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SCHONENBERG ESTATE

Environmental Compliance Audit Report 2015

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Schonenberg Estate

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ABBREVIATIONS

DEA&DP	Department of Environmental Affairs and Development Planning
DW&S	Department of Water and Sanitation (previously Department of Water Affairs)
ECO	Environmental Control Officer
EM	Estate Manager
MM	Maintenance Manager
SHOA	Schonenberg Home Owners Association
CEMP	Construction Environmental Management Plan
OEMP	Operational Environmental Management Plan
EA	Environmental Authorisation

DEFINITIONS

Alien vegetation	All undesirable vegetation, defined as but not limited to, all declared category 1 and category 2 plants in terms of the Conservation of Agricultural Resources Act (43 of 1983) (CARA) amended regulations 15 and 16 as promulgated in March 2001.
Alternatives	Different mechanisms for achieving the general purpose and need of the proposed activity or development. Alternatives may be in terms of location, activity, processes, timing, or “do nothing” (i.e. “no-go”).
Assessment	The evaluation, judgement, organising, rating, interpreting and communicating information which is relevant.
Audit Report	This document.
Auditor	Doug Jeffery Environmental Consultants.
Biota	The animal and plant life of a particular region, habitat or ecosystem.
Construction activity	Any action taken by a contractor, his subcontractors, suppliers or personnel in undertaking the construction work, otherwise referred to as “Works”
Construction area(s)	All areas used by a contractor in order to carry out the required construction activities. This includes all offices, accommodation facilities, testing facilities / laboratories, batching areas, storage & stockpiling areas, workshops, spoiling areas, access roads, traffic accommodation (e.g. bypasses), etc.
Ecosystem	A biological community of interacting organisms (plants and animals) and their physical environment.
Endangered species	A species of plant or animal which has been categorised by the International Union for Conservation of Nature (IUCN) Red Data List as likely to become extinct.
Endemic	A plant or animal species that is native or restricted to a certain area or range.
Environment	The surroundings within which humans exist and that are made up of - <ul style="list-style-type: none">• land, water and atmosphere;• micro-organisms, plant and animal life;• any part or combination of the above and the interrelationships among and between them;

- the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

Environmental Authorisation The permission required from the competent authority for an activity as listed according to the NEMA regulations.

Environmental Impact Any change to the environment, whether desirable or undesirable, that would result directly or indirectly from any construction activity.

Environmental Management Ensuring that environmental concerns are included in all stages of development in order to ensure that the proposed activity or development is done in a sustainable manner and does not exceed the carrying capacity of the surrounding local environment.

Environmental Management Plan Schonenberg Lifestyle Estate Operational Environmental Management Plan, as compiled by Doug Jeffery Environmental Consultants, July 2005, including annexures and diagrams.

Estate Manager Appointed by the Schonenberg Estate to ensure the general management of the Estate, including the implementation of the OEMP requirements.

Hazardous material / substances Any waste that contains organic or inorganic elements or compounds, that may, owing to its inherent physical, chemical or toxicological characteristics, have a detrimental impact on health and the environment.

Homeowners association Schonenberg Home Owners Association; established and operated in terms of Schonenberg Estate Home Owners Association Constitution.

Indigenous A “native” species of plant or animal that occurs naturally in a particular place or region, and was not artificially or intentionally introduced.

Landscape contractor The contractor appointed to undertake the maintenance of all landscaped areas during the operational phases of the development.

Local Authority Otherwise referred to as the “Council” – the local municipal authority that operates or is responsible in the area.

Rehabilitation Return an impacted area to its original condition

Remediation Make good an environmental impact that cannot be returned to its original condition.

Significant impact An impact that may, but its magnitude, duration, intensity, or probability, have a notable effect on one or more aspects of the environment.

Vegetation rehabilitation The re-establishment of locally indigenous vegetation with a similar species composition to that which naturally occurs in the area.

ESTATE PERSONNEL

Estate Manager Gerrie van Niekerk

Asset Care Manager Martin Lottering

Asset Care Administrator Kate Wium¹

Maintenance Manager Christo Pienaar

Environmental Officer Sheila Ives (also chairperson of the Environmental Sub-Committee)

¹ A few days after the Audit was completed, Kate Wium resigned from the position of Asset Care Administrator.

EXECUTIVE SUMMARY

This Executive Summary provides a synopsis, in table format, of identified actions to be undertaken in levels of priority. It also demonstrates the compliance levels of the Schonenberg Home Owners Association (SHOA) with the objectives of the Operational Environmental Management Plan (OEMP). They are set out in a similar format to that presented in the OEMP. A table of definitions of compliance ratings is provided at the end of the Executive Summary.

SECTION A General Information

No.	Specification	Compliance	Future Audit
2	12 month compliance audit	Compliant	November 2016
5	5 yearly OEMP review	Compliant	September 2019

SECTION B Management Program

No.	Management Program	Compliance With Objective	
		Compliance with Objectives	Priority Rating
2.1	Water Resources & Freshwater	Broad compliance	2
2.2	Invasive Vegetation	Full compliance	3
2.3	Erosion	Broad compliance	2
2.4	Fire Management	Full compliance	4
2.5	Fauna	Full compliance	3
2.6	Monitoring	Full compliance	4
2.7	Waste Management	Full compliance	4
2.8	Aesthetics & Landscaping	Full compliance	4
2.9	Maintenance of Infrastructure	Full compliance	4

Table of definitions of Compliance Ratings

Term	Definition
Full compliance	Fully complies with the objectives and guidelines specified in the OEMP
Broad compliance	Complies with most of the objectives and guidelines specified in the OEMP
Partial compliance	Only complies with a small number of objectives and guidelines specified in the OEMP
Non compliance	Does not comply with the objectives and guidelines specified in the OEMP

Table of definitions of Priority Rating

Term	Definition
1	Action to be taken immediately
2	Action to be implemented within the next year
3	Action to be implemented within the next two – three years
4	No action is required, systems to continue as they are

1. GENERAL INFORMATION

1.1. BACKGROUND

The Schonenberg Estate is located just north of the N2 highway, between the western extremes of Somerset West and the village of Croydon. The Estate is bound by the R102 and N2 to the south and west, the R44 to the east, and the M9 Main Road to the north. The estate consists of single residential homes (including plots, group sites), a retirement village, public open space and conservation areas.

Central coordinates of the site are: 34°4'0.46" S – 18°48'50.09" E.

Construction of individual homes is now almost entirely complete. However there are some vacant plots and on-going development sites.

1.2. INTRODUCTION

Doug Jeffery Environmental Consultants was approached and appointed by the SHOA to undertake the fifth operational phase environmental management plan audit. This followed the fourth (November 2014) and third (November 2013) and second (October 2012) audits, conducted by Total Impact Assessments. The first audit took place in August 2011, and was conducted by Doug Jeffery Environmental Consultants.

An OEMP was originally drafted in July 2005, and redrafted in August 2014, in order to deal with aspects of the development and surrounding natural environment which will require management to maintain the quality of the ecological and man-made environment, as well as activities on site, which may have potentially negative impacts on the environment. The requirement for the OEMP comes about as a condition of the original Environmental Authorisation (EA) as issued by Department of Environmental Affairs and Development Planning (DEA&DP). The OEMP is therefore a legally binding document and must be implemented at Schonenberg Estate.

The Estate Manager, Gerrie van Niekerk, is familiar with the EA received from DEA&DP, as well as the legally binding OEMP document. The SHOA created an Environmental Sub-Committee, chaired by Sheila Ives, to assist in this regard.

While providing guidelines as to how these aspects should be managed in the long-term, this document should be seen as open-ended, requiring reviews and updating in order for it to remain relevant to the requirements of the site and the environment. It is essentially a broad audit for the implementation of the OEMP, and general environmental management practises on site, in order to evaluate the success of the environmental management, as well as identifying issues regarding further attention, or specifications / requirements of the OEMP which may require updating. To this end the OEMP was reviewed in 2014. The updated document was approved by DEA&DP on the 26 of September 2014.

1.3. AUDITING

This audit report fulfils the requirements for external environmental audits as detailed in the OEMP and based on which the terms of reference for the audit report were developed.

In this regard it must be stated that Doug Jeffery Environmental Consultants is an independent environmental consulting firm. This report and all other information has been drafted and submitted as being a true and honest reflection of circumstances at that time, to the best of the consultant's ability, knowledge and the information made available.

1.3.1 OEMP Requirements

A suitably experienced independent environmental consultant must be appointed as an external auditor to undertake environmental audits on the site. The purpose of this exercise is not only to audit compliance with the

environmental management requirements set out in this document, but also relevance of the OEMP to the site conditions and environmental management requirements at the time.

An environmental audit is to be undertaken annually in accordance with the amended OEMP. Each audit report will detail the progress, problems and issues arising from the management of all components of the site, as well as recommendations for improved environmental management. This is to identify any obvious problems or potential problems with the environmental management procedures on the Estate, to establish additional issues requiring attention and amendments required to the terms and conditions of the OEMP.

The audit report is to be submitted to the SHOA and DEA&DP for their information.

1.3.2 Terms of reference

The terms of reference for this audit were thus:

- Determine from the OEMP document, criteria that have been either prescriptive or recommended, to be implemented during the operational phase of the development.
- Liaison with the Estate Manager and the Environmental Officer to discuss the implementation of the provisions of the OEMP.
- Undertake a site inspection of the Schonenberg Estate to examine the present condition of the estate based on visual observations, and to assess the general degree of compliance with the relevant provisions of the OEMP.
- Determine whether the recommendations of the previous year's audit have been implemented.
- Make recommendations regarding improved management on site, as well as proposed changes to the OEMP document where specifications are no longer applicable.
- Obtain evidence of compliance or non-compliance and corroborate both verbal and physical evidence where possible.
- Compile a draft report for comments to the principal parties including the Estate Manager, and the chairperson of the SHOA.
- Compile a final report on the OEMP audit.

The above being noted, this audit is in effect the fifth environmental audit to be carried out for the estate. The estate management are of the opinion that annual audits of Schonenberg Estate should continue. It is therefore recommended that the next audit be carried out 12 Months/ 1 Year after the date of issue of this report: November 2016.

The approach taken to providing the input required by the Terms of Reference was as follows:

- OEMP Audit Report (Cole 2013);
- Schonenberg Estate HOA webpage;
- Schonenberg's environmental management file, including all environmental management records kept.
- Verbal communications with the Environmental Officer and the Estate Manager.

1.4 MEETING AND SITE VISIT

A meeting and site visit was conducted on the 19th of November 2015. The purpose of the meeting was for the auditors to get an understanding of how the Estate functions and to consider the Estate's environmental file and environmental administration.

The following were present at the meeting:

- Gerrie van Niekerk (Estate Manager)
- Shiela Ives (Environmental Officer, Environmental Sub-committee chairperson)
- Jeremy Keyser (Doug Jeffery Environmental Consultants)
- Dale Morris (Doug Jeffery Environmental Consultants)

The meeting was followed by a site inspection undertaken by Doug Jeffrey Environmental Consultants.

1.5 LEGISLATION

The following is a list of new and current legislation that may have relevance for the Schonenberg Estate that must be considered by the SHOA when taking management decisions for the estate.

Legislation	Comment
National Environmental Management Amendment Act No 62 of 2008	This legislation came into effect after the Schonenberg Estate was "approved for development". This is however the current environmental legislation that addresses activities and developments that required Environmental Authorisation. This may impact any future changes, expansions or alteration of the Schonenberg Estate.
National Environmental Management Waste Act No 59 of 2008	Addresses all aspects regarding waste including the sorting, disposal, recycling storage and generation of waste.
National Environmental Management Biodiversity Act No 10 of 2004	Its objective is to provide for the management and conservation of South Africa's Biodiversity
Environmental Conservation Act No 73 of 1989	For the most part this legislation has been repealed and its functions take on by NEMA and related legislation. Certain aspects are still effective.
National Heritage Resources Act No 25 of 1999	Address the conservation and protection of historical and culturally historic resources.
National Water Act No 36 of 1998	Provides the legal framework for effective and sustainable management of our water resources.
Veld and Forest Fire Act No 101 of 1998	Addresses land owners responsibilities, protection of property, planning and other matters related to veld .
The Conservation of Agricultural Resources Act No 43 of 1983	Among other aspects it addressed the listing and control of Invasive Alien Species.
Land Use Planning Ordinance of the Cape Province (Ordinance 15 of 1958)	Addresses various land use matter town planning issues and property zoning.
Occupational Health and Safety Act No 85 of 1993	Self-explanatory.
Local Municipal By-Laws	Self-explanatory, It must however be noted that these change more regularly than National and Provincial legislation.

1.6 OEMP REVIEW

The process for updating of the OEMP document and obtaining relevant approvals is to be done as detailed in the OEMP (Section 5: Review of OEMP). The OEMP is to be reviewed once every five years by an independent environmental consultant, unless otherwise required by the authorities and the SHOA.

The auditor is to highlight issues to be addressed in the OEMP, or changes required, during the annual audit. These points are to be included as annexures to the OEMP and to be considered during the review of the

process. Recommended changes to the OEMP must be forwarded to the DEA&DP for their approval, and subsequent incorporation into the OEMP. Records of this review must be placed on file.

1.7 ENVIRONMENTAL AUTHORISATION

An Environmental Authorisation was issued for the development of the Schonenberg Estate on the 1st of December 2003 to a development company called Heartland Properties (Pty) Ltd. This authorised the application for “the proposed change in land use on portion 46 on the farm no. 794, Stellenbosch, for the development of a housing complex which includes commercial, retail and public facilities”. The commercial and retail facilities thereby authorised became the complex now known as the Waterstone Shopping Centre, located east of the site. On the 23rd of March 2015, DEA&DP issued a notice acknowledging a change of ownership (Annexure 6), moving the management of the Estate under the directive of the Schonenberg Homeowners Association and away from Heartland Properties. However, according to this notice, the SHOA is now still responsible for activities conducted at the Waterstone Shopping Centre, which does not form part of the housing Estate.

The situation poses difficult legal and practical issues insofar as to how the implementation of the EA is managed. This is due to the fact that Schonenberg Estate and the Waterstone Shopping Centre are separate entities with no mutual obligations or agreements in place (of which the auditor is aware).

As Schonenberg Estate is now the sole holder of the Ea, and therefore responsible for its implementation and compliance, it is in Schonenberg’s best interest to see that this matter is resolved as soon as possible.

At this time, as the auditor does not have any right to access and inspect the Watersone commercial complex, this area has not been included with this audit.

1.8 ASSUMPTIONS AND LIMITATIONS

It is assumed that the information received from the Estate Manager, Environmental Officer, or any other source is accurate and correct, whether in writing or received verbally.

It is further assumed that following the audit report, SHOA will make the relevant changes to the environmental management and the OEMP as recommended in the audit report, and that this will be enforced and monitored by the relevant authorities who have required the OEMP as well as audits thereof.

The following limitations apply to the investigation that was undertaken:

- A review of the OEMP was not undertaken.
- The Waterstone Shopping Centre has not been included with this audit, as noted in Section 1.7 above.

2 MANAGEMENT PROGRAMS

In this section of the report, the key aspects of environmental management that were of concern during the previous audit are discussed. Recommendations are made where improved management is required.

The OEMP for Schonenberg Estate incorporates the management requirements as a series of nine “programs”.

2.1 PROGRAM 1 – WATER RESOURCES & FRESHWATER

The Estate supports a number of water resources, consisting of a wetland/seep area, two irrigation dams, six stormwater retention dams along the southern boundary, two small dams on the northern boundary, a stormwater course along the eastern boundary and various streams and watercourses that collect stormwater and channel it into waterbodies.

2.1.1 Purpose

Program 1 deals specifically with the management of water resources and freshwater ecosystems.

It is the intention of this program that the following broad objectives be achieved:

- Maintaining or improving the functional value of the dams and wetlands in terms of storm water attenuation.
- Managing the impacts of the development on the dams and wetlands.
- Managing other impacts likely to affect the quality of freshwater ecosystems on the site.
- Maximising and maintaining wetland habitat quality.

2.1.2 Current Management

- There is an established child’s play park near the feature pond in the south-western corner of the wetland conservation area and to the south of the drainage channel running through the conservation area. A fence has been erected to prevent movement into the seep from this area.
- One of the pathways through the seep area has been closed to access (Photo 6). A fence has been placed across the entrance/exit points of the path, and signs declaring “no access beyond this point” have been erected. This has been done in an effort to prevent further disturbance to the seep area, and allow the decommissioned pathway to rejuvenate.
- During the previous audit, the need for further “no-go” signage around the seep was discussed. At present, no further signs have been erected, but discussions are continuing within the SHOA.
- A number of sign boards (Photo 7 and 12) have been placed at the entrances to the conservation area and along the pathways in order to provide general information about the plants and animals associated with the wetlands, as well as highlighting the importance of staying out of such areas.
- A contravention notice (Annexure 7) was received by the Estate from the City of Cape Town, following an inspection. The contravention, in terms of Section 4(c) of the By-Law relating to Stormwater Management (PG6300; LA31420) promulgated on the 23rd of September 2005, was with regards to the use of herbicide in some of the Estate’s wetlands. The contractor appointed for vegetation control, Phillip Conradie, holds a registered pest control certificate and advised the use of herbicide in this case. The current status of the matter is that all use of herbicide on the Estate has been halted. The existing manuals and policies that are in place pertaining to wetland management and herbicide use are currently being updated to reflect this.
- Clearing of all alien vegetation, by Crown Vegetation Maintenance staff, from watercourses, seeps and wetlands is done by hand, and in accordance with a program. The program has been established in order to determine the required frequency of future management operations, as well as the rate of growth of alien invasives.

- The Estate has purchased five carp fish (sterilized, and certified by Cape Nature, see Annexure 5) and released them into Dam 1, in an effort to assist in curbing the over-growth of pond weed.
- Algae content in the ponds is now under control. A major upgrade of the Estate's irrigation system has resulted in improved water circulation, which has assisted in curbing the growth of algae. Manual removal, using rakes, is still in operation (Photo 22).
- Algae content within ponds and stormwater detention areas has been a problem in the past. However, with more rigorous observation, it appears that algae growth in the ponds undergoes natural seasonal variations in surface coverage, and tends to die off after notable rainfall episodes, when the water is circulated. If algae blooms reach unacceptable levels, the material is manually removed with rakes. After discussions with Total Impact Assessments last year the estates maintenance manager has introduced barley bags in certain key areas. It has been reported that this has seemed to reduce the level of algae in the areas where the bags have been deployed.
- The education program is still ongoing and is constantly being updated. E-news letters are sent out as necessary, but at least once a month. A new Schonenberg website has recently been launched. Letter drops and SMS's are no longer used.
- The "no mowing" policy in the seep area is still in place and is ongoing.
- Susan Killian, the Estate's horticulturist, is still in charge of alien control in the seep. The current status is acceptable and very positive. A new and updated list of alien vegetation in the seep area has been compiled (Annexure 4).
- The establishing of new vegetation in the seep has met with some difficulty, as there is a "no watering policy" in place. However, no-one (including the Estate management) appears to know where the policy was first promulgated. Water wise gardens are in place in some areas, and being expanded into others. In the case of landscaped gardens, some small-scale use of exotic succulents (e.g. Agave from America) is used for aesthetic and water conservation purposes. A presentation on water-wise gardens was done for the benefit of the residents, and information has been circulated in the e-news letter.
- Following the discovery, during the previous audit, that a digger loader had worked in one of the retention ponds to clear a stormwater outlet of silt and vegetation, all clearing of these areas is now done by hand.
- The stormwater channel along the eastern boundary of the site is being contaminated by activities at the Waterstone Retail Complex, immediately upstream of Schonenberg (Photo's 16 and 17). A number of residents have complained of foul odours. Discussions have been undertaken between Waterstone and the SHOA. Waterstone have acknowledged the problem, but so far have done nothing to amend it. Water sampling of the channel has been done, and this will continue.

2.1.3 Management Actions Required

- Although photographic records are being kept of certain actions (alien and algae removal), these can be improved. Emphasis should be placed on not only taking pictures from the same location with the same view, but also on the *regularity* of the records.
- The education program should continue in operation, with emphasis being placed on the importance of the seep area and the need to ensure that children are encouraged to stay out of these areas.
- The contamination of the eastern channel by the Waterstone village must be curbed. If necessary, the SHOA should seek assistance from the authorities.

2.2 PROGRAM 2 – INVASIVE VEGETATION

Certain invasive vegetation types, notably kikuyu grass and bulrushes are present on the Estate and create the risk of impacting on wetland and watercourse ecological viability and reducing vegetation diversity by

outcompeting native species. The removal of aliens will therefore protect the integrity of natural systems on site and promote the preservation of diversity.

2.2.1 Purpose

Program 2 deals specifically with the control and removal of alien vegetation.

2.2.2 Current Management

- The clearing of alien vegetation is continuing. However, following the contravention notice issued by City of Cape Town (see above), a new approach is being taken, and only manual clearing is being implemented.
- The alien invasive known as Patterson's Curse has been tackled in the past year. Photographic monitoring was done of the removal and subsequent re-growth of indigenous vegetation and shows a major decline of the invasive pest.
- Management of the vegetation maintenance and alien clearing on site has been upgraded enormously over the past year. Two separate teams are in place, with management programs, records, and training being done on a daily basis.
- A program has been set up to control and record the clearing bulrush clearing activities in the retention ponds (Photo's 19 and 20). Some selected stands of bulrushes are being retained, as they promote bird life.
- Undeveloped plots are kept clear of alien vegetation. A bi-annual clearing operation is undertaken on these sites. Monitoring is done through observations during the standard road-verge maintenance.
- Kikuyu growth in the seep area is still at an acceptable level, despite the use of herbicide being halted.
- Woody alien vegetation is still under control. Monitoring is continuing.
- There is a concern from the SHOA that the erven surrounding the seep area are acting as alien vegetation "feeders" – removal of aliens from the seep will be forever ongoing, while plant matter, seeds etc. migrate from these areas. However, the SHOA does not have the legal right to control what homeowners grow on their private land.
- Some of the poplar trees, planted on road verges during the Estate's landscaping phase, are now beginning to cause upliftment of the surrounding pavement (Photo 14).

2.2.3 Management Actions Required

- While the SHOA cannot control what is planted by private land owners in their gardens around the seep area, it is recommended that some discussions are initiated with an attempt to resolve this – perhaps a clause can be added to the homeowner's constitution to this effect.
- It is recommended that some kind of policy be put in place to prevent kikuyu being grown on private erven, and some incentive that promotes its eradication from the estate.

2.3 PROGRAM 3 – EROSION

Although most of the stormwater that is generated on the Estate is being adequately catered for in the formal stormwater system and the established drainage lines, it is important that these and other areas are monitored as they may be vulnerable to erosion.

2.3.1 Purpose

Program 3 deals with erosion of vulnerable drainage lines, specifically those associated with the stormwater system. The aim is to ensure that these continue to function and that siltation and sedimentation does not lead to a decline in water quality.

2.3.2 Management Actions Noted/Observed

- Areas susceptible to erosion are monitored on a monthly basis.
- Some areas of the seep were a matter of concern during the previous audit. Work has been done in this area, and is continuing (Photo 15).
- Erosion gullies have begun to develop along the bank of the main road, near the north-east side of the Estate. The City of Cape Town recommended the construction of a lined channel to guide water through this area and prevent future erosion. This will be done.
- No signs of erosion elsewhere were noted during Auditor's walk through the estate. The SHOA has appointed Franz Wium to perform the functions of an ECO to monitor individual house construction. During his inspections erosion will be addressed when noted in construction areas.

2.3.3 Management Actions Required

- Photographic records should be kept of areas (such as the road banks, mentioned above, and stormwater outlets) that are particularly susceptible to erosion, in order to monitor the progression of sediment removal and the effect of remediation activities.
- Monitoring of all areas on site for erosion must be undertaken monthly and after heavy rainfall episodes.
- Where siltation or silt build up have been noted at or near stormwater outlets this must be removed carefully and manually.

2.4 PROGRAM 4 – FIRE MANAGEMENT

2.4.1 Purpose

Program 4 is intended to ensure that fires occurring in the neighbouring areas do not represent an undue threat to the estate and that activities on site do not pose an increased fire risk to the conservation areas.

2.4.2 Management Actions Noted/Observed

- Fire hydrant markings have been painted on all applicable roads throughout the estate.
- Fire hydrants have been serviced.
- Fire training has been done with the security staff on site.
- A fire safety audit has been completed (Annexure 8).

2.4.3 Management Actions Required

- Regular checks of the fire equipment on the estate must continue to be carried out.

2.5 PROGRAM 5 – FAUNA

The presence of domestic animals in wetland areas was identified as an issue of concern during last year's audit.

2.5.1 Purpose

The aim of this program is to ensure that the animals found on site are not harmed and all habitats on site are maintained in good ecological condition to ensure that it can support local fauna. It is vital that ecological corridors are maintained to ensure that fauna can move throughout the habitats on site, as appropriate.

2.5.2 Management Actions Noted/Observed

- A dog management group has been founded and disbanded in the last year. The effect of this was to place more litter bins around the estate, in which residents could place their dog waste (Photo 18).

- The management of domestic animals within the Estate must adhere to the City of Cape Town's regulations for keeping domestic animals.
- Various bird species were observed during the time of the site visit.
- There is still concern with regards to the use of the seep by domestic animals, particularly cats (Photo 8). While it is acknowledged that there is little the SHOA can do about the situation, it was reported that the seep area is being monitored by residents and this is having an effect and residents are reporting when people and pets enter the seep area.

2.5.3 Management Actions Required

- Regular correspondence with residents should continue concerning the importance of keeping domestic animals outside of conservation and similar natural areas that provide refugia for small indigenous fauna. Domestic animals are to be kept on a lead when not in resident's private dwelling.
- While the SHOA cannot ban residents from keeping animals, it was suggested that pets from homes around the seep are at least registered and a database maintained.

2.6 PROGRAM 6 - MONITORING

It is important that certain aspects of the environment are monitored on a regular basis to ensure that the conditions are not deteriorating and that management activities are achieving their goal. Monitoring can also provide information on problems that may arise over time.

2.6.1 Purpose

Recording conditions on a regular basis will provide base line data over time, against which the effectiveness of management activities can be assessed.

2.6.2 Management Actions Noted/Observed

- The environmental file for the estate is still in place and is kept up to date.
- The facebook group has been shut down and is no longer in use.
- The newsletter is no longer biannual. E-news letters are sent out as required, but at least on a monthly basis.
- An ECO, Franz Wium, has been appointed by the SHOA to monitor the construction of the final new houses on the Estate.

2.6.3 Management Actions Required

- The Estate Manager is reminded that all monitoring records and correspondence relating to the Environmental Management of the estate and scheduling are to be kept on file.
- All contractors/staff are to undergo environmental inductions for Schonenberg Estate. All contractors are to abide by the specifications of the CEMP for Schonenberg Estate.

2.7 PROGRAM 7 – WASTE MANAGEMENT

DEA&DP has instituted a policy of waste reduction, reuse and recycling, which is supported by the City of Cape Town. The EA for Schonenberg requires that a Waste Management Programme be implemented to minimise waste and actively prevent waste from impacting on residents, the environment and surrounding landowners.

2.7.1 Purpose

Program 7 has been developed to uphold the policy of waste reduction, reuse and recycling, in accordance with the City of Cape Town guidelines.

2.7.2 Management Actions Noted/Observed

- Litter clean-ups are still ongoing.
- Household waste is still collected.
- In the past, residents were permitted to take their garden refuse to the Estate's nursery for disposal. The nursery would then use all applicable material to make compost. Unfortunately, with the upgrading of the Estate's vegetation management, the influx of garden refuse from public open spaces in the estate (Photo 3) has meant that this practice has been discontinued, as the nursery does not have the space to store and compost the resident's garden refuse. As such, the disposal of garden refuse is now the responsibility of individual homeowners.
- Litter traps in the watercourses are cleared by the landscaping team.

2.7.3 Management Actions Required

- The bulrushes in the stormwater retention ponds are cut on a regular basis and disposed of at a local facility for vegetation waste (Wurmbosch in Stellenbosch). Some kind of proof of delivery should be obtained and kept on file.
- The litter traps on the main stormwater inlets and outlets of the Estate must continue to be monitored and maintained.

2.8 PROGRAM 8 – AESTHETICS & LANDSCAPING

Schonenberg Estate has developed Architectural and Landscaping guidelines to ensure that the estate has a distinctive character that is in keeping with and adds to the greater area.

2.8.1 Purpose

This program aims to ensure that Architectural and Landscaping guidelines are implemented and upheld.

2.8.2 Management Actions Noted/Observed

- The activity permitted by the General Authorisation (Annexure 3) confirmed by the Department of Water and Sanitation – that of using the retention dams for irrigation – is not being undertaken. The dams are now exclusively used for retention, and not storage and irrigation.
- The indigenous nursery (Photo's 1 and 2) in the south-west corner of the Estate is in full use for propagation of indigenous plants and compost.
- Monitoring of private gardens is done on an impromptu basis by the Estate Manager.
- Boardwalks around the Estate (such as those shown in Photo's 4 and 7) are all maintained in good condition. One of the paths through the seep has been closed. Another, along the western edge of the northern part of the seep was proposed for closure, but has remained open (Photo 11). It is the opinion of the auditor that maintaining this path as a walkway for residents will not have an adverse effect on the ecology of the seep.
- A major irrigation system overhaul has taken place.
- Most observed landscaping was of indigenous species. An approved indigenous plant list (Annexure 2), as well as a shortlist of prohibited plants, will shortly be made available to homeowners on newly-created the Estate website.
- No buildings that were observed appeared aesthetically unpleasing or in contrast to the character of the Schonenberg Estate. The SHOA has an established sub-committee that address these matters and ensures all units comply with the requirements.

- A sub-committee of the SHOA addresses the matter regarding the approvals of plans and construction. A separate file for each house under construction (as well as those even still requiring approval) is kept by Franz Wium, the ECO appointed by the Estate to monitor construction activities.

2.8.3 Management Actions Required

- The Estate Manager and Maintenance Manager must ensure all residents are aware of the indigenous plant list and that monitoring of the private gardens does take place.

2.9 PROGRAM 9 – MAINTENANCE OF INFRASTRUCTURE

The Estate needs to be managed in such a way as to maintain the upkeep and continued operation of activities on the grounds.

2.9.1 Purpose

The objective of this program is to ensure that the infrastructure on the Estate is maintained to a satisfactory standard.

2.9.2 Management Actions Noted/Observed

- A detailed management schedule and monitoring process is in place for the Estate. From the auditor's observations this schedule provides sufficient information as to what needs to be done or what monitoring undertaken, in regards to infrastructure maintenance.
- The areas of the estate inspected by the auditor showed no significant signs of disrepair or lack of maintenance.

2.9.3 Management Actions Required

- Any maintenance work carried out must be done so in accordance with the Estates approved CEMP.
- Contractor must sign relevant documentation stating they are aware of the sensitive nature of the site, and the rules and regulations regarding this.

3 CONCLUSION

The management of environmental goals at the Schonenberg Estate has continued to improve. The recording of management activities conducted within the Estate is of a high standard and the works being undertaken are done so in an appropriate timeframe and with a suitable mind set and objective. It is the opinion of the auditor that all significant issues identified during the previous audit have been rectified. No additional major environmental concerns were identified during this audit.

Since recommendations were made during the previous audit, the following important management issues have been dealt with adequately:

- Contact has been made with the Waterstone Retail development, to address issues with the stormwater channel running along the eastern boundary of the Estate.
- Following the issuing of a Contravention Notice by the City of Cape Town regarding the use of herbicide in sensitive areas (Annexure 7), all herbicide use by the SHOA has been halted and current policies and programs are being reviewed to reflect this shift in management practices.
- Advice regarding the erosion of some areas has been sought from the City of Cape Town. Erosion control measures will be put in place in the coming year.
- Fire management programs on the Estate have been upgraded. Security staff have received emergency training and fire hydrant signs have been painted on appropriate road surfaces around the Estate.
- Landscaping, gardening and maintenance teams are now guided and trained by daily toolbox talks, newly reviewed programs and plans. The result is better management of open spaces, environmental systems and infrastructure on the Estate.
- A major irrigation system overhaul has been undertaken. The convenient side effect of this is the mixing of some of the dams on site resulting in the reduction of algae.

Besides merely complying with the OEMP, it is expected from management and homeowners of the Schonenberg Estate to display general good environmental practise regarding all activities in the Estate. While most aspects of the development are managed well, the following management aspects require additional attention:

- The change of ownership and management of the Waterstone Retail development in terms of the Environmental Authorisation (refer to section 1.7 above) must be resolved.
- The use of photographic monitoring to observe the growth patterns of algal growth on the ponds and the effect of alien clearing.
- The effect that the Waterstone Retail development is having on the drainage channel on the eastern boundary of the Estate must be resolved.
- A resolution regarding the planted poplar trees around the Estate must be discussed. While removing these trees and replacing them with a species that is (a) indigenous and (b) less likely to cause upliftment of the adjacent pavement surface will be prohibitively expensive, this may be outweighed by the continued costs of maintaining the areas around these trees.

Annexure 1
Photographs



Photo 1: Part of the Schonenberg Estate nursery.



Photo 2: The shade house at the nursery.



Photo 3: Composting piles at the nursery.

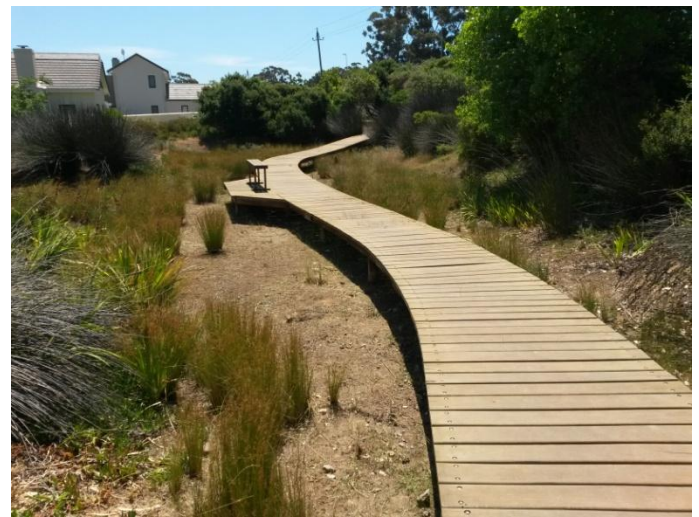


Photo 4: The boardwalk crossing the area of public open space near the north-west corner of the Estate.



Photo 5: One of the dams near the north-west corner of the Estate. Note the lack of water, attributed to low rainfall.



Photo 6: One of the entrance points of the closed pathway through the seep.



Photo 7: One of the sign boards placed around the seep conservation area.



Photo 8: A domestic cat, spotted in the seep conservation area.



Photo 9: View of the lower part of the seep conservation area.



Photo 10: One of the small naturalised streams in the seep area.



Photo 11: One of the gravel paths on the edge of the seep area. Discussions regarding the closure of this particular path are still continuing.



Photo 12: One of the information boards that have been placed around the seep.



Photo 13: View of the upper part of the seep area.



Photo 14: Tree roots from the road-side poplars are causing lifting of pavement surfaces.



Photo 15: A stream in the seep area was noted as a potential area of concern in the previous audit.



Photo 16: The point where the drainage channel along the eastern boundary enters the estate. The Waterstone complex is just upstream of this point.



Photo 17: The channel along the eastern boundary of the Estate.



Photo 18: Signs and litter bins put in place through the efforts of the dog control group.



Photo 19: One of the retention ponds, stocked with fully grown bulrushes.



Photo 20: Another of the retention dams, containing bulrushes that were cut recently, and have subsequently begun to re-grow.



Photo 21: During the previous audit, it was noticed that this area had been dredged by a digger-loader. This area has subsequently rehabilitated itself and little (if any) sign of the activity remains.



Photo 22: One of the dams near the south-west corner of the Estate. Note the pond weed that has been removed from the dams (piled in the foreground) and is ready to be disposed of.



Photo 23: The dam into which the carp have been introduced.

Annexure 2
Approved Plant List

Latin name	Common name	Height & Spread	Wind resistant	Shade plant	Drought tolerant	Description	Function
TREES							
<i>Apodytes dimidiata</i>	White pear	4-5m	1/2	1/2	✘	Small tree with dark green leaves and sprays of white flowers during summer	Good patio tree or in a mixed shady border as a feature.
<i>Brabejum stellatifolium</i>	Wild almond	5-8m	✓	1/2	✓	Medium tree with attractive foliage and sprays of white flowers in summer	Best planted in groups for effect, can also be pruned into a shade tree.
<i>Brachylaena discolor</i>	Wild silver oak, Kusvaalbos	5 x 4m	✓	✘	1/2	Evergreen shrub or small tree with leaves dark green on top and grayish beneath; Creamy-white flowers in summer; Fast growing	Prune up to form shade tree or prune as hedge for use as windbreak.
<i>Buddleja saligna</i>	Mock olive	1.5 x 3m	✓	✘	✓	Fast growing grey/green evergreen shrub with cream flowers in summer	Excellent hedge and windbreak. Plant in rows or groups.
<i>Buddleja salyifolia</i>	sagewood	2-4m	✓	✘	✓	Large evergreen shrub with scented lilac flowers in spring, distinctive grey/green leaves; Fast growing.	Scented informal hedge or windbreak.
<i>Canthium mundianum</i>	Rock Alder	5-10m	✘	1/2	1/2	Small sparsely branched tree with dark green hairy leaves and red berries	Prune to form single stemmed tree.
<i>Chionanthus foveolata</i>	Fine-leaved ironwood	5-30m	✓	✓	✓	Evergreen tree with glossy foliage, white flowers and red/purple fruit	Good as a windbreak and screen. Attracts birds.
<i>Cunonia capensis</i>	Red Alder	3-8m	1/2	1/2	1/2	Fast growing evergreen tree with attractive foliage and cream flowers in autumn	Good patio tree. Does best planted with pioneers.
<i>Curtisia dentata</i>	Assegai wood	6-12	✓	1/2	1/2	Fast growing attractive tree with large shiny serrated leaves with yellow fruits	Suitable as tall hedge. Can be pruned into a shade tree.
<i>Cussonia thrysiflora</i>	Coastal cabbage tree	5m	✓	✘	✓	Small structural tree with corky bark and attractive leaves	Feature tree best planted alone or in groups of three .
<i>Acacia xanthophloea</i>	Fever tree	4-5m	1/2	✘	✓	Stunning structural tree with	Excellent feature tree and good

						lime green bark and leaves and medium sized thorns	as a security hedge.
<i>Calodendron capense</i>	Cape chestnut	10-20m	1/2	✘	✓	Large handsome semi deciduous tree with striking pink flowers in spring	Feature tree best planted alone. Prune to shape for a shade tree.
<i>Celtis africana</i>	White stinkwood	12-30m	1/2	✘	✓	Tall deciduous tree with furry leaves and smooth bark	Feature tree. Prune out lower branches to form dense crown.
<i>Cussonia paniculata</i>	kiepersol	3-5m	✓	✘	✓	Structural evergreen tree with large attractive blue/grey leaves and furrowed corky bark; Fast growing	Feature tree best planted alone or in groups of three.
<i>Dais cotinifolia</i>	pompom tree	6 x 4m	✘	✘	✘	Semi-deciduous small tree with clusters of pink flowers in late spring to early summer	Feature tree providing shade in summer.
<i>Diospyros glabra</i>	Blueberry bush	5m	✓	✘	✓	Small erect evergreen dense tree with grey bark	Suitable for hedge.
<i>Diospyros whyteana</i>	Cape ebony	3-7m	✓	✓	✘	Neat evergreen tree with small glossy leaves and red fruit; Fast growing	Suitable for hedge or plant in groups as a feature.
<i>Ekebegia capensis</i>	Cape Ash	10-20m	✓	✘	✓	Handsome tall tree with attractive foliage and red fruits	Stunning feature tree providing shade
<i>Ficus natalensis</i>	Natal Fig	10-20m	✓	✘	✓	Fast growing shade tree with large root system	Plant in damp areas and not near walls or paving
<i>Liquidamber styraciflua</i>	Liquidamber	8-10m	1/2	1/2	1/2	Deciduous tree with stunning foliage that changes colour from green to yellow to red	Feature tree to be planted in areas that can tolerate leaf fall
<i>Erythrina lysistemon</i>	Coral tree	10 x 6m	✓	✘	✓	Large semi-deciduous tree with prickly bark and masses of scarlet flowers from late winter to late spring; Fast growing	Feature tree providing shade during summer and flowers in winter

<i>Halleria lucida</i>	Tree fuschia	3-5m	½	½	½	Fast growing pioneer specie with red fuschia like flowers	Good in mixed border or planted in groups of three
<i>Ilex mitis</i>	Cape Holly	6-10m	½	½	½	Medium tree with glossy leaves and red berries	Perfect shade tree for small gardens. Plant with pioneer species for best results
<i>Indigofera frutescens</i>	River indigo	5-8m	½	½	✘	Small graceful tree with sprays of rose pink flowers in mid summer	Feature plant
<i>Kiggeleria africana</i>	wild peach	10 x 5m	✓	½	✓	Large evergreen tree with grey/green leaves and small cream flowers in late spring; Very fast growing	Suitable for tall windbreak or shade tree
<i>Maytenus heterophylla</i>	Pendoring spike	4-9m	✓	✘	✓	Small tree with huge thorns; Fast growing	Perfect as a security hedge because of its thorns
<i>Olea europaea</i> subsp. <i>africana</i>	Wild olive	8 x 6m	✓	✘	✓	Rounded evergreen tree with smooth neat grey/green leaves; slow growing	Good windbreak, can be pruned to provide shade
<i>Olea capensis</i>	Ironwood	10-40m	✓	½	✓	Bushy evergreen tree with glossy leaves and purple fruit	Feature tree and shade tree
<i>Podalyria calyptata</i>	Sweet pea	2-4m	½	½	½	Dainty attractive tree with grey/green foliage covered in masses of sweetly scented pink flowers from late winter	Best planted with pioneer species. Lovely feature plant
<i>Podocarpus latifolius</i>	Real Yellowwood	10-20m	✘	½	✘	Attractive tree with blue/green foliage and conifer like growth habit	Suitable for a dense informal hedge or as a feature tree
<i>Populus nigra</i>	Lombardy Poplar	14-20m	✓	✘	✓	Columnar tree with bright green leaves that turn yellow	Do not plant near water feature or pool as it has invasive roots. Good windbreak and screen
<i>Psoralea pinnata</i>	Fountain bush	4m	✓	½	✘	Small tree with fine leaves and blue pea shaped flowers	Plant in damp areas as a feature in a mixed border
<i>Quercus palustris</i>	Pin Oak	10-18m	½	✘	½	Deciduous cone shaped tree with lovely foliage	Feature tree and shade tree in summer
<i>Rapanea melanophloes</i>	Cape beach	4-15m	✓	✓	✓	Leathery maroon leaves and purple berries loved by birds	Pioneer specie providing shade for other trees
<i>Rhus undulata</i>	Namaqua Kuni Bush	5m	✓	✘	✓	Fast growing tough tree with grey/brown bark	Perfect for screening and hedges
<i>Rhus viminalis</i>	Wit karee	5 x 4m	✓	✘	✓	Evergreen tree with willow like	Excellent windbreak and

						habit and attractive fresh green leaves; Fast growing	feature/shade tree near water features
<i>Syzigium cordatum</i>	Waterbessie	8-15m	✓	½	✓	Evergreen tall tree with attractive red tinged leaves and edible fruits; Fast growing	Good as a screen, hedge or in wet positions
<i>Tarchonanthus camphoratus</i>	Camphor bush	3-9m	✓	✗	✓	Small shrubby tree with fluffy white flowers and grey/ green leaves; Fast growing	Excellent pioneer species. Good as a informal hedge
<i>Trichelia emitica</i>	Natal Mahogany	10-25m	½	½	½	Handsome large tree with attractive foliage. Evergreen	Plant as a feature tree that will provide shade
<i>Virgilia divartica</i>	Pink Keurboom	3-5m	✓	✓	✓	Small fast growing tree with masses of pink blossoms in spring	Excellent pioneer species, windbreak and feature tree

SHRUBS

<i>Agathosma</i> spp.	Buchu	40cm-1.5m	✓	✗	✓	Aromatic shrub with typical fynbos foliage, flower colour ranges from pink, yellow, purple to white	Ornamental shrub that is best planted in groups, can also be used as edging
<i>Anisodonteia scabrosa</i>	Mallow	1-2m	✓	✗	✓	Fast growing shrub covered in cheerful pink flowers all year round	Responds well to pruning and makes a good topiary subject
<i>Aspalanthus</i> ssp		70cm	✓	✗	✓	Fast growing erect shrub with spiky foliage and yellow pea shaped flowers	Prune to shape. Lovely in mixed borders and in groups
<i>Asparagus capensis</i>	Katbos	30-80cm	✓	✓	✓	Rigid prickly shrublet with white flowers form April-June	Lovely in mixed borders or mass planting
<i>Athanasia dentata</i>		60cm	✓	✗	✓	Small shrub with dainty leaves and yellow flowerheads	Suitable for dry sunny spots
<i>Barleria obtusa</i>	Bush violet	1m	✓	½	½	Fast growing sprawling shrub covered in blue flowers in autumn	Good for mass planting, can also be pruned into a low formal hedge
<i>Bauhinia galpinii</i>	Pride of de Kaap	2 x 3m	✓	✗	✓	Large rambling shrub with attractive foliage and gorgeous red flowers in autumn	Excellent screen/hedge. Also good as a feature plant in a mixed border
<i>Carissa macrocarpa</i>	Num-num	1-2m	✓	✗	✓	Dense thorny shrub with white flowers and large edible red fruits	Perfect security hedge, can also be pruned to shape
<i>Chironia tetragona</i>			✓	½	½	Dainty erect shrublet with sticky buds and striking	Best planted in mixed borders in clumps

						magenta flowers in summer	
<i>Chysanthemoides monilifera</i>	Bush tick berry	2 x 1.5m	✓	✓	✓	Versatile fast growing rounded shrub with cheery yellow daisy like flowers and black fruits	Good screen, hedge and windbreak, bank stabilization and pioneer species
<i>Coleonema album</i>	Confetti bush	1 x 1.5m	✓	½	✓	Masses of scented fine foliage with delicate white starry flowers in winter	Excellent in an informal border. Can be pruned to shape and also good bonsai
<i>Crotalaria capensis</i>	Cape rattle pod	3m	✓	✗	✓	Branched shrub with pretty yellow flowers throughout summer	Good feature plant and informal border plant
<i>Dodonaea angustifolia</i>	Sand olive	1.5 x 3m	✓	✓	✓	Large fast growing shrub with shiny leaves and yellow flowers	Good windbreak, screen and hedge
<i>Dovyalis caffra</i>	Kei apple	1 x 3m	½	½	✓	Large shrub with large thorns and edible fruit	Makes an impenetrable hedge
<i>Erica baccans</i>	Berry heath	2.5m	✓	✗	✓	Well branched erect shrub with magenta flowers	Good feature plant and cut flower
<i>Erica caffra</i>	Water Heath	1-2m	✓	½	✗	Tall robust erica with dark green leaves and white flowers	Plant in damp areas or near water features
<i>Erica cerinthoides</i>	Fire heath	50cm	½	✗	✓	Small shrublet with striking hairy red flowers	Good container plant. Best planted in groups as feature
<i>Erica glandulosa</i>		1.5m	½	✗	½	Erect shrub covered in pink to orange tubular flowers from autumn to spring	Feature plant, prune to shape
<i>Erica mammosa</i>		1m	½	✗	✓	Tall shrub with dense puffed pink tubular flower heads	Stunning in a mixed border or in clumps. Prune to keep neat.
<i>Eriosephalus africanus</i>	Wild Rosemary	1m	✓	✗	✓	Fragrant soft grey leaves and white puffy flowers during winter and summer	Prune to shape. Can be used in potpourri and cooking
<i>Euryops virgineus</i>	Honey euryops	1m	✓	✗	✓	Fluffy green foliage with scented small daisy like flowers	Low informal hedge and bank stabilization
<i>Felicia filifolia</i>		50cm	✓	✗	✓	Dainty shrub covered in blue daisies during late summer	Best planted in groups of five or more. Prune to shape
<i>Freylinia lanceolata</i>	Honey bell bush	3m	½	½	✗	Graceful shrub with drooping willow like habit, golden honey scented flowers all year long	Thrives in moist conditions and makes a beautiful hedge and can be pruned to shape
<i>Grewia occidentalis</i>	Cross berry	2-3m	✓	✓	✓	Dense shrub with large pretty pink flowers	Prune to keep neat. Perfect hedge, grows well next to walls
<i>Helichrysum crispum</i>		1m	✓	½	✓	Aromatic grey woolly foliage and cream flowers	Good border plant, can be pruned to shape
<i>Leonotis leonorus</i>	Wild Dagga	1.5m	½	✗	✓	Tall showy plant with large velvety flowers during winter	Feature plant, also good in mixed borders

<i>Leucadendron salignum</i>	Tolbos	1.6m	✓	✘	✓	Erect shrub with attractive foliage and cones	Excellent hedge or screen, can be pruned to shape
<i>Leucadendron sessile</i>		1.5m	✓	✘	✓	Short dense shrub with attractive foliage that turns from yellow to red	Stunning feature plant
<i>Leucospermum cordifolium</i>	Pincushion	1.5m	✓	✘	✓	Rounded spreading shrub with stunning red/orange pincushion flowers in spring to summer	Attractive feature plant. Best planted alone or in a large mixed border
<i>Lobelia chamaepitys</i>	Wild Lobelia		1/2	1/2	1/2	Dainty violet flowers on slender stalks	Plant in large groups for a stunning display
<i>Metalasia densa</i>		1.5m	✓	✘	✓	Spiky grey/green foliage with white flower heads	Good border plant that requires little maintenance
<i>Metalasia muricata</i>	Blombos	1.5m	✓	✘	✓	Spiky grey/green foliage with white flower heads	Good border plant that requires little maintenance
<i>Muraltia heisteria</i>	Kastybos	50-90cm	✓	✘	✓	Erect prickly shrublet with masses of purple flowers in spring	Good border plant that requires little maintenance
<i>Pelargonium cucullatum</i>	Wildemalva	2m	✓	1/2	✓	Dense shrub with hairy leaves and magenta flowers in spring	Good screen and windbreak, can be used for bank stabilisation
<i>Plumbago capensis</i>	Plumbago	1.5m	✓	✘	✓	Popular attractive sprawling shrub with masses of blue flowers for most of the year	Prune to shape into formal hedge. Plant in clumps for border beds
<i>Protea repens</i>	sugarbush	1.5m	1/2	✘	✓	Bushy shrub with lovely white/cream to pink flower heads in winter	Feature plant. Prune to keep neat
<i>Rhus crenata</i>	Dune crow-berry	3m	✓	1/2	✓	Large vigorous rounded shrub with glossy leaves and red berries	Versatile border, screen, hedge plant and bank stabilization. Prune to shape
<i>Salvia africana-lutea</i>	Wild sage	1.5m	✓	✘	✓	Soft grey foliage and attractive golden brown flowers	Good border or low hedge plant, can be pruned to shape
<i>Strelitzia juncea</i>	crane flower	1.5m	✓	✘	✓	Spiky foliage and gorgeous orange blooms	Accent plant best planted alone or in groups
<i>Tecomaria capensis</i>	Cape honeysuckle	2m	✓	1/2	✓	Glossy leafed shrub with flowers of varying colours during most of the year	Perfect hedge, screen or topiary subject. Prune to desired shape
RESTIOS, GRASSES & SEDGES							
<i>Calopsis paniculata</i>	Besemriet	3m	✓	✘	✘	Graceful grass with much branched stems	Lovely low maintenance feature plants. Plant near water

<i>Chondropetalum tectorum</i>	Restio, Dakriet	1.5m	✓	✗	✗	Striking tall restio with black seed heads; good for wet areas	Accent plant; low maintenance
<i>Cyperus textilis</i>	Cyperus	1-3m	✓	✗	✗	Long rounded stems with beautiful sprays of foliage at the end	Perfect water feature or damp area plant
<i>Elegia capensis</i>	Fonteinriet	2m	½	½	✗	Tall restio with long needle like leaves and tall bamboo like stems	Accent plant for water features and damp areas
<i>Ischyrolepsis subverticillata</i>	Tuinteit	2m	✓	½	✗	Beautiful tall clump forming restio with decorative dark green foliage	Low maintenance strong accent plant. Plant in groups of three or alone
<i>Juncus Krausii</i>	Mat sedge	60cm	✓	½	✗	Grey green rush leaves with tufted seed heads	Accent plant for water features and damp areas
<i>Restio multiflorus</i>	Restio	70cm	✓	✓	✗	Compact structural plant with white and golden flowers in winter	Feature plant to be used in clumps or alone. Low maintenance
<i>Thamnochortus cinereus</i>	Silverreit	1m	✓	✓	✓	Colourful restio with grey/green sideshoots and silver tassels	Low maintenance accent plant

GROUNDCOVERS

<i>Agapanthus praecox</i>	Agapanthus	50cm	✓	½	✓	Large strap like leaves and tall blue flowers on stalks	Excellent groundcover. Plant in groups for best effect
<i>Agapanthus nana</i>	Dwarf Agapanthus	20cm	✓	½	✓	Thin strap like leaves with lovely flowers on stalks	Excellent groundcover. Plant in groups for best effect
<i>Arctotis stoechadifolia</i>	Arctotis	20cm	✓	✗	✓	Silvery foliage with large daisy like flowers; Fast growing	Good clump forming plant for bank stabilization and mass planting
<i>Asparagus desiflorus "meyersii"</i>	Cat's tail asparagus	50cm	✓	✓	✓	Structural foliage plant with dense thick fronds and tiny white flowers followed by red berries	Good for dry shade under trees. Plant in groups for best effect
<i>Chasmanthe floribunda</i>	Chasmanthe	50cm	✓	½	½	Deciduous bulb with pointed strappy leaves and stunning yellow blooms	Feature plant, best planted in groups near water features
<i>Clivia sp</i>	Bush lily	30cm-1m	✗	✓	✓	Broad dark green strappy leaves with dense umbels of large orange flowers	Feature plant for very shady beds
<i>Crassula multicava</i>	Fairy crassula	15cm	✓	✓	✓	Dainty succulent with attractive foliage and pretty pink flowers	Perfect for dry shade and rockeries. Plant in groups for effect

<i>Dietes grandiflora</i>	Wild Iris	1m	✓	✓	✓	Attractive strappy leaves with stunning white iris like flowers for most of the year	Best planted in groups as a feature also in mixed borders
<i>Dymondia margaretea</i>	Dymondia	10cm	✓	✗	✓	Clump forming low growing with cheerful yellow daisy like flowers	Suitable for bank stabilization. Best planted in groups
<i>Felicia aethiopica</i>	Margueriet	30cm	✓	✗	✓	Bright green round leaves and navy blue flowers in spring and summer	Suitable for bank stabilization. Best planted in groups
<i>Felicia echinata</i>	Dune daisy	60cm	✓	✗	✓	Dark prickly glossy leaves with mauve and white flowers from autumn	Suitable for bank stabilization and as a feature planted in groups
<i>Gazania krebsiana</i>	Botterblom	10cm	✓	✗	✓	Clump forming with dark foliage and flame red flowers	Plant in groups for a striking display. Suitable for bank stabilization
<i>Gazania rigens var uniflora</i>	Gazania	10cm	✓	✗	✓	Silvery foliage and cheerful yellow daisies all year round	Bank stabilization, borders and en mass
<i>Geranium incanum</i>	Bergtee	30cm	✗	1/2	✗	Rosy colored lacy foliage with white flowers for most of the year	Plant in large groups for a stunning display, can also be used for bank stabilization
<i>Helichrysum cymosum</i>	Goue tapyt	50cm	✓	✗	✓	Small grey leaf with fluffy yellow flowers in summer	Excellent bank stabilization, relatively low maintenance
<i>Helichrysum petiolare</i>	Kooigoed	50cm	✓	1/2	1/2	Aromatic grey woolly foliage with cream flowers in summer	Lovely border plant, can be pruned and used for bank stabilization
<i>Kniphofia praecox</i>	Red hot poker	50cm-1m	✓	✗	✓	Stunning red rocket like flowers with thin strappy leaves	Plant near water feature or in groups as a feature
<i>Lobelia chamaepitys</i>	Wild Lobelia		1/2	1/2	1/2	Dainty violet flowers on slender stalks	Plant in large groups for a stunning display
<i>Lobelia coronopifolia</i>	Lobelia		1/2	1/2	1/2	Dainty white and pink flowers on slender stalks	Plant in large groups for a stunning display
<i>Pelargonium capitatum</i>	Rose scented pelargonium	1m	✓	✗	✓	Spreading shrub with rose scented foliage and flowers all year round	Perfect bank stabilization and mixed borders
<i>Pelargonium tomentosum</i>	Mint scented pelargonium	40cm	✓	✓	✓	Sprawling plant with large mint scented leaves and small white flowers	Suitable for bank stabilization and mixed borders
<i>Pelargonium peltatum</i>	Ivy leaved pelargonium	30cm	✓	✗	✓	Glossy ivy shaped leaves and pink flowers	Good for climbing up fences and retaining walls
<i>Plectranthus neochilus</i>	Spur flower	20cm	✓	1/2	✓	Semi-succulent grey leaves and blue flowers all year	Perfect for dry shade, retaining walls and bank stabilization
<i>Plectranthus sp</i>		15cm-1m	1/2	✓	1/2	Versatile plant species with serrated leaf shape and a variety of flower shapes and	Perfect for damp and dry shade. Plant in groups for best effect also good as edging

						colours	
<i>Rumhora adiantiformis</i>	Seven week fern	25-55cm	✘	✓	✘	Beautiful fern with dark green leathery leaves	Plant in a damp or dry shady position.
<i>Scabiosa sp</i>	Cape Scabious, Pincushion, Koringblom	20cm	✓	✘	✓	Attractive clump forming perennial covered in masses of pom pom flowers	Plant as edging or in groups for a glorious display
<i>Sutera cordata</i>	Sutera	5cm	1/2	1/2	1/2	Trailing groundcover covered in white and mauve flowers all year long	Good between pavers and in hanging baskets, also in dry shade
<i>Watsonia spp.</i>	Watsonia	50cm	✓	1/2	✓	Evergreen and deciduous varieties with strap like leaves and stunning blooms ranging from red, pink, salmon to white	Stunning near water features and planted in groups to provide a colourful display
<i>Zantedeschia aethopica</i>	Arum lily	1-1.5m	✓	1/2	✘	Creamy white spathes and large attractive leaves	Thrives in moist shady areas. Perfect around water features

CLIMBERS

<i>Jasminum multipartitum</i>	Starry-eyed jasmine, Sterretjies-jasmyn	1.5 to 3m	✓	1/2	1/2	Scrambling plant with dark green leaves and sweet smelling white flowers; Medium to fast growing	Trained up it grows to 3m, left as shrub it reaches 1.5m
<i>Senecio tamoides</i>	Canary creeper	-	✓	1/2	✓	Fast growing with glossy leaves and masses of yellow flowers in autumn	Excellent for bank stabilization, hanging baskets. Needs firm support
<i>Thunbergia alata</i>	Black eyed Susan	-	1/2	1/2	1/2	Fast growing with attractive orange blooms all year long	Stunning in hanging baskets and trailing up fences. Needs light support
<i>Rhoicissus tomentosa</i>	Wild grape	-	1/2	1/2	1/2	Attractive round large showy foliage with edible grape like berries	Excellent grown over pergolas. Needs firm support

SUCCULENTS

<i>Aloe ferox</i>	Bitter aloe	2m	✓	✘	✓	Large striking accent plant with huge spikes of deep orange flowers in winter	Good in very dry rocky areas. Best planted alone or in a row
<i>Bulbine frutescens</i>	Katstert	20cm	✓	✘	✓	Clump forming succulent with spikes of yellow/orange flowers all year long	Plant in groups for best effect. Good for bank stabilization
<i>Carpobrotus spp</i>	Sour fig	15cm	✓	✘	✓	Thick rampant clump forming succulent with flat pink, white and yellow flowers and & fruit	Perfect for bank stabilization, very low maintenance

Annexure 3

General Authorisation from DW&S



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

WESTERN CAPE REGION

Private Bag X16, Sanlam Hof, 7532, 52 Voortrekker Road, Bellville 7530 Tel: (021) 941 6000, Fax: (021) 941 6077

Enquiries: Marshall Booyesen Tel: 021 941 6292 Fax: 086 6470153 Email: booyesenm@dwa.gov.za
Ref No.: 16/2/7/G200

ATTENTION: Mr. Terrance Sanders

Schonenberg Estate Home Owners Association
Old Main Road
SOMERSET WEST
7130

Dear Sir

GENERAL AUTHORISATION IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT (Act 36 of 1998): SCHONENBERG ESTATE, SOMERSET WEST, WESTERN CAPE

Your site meeting dated 23 July 2013 with this Department and the subsequent information provided on 13 August 2013 to store natural run-off in 2 dams for irrigation of gardens refers.

In terms of section 21 of the National Water Act, 1998 (Act 36 of 1998), the taking of water is considered a water use.

All water uses that were not lawfully exercised two years prior to the implementation of the National Water Act, 1998 (Act 36 of 1998) and that do not fall under a General Authorisation, require a licence application. An existing lawful use means a water use that was lawful in terms of our previous legislation and which was exercised within the qualifying period of 1 October 1996 to 1 October 1998.

The General Authorisation (GA) No. 399, dated 26 March 2004 in terms of section 39 of the National Water Act, 1998 (Act 36 of 1998) authorises a person who lawfully occupies a property to abstract and store certain amounts of water, depending on the zone/area where the property is situated, without a licence.

Your property as described above falls in the G22H Quaternary Drainage area of the General Authorisation for surface water abstraction. Taking into account your combined rate of 34m³/8hr from Dam1 and Sam`s dam, this would allow you to store and abstract 24939m³ of water/annum. This Department strongly insist that water saving plants be used to keep water use minimal.

The lawful occupiers are thus authorized to abstract the above-said amount of water on their property without a licence, as long as the lawful owner(s) complies with the following conditions:

- (a) The water use does not impact on the water resource or any other person`s water use, property or land;
- (b) The water use is not excessive in relation to the capacity of the water resource and the needs of the users;

- (c) The water use is not detrimental to the health and safety of the public in the vicinity of the activity;
- (d) The user needs to register the water use at the Department before any water use activity can commence;
- (e) As soon as the volume of abstraction exceeds the above-mentioned limit, the user needs to apply for a licence;
- (f) The registered user must ensure the establishment of monitoring programmes to measure the quantity of water abstracted; and
- (g) All conditions of the said GA are complied with.

EXCLUSION

This Authorisation does not apply-

- (a) to any lawful taking and storage within a government water control area, a government water work, a catchment control area or an irrigation district as defined in the Water Act, 1956 (Act No. 54 of 1956) prior to its repeal;
- (b) to a person who does not have lawful access to any waterworks or water resource;
- (c) to wetlands, the dewatering of mines or storage of water underground;
- (d) to an exclusion zone of 750 meters inland from the high water mark; and
- (e) to an area where the limits of taking and storage water were reduced in terms of section 9B (1C) of the Water Act, 1956 (Act No. 54 of 1956).

COMPLIANCE WITH NATIONAL WATER ACT AND OTHER LAWS


This Authorisation does not-

- (a) apply to any water use under Schedule 1 of the National Water Act, 1998 (Act 36 of 1998);
- (b) replace any existing authorisation that is recognised under the National Water Act; or
- (c) exempt a person who uses water from compliance with any other provision of the National Water Act unless stated otherwise in this notice, or any other applicable law, regulation ordinance or by-law.

Any deviations from the above mentioned conditions would require an application for a licence.

For more information, feel free to contact the Regional office on the abovementioned contact details.

Yours faithfully


CHIEF DIRECTOR: WESTERN CAPE

DATE: 10 October 2013

Annexure 4

List of Alien Invasive Species

Found in the Seep Conservation Area

cr PLANTLIST SEEP - SCHONENBURG

DATE ; SEPT. '13

	BOTANICLE NAME	COMMON NAME ENGLISH	COMMON NAME AFRIKAANS	P - PLANT SG - SELF GERM.
1	ACMADENIA CANDIDA			SG
2	AGAPANTHUS SP			P-LANDSCAPER
3	ALBUCA CANADENSIS			SG
4	ALBUCA COOPERI	SOLDIER-IN-A-BOX	GELDBEURSIES	SG
5	ARISTEA AFRICANA		MAAGBOSSIE	P-LANDSCAPER
6	ASPALATHUS CORDATA	CAPE CORSE		SG
7	ASPARAGUS SP ?			SG
8	ATHANASIEA TRIFURCATA		KLAASLOUWBOS	SG
9	BAEOMETRA UNIFLORA	BEETLE LILY		SG
10	BARLERIA SP			P
11	BRACHYLEANA			P-LANDSCAPER
12	BULBINELLA FRITICOSA			P-LANDSCAPER
13	CARPOBROTUS EDULIS			P
14	CHASMANTHE AETHIOPICA			P
15	CLIFFORTIA RUSCIFOLIA	CLIMBER'S FRIEND	STEEKBOS	SG
16	COLEONEMA JUNIPERINUM	CAPE MAY		SG
17	CUNONIA CAPENSIS			P
18	CYPERUS TRXTILIS			P-LANDSCAPER
19	CYPERUS MARGINATUS		MATJIESGOED	P-LANDSCAPER
20	CYPERUS THUNBERGII			P-LANDSCAPER
21	ELEGIA CAPENSIS		FONTEINRIET	P-LANDSCAPER
22	ELEGIA TECRORUM		DEKRIET	P-LANDSCAPER
23	ELYTROPAPPUS RHINO		RENOSTERBOS	SG
24	EUPHORBIA ERYTHRINAS		PISGOED	SG
25	FICINIA NODOSA	DUNE SLACK SEDGE	STEEKRIETJIE	P-LANDSCAPER
26	GLADIOLUS BREVITUBUS			SG
27	GNIDIA SQUARROSA			SG
28	HALLERIA ELLIPTICA	BUSH HONEYSUC	NOTSUNG	P-LANDSCAPER
29	HELICRYSUM PANDURIFOLIUM		KOOIGOED	SG
30	ILEX MITIS	CAPE HOLLY		P
31	KIGGELARIA AFRICANA			P
32	KNIPHOFIA UVARIA	RED HOT POKER		P-LANDSCAPER
33	LACHENALIA ORCHIOIDES	WILD HYACINTH	GREENVIOOLTJIE	SG
34	LOBELIA LINEARIS			SG
35	METALASIA MURICATA		BLOMBOS,	SG & P
36	OSTEOSPERMUM INCANUM			P
37	ORNITHOGALUM THYRSOIDES	TICKBERRY	BOSLUISBOSSIE	P
38	ORPHIUM FRUTESCENS	CHINCHERINCHEE	TJENKERIENTJEE	SG
39	OXALIS ECKLONIANA	SEAROSE		SG & P
40	OXALIS LUTEOLA			SG
41	OXALIS OBTUSA			SG
42	OXALIS POLYPHYLLA			SG
43	PASSERINA RIGIDA			SG
44	PELARGONIUM CAPITATUM	VINERSURING	SEEKOPPIESGANNA	SG

	BOTANICAL NAME	COMMON NAME ENGLISH	COMMON NAME AFRIKAANS	P - PLANT SG - SELF GERM.
45	PELARGONIUM CUCULLATUM			SG
46	PELARGONIUM INCANUM			P-LANDSCAPER
47	PELARGONIUM MYRRHIFOLIUM		AMARABOSSIE	P
48	PODALARIA CALYPTRA	RAMBOSSIE	BUTTERFLY PELARG	SG
49	PSOLARIA PINNATA	KEURTJIE	ERTJIEBLOM	P
50	PYCREUS SP ?			SG
51	RESTIO BIFARIUS			P
52	RHUS ANGUSTIFOLIA			P-LANDSCAPER
53	RHUS CRENATA	TAAIBOS	WILLOW KORENTEBOS	SG
54	RHUS LANCEA	KAREE		P-LANDSCAPER
55	ROMULEA HIRSUTA			SG
56	ROMULEA ROSEA		KNIKKERTJIES	SG
57	TORILIS ARVENSIS	HEDGE PARSELEY		SG
58	SALIX MUCRONATA	CAPE WILLOW	KAAPSE WILGER	P
59	SALIX			P
60	SATYRIUM CORIIFOLIUM		P	SG
61	SCIRPUS SP. ?			SG
62	SENECIO ABRUPTUS		BASTERGEELHONGERBLOM	SG
63	STACHYS AETHIOPIEA			SG
64	STRUTHIOLA MYRSINITES		KATBOSSIE	SG
65	STOEBE PLUMOSA		SLANGBOS	SG
66	TEPHROSIA CAPENSIS	FISH BEAN		SG
67	TETRARIA BRACHYPHYLLA		CYPERUS SP	SG
68	THAMNOCHORTUS INSIGNIS		DEKRIET	P-LANDSCAPER
69	TYPHA CAPENSIS	BULLRUSHES	PALMIETE	P-LANDSCAPER
70	WATSONIA ZEYHERII			P-LANDSCAPER
71	WIIDRINGTONIA NODIFLORA	MOUNTAIN CYPRESS	BERG SIPRES	P
72	WURMBEA STRICTA		RYSBLOMMETJIE	P
73	ZANTHEDESCHIA AETHIOPICA	CALLA	VARKLELIE	SG & P

GRASSES

1	BRIZA MAXIMA			SG
2	BRIZA MINOR			SG
3	BROMIS CARTHARTICUS		MEERJARIGE RAAIGRAS	SG
4	ERAGROSTIS CAPENSIS		ROOIGRAS	SG
5	ERAGROSTIS RACEMOSA		SMALHARTJIES GRAS	SG
6	SOLEPSIS HYSTRIX		HARTJIESGRAS	SG
7	LOLIUM PERENNE		GROOTBEWERTJIE GRAS	SG
8	THEMEDA TRIANDRA		REDDINGSGRAS	SG

SAMPIOENE

1	Amanita Pantherina	PANTHER CAPS		
2	Coprinus comatus	SHAGGY INK CAP		
3	Lactarius deliciosus -	ORANGE PINE RIING		
4	Suillus Granulatis			

VERWYSINGS

- 1 EASY IDENTIFICATION OF SOME SOUTH-AFICAN WETLAND PLANTS - WATER RESEARH COMMISSION
- 2 RESTIOS OF THE FYNBOS - ELS DORRAT - HAAKSMA & H. PETER LINDER
- 3 WILD FLOWERS OF SOUTH AFRICA - JOHN MANNING
- 4 FYNBOS - JOHN MANNING
- 5 STELLENBOSCH TO HERMANUS WILD FLOWER GUIDE 5 - ANN BEAN & AMIDA JOHNS

N.S. DAAR IS NOG PLANTE SOORTE, MAAR KON NOG NIE IDENTIFISEERD NIE

SCHONENBURG SEEP

25/08/13

Die afgelope maande word daar gekonsentreer net op onkruid wat groot genoeg is om uit te haal, nog voor saadvorming.

GEIDENTIFISEERDE PROBLEEMPLANTE EN INDRINGERONKRUIDE IN SEEP

1. ACACIA SP [WATTELS]
2. ANAGALLIS ARVENSIS [ROOIMUUR, PIMPERNEL]
3. **ARGENOME MEXICANA [GEELBLOMBLOUDDISSEL, YELLOW-FLOWERED MEXICAN POPPY]**
4. AVENA FATUA [GEWONE WILDE HAWER, COMMON WILD OATS]
5. BIDENS PILOSA [GEWONE KNAPSE KEREL, COMMON BLACKJACK]
6. CALLISTEMON, SP
7. CIRSIUM VULGARE [SPEERDISSEL, SPEAR THISTLE]
8. CONSYZA BONARIENSIS [KLEINSKRAALHANS, FLAX LEAF FLEABANE]
9. CONYZA sp [VAALKRANSHANS]
10. CORONOPIS DIDYMUS [PEPERKRUID, CARROT WEED]
11. CORTODARIA SP [GRAS]
12. **DITTRICHIA SP [KAAPSE KAKIEBOS]**
13. **ECHIUM PLANTAGINEUM [BLUE ECHIUM]**
14. ERODIUM MOSCHATUM [TURKNAEL, MUSK HERONS'S BILL]
15. EUPHORBIA HELIOSCOPIA [SAMBREELMELKKRUID, UMBRELLA MILKWOOD]???
16. FLAVERIA BIDENTIS [SMELTEBOSSIE]
17. **FOENICULUM VULGARE [VINKEL, WILD FENNEL]**
18. FUMARIA MURALIS [DUIWE KERWEL]
19. GAMACHAETE PENNSYLVANICA [ROERKRUID]
20. **HAKA SP [PORT JACKSON]**
21. HYDROCOTYLE AMERICANA [PERDE KLOUTJIES, NAVELWORT]
22. HYPOCHAERIS RADICATA [HARIGE SKAAPSLAAI, HAIRY WILD LETTUCE]
23. LOLIUM MULTIFLORUM [DRABOK [RAAIGRAS, ITALIAN RYEGRASS]
24. LOTUS SUBBIFLORIS [LOTUS]
25. MALVA PARVIFLORA [BROOD-EN-BOTTER]
26. MEDICAGO POLYMORPHA [KLITSKLAWER, BUR CLOVER]
27. **MEDICAGO SATIVA [LUSERN]**
28. MELILOTUS ALBUS [WITSTINKKLAWER, WHITE SWEET CLOVER]
29. MELILOTUS INDICUS [EENJARIGE GEELSTINKKLAWER, ANNUAL YELLOW SWEET CLOVER]
30. NASTURSIUM OFFICINALE [STERKKOS, WATERCRESS]
31. OENOTHERA INDECORA [NAGBLOM, EVENING PRIMROSE]
32. OXALIS LATIFOLIA [ROOITUINSURING, RED GARDEN SORREL]
33. OXALIS PES – CAPRAE [GEELSURING, YELLOW SORREL]
34. PANUCUM SP.
35. **PENNISETUM CLANDESTINUM [KIKOEJOE]**
36. **PICRIS ECHIOIDES [BRISTLY OXTONGUE]**
37. PINUS SP [DENNE]
38. **PLANTAGO SP [GROOTWEEBLAAR, BROADLEAF RIBWORT]**

39. POLYGONUM AVICULARE [VOELDUISENDEKNOP, PROSTRATE KNOTWEED]

40. PSEUDOGNAPHALIMUM LUTEO-ALBUM] [JERSEY CUDWEED]

41. **RAPHANUS RAPHANISTRUM [RAMENAS, WILD RADISH]**

42. **RAPISTRUM RUGOSUM [WILD MUSTARD, WILDE MOSTERD]**

43. RUMEX ACETOSELLA SUB. ANGIOCARPUS [ROOISURING, SHEEP SORREL]

44. RUMEX CRISPUS [KRULTONGBLAAR, CURLY DOCK]

45. SENECEO CONSANGUINEUS [HONGERBOS=SENECIO, STARVATION-SENECIO] ????

46. SISYBIUM ORIENTALE [INDIAN HEDGE MUSTARD]

47. SONCHUS SP [SYDISSEL] XANTHIUM SPINOSUM [BOETEBOSSIE]

48. TARAXACUM OFFICINALE [PERDEBLOM, COMMON DANDOLIEN]

49. TRIFOLIUM ANGUSTIFOLIA [NARROW LEAVED CLOVER]

50. TRIFOLIUM REPENS [WITKLAWER, WHITE CLOVER]

51. **TYPHA CAPENSIS [PAPKUIL, BULLRUSH]**

52. **VICIA SATIVA [BREEBLAAR PERS-WIEKE, BROAD-LEAVED PURPLE VETCH]**

53. **VICIA BENGHALENSIS [SMALBLAARPERSWIELE, NARROW – LEAFED –PURPLE VETCH]**

N.S. DAAR IS NOG GRASSOORTE, WATERPLANTE EN SOORTE PAPIRUSSE WAT OOK INDRINGERS IS, MAAR KON NOG NIE IDENTIFISEERD NIE

BAIE DANKIE

SUSAN KILLIAN

VERWYSINGS

PROBLEEMPLANTE EN INDRINGERONKRUIDE VAN SUID AFRIKA – CLIVE BROMILOW

NS ALLES MET ROOI GETIK, IS DIT WAAROP GEKONSENTEER IS IN 2013, BEHALWE PENNISETUM SP

Annexure 5
Permit from Cape Nature for Introduction
of Grass Carp

Western Cape Province

Telephone No: (027) 021 483 0000
 EMail: permits.fax@capenature.co.za
 PGWC Shared Services Centre
 cnr Bosduif and Volstruis Streets
 Bridgetown
 7764



Facsimile No: (027)0865567734
 Internet: www.capenature.co.za
 Private Bag X29
 Gatesville
 7766

PERMIT TO TRANSPORT AND STOCK LIVE FISHES

(Issued in terms of the provisions of the Nature Cons. Ordinance, 1974 (Ord 19 of 1974) (Section 57 & 58))
Not Transferable

Holder			
Full Name	Mr M Lottering	Identity No.	7804115034082
Trade Name	NA	Registration No.	AAA043-00180
Postal Address	Private Bag X3	Physical Address	26 Hendrik Street
Suburb\Town	Somerset West	Suburb\Town	Paarl North
Province\State	Western Cape	Province\State	Western Cape
Country	Sotuh Africa	Country	South Africa
Postal\Zip Code	7129	Longitude	.0000
		Latitude	.0000

In terms of Sections 57 & 58 of the Nature Conservation Ordinance, 1974 (Ordinance 19 of 1974), a permit is hereby issued to the Holder to transport and stock in the Province of the Western Cape the under-mentioned live fishes:

Details	
Permit/Licence No	0057-AAA007-00018
Expiry Date	09/07/2016
Date Issued	10/07/2015
Amount Paid	R 0.00
Reference	CONCESSION
File Code	1/2/3/6
Stamp:	

Description	Supplier	Destination
Organization	De Rust Fish Farm	NA
Person	Claassen FA Mr	Lottering M Mr
ID	5708065002084	7804115034082
Properties	48 Main Road	Schonenberg Estate
Physical Address	NA	NA
District	Bonnievale	Somerset West
Province/State	Western Cape	Western Cape
Country	South Africa	Sotuh Africa
Longitude	.0000	.0000
Latitude	.0000	.0000

Species (Scientific Name)	Qty	Note
Grass carp (Ctenopharyngodon idella)	5	Sterile. Conditions apply, note special conditions

Issued by:
 Lee-Anne Benjamin

Approved on Behalf CEO
 Western Cape Nature Conservation Board

10/07/2015
Effective Date

Signature of Holder
 I acknowledge, accept and understand fully the permit conditions as described

Standard Conditions

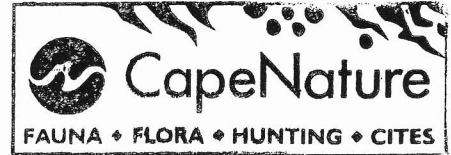
1. This permit is valid for one year only.
2. This permit is not transferable.
3. Fish may only be stocked at the locality indicated on this permit. Moving fish to a new location requires a new permit application.
4. Under no circumstances may any fish be translocated to any river system.
5. Non-compliance with permit conditions will result in the permit becoming invalid.


Special Conditions

THIS PERMIT IS ISSUED SUBJECT TO THE FOLLOWING SPECIAL CONDITION:

1. A permit issued in terms of the National Environmental Management: Biodiversity Act - Alien Invasive Species (AIS) Regulations is required in addition to this permit for the stocking of sterile *C. idella*.

GPS coordinates: S: 34° 03' 59.7
E: 18° 48' 38.7"




BENJAMIN
CHIEF EXECUTIVE OFFICER
WCNCB

Annexure 6

Change of Ownership of the EA



**Western Cape
Government**

Environmental Affairs and
Development Planning

Directorate: Development Management (Region 2)

REFERENCE: 16/3/3/6/B4/45/1035/15

ENQUIRIES: BERNADETTE OSBORNE

DATE: 2015 -03- 23

Schonenburg Homeowners Association
Schonenberg Estate
Private Bag X3
SOMERSET WEST
7129

Attention: G. van Niekerk

Tel: (021) 855 4537
Fax: (021) 855 5919

Dear Sir/Madam

CHANGE OF OWNERSHIP OF THE ENVIRONMENTAL AUTHORISATION: THE CHANGE IN LAND USE ON PORTION NO. 46 ON THE FARM NO. 794, STELLENBOSCH, FOR THE DEVELOPMENT OF A HOUSING COMPLEX WHICH INCLUDES COMMERCIAL, RETAIL AND PUBLIC FACILITIES.

1. The Environmental Authorisation ("EA") referenced "E12/2/1-105 Farm 794/46" issued on 1 December 2003 and your letter dated 9 February 2015, refer.
2. This Department takes note of the change of ownership from Heartland Properties (Pty) Ltd to Schonenburg Homeowners Association and would like to express its appreciation for your compliance with Condition 11 of the EA.
3. We look forward to receiving your co-operation in ensuring continuous compliance with the conditions of the EA.
4. Be advised that the Department may conduct compliance site visits as deemed necessary.
5. This Department reserves the right to revise initial comments and request further information based on any new or revised information received.
6. Kindly quote the abovementioned reference number in any future correspondence in respect of the application.
7. Thank you for your interest in the future of our environment.

Yours faithfully


PP

HEAD OF DEPARTMENT

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

Cc: (1) J Gichobi (Frontline Safety, Health and Environmental Consultants)
(2) G September (City of Cape Town)

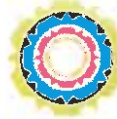
Fax: (086) 605 6469
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2nd Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 3679/4349 Fax: +27 21 483 3633
E-mail: Bernadette.Osborne@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp

Annexure 7

Notice of Contravention from CoCT



Goodwood Municipal Office
Voortrekker Road, Goodwood.
P O Box 100
Goodwood 7459

Tel: +27 21 6841042
Fax: +27 21 6379722

Webmail: <http://www.capetown.gov.za>

E-mail

Ref:

Goodwood Municipal Office
Voortrekker Road, Goodwood
iBhoksi 100
Goodwood 7459

Umnxeba: +27 21 6841042
Ifeksi: +27 21 6379722

Goodwood Munisipale Kantoor
Voortrekkerweg, Goodwood
Posbus 100
Goodwood 7459

Tel: +27 21 6841042
Faks: +27 21 6379722

**WATER SERVICES – POLICY, STRATEGY & REGULATION SECTION, WATER DEMAND
MANAGEMENT & STRATEGY BRANCH, WATER & SANITATION
DEPARTMENT**

DATE: 24-08-2015 Rev 10 Sept.

.....
Attention: Mr Gerrie van Niekerk / Ms Sheila Ives
Schonenberg Estate Home Owners Association
Old Main Rd
Somerset West 7130

estatemanager@schonenberg.co.za

Dear Sir/Madam

**NOTICE OF A CONTRAVENTION OF THE BY-LAW RELATING TO STORMWATER
MANAGEMENT (PG6300; LA31420) PROMULGATED 23 SEPTEMBER 2005.**

An inspection of the abovementioned premises on 20 – 08 - 2015 revealed that without the prior written consent of Council, in contravention of Section 4 (c) of the By-Law relating to Stormwater Management (PG6300; LA31420) promulgated 23 September 2005:

Agil 100EC is used to control weeds at least four times a year and is toxic to aquatic life and the environment. At Schonenberg Estate it is applied directly to the river banks, streams and wetland.

.....
Your attention is drawn to Section 4 which reads as follows:

4. Protection of stormwater system

No person may, except with the written consent of the Council and subject to any conditions it may impose—

- (a) damage, endanger, destroy or undertake any action likely to damage, endanger or destroy, the stormwater system or the operation thereof;
- (b) discharge from any place, or place onto any surface, any substance other than stormwater, where that substance could reasonably be expected to find its way into the stormwater system;
- (c) discharge, permit to enter or place anything likely to damage the stormwater system or interfere with the operation thereof or contaminate or pollute the water therein;
- (d) construct or erect any structure or thing over or in such a position or in such a manner so as to interfere with or endanger the stormwater system or the operation thereof; or
- (e) make an opening into a stormwater pipe, canal or culvert, or
- (f) drain, abstract or divert any water directly from the stormwater system, or
- (g) fill, excavate, shape, landscape, open up or remove the ground above, within, under or immediately next to any part of the stormwater system.

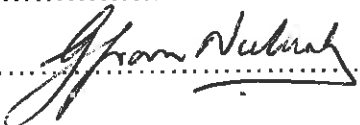
Accordingly, acting under duly authorised delegation, I hereby call upon you, in terms of section 10 of the By-law relating to Storm water Management (PG6300; LA31420) promulgated 23 September 2005, to cease forthwith the unauthorised use of Agil 100 EC herbicide product to the City's storm water system.

In terms of Section 11 of the By-law failure to comply with this notice will constitute an offence. The council may, accordingly, without further notice, institute legal proceedings against you, either civil or criminal, should you fail to comply with the terms of this notice. Should the laboratory results of the sampled samples indicate the need for rehabilitation of the contaminated streams, river bank and wetland, the City of Cape Town may direct the polluter to rehabilitate the affected areas. For any enquiry you may contact the Helderberg district office's Senior Water Pollution Control Inspector Mr Thobile Mizah @ 021 444 2376 or Thobile.Mizah @capetown.gov.za

Yours sincerely,

(For) DIRECTOR: WATER AND SANITATION

RECEIVED BY

Name printed G. J. VAN NIEKERK
Position ESTATE MANAGER
Sign 

Annexure 8
Fire Safety Audit



Schoenenberg Estate Safety Audit

This audit was conducted at the request of the body corporate and reviews safety aspects of the estate and encompasses aspects of fire, medical and health and safety. While every effort is made to be thorough, we cannot be held liable for any transgressions of the act that were missed nor changed after the report was submitted.

Main office:

Smoke detectors were noted however the workings thereof have not being confirmed. No fire extinguishers were found upstairs. 1 x 4kg DCP extinguisher was found downstairs however not mounted to the wall nor marked with any signage. It is sufficient however due to not being mounted nor sign boarded it does not conform with the act. We would recommend the DVP be moved upstairs and a CO2 extinguisher is placed downstairs which is more appropriate for electronic equipment fires. The emergency evacuation route isn't marked and a clear emergency exit is not designated nor marked either. A key needs to be kept in a breakable box, mounted at the exit of choice. We recommend the water cooler is moved further away from the photocopier machine. The generator housing the enclosure is wooden and therefore easily combustible. It is recommended the generators are placed in drip trays so should the fuel tank rupture, the fuel does not catch alight and spread. We then recommend they are moved out of the wooden enclosure and a simple, less combustible shelter is provided.

Security office:

High levels of clutter are noted which is bad house-keeping and therefore an increased fire risk. 2 x 4kg DCP extinguishers are present however incorrectly coloured. They have green tops which indicate Halon or BFC which is illegal and confusing. They are also unmounted and no signage present. Comprehensive maps of the estate are not present. To cater for emergency vehicles entering the estate, we suggest either an escort to the incident by the emergency response vehicle otherwise laminated maps of the estate to be provided on entry which the security can mark with a whiteboard marker to help emergency vehicles navigate to the residence in question easier. A fire

broke out on the estates perimeter during the inspection and we were able to witness the procedure carried out by security. The following was noted:

- Poor communication between the security office and emergency response vehicle which was on scene.
- The security office was not sure how and who to call. Numerous attempts were made to try and contact the fire department.
- No communication to their central control room was made in the first 10 minutes.
- No update from the emergency vehicle.
- No firefighting readiness was conducted by the security team should the fire begin to threaten the estate. With the vehicle on the outside of the estate, they had no access to hydrants within the perimeter.

We therefore propose the following:

- Provide site specific training for the estate. This included the use of extinguishers, the use of fire hydrants and equipment, familiarization of the estates fire risk points.
- Improvement and rehearsing of procedures. This includes security breaches, medical emergencies, fire emergencies, contacting the correct authorities and response units, positioning and responsibilities/roles of the control room, roaming guards and control room.
- Familiarization of the estates hydrant points and coverage areas.
- Review of lists within the control room. Simplify them with basic emergency numbers and step by step instructions which are easy to follow in the case of an emergency.
- The emergency response vehicle remains inside the estate during a fire on the outside perimeter of the estate. During which time they are able to connect and ready hydrants to ensure the fire does not get close nor breach the estates perimeter.
- A second set of hoses and nozzles are purchased and kept in the main office or security office. This serves multiple purposes. Allow access to fire equipment by estate staff should the emergency response vehicle be delayed, extend the reach of the current hose and double up at a second hydrant point for increased water flow on a larger fire.
- A means of communication is needed between Schoenenberg management and the onsite emergency response vehicle.

7 Guards within the estate were interviewed and it has become apparent that not one is trained or else holds a valid, in date certificate for either basic firefighting or first aid on any level. The only training which they held was training from previous employment which had expired. This does not speak for the guards which weren't on-site or interviewed during the time of this audit. It is

suggested that all guards hold at least a valid first aid and basic firefighting certificate as required by Psira. We recommend this is done in house to ensure quality, compliance with department of labour and site specific advantage. **Contractors:** it is recommended that security staff ensures that contractors entering site carry the legal required first aid and firefighting equipment to ensure that should a fire start on their site, they are equipped to either extinguish it or at least control it until backup arrived. A guideline of what they should be checking for should be provided to them.

Server room (adjoined to security office):

This is an enclosed area with a high fire risk due to the heat of the equipment and electrical components. Should a fire start in here it will only be detected once the door begins to burn or smoke is detected which would be in late stages of the fire. In addition to the current CO2 extinguisher present, 1 extra 9kg CO2 is recommended and both needs to be mounted. We would also suggest the second one is mounted outside the door as the heat generated by the fire might make them difficult to handle. It is also recommended that a smoke detector is mounted to the roof with an audible alarm which can be heard from the security control room so they are able to take early action.

Estate Agent:

This area falls under commercial property. Compliant emergency exits are vital. Either a spring loaded push-bar system or a key mounted to the wall in a breakable box is recommended for the designated emergency exit. Visible emergency signage is required indicating evacuation routes and exits. 1 x 4.5kg DCP and 1 x 9kg CO2 were found downstairs and 1 x 4.5kg DCP and 1 x 2kg DCP were found upstairs. This is found to be sufficient however they need to be mounted and signage indicating location placed above and nearby if necessary. We would also recommend that the 2kg DCP is moved and mounted in the kitchen.

Maintenance area (Crown)

This area is considered extremely high risk for the following reasons:

- Petrol powered equipment such as weed eaters and lawnmowers
- Boats and other pleasure craft are stored here each with the ability to carry in excess of 40L of petrol and or diesel.
- The boats are parked on the perimeter and therefore exposed to veld fires common on the boundary.
- Fuel stores for equipment
- Huge excess of dry tree and grass cuttings dumped on site

It was noted that only one 4.5kg DCP was on site which, although was still sealed and stamped in date, was discharged and in poor condition not unlike various other extinguishers on site which brings into question the quality of external fire services/suppliers.

We therefore propose the following:

- At least 2 x 9kg CO2, 1 x 4.5kg DCP and 1 x 4.5 AFFF extinguishers to be kept on site.
- Firefighting knowledge is essential for staff occupying this site.
- Tips of boat storage to be provided and enforced as best as possible to all owners storing boats on this site (see notes attached at the end of this report)
- All dumping to be prohibited and site to be cleared as a matter of urgency
- A motorized gate to be installed else security posted to prohibit dumping on site by residents and contractors.
- If possible, relocate boats away from the perimeter fence to reduce ignition risk from a veld fire

Retirement village:

It is recommended, if possible, to absolve Schoenenberg body corporate of any involvement and responsibility of fire, medical and health and safety compliance and an agreement drafted stating as such (agreement available on request). We do, however recommend a copy of their compliancy is requested. From a short walk through, it was noted that there was limited emergency signage in the reception area, the passage next to the reception desk was obstructed, the fire equipment cupboard was poorly marked as to the location of the fire equipment, no board stating the people designated as first aiders, fire marshals and health and safety reps was displayed, the lifesaving ring mounted in the pool area had no rope for retrieval, the hair salon had no extinguisher.

Gate 2 (contractor's gate):

All the issues found at the primary gate apply here. Training is lacking and needs to be addressed as a matter of urgency. The security manager's office was cluttered and increased fire risk. The 4.5kg DCP extinguisher was discharged, not mounted and without any signage (found under the desk).

Refuse area:

The hose reel glass was broken and it was not serviced. The AFFF extinguisher was dented and structural integrity questionable.

General estate:

Suggestions below refer to the estates common property.

- Occasional boards with maps of the estate indicating where the person currently is (including street name) to assist emergency vehicles and reporting
- Street signs to be illuminated
- A second hose and nozzle for the hydrants to be kept in security office or by estate management
- Residents to be educated in basic emergency procedures. How to deal with a small fire, basic household emergency and estate evacuation.
- Provide reasonable lighting at emergency assembly points
- Smoke markers to be carried by either emergency response vehicle or estate management and helicopter landing (LZ) procedures to be taught to relevant parties
- Helicopter landing zone to be demarcated by way of signage to prevent visitors, residents or emergency vehicles from obstructing this area
- Enforce speed limits by way of speed bumps, informing residents or dangers of speeding, implement a penalty system by way of fine.
- Ensure contractors sign an agreement containing codes of conduct, rules and regulations of the estate. This will help prevent them from straying within the estate during lunch, tea etc. Regular site visits by patrol vehicle or estate management to ensure these rules are being adhered to.
- Provide signage at hydrant points preventing vehicles parking and obstructing these points.
- Number emergency evacuation points on the map so emergency vehicles can easily identify them.

Tips for safe boat storage

- Ensure fuel lines are closed and run dry. You can do this by closing your fuel stop-cocks and letting your motor run until it cuts. This also prevents fuel from becoming stale within your motor and perishing various seals. Once this is done, disconnect your fuel line/s from the motor (applicable with outboards only)
- Tank breather valves and left open and tank hatches and left slightly ajar. This prevents vapour from causing tank expansion and possible rupture. Leaving the hatches slightly open allows the vapours emitting from the tank to escape rather than being trapped inside the hatch. If your boat has a cover, ensure the vapour has a place to escape by leaving a part of the cover loose or install an eye at an elevated area to allow ventilation
- Ensure the fire extinguisher is according to SAMSA regulation (1 DCP extinguisher per motor) and are kept in date and free from rust
- Ensure all hatches containing pyrotechnics (flares) and removed from the vessel upon storage to reduce the fire risk. They should also be kept open to prevent moisture build up
- Battery switches should be turned off and if not installed, batteries disconnected to avoid shorts caused by water and moisture build up
- Remove your key from the ignition to avoid tampering.
- Ensure your boat is securely tied down to facilitate quick removal in the case of a fire
- Regularly inspect fuel lines and priming bulbs for leaks