advanced aerators and air-conditioning condensate recovery systems to reduce water consumption.

The proposed groundwater abstraction is in line with these sustainability and catchment-management objectives. It makes beneficial use of an existing groundwater resource to meet the Centre's water requirements sustainably, while reducing reliance on municipal supply. The borehole has sustainable capacity relative to the Centre's current demand, allowing the resource to be utilised without placing undue pressure on the aquifer. Groundwater will be treated onsite prior to use, and irrigation will be managed according to landscaping requirements to avoid unnecessary water consumption. Groundwater levels and abstraction volumes will also be monitored to ensure responsible use of the resource.

By providing a reliable alternative water source, the abstraction will improve the Centre's resilience to drought and potential future municipal water-supply constraints. This is consistent with the GreenCape report's recognition of increasing pressure on water resources due to climate change, population growth and urbanisation, and the need to balance water security, environmental sustainability and continued economic activity.

Overall, the proposed development is consistent with the priorities highlighted in the 2017 GreenCape report by promoting water efficiency, resilience to climate-related risks, and sustainable economic activity within the Berg-Olifants catchment.

f) Likely effect of the water use to be authorized on the water resource and on other water users.

The proposed water use comprises groundwater abstraction from the existing onsite borehole, HBC_BH1. The Geohydrological Report prepared by H2 Consulting (Pty) Ltd in August 2026 found that the area comprises a shallow Primary aquifer and a deeper Secondary aquifer, separated by a clay aquitard. HBC_BH1 is approximately 40m deep and targets the Secondary aquifer, with the overlying layers sealed by steel casing. Groundwater will therefore be abstracted from the deeper Secondary aquifer. As such The Geohydrological Report concluded that the abstraction is not expected to adversely affect the surrounding wetlands.

Potential impacts of the abstraction identified within the Geohydrological Report include drawdown of the local aquifer and associated effects on other groundwater users. Modelling predicts approximately 1.1m of additional drawdown over two years. The impact was rated Low without mitigation and Very Low with mitigation. Pumping rates and abstraction periods should be limited to allow groundwater-level recovery and minimise

drawdown. A groundwater monitoring and management programme was proposed to monitor groundwater levels, abstraction volumes, water quality, temperature and electrical conductivity. Monitoring data should be reviewed quarterly by a SACNASP-registered hydrogeologist. Overall, the Geohydrological Report considers the abstraction to be feasible and is not expected to significantly affect the groundwater resource or other water users, provided the recommended pumping limits, mitigation and monitoring measures are implemented.

The Freshwater Assessment undertaken by everWater Freshwater Consulting Services in August 2026 identified the Geelsloot Stream and two seep wetlands as potential freshwater features within the regulated area from the onsite borehole. Field verification confirmed that only the Geelsloot Stream constitutes a natural freshwater feature requiring assessment in terms of Section 21(c) and (i) of the National Water Act. The larger seep wetland mapped to the north-east of the site was confirmed as a desktop mapping error, while the smaller seep East of the borehole is an artificial wet area associated with an overtopping stormwater channel.

The proposed abstraction from the existing borehole could potentially affect the Geelsloot Stream through indirect changes to hydrology. However, the geohydrological assessment confirmed that the borehole abstracts from the deeper Secondary aquifer, which is separated from the shallow Primary aquifer by a clay aquitard. As the shallow aquifer supports near-surface hydrological processes, abstraction from the Secondary aquifer is not expected to affect the Geelsloot Stream. The potential impact on the hydrology of the surrounding section of the stream, and on downstream flows, is therefore considered negligible to none (everWater, August 2026). The recommended mitigation measures, including restricting abstraction to 1.5L/s (approximately 135m³/day) and implementing groundwater level, quality and abstraction-volume monitoring, will further minimise the potential for indirect impacts on the Geelsloot Stream and associated freshwater ecosystems.

g) Class and the resource quality objectives of the water resource

The proposed water use comprises the abstraction of groundwater from the onsite borehole (HBC_BH1) for use within the retail centre and for landscaping irrigation.

The area surrounding the Centre is underlain by two aquifer systems, namely a primary sand aquifer and a secondary bedrock aquifer, separated by a clay layer of variable thickness. Tertiary to Recent deposits surrounding the property consist mainly of sandy loam soils, underlain by rocks of the Malmesbury Group. The sand thickness at the site is expected to be less than 5m. The basement rocks comprise the Tygerberg Formation of the Malmesbury Group, which consists mainly of alternating layers of grey to green phyllitic shale,

siltstone and medium- to fine-grained impure sandstone (greywacke). The transition between the sands and the Malmesbury Group rocks is characterised by a clay layer formed through shale weathering. The degree and depth of weathering may vary over relatively short distances.

Borehole HBC_BH1 is 40m deep and targets the secondary aquifer of the Malmesbury Group. Typical borehole construction seals off the sand and clay with steel casing, and groundwater is therefore abstracted from the deeper secondary aquifer only. According to the DWAF 1:500 000 hydrogeological map, expected borehole yields for both the primary sand aquifer and secondary Tygerberg Formation aquifer range from 0.5 to 2L/s, which is generally consistent with the yield recorded for HBC_BH1. The aquifer is classified as a major aquifer.

According to the DWAF aquifer vulnerability map (DWAF, 2013), the site's vulnerability rating is classified as ‘Most’, while the secondary aquifer into which HBC_BH1 was drilled has a ‘Moderate’ vulnerability rating.

Laboratory analysis of groundwater from HBC_BH1 indicates elevated salinity and chloride concentrations. No *E. coli* was detected; however, the heterotrophic plate count of 4 600cfu/mL exceeds the SANS 241 limits, and the groundwater must therefore be disinfected before use. Several other analysed parameters also exceed the SANS 241 limits. The groundwater will therefore require treatment prior to use, including metal removal, desalination and disinfection.

According to the Freshwater Assessment undertaken by everWater (everWater, August 2026) the proposed water use falls within the G22J Catchment, which falls within the D7 Sir Lowry’s zone, general RQOs as well as RQO’s for RIVERS and ESTAURIES are applicable. RQO’s specifically relating to the project would include those for the Lourens River and Lourens Estuary.

Table 18: Summary of Water Resource Classes per integrated unit of analysis (everWater, August 2026).

Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	% nMAR*
D7 Sir Lowry's	II	G22J	D7-R18	Lourens	Bvii21	D	114
		G22K	D7-R19	Sir Lowry's Pass*	Bviii9	C	84
		G40A	D7-R20	Steenbras	Bvii22	B/C	81
		G22J	**D7-E07**	**Lourens**	**Bxi4**	**D**	**85**

Table 19: Resource quality objectives for rivers in priority resource units in the integrated unit of analysis D7 Sir Lowrys(everWater, August 2026).

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
D7 Sir Lowry's	II	G22J	D7-R18	Lourens River	Bvii21	D	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows sufficient to maintain the river in a D category	Months: Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep Maintenance flows (million cubic metres) Low: 0.523, 0.448, 0.277, 0.151, 0.108, 0.100, 0.141, 0.254, 0.410, 0.520, 0.592, 0.568 Maintenance flows (million cubic metres) High: 0.355, 0.083, 0.000, 0.000, 0.000, 0.000, 0.000, 0.563, 1.007, 1.463, 0.297, 0.593
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 55 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≤ pH ≤ 8.5 (5th and 95th percentiles)
									Water temperature		2°C difference from ambient water temperature
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
								Toxins	Ammonia	Toxicity levels must not pose a	≤ 0.073 milligrams per litre (95th percentile)

Table 20: Resource quality objectives for estuaries in priority resource units in the integrated unit of analysis D7 Sir Lowry's (everWater, August 2026).

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
D7 Sir Lowry's	II	G22J	D7-E07	Lourens Estuary	Bxi4	D	Quantity	Surface flow	Flow	Freshwater inflow adequate to maintain water quality and habitat suitable for flora and fauna	Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	83 %	56 %	27 %	16 %	10 %	18 %	35 %	49 %	78 %	89 %	90 %	88 %	76 %
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow: <350 µg.l^{-1}													
											Lower estuary: <300 µg.l^{-1}													
									DIP		River inflow: <80 µg.l^{-1}													
											Lower estuary: <80 µg.l^{-1}													
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity in lower estuary >15, maximum = 35												
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>4 mg.l^{-1}												
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for intermediate contact recreation	≤185 Enterococci/100 ml (90th percentile, hazen system)												
									Escherichia coli		≤500 E. coli/100 ml (90th percentile, hazen system)												
							Habitat	Hydrodynamics	Mouth state	Habitat health adequate for microalgae, macrophytes, invertebrates, fish, birds and recreational use	Permanently open												
									Tidal variation		<10% change from present state												
								Sediments	Sediment characteristics, Channel shape/size		Bathymetry and sediment MdØ change <10% from baseline												
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Phytoplankton biomass and composition suitable for invertebrates, fish, birds and recreational use	Maintain low phytoplankton biomass (chlorophyll- a < 20 µg/ℓ) and a diversity of phytoplankton groups.												
								Macrophytes	Extent, distribution and richness of macrophytes	Macrophyte cover and composition suitable for invertebrates, fish, birds and recreational use	Restore and maintain the distribution and area cover of macrophyte habitats particularly salt marsh												

The Freshwater Assessment (everWater, August 2026) identified one natural watercourse, the Geelsloot Stream, that could potentially be impacted by the proposed abstraction. The Geelsloot Stream is a seasonal, highly modified and canalised watercourse draining the south-western Helderberg Mountain slopes. Through Somerset West, it flows through a network of modified stormwater canals and channels before passing around the Helderberg Centre and continuing downstream towards the Lourens River and False Bay. The section adjacent to the property is seriously to critically modified (present ecological state within category E/F), consisting of an earthen canal with gabion-lined banks, limited pioneer vegetation and very low flow. It is periodically cleared as part of the City's maintenance programme and is affected by pollution and rubbish from upstream areas. The Ecological Importance and Sensitivity of this section of the watercourse is rated as Low to Very Low (everWater, August 2026).

h) Investments already made and to be made by the water user in respect of the water use in question

Investments already made in respect of the proposed water use include the drilling, equipping and yield testing of the borehole and specialist and consultant fees, totalling approximately R500 000. Further investment will be required for the purchase and installation of the required groundwater treatment plant which amount to approximately R500 000.

i) Strategic importance of the water use to be authorised

The authorisation of the proposed water use is strategically important from both a water security and economic perspective. The proposed water use will enable the established Helderberg Centre to utilise an existing on-site groundwater resource to meet its water and landscaping irrigation requirements, thereby reducing its reliance on municipal water supply. The borehole has sufficient sustainable capacity relative to the Centre's current demand, allowing the resource to be utilised without placing undue pressure on the aquifer. The use of the borehole will also improve the Centre's resilience to potential future drought conditions, water restrictions and interruptions in municipal supply.

According to the National Water Resources Strategy the latest Water Sector Priority Focus Areas 2020 to 2030 are:

- Reducing water demand and increasing supply
- Redistributing water for transformation,
- Managing water and sanitation services under a changing climate,
- Regulating the water and sanitation sector,
- Improving raw water quality,
- Protecting and restoring ecological infrastructure for the green economy,
- Creating effective water sector institutions,

- Promoting international cooperation,
- Building capacity for action,
- Ensuring financial sustainability,
- Managing data and information in line with 4IR and global knowledge,
- Enhancing research, development and innovation,
- Addressing legislative and policy gaps.

The proposed water uses are in line with the following priority focus areas:

1. **Reducing water demand and increasing supply** – The proposed water use supports the Centre's sustainability strategy, which promotes water conservation and the responsible use of resources. The use of an existing groundwater resource will provide an alternative source of water while reducing reliance on municipal supply. The Centre's broader sustainability approach includes reducing, reusing and recycling resources, with water stewardship measures across the retail portfolio including groundwater harvesting, water-wise landscaping, advanced aerators and air-conditioning condensate recovery systems. The proposed abstraction is consistent with this approach by supporting the responsible use of water and reducing demand on municipal water resources.
2. **Managing water and sanitation services under a changing climate** – The Western Cape is vulnerable to drought and variability in water availability. The proposed groundwater abstraction will strengthen the Centre's water security and resilience during periods of drought, water restrictions or interruptions in municipal supply.
3. **Protecting and restoring ecological infrastructure for the green economy** – The proposed abstraction will make use of an existing groundwater resource and, based on the freshwater and geohydrological specialist assessments, is not expected to result in significant adverse impacts on the surrounding freshwater environment, or nearby groundwater users provided the recommended mitigation and groundwater monitoring measures are implemented.

The strategic importance of the proposed water use is further supported by the economic role of the Helderberg Centre. The Centre is an established commercial node that receives approximately 300,000 visitors per month and accommodates numerous retail and service businesses. Reliable water availability is important for the continued operation of the Centre and its tenants, as well as the employment and economic activity associated with the property. The proposed groundwater abstraction will therefore contribute to the long-term operational resilience of an established commercial facility.

When considering the contribution of the development to justifiable economic and social development, relevant spatial plans must be taken into account, including Municipal Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs) and Environmental Management Frameworks (EMFs).

The City of Cape Town IDP prioritises economic growth, employment creation and resilience to climate change and resource constraints. The Helderberg Centre contributes to local economic activity through its established retail and service businesses and associated employment. The proposed water use will support the continued operation of the Centre by improving its water security and reducing its vulnerability to municipal water-supply constraints.

The City of Cape Town's SDF promotes inclusive economic growth and balanced urban development. The Helderberg Centre is an established commercial node that contributes to the local economy and provides retail and service opportunities. The proposed water use does not compromise food security or ecological integrity but instead supports the sustainable use of and existing retail centre.

The City of Cape Town's Climate Action Plan (2021) identifies Water Security and Drought Readiness as a strategic focus area. The proposed use of groundwater as an alternative water source will strengthen the Centre's resilience to drought, water restrictions and interruptions in municipal supply, supporting the broader objective of improving water security under a changing climate.

The City's Environmental Strategy promotes long-term prosperity through sustainable management of natural resources. Desired outcomes include strengthened water conservation, increased wastewater reuse, and the adoption of water-sensitive urban design. The proposed development aligns with these objectives by promoting the responsible use of water resources, reducing reliance on municipal water supply, and making sustainable use of an existing groundwater resource. The Centre's broader sustainability strategy further supports water conservation through measures such as groundwater harvesting, water-wise landscaping, advanced aerators and air-conditioning condensate recovery systems.

Furthermore, the proposed property is zoned General Business 4. The proposed water use activities will support the approved land use rights and the existing function of the property. The proposed water use will not change the land use but will instead support the continued sustainable functioning of the existing retail centre.

j) The quality of water in the water resource which may be required for the Reserve and for meeting international obligations

The property is situated within a Strategic Water Source Area (SWSA) for surface water and falls within the Lourens River catchment, specifically Quaternary Catchment G22J of the Berg Water Management Area. It is underlain by the Tygerberg Formation and is located within the Stellenbosch-Helderberg Groundwater Resource Unit (GRU).

A High-Confidence Groundwater Reserve Determination Study was completed in 2024 for the Berg Catchment (Misrole & Wise, Umvoto South Africa (Pty) Ltd., on behalf of DWS). The study provides insights into the groundwater resource systems within the Berg catchment. Its main objective was to

provide aquifer-specific information to support informed management of stressed or over-utilised groundwater resources. The groundwater quantity reserve for the Stellenbosch-Helderberg GRU is summarised in the table below:

Table 21: Preliminary Groundwater quantity reserve – Stellenbosch-Helderberg GRU (2022)

Recharge (Mm^3/a)	Ecological Water Requirement Reserve (Mm^3/a)	Basic Human Needs Reserve (Mm^3/a)	Groundwater reserve (Mm^3/a)	Total Allocatable Volume (Mm^3/a)	Water Use (Mm^3/a)	Still Allocatable (Mm^3/a)
41.52	2.34	0.24	2.58	38.94	8.81	30.13

To evaluate potential stress on groundwater resources, the Reserve Determination Study applies an "Allocation Factor" representing the ratio of allocatable groundwater volume to the total recharge for each GRU. Based on this measure, the Stellenbosch-Helderberg GRU falls within Category C, which indicates moderate stress. This suggests that while groundwater remains available, careful management is required to avoid over-allocation and to maintain ecological and basic human needs.

The quality of water in the receiving watercourses and downstream environment is not expected to be adversely affected by the proposed water use (H2 cOnsulting, August 2026 & everWater, August 2026). There are no known international obligations directly linked to the water resources associated with the proposed development that would be affected by the proposed activities. Overall, the proposed development will not negatively impact the water quality required for the Reserve and will not negatively impact on the ecological functioning of nearby groundwater or surface water resources.

k) Probable duration of any undertaking for which a water use is to be authorised

The Water use authorisation will be linked to a long-term investment and operational presence of the landowner in the area and should be issued for 20 years and reviewed every 5 years to assure demand and use appropriateness.

18. Declaration by the application with signature confirming that the information submitted is correct

We the applicant, Helderberg Property Investments (Pty) Ltd, hereby confirm that the information submitted as part of this WULA application is true.

Signed by: Grant Elliott **Date:** 23/09/2026

Signature: