PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT
EIA REFERENCE: 16/3/3/2/A5/20/2046/24
APPEAL DECISION: 14/3/1/A5/20/0705/26

ANNEXURE 6 - ALIEN VEGETATION MANAGEMENT PLAN

OCTOBER 2026

DEA&DP IN-PROCESS NR: 16/3/3/2/A5/20/2046/24

DRAFT ALIEN VEGETATION MANAGEMENT PLAN FOR THE PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT

(P10 OF FARM 724, RE OF FARM 724, P23 OF FARM 724, P7 OF FARM 942, RE OF FARM 474, P3 OF FARM 474 AND P4 OF FARM 474)

MARCH 2025



COVER IMAGE NOT REPRESENTATIVE OF THE PROJECT SITE
© SHUTTERSTOCK

PREPARED FOR
CAPEWINELANDS AERO (PTY) LTD

PREPARED BY
PHS CONSULTING

P.O. BOX 1752, HERMANUS, 7200 I TEL: +27 28 312 1734 I FAX: 086 508 3249,
OLIVIA@PHSCONSULTING.CO.ZA / PAUL@PHSCONSULTING.CO.ZA

Document Details

DOCUMENT TITLE	Draft Alien Vegetation Management Plan for the Proposed Expansion of the Cape Winelands Airport
NUMBER OF PAGES	43
DOCUMENT VERSION	Draft Report for Comment Version 2

Document Control

	NAME	**EAPASA REGISTRATION NUMBER**	**SIGNATURE**	**DATE**
AUTHOR	Olivia Brunings	2023/6743 (Candidate)		07/03/2025
REVIEWER	Paul Slabbert	2019/1036		07/03/2025

PLEASE NOTE THAT ALL CHANGES FROM THE DRAFT REPORT FOR COMMENT VERSION 1 ARE UNDERLINED. GENERAL TEXT CHANGES ARE NOT UNDERLINE

TABLE OF CONTENTS

KEY TERMS AND ABBREVIATIONS 5

SECTION 1: CONTEXTUAL INFORMATION 7

1.1. Project Background 7

1.2. Purpose of the Alien Vegetation Management Plan 12

1.3. Management Strategy 12

1.4. Relevant legislation and policies 14

1.5. Status of the Alien Vegetation Management Plan 15

1.6. Responsible persons 16

1.6.1. Applicant 16

1.6.2. CWA Environmental Management Division 16

1.6.3. CWA Alien Vegetation Management Unit 17

1.6.4. The Environmental Control Officer (ECO) 17

1.6.5. The Competent Authority 18

1.6.6. Engineers and Contractors 18

SECTION 2: OVERVIEW OF SITE CONDITIONS 18

2.1. Regional Context 18

2.2. Vegetation of the property 19

2.2.1. Botanical Sensitivity 19

2.2.2. Alien and Invasive Vegetation Onsite 22

2.4. Landscaping Plan 23

SECTION 3: CONTROL GUIDELINES 25

3.1. Priority Areas for Clearing 25

3.3. Construction Phase Activities Required 28

3.4. Operational Phase Activities Required 28

3.5. General Alien Clearing Recommendations 29

SECTION 4: CONTROL METHODS 30

4.1. General Management Methodology 30

4.1.1. Mechanical Control 30

4.1.2. Chemical Control 31

4.1.3. Biological Control 33

4.2. Species Specific Methodology 33

4.2.1. *Acacia Saligna* (Port Jackson) 33

4.2.2. Gum trees (Eucalyptus spp.) 34

4.3. Herbicide Use Policy 34

4.4. Personal Protective Equipment (PPE) 37

4.5. Alternative Approaches for Biomass Clearance 37

SECTION 5: MAINTENANCE AND FOLLOW-UP 38
5.1. Timing and Frequency of Follow-Up 38
5.2. Focus of Follow-Up Treatments 38
5.3. Resource Allocation and Funding 39
5.4. General Monitoring Requirements 39
SECTION 6: BUDGETING 39
SECTION 7: MONITORING AND COMPLIANCE 41
7.1. Reporting and Record Keeping 41
7.2. Environmental Monitoring and Audits 41
7.3. Record Keeping 42
APPENDIX A: Alien vegetation clearing REPORT TEMPLATE 43

KEY TERMS AND ABBREVIATIONS

Alien Vegetation Control Officer (ACO) – A suitably qualified team leader responsible responsible for managing the Alien Vegetation Management Unit and monitoring their progress.

Alien Vegetation Management Plan (AVMP) - A strategic framework designed to control, manage, and reduce the impact of alien and invasive plant species in a specific area

Alien Vegetation Management Unit – A dedicated team stationed permanently at CWA responsible for implementing and maintaining the Alien Vegetation Management Plan. This team ensures effective control and management of invasive species, aligning all activities with the plan's requirements.

Applicant – Capewinelands Aero (Pty) Ltd. The Applicant who is the landowner, person in control of the land, developer and operator of the airport will be responsible for the overall implementation of the AVMP.

Auditing - A systematic and objective assessment of an organization's activities and services conducted and documented on a periodic basis to a predetermined standard.

CWA – Cape Winelands Airport

Department of Environmental Affairs and Development Planning (DEA&DP)– the provincial authority for sustainable environmental management and integrated development planning.

Environmental Auditor – An independent EAP appointed to conduct an audit of the environmental management systems in place for an organization or development.

Environmental Manager (EM) – Head of the CWA Environmental Management Division. The EM will oversee all aspects of the Environmental Management on site. The Environment Manager is responsible for ensuring that the organization meets its environmental policy commitments and improves its environmental performance.

Environmental Management Division (EMD) – Designated entity for overseeing and ensuring environmental compliance throughout the construction and operation of CWA.

Environmental Management Programme (EMPr) an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation, and decommissioning of a project are managed, and that positive benefit of the projects are enhanced.

Environmental Control Officer (ECO) – a suitably qualified environmental consultant to be appointed by the Applicant to oversee the implementation of the suite of Environmental Management Plans complied for the site, inclusive of this Alien Vegetation Management Plan.

IAP – Invasive Alien Plants

Management Unit – A specific, clearly defined area of land designated for alien and invasive vegetation management according to a pre-determined schedule.

National Environmental Management Act (Act 107 of 1998, as amended) (NEMA)– national legislation that provides principles for decision-making on matters that affect the environment.

Site - Area where the proposed development will take place

SECTION 1: CONTEXTUAL INFORMATION

1.1. Project Background

Overview of the proposed development:

The Cape Winelands Airport (CWA), historically known as Fisantekraal Airfield (FAFK), is located approximately 10.5 km northeast of Durbanville and 25 km northeast of Cape Town International Airport (CTIA) (see Figure 1). Initially constructed around 1943 as a South African Air Force aerodrome during World War II, CWA has since transitioned into a general aviation (GA) airfield. The current 150-hectare site includes four concrete runways, each 90 meters wide and varying in length between 700 meters and 1,500 meters. The facility supports various unscheduled operations such as recreational flying, flight training, aircraft maintenance, charter operations, crop spraying, and aerial banner towing.

The proposed development will expand the existing airport facilities, encompassing five additional cadastral portions (see Figure 2), creating a combined area of 885 hectares. Of this area, 470 hectares will be allocated for airport development, including an airside precinct, terminal precinct, services precinct, general aviation precinct and associated landscaping (see Figure 4). The remaining land will remain as agricultural zones, designated as an agricultural precinct (Figure 4). This agricultural precinct will feature a combination of dryland agriculture, conservation of botanically sensitive areas, and wetland offsets.

Alien vegetation management:

Invasive alien plants pose a significant environmental challenge in South Africa, affecting nearly 10 million hectares of land (8.28% of the country). These species, introduced from regions such as Australia, the Americas, Europe, and Asia, were originally brought for various purposes—ranging from commercial use to ornamental planting and dune stabilization. Others have been introduced accidentally. Invasive alien vegetation outcompetes native plants, reduces biodiversity, adds to the fuel load increasing the fire frequency and intensity, transforms the riparian zones, affects the functioning of aquatic ecosystems by altering water quality and flow, and unnaturally supports an increase in some fauna.

The proposed Cape Winelands Airport (CWA) development site is notably impacted by invasive species such as *Acacia saligna* (Port Jackson), *Pinus* species (pines), and *Eucalyptus* species (gums) among others. While initial efforts to clear invasive vegetation from the original CWA site began in 2020 along with the development of an Alien Invasive Management Plan (AIMP), the redevelopment and expansion of the CWA

necessitates an updated and comprehensive plan to address the broader site area. The current Alien Vegetation Management Plan (AVMP) has been developed to cover the entire CWA. This AVMP integrates the existing AIMP (October 2022) and will replace it, ensuring a unified approach to vegetation management across the expanded area.

Landowners are under a legal obligation to control invading alien plants occurring on their properties. This Alien Vegetation Management Plan forms part of the overarching Environmental Management Programme (EMPr) for the expansion and operation of the proposed CWA and serves as a strategic framework for managing invasive alien species on the entire CWA property. It covers all phase of the process, from targeted, systematic removal to ongoing management and control. The plan also establishes long-term, structured approaches for continued management and monitoring, ensuring the ecological integrity of the site both during and after the development process.

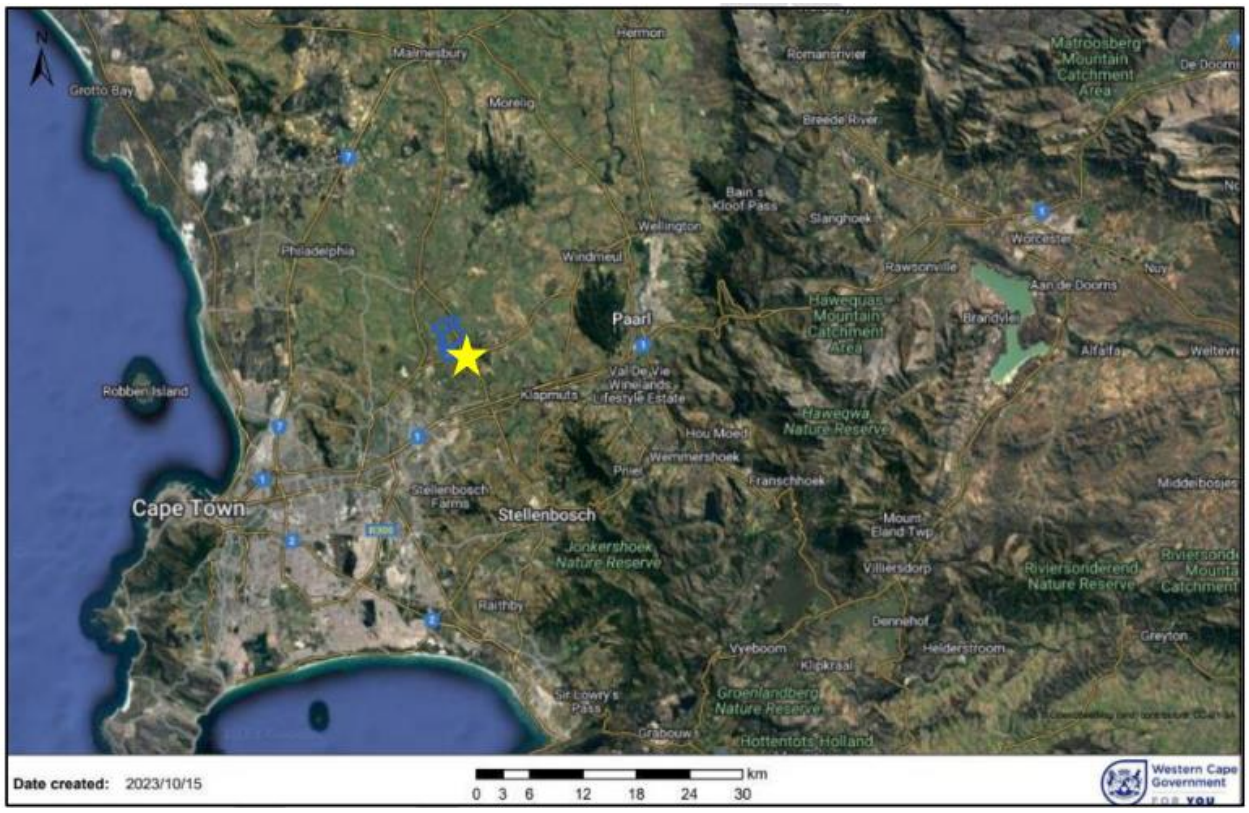


Figure 1: Regional location of CWA (indicated by yellow star and with cadastrals outlined in blue) (PHS Consulting, Oct 2023)

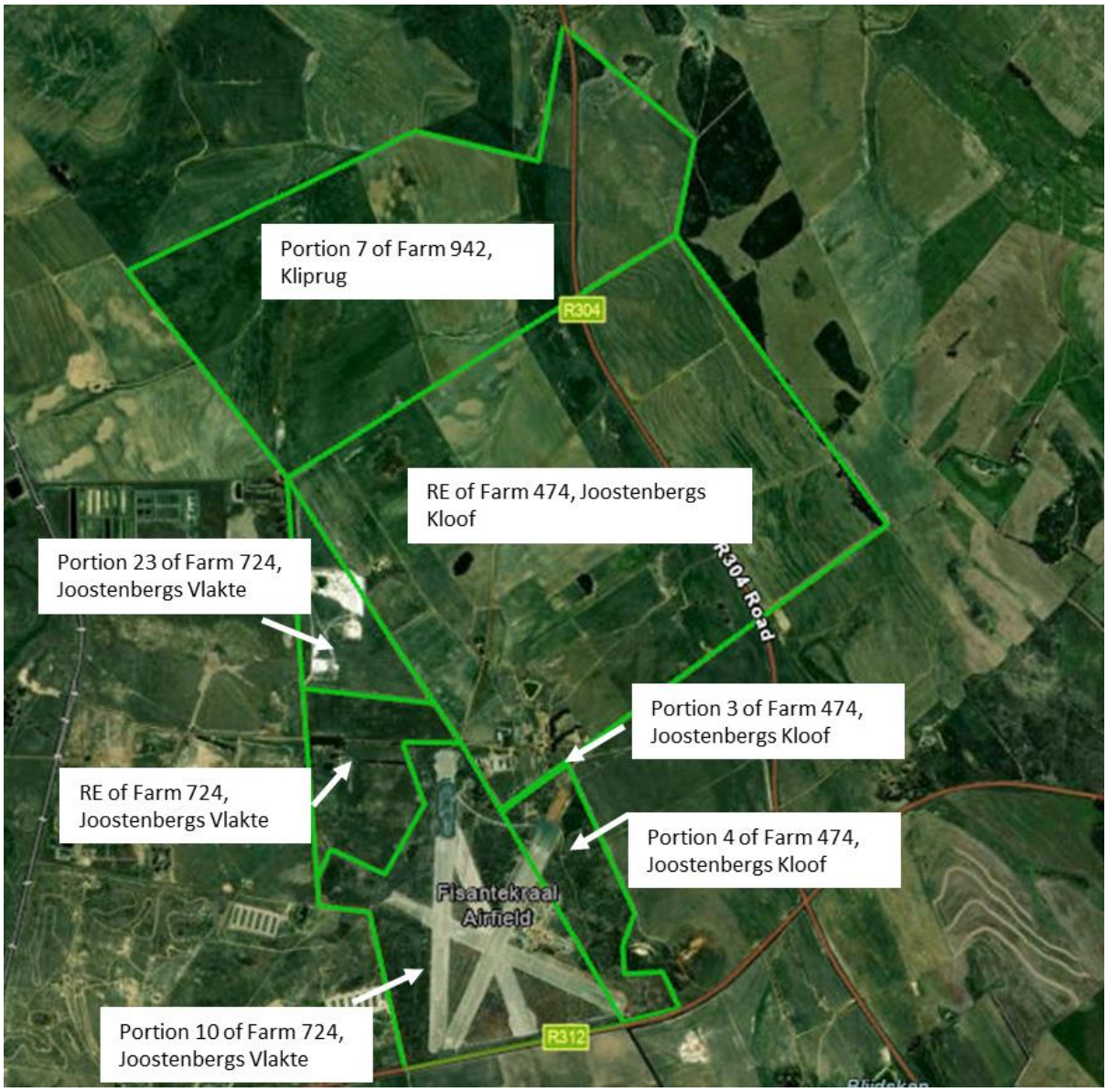


Figure 2: Cadastrals forming part of application area



Figure 3: Phase 1 preferred SDP - Precinct Plan (Capex, August 2024)



Figure 4: Phase 2 preferred SDP - Precinct Plan (Capex, January 2025)

1.2. Purpose of the Alien Vegetation Management Plan

The purpose of this Alien Vegetation Management Plan is to outline a comprehensive strategy for the complete eradication of alien invasive plants and the long-term maintenance of the site in an alien-free condition. This plan aims to ensure compliance with airport safety standards, restore ecological functioning, and improve habitat quality, particularly in areas of botanical sensitivity and ecological importance.

To achieve these goals, the plan focuses on meeting the following objectives:

- Identify and confirm areas for alien vegetation clearing.
- Establish methods for effective alien clearing, including necessary follow-up actions.
- Provide a realistic program with clear targets for the clearing process.
- Promote the conservation of indigenous plant species within the property.
- Support job creation and skills development in local communities.
- Ensure the sustainable reuse of cleared biomass to maximize environmental benefits.

1.3. Management Strategy

The Alien Vegetation Management Strategy is designed to ensure a structured, continuous, and effective approach to eradicating and managing invasive alien plants on the site. The strategy focuses on phased clearing, proper resource allocation, and collaboration between the in-house team and contractors during construction.

Before initiating the clearing of any section, it is essential to recognize that once the program begins, it must be carried through to completion. Ad hoc clearing without a structured follow-up plan is ineffective and provides little value. To achieve the desired outcomes, the program must be implemented in a phased, systematic manner, as detailed in this document. This approach ensures long-term success and sustainable management of the cleared areas.

1. Appointment of Alien Clearing Team

A trained and experienced team is essential to the success of follow-up efforts. The applicant must appoint an experienced in-house alien clearing team. This team should ideally be sourced from the local community and be knowledgeable in alien clearing techniques. Where necessary, training must be provided to ensure all workers can

perform their duties effectively. The size of the team should be aligned with the scale of the site and the extent of the infestation. The team must include:

- At least one qualified supervisor with demonstrated experience in alien vegetation management. The supervisor will be responsible for managing the team and monitoring their progress and will be known as the Alien Vegetation Control Officer (ACO).
- Trained team members: All team members must undergo training upon appointment to ensure they are familiar with both the alien clearing methods and the specifics of this management plan. The following roles will need to be fulfilled:
    - Chainsaw operators for felling and cutting of invasive vegetation.
    - Herbicide applicators (where necessary) to ensure effective treatment of regrowth.
    - General workers to assist with various tasks.

The team should be fully briefed on the specific needs of the site, including any sensitive areas that require special attention or avoidance, the targets and schedule for follow-up events, and the immediate priority zones where urgent clearing is necessary.

2. Construction Phase: Contractor Responsibilities

   Once construction begins, contractors will be responsible for alien vegetation management within their assigned work areas. The following guidelines apply:

   - Contractors must actively remove alien plants throughout all construction activities to prevent their spread within work zones. Hand-pulling seedlings is the most effective method for removal. Following initial clearing efforts, it is advisable for contractors to allocate a few minutes weekly for their teams to engage in hand-pulling seedlings, thereby maintaining control over emerging invasive plants.
   - Construction activities disrupt soil and vegetation, increasing the risk of alien plant establishment. Therefore, clearing efforts must prioritize areas experiencing disturbance, such as excavated or cleared zones, to prevent the rapid spread of alien species in these high-risk areas.
   - The requirement for alien vegetation management must be included in the tendering process to ensure that contractors allocate the necessary resources.

- Contractors must be supervised by the ECO to ensure compliance with the ongoing alien vegetation management during construction.

3. Construction Phase: In-House Alien Clearing Team

   Once construction in the airside precinct commences, the in-house team should concentrate primarily on this extensive area, ensuring it remains free of alien vegetation. Before this phase begins, the team can assist in other areas as required, depending on available capacity and specific requests from contractors.

4. Post-construction Phase: In-house Alien Clearing Team Responsibility

   Once construction is completed in a given area and handed over by the contractors, the in-house team will assume full responsibility for managing alien vegetation. This includes ongoing follow-up activities throughout the operational phase of the development. As the project advances, the in-house team must establish management units across the property and develop a clearing schedule to monitor initial clearing and follow-up efforts, ensuring alignment with the requirements of the management plan.

1.4. Relevant legislation and policies

The following is a list of the principal legislation for alien invasive vegetation management as relevant to the proposed development. All activities on site must ensure compliance with the provisions of the legislation as applicable:

- Conservation of Agricultural Resources Act (Act No. 43 of 1983)
- National Environmental Management Act, 107 of 1998
- National Environmental Management: Biodiversity Act, 2004 (Act No.10 of 2004)
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 Of 2004): Alien and Invasive Species Lists, 2020 (GN1003 of September 2020)
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 Of 2004) Alien and Invasive Species Regulations (GN R1020 of September 2020)
- Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No. 36 of 1947)
- National Water Act, Act 36 of 1998
- Section 31A of the Environment Conservation Act, 73 of 1989;
- Municipal by-laws and the National Veld and Forest Fire Act 101 of 1989
- Occupational Health and Safety Act (No. 85 of 1993)
- Basic Conditions of Employment Act 75 of 1997

Landowners are under legal obligation to control invading alien plants occurring on their properties by removing any listed invasive species. A listed invasive species means any species, which is listed in terms of section 70 of the National Environmental Management Biodiversity Act (NEMBA), whose establishment and spread occurs outside of its natural distribution range. In accordance with Section 70 of NEMBA Alien and Invasive Species lists have been published in Government Notice GN1003 of September 2020. All invasive species listed are classified into 4 categories to which specified regulations apply as detailed in GNR1020, in summary:

- Category 1a: These invasive species require compulsory control, and eradication is legally required. No permits are issued for these species.
- Category 1b: Invasive species requiring compulsory control as part of an invasive species control program. Remove and destroy. They have such high invasive potential that infestations may qualify for government-sponsored management. No permits are issued.
- Category 2: These species are regulated by area, requiring a demarcation permit to import, grow, possess, or trade. Category 2 plants are prohibited in riparian zones.
- Category 3: These species are regulated by activity, and individual permits are required for any restricted activities such as possession, sale, or cultivation. Like Category 2, Category 3 species are prohibited in riparian zones.

Species regulated under the Conservation of Agricultural Resources Act (CARA) (Act 43 of 1983), which are listed as weeds or invader plants, are exempt from NEMBA. In such cases, CARA's provisions take precedence over those of NEMBA.

1.5. Status of the Alien Vegetation Management Plan

The AVMP must form part of all contractual documents for this project. The Environmental Authorization ascribes legal status to this Management Plan and any subsequent amendments thereto. The approval of the Management Plan by DEA&DP will require that the applicant and all appointed contractors must comply with the requirements herein. Any amendments/ changes/ upgrades to the Management Plan will require submission to and approval by DEA&DP.

1.6. Responsible persons

1.6.1. Applicant

The Applicant will be responsible for the overall implementation of the AVMP. This includes ensuring adherence to all stipulations within the plan and appointing the necessary personnel to facilitate its complete execution. Furthermore, the Applicant must provide all principal contractors with a copy of the AVMP as part of the tender and contract documentation, allowing contractors to factor the plan's requirements into their respective construction contracts.

The Applicant also holds the overarching environmental responsibility to ensure that both construction and operational activities comply with relevant legislation. This entails a thorough understanding of the AVMP, any Environmental Authorizations, or other legally binding documentation associated with the project, to guarantee compliance at every stage.

1.6.2. CWA Environmental Management Division

The CWA Environmental Management Division (EMD) will be established at the start of the construction phase to ensure environmental compliance throughout the project. The CWA EMD will appoint an Environmental Manager (EM) to oversee all aspects of the Environmental Management on site. The Environment Manager is responsible for ensuring that the organization meets its environmental policy commitments and improves its environmental performance. Not only do they monitor performance against and ensure compliance with relevant laws and regulatory requirements, but they are also proactive in identifying and promoting opportunities to reduce the environmental impact of the organization’s activities, products and services.

Led by an Environmental Manager, the CWA EMD will consist of several teams for e.g. landscaping, waste management, alien species control, fire management etc. During the initial phases it could be one multitask team to be split as the tasks increases. Each team will have a Control Officer reporting directly to the EM. In the case of Alien Vegetation this would be the Alien Vegetation Control Officer. The Environmental Manager will oversee the implementation of Environmental Management Plans (EMPr), compliance with regulations, day-to-day environmental management of the site, managing the necessary applications, and overseeing external service providers such as the appointed Environmental Control Officer. Responsibilities also include internal audits and developing strategies for waste minimization and emissions reduction.

1.6.3. CWA Alien Vegetation Management Unit

The designated CWA Alien Vegetation Management Unit will be responsible for the overall implementation of the AVMP. Upon appointment, all team members must receive comprehensive training on the AVMP's requirements, with ongoing training provided to any newly appointed team members throughout the operational phase. It is the responsibility of the applicant to ensure that this training is conducted.

A designated Alien Vegetation Control Officer must be appointed within the EMD to lead the alien vegetation management and oversee the implementation of the AVMP. The alien vegetation control officer will assume overall responsibility for managing the AVMP, employees and contractors and ensure and oversee the implementation of the AVMP onsite in its entirety. All decisions regarding alien vegetation related environmental procedures and protocol must be approved by the alien vegetation control officer, who also has the authority to stop any activity in contravention of the AVMP. The role of is interactive and must include daily site visits.

Key Responsibilities of the Alein Vegetation Control Officer:

- Assume overall command of alien vegetation removal operations onsite.
- Provide training to all staff on AVMP requirements.
- Conduct regular monitoring of the site to identify high priority areas for clearing.
- Compile and submit monthly monitoring reports to the ECO.
- Work closely with the ECO, applicant, and contractors to resolve any alien vegetation related issues that arise.

1.6.4. The Environmental Control Officer (ECO)

The Environmental Control Officer (ECO) is responsible for overseeing and verifying the proper execution of the EMPr during the construction and operational phase. This includes ensuring that various contractors working on-site comply with the waste management plan within their designated areas. During the construction phase, an independent Environmental Assessment Practitioner (EAP) firm must be appointed to serve as the ECO who will work alongside the EM. Once the project transitions fully into the operational phase, this function can be managed by an in-house ECO within the CWA Environmental Management Division who will report to the EM. During the construction and operational phases, monthly ECO reports must be prepared and submitted to the Department of Environmental Affairs and Development Planning (DEADP) during construction and to the EM during operations.

1.6.5. The Competent Authority

DEA&DP will review the AVMP and on approval they may have the following role to play:

- Review and monitor implementation of the AVMP;
- Review whether there is compliance by the Applicant;
- Perform random control checks;
- Review incident and audit reports;
- Enforce legal mechanisms for contraventions of the AVMP.

1.6.6. Engineers and Contractors

The engineers and contractors, where applicable, are responsible for physically carrying out certain development and maintenance activities. The responsibilities indicated here are also relevant to sub-contractors.
The responsibilities of the engineers and contractors include but are not limited to the following:

- Be conversant with the AVMP, EMPr, any relevant Environmental Authorization or any other legally binding documentation;
- Have a responsibility to adhere to any conditions and recommendations laid out in above mentioned documentation;
- Prevent actions that may cause harm to the environment;
- Be responsible for any remedial activities in response to an environmental incident;
- Review and amend any construction activities to align with the AVMP, EMPr and Best Practice Principles;
- Ensure compliance of all site personnel and / or visitors to the AVMP, EMPr and any other authorisations.

SECTION 2: OVERVIEW OF SITE CONDITIONS

2.1. Regional Context

The proposed development site is situated within the West Coast Renosterveld bioregion, part of the Fynbos biome and the Core Region of the Greater Cape Floristic Region (GCFR). The GCFR is one of six global floristic regions, and notably, it is the only one primarily confined to a single country, South Africa. Despite covering just 0.2% of the world's land surface, the GCFR hosts approximately 11,500 plant species, half of South Africa's total plant diversity. The region is characterized by a high degree of endemism, with many species being found nowhere else. However, extensive habitat loss from agriculture, urbanization, and alien plant invasions has led to severe conservation

challenges. Around 67% of South Africa's threatened plant species are located in the southwestern Cape, making it a national and global conservation priority.

The West Coast Renosterveld bioregion is defined by high winter rainfall, fertile soils, low topographic diversity, large urban areas, intense agriculture and high levels if invasive vegetation. Due to this combination of factors, over 90% of the region's natural vegetation has been lost, resulting in one of the highest concentrations of threatened plant species globally. The lowland regions of the Cape metropole (stretching from Atlantis in the north, southeast to near Somerset West), generally known as the Cape Flats, is under enormous pressure in terms of its biological diversity. The study area lies just outside the northeastern fringes of what is normally considered the "Cape Flats".

2.2. Vegetation of the property

In order to plan for vegetation clearance, one needs to understand and record what types of vegetation occur in what areas on site. According to the South African Vegetation Map, three different vegetation types would have occurred in the study area before human disturbance (Figure 5).

Swartland Granite Renosterveld originally covered much of the site and is considered Endangered at both national (Government of South Africa, 2022) and regional levels (Holmes et al., 2008). Approximately 15% of the greater study area was historically Swartland Shale Renosterveld, which is classified as Critically Endangered on both national and regional scales. In the northern part of the site, Cape Flats Sand Fynbos, classified as Critically Endangered, was initially identified on the South African Vegetation Map. However, based on field verification, the remaining natural vegetation in this area has been identified as Swartland Silcrete Renosterveld, another Critically Endangered vegetation type (Nick Helme Botanical Surveys, Botanical Impact Assessment, September 2024).

2.2.1. Botanical Sensitivity

The Botanical Impact Assessment undertaken by Nick Helme revealed the following (Nick Helme Botanical Surveys, Botanical Impact Assessment, September 2024):

- About 93% of the site has been heavily disturbed and degraded over a long period of time, with the result that negligible indigenous vegetation is found in these areas, and these areas are of Low botanical sensitivity. Indigenous plant diversity is very low in the most disturbed parts of the airport precinct, and is low overall, compared to pristine Renosterveld, which would have at least 250 species in a site of this size (if pristine). There is no indigenous plant cover in the large, cultivated areas in the agricultural precinct.

- Approximately 7% of the site (about 6.5ha) is deemed to be of Medium, High or Very High botanical sensitivity (Figure 6 - Figure 8).
- Two patches of very high sensitivity, four patches of high sensitivity and eight patches of medium sensitivity have been mapped in the airport precinct (Figure 6 & Figure 7) and two patches of very high sensitivity and two patches of medium sensitivity have been mapped in the agricultural precinct (Figure 8).
- Ideally all areas of Medium, High or Very High botanical sensitivity should be conserved and ideally, they would also all be ecologically connected via rehabilitated Low sensitivity areas. From a botanical perspective most of these areas would be ecologically viable, especially if connected by ecological corridors. Key ecological management interventions required would be ongoing alien vegetation management (pre and post burn) and management burns in the appropriate autumn season (once every 8-12 years).

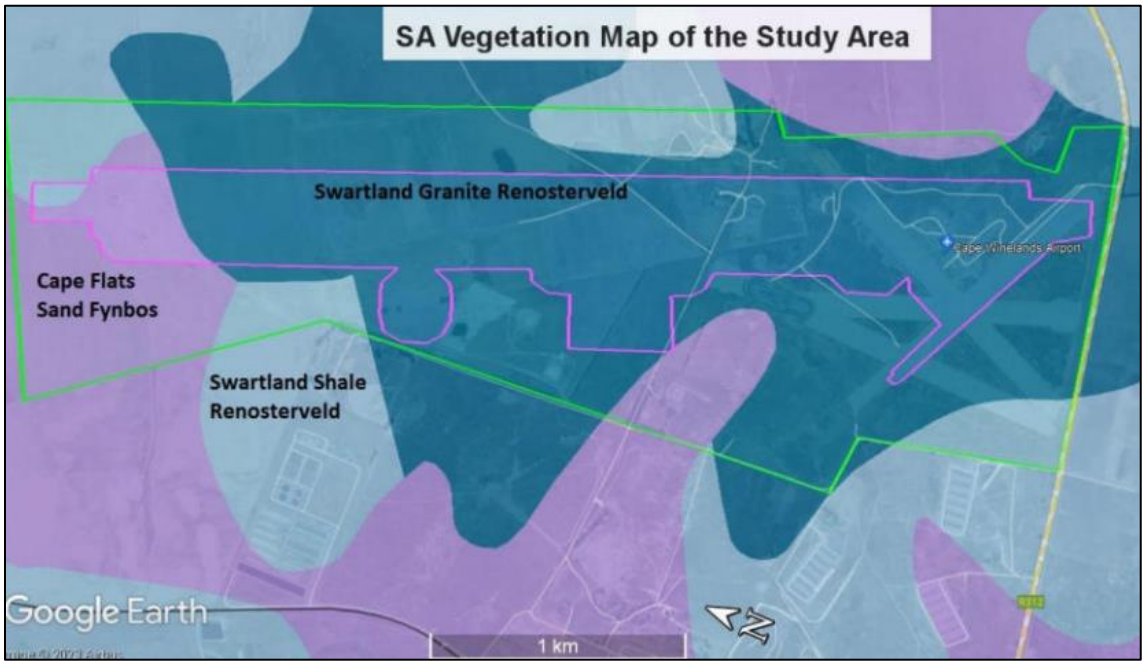


Figure 5: Extract of the SA Vegetation Map (Mucin & Rutherford 2012) showing that three different vegetation types would originally have occurred in the primary study area (excluding the Agricultural Precinct), with Swartland Granite Renosterveld making up the bulk of the site. The green polygon is the study area, and the pink polygon is the airside development footprint (Nick Helme Botanical Surveys, Impact Assessment, September 2024).

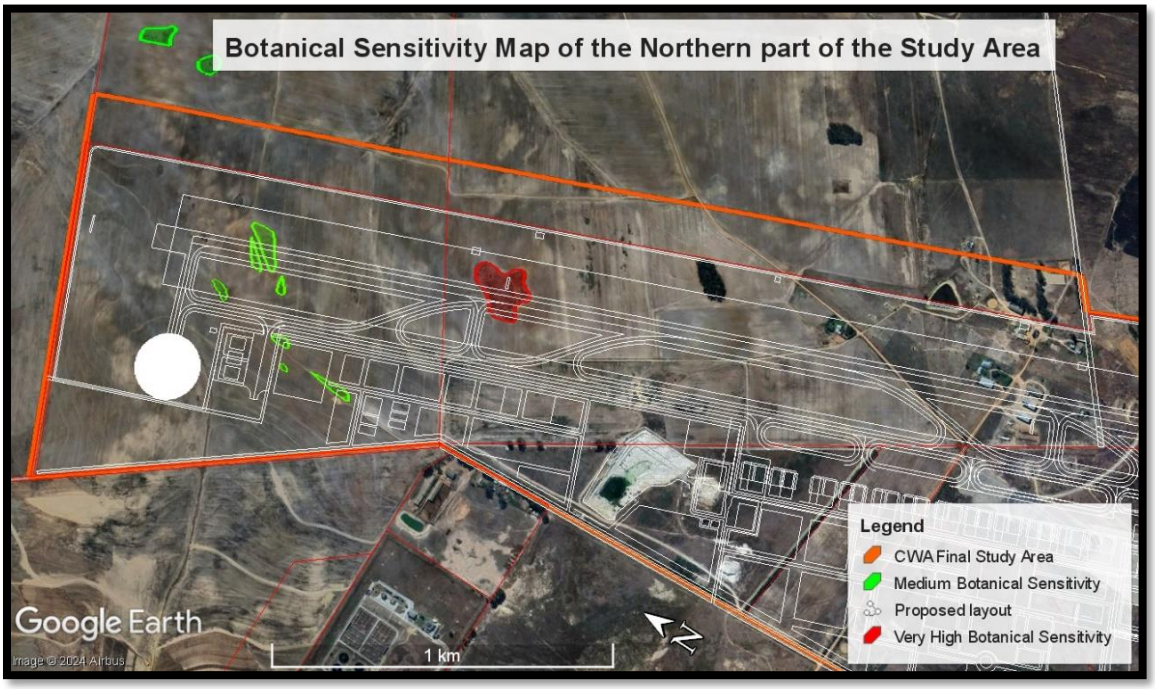


Figure 6: Botanical sensitivity map for the northern part of the airport precinct. All areas not shaded green or red within the study area are of Low botanical sensitivity (Nick Helme Botanical Surveys, Impact Assessment, September 2024).

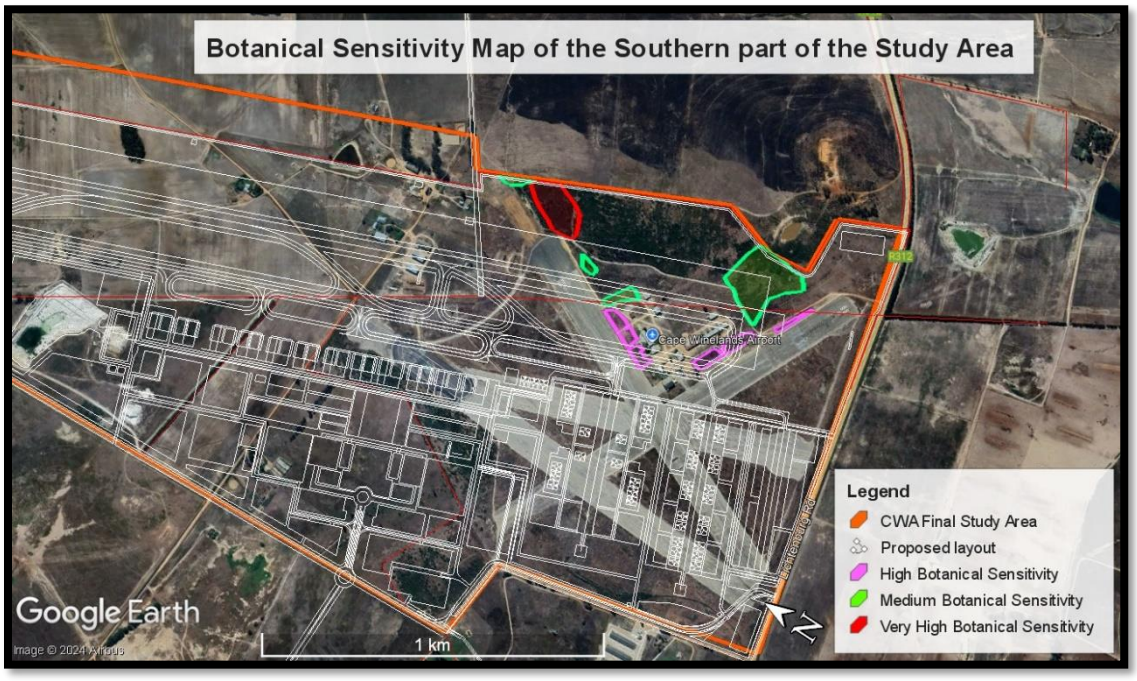


Figure 7: Botanical sensitivity map for the southern part of the study area. All areas within the airport precinct not shaded green, red or pink are of Low sensitivity (Nick Helme Botanical Surveys, Impact Assessment, September 2024).

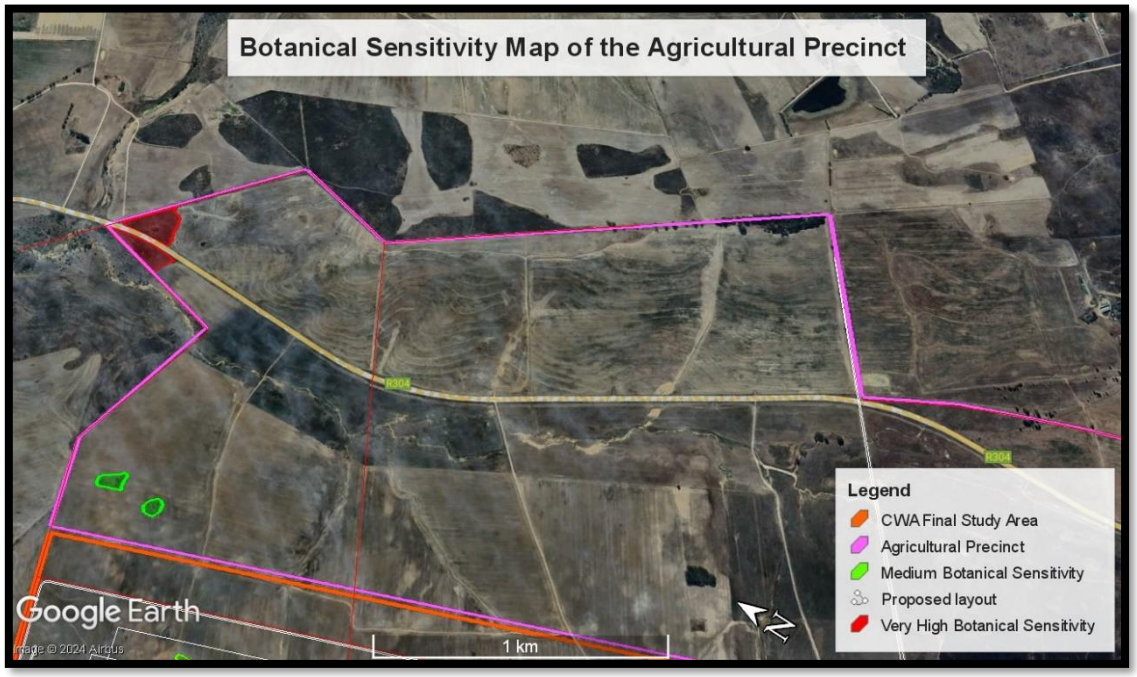


Figure 8: Botanical sensitivity map for agricultural precinct. All areas not shaded green or red within the precinct are of Low botanical sensitivity (Nick Helme Botanical Surveys, Impact Assessment, September 2024).

2.2.2. Alien and Invasive Vegetation Onsite

The airport precinct has been heavily infested with woody alien invasive vegetation, predominantly *Acacia saligna* (Port Jackson), with occasional occurrences of *Leptospermum laevigatum* (Australian myrtle), *Pinus spp*. (pines), and *Eucalyptus spp*. (gums). Prior to the clearance efforts in late 2020 and early 2021, the cover of woody alien invasive species ranged from 50% to 100%, averaging around 75%. Although the biocontrol fungus has significantly impacted Port Jackson, reducing seed production and even killing some plants, a substantial seedbank persists. This seedbank is likely to germinate following fire or other clearing methods, as demonstrated by past occurrences.

The dense cover of woody alien invasives is primarily a result of prior soil disturbances, which include cultivation, ferricrete quarrying in some areas, and extensive disturbances related to airfield development and maintenance. Even areas that appear undisturbed have been colonized by alien species through seed dispersal.

In these disturbed areas, the understorey is dominated by alien invasive herbs and grasses, including *Plantago lanceolata* (ribwort plantain), *Echium spp.* (Patterson's curse), *Erodium spp.* (cranesbill), *Lolium spp.* (ryegrass), and *Avena spp*. (wild oats).

2.4. Landscaping Plan

A comprehensive landscaping plan has been developed for the airport precinct, as shown in Figure 9. The landscaping will incorporate fynbos and renosterveld planting, using specific species to achieve the required vegetation heights for airport operations. An essential ecological management strategy for areas landscaped with natural fynbos or renosterveld vegetation is the continuous management and removal of all alien invasive species.



Figure 9: Cape Winelands Airport Landscape Concept Plan (Planning Partners, March 2025)

SECTION 3: CONTROL GUIDELINES

3.1. Priority Areas for Clearing

During the construction phase, the entire proposed development area should be systematically cleared of alien vegetation as per Section 1.3. to ensure that, once operational, ongoing maintenance will be the primary focus. Initial clearing will occur across the entire site, with priority given to areas where construction activities or ground disturbances are taking place. Wherever disturbance occurs during construction, alien vegetation clearing will be prioritized to prevent the spread of invasive species.

Once the site transitions to the operational phase, the following areas will be prioritized for clearing and ongoing maintenance:

1. Safety buffer Area Around the Runway: For safety reasons, the buffer area surrounding the runway will be cleared and maintained as the co-top priority.
2. Areas of Medium, High, and Very High Botanical Sensitivity (Figure 6- Figure 8) & Wetland Offset Areas (Figure 10). These ecologically significant areas will be cleared and maintained to protect sensitive vegetation and preserve critical habitats as the co-top priority.

   All invasive alien vegetation in the conservation areas on site must be removed within one year of any project approval, using appropriate methodology (see Martens et al 2021), by qualified personnel. Ongoing annual alien vegetation removal must be undertaken.

   No spraying of herbicide should be undertaken in any conservation areas.
3. Firebreaks: Maintaining firebreaks will be critical to reducing fire risk and ensuring compliance with fire management regulations.
4. Onsite Areas Planted with Indigenous Vegetation: Priority will be given to maintaining areas where indigenous vegetation has been planted to support local biodiversity and prevent the re-establishment of alien species.
5. Remainder of the Site: Any other areas on the site will be addressed after higher-priority zones have been cleared and maintained.

This phased and prioritized approach ensures effective alien vegetation control during both construction and operational phases, aligning with environmental best practices and safety requirements.

Please note: During the operational phase, any maintenance, landscaping, or other activities that cause disturbance should be flagged as focus areas for follow-up alien vegetation clearing.

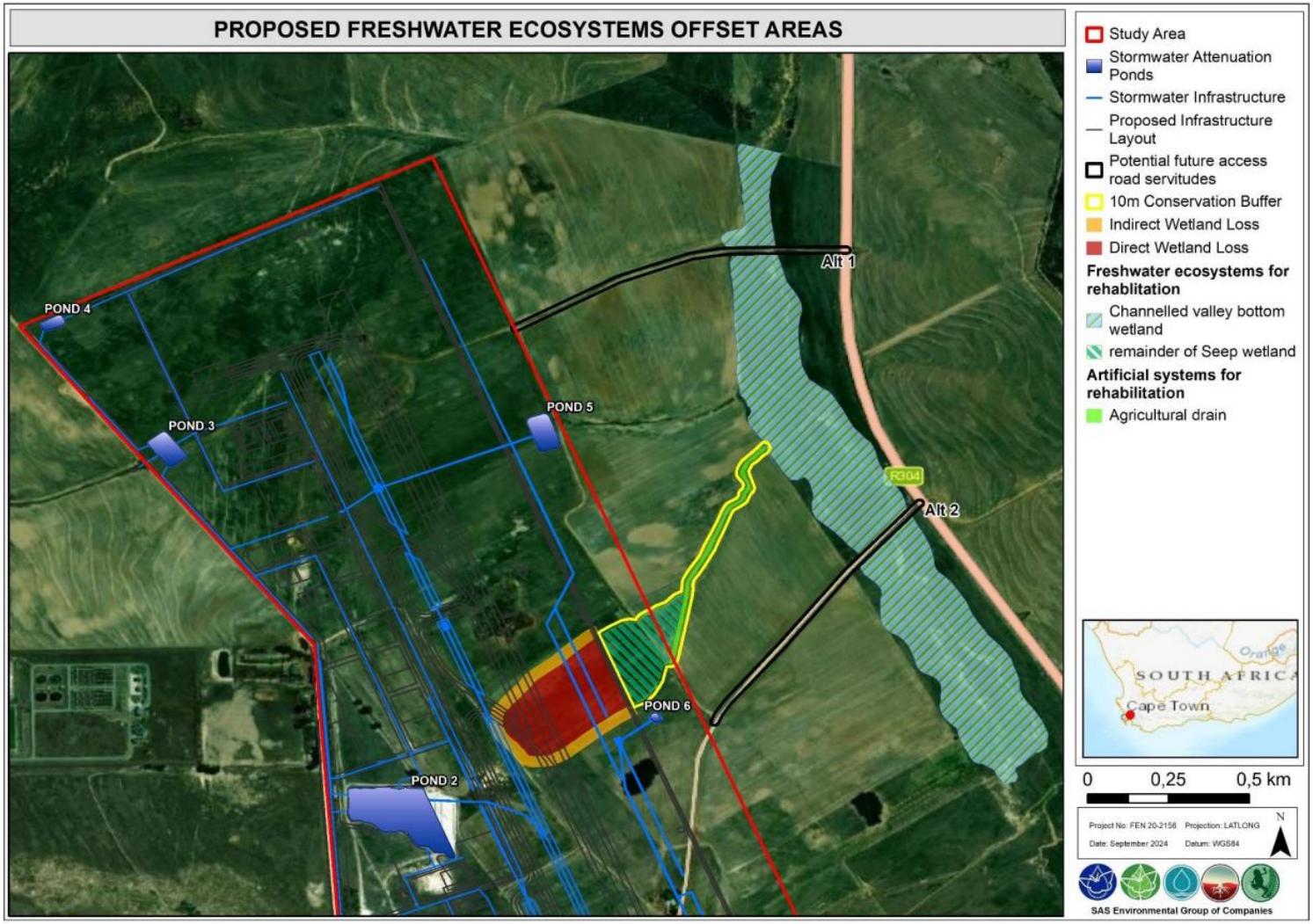


Figure 10: Extent of wetland to be lost (7.44 ha) vs identified wetland areas to be rehabilitated (FEN, Draf Wetland Offset Study and Implementation Plan, September 2024)

3.3. Construction Phase Activities Required

All contractors are responsible for alien vegetation management as per this plan within their designated work areas. To minimize soil and vegetation disturbance and reduce the risk of invasive alien plants establishing on site during the construction phase, the following actions are required:

Action	Frequency
Clearing of alien invasive vegetation should be undertaken as the work front progresses. Mass clearing should not be implemented unless the entire cleared area is to be developed immediately thereafter.	Weekly
For large areas of land clearance, soil stabilization methods, such as using packed brush, must be implemented. Organic matter used for stabilization should not be sourced from outside the site. Additionally, resprouting alien invasive vegetation must not be used as packed brush.	As required
Continuous follow-up monitoring and management, including hand-pulling emerging seedlings, must be practiced throughout the construction phase within active work areas.	Weekly
Care must be taken to avoid the introduction of alien invasive plant species to the site. Particular attention must be paid to imported material such as building sand or dirty earth-moving equipment. Stockpiles should be checked regularly and any weeds emerging from material stockpiles should be removed.	Weekly
ECO to conduct monthly surveys of all construction work areas to monitor the implementation of alien vegetation removal as required by the contractors.	Monthly
Independent audits of the AVMP implementation must be conducted every six months.	Every 6 months

3.4. Operational Phase Activities Required

Upon the completion of construction in a given area and the handover by contractors, the in-house team will resume full responsibility for alien vegetation management throughout the operational phase of the development. The following management actions are aimed at maintaining cleared areas free of invasive alien species:

Action	Frequency
Ongoing alien vegetation clearing follow-ups will be required in areas where primary clearing has taken place. Initial follow-up should take place four months after the area was initially cleared. Thereafter follow up should take place after year one of the initial clearing and continue on a dedicated annual basis thereafter.	Initial follow-up: 4 months after clearing Thereafter, annually.
Areas of natural vegetation that need to maintained or managed to reduce plant height or biomass, should be controlled using methods that leave the soil protected	As required

If disturbance (such as maintenance activities, landscaping, or fire) occurs within natural areas during the operational phase, these areas must be prioritized for follow-up clearance within one month of the disturbance.	Within 1 month of disturbance.
ECO to conduct monthly surveys of all vegetated areas to monitor the implementation of alien vegetation removal as required by the team.	Monthly
Independent audits of the AVMP implementation must be conducted annually.	Annually

3.5. General Alien Clearing Recommendations

The following priorities should be implemented at the onset of alien clearing activities:

- Areas identified in Section 3.1 to be cleared sequentially.
- Areas requiring follow-up treatment take precedence over areas which still require initial clearing. This is to reduce the time and cost required for follow-up.
- One should always consider the natural gradient of the area being cleared - all operations should follow the slope or drainage lines to minimize erosion.
- Less dense areas should then be targeted to prevent the build-up of species and the development of dense alien clumps. This will also help prevent the buildup of seed banks.
- Dense stands should be left for last, as these areas are unlikely to further increase in density. Dense stands also require dedicated and expensive follow-up treatments to prevent re-establishment.
- Areas around existing infrastructure should be cleared to reduce the fire risk.
- Disturbed footprint areas should be kept as small as possible when removing alien plant species.
- No vehicles should be allowed to drive through designated sensitive freshwater ecosystems areas during the eradication of alien and weed species.
- To prevent the spread of seeds and spores alien clearing operations should not be conducted in high wind conditions.

SECTION 4: CONTROL METHODS

4.1. General Management Methodology

The areas identified in Section 3.1 shall be cleared sequentially by implementing the following management methods where appropriate, the management team should instruct the clearing team regarding the appropriate methods to apply in a specific area:

4.1.1. Mechanical Control

This entails damaging or removing the plant by physical action. The following mechanical techniques could be used:

Hand pulling

Use: Seedlings with a stem diameter of <2cm

Hand pulling should be implemented as the preferred clearing technique as far as possible, since the entire plant is removed quickly and there is no chance of resprouting. When implemented correctly, this method is extremely effective, yet its application is limited to seedlings. Thus, regular monitoring and follow-up treatments are important to ensure successful and economical eradication using this technique. The procedure to be implemented is as follows:

1. Wearing gloves, grip the plant firmly at the base of the stem and pull hard to remove the entire plant, including the rootstocks.
2. If the roots of the plant break off during removal, use a spade to dig them out.
3. Shake the excess sandy material from the plant to ensure a higher mortality rate and make the plant easier to stockpile and lighter to transport.

Tree Popping

Use: Seedlings/Saplings with a stem diameter of approximately 2-5cm

This technique is used for medium tree specimens and involves the use of an implement commonly marketed as a "Tree-Popper". This tool consists of a base plate and a leaver that are joined to form a small pair of jaws. The tree is placed in the jaws of the tool and the leaver is used to pull the entire tree, including the roots, out. This tool is extremely useful for trees that are too large to be effectively removed by hand pulling yet are not yet large enough

to require felling. The method to be used is similar to that outlined for hand pulling, however, the Tree-Popper is used instead of hands only.

Cutting / Felling

Use: Trees with a stem diameter of >5cm

Once the stems of trees reach a diameter of greater than 5cm, felling will need to be implemented to remove the individual. Felling can be undertaken using chain saws and/or bow saws. Trees must be cut with a neat straight cut to reduce the chance of resprouting and improve the effectiveness of stump herbicide treatment. Trees must be cut down as close to the ground as possible (between 5cm and 30cm above the ground). Felling must be undertaken by appropriately trained individuals that possess and make use of the required Personal Protective Equipment (PPE) for the task at hand. In the case of resprouting species, felling must be combined with chemical treatment of the cut stumps as detailed below.

Ring barking

Use: Stems with diameters greater than 15cm, where the time taken to fell, de-branch and stack would be excessive

Since this method means the tree is left standing, it is recommended only for single large trees or very low-density invasions, not for stands. Ring barking on smaller diameter stems is ineffective and it would be quicker to just cut the tree down. Basal bark treatment could be considered as an alternative in some cases.

- Slashers or axes should be used for debarking.
- Remove the bark and cambium (outer rings where the trunk grows) in a continuous band around the trunk of the tree at least 25 cm wide, starting as low as possible.
- Where clean debarking is not possible due to crevices in the stem or where exposed roots are present, a combination of bark removal and basal stem treatments should be carried out.

4.1.2. Chemical Control

Chemical control makes use of herbicides to kill target Invasive Alien Plants (IAPs). Chemical methods are a good choice when the IAPs are still seedlings or young. At this stage of a plant's life, it is growing fast, so herbicides will be quickly translocated through the plant to reach the roots. The leaves and stem are young and green with a large surface area, allowing for good absorption of the herbicide. Chemical control should not be applied when it is raining. It is important to note that herbicide can also harm many non-target species and must always be used with the greatest care.

Herbicide Stump Treatment

Use: Resprouting species that have undergone felling treatment

Certain species, such as *Acacia saligna* ,are known to resprout from the stump or roots after felling. To prevent this an herbicide treatment needs to be applied post-felling. Once the tree has been cut down to create a smooth surface that exposes the outer rings of the stem where the trunk grows (the cambium) a died 3% Tryclopyr herbicide solution must be applied to the freshly cut surface. All side branches should also be removed from the stump and treated with herbicide. The herbicide treatment should be applied as soon as possible after felling (preferably within 3 minutes) to ensure effective treatment. Where trees with a diameter of greater than 10cm are felled, only the outer rings need to be treated with herbicide. When using a product that is mixed with penetrant oil, the entire stump and exposed roots must be treated.

Foliar treatment

Foliar treatment is when herbicide is applied to the leaves of the plant, usually by spraying.

- Spray herbicide with a knapsack sprayer, mist-blower or high-pressure sprayer firefighting unit, e.g. a bakkie-sakkie.
- The correct choice of nozzle is important to achieve an even spray cover.
- The best results can be expected in the active growing season (but some species are more susceptible to chemical absorption when they are sprayed in summer).

Blanket Spraying

Use: Young, dense, uniform stands of IAPs.

Blanket spraying, or broadcast spraying, is when herbicide is sprayed across an entire area of over 70% infestation. While this method is recognized, it should be used with a high level of caution due to the significant environmental risk. It is the most cost-effective way to eradicate young, dense, uniform stands of IAPs. Some IAPs, like introduced acacias, germinate by the thousands after fire. The first line of attack to reduce these numbers is the use of broadcast spraying. Calibration is crucial to ensure even distribution of herbicide over the target area

Aerial application

Use: Large-scale & inaccessible infestations of alien invasive vegetation

Aerial application is spraying either large-scale infestations or targeted inaccessible plants from an aircraft. While aerial application is a recognized method of IAP control, it is still under development and should be used with a

high level of caution due to the significant environmental risk. Aerial spraying can only be done by registered and certified operators according to strict regulations. The pilot must ensure that the spray mixture is distributed evenly over the target area and that the wastage of herbicide, as well as drift onto indigenous species, is kept to a minimum. It is essential that the following criteria be met:

- Inform your neighbors well in advance before spraying commences.
- Use only an aerial registered product. Port Jackson (*Acacia saligna*) and Rooikrans (*Acacia cyclops*) have herbicides registered for aerial application.
- Adult Port Jackson and Rooikrans must be sprayed in summer (i.e. November–March) for optimum results.

4.1.3. Biological Control

Biological control using species-specific insects and diseases from the alien plant's native region has been implemented in South Africa, with 76 biocontrol agents released to target 40 invasive weed species. While active biocontrol is not recommended at this stage due to the severity of the current infestation, it remains a potential option for future management. Notably, a biocontrol fungus already present in South Africa has had a significant impact on Port Jackson plants at the site, reducing seed production and even killing some individuals.

4.2. Species Specific Methodology

4.2.1. *Acacia Saligna* (Port Jackson)

Seedlings

Hand-pulling or tree-popping should be employed, depending on site sensitivity. For chemical control, apply a foliar spray of Mamba (Glyphosate) as a spot treatment at 1.5% concentration, using 2-4 litres per hectare. Alternatively, a mixture of 50 ml of Garlon 4 or Viroaxe (Triclopyr Ester) with 10 litres of water can be applied at 1.5 litres per hectare. However, avoid using Garlon or Viroaxe in areas where pioneer grass seedlings are present. Touchdown (Glyphosate Trimesium) can also be applied at 2-4 litres per hectare where appropriate.

Young Trees and Saplings

Hand-pulling or tree-popping is effective. In less sensitive areas away from water bodies, Touchdown (Glyphosate Trimesium) can be used at the same rate of 2-4 litres per hectare.

Large Trees

These should be felled as close to ground level as possible, with stump treatment using Timbrel. Frilling, combined with Timbrel application, is also recommended.

The most effective approach combines mechanical methods with herbicide application. Follow-up weeding is necessary when seedlings reach 15-40 cm in height to ensure long-term control.

4.2.2. Gum trees (Eucalyptus spp.)

Seedlings

To ensure maximum success, all seedlings should be hand-pulled

Mature Trees

- Ring Barking and Stem Frilling: For effective control of mature trees, ring barking or stem frilling is recommended. A 10 cm wide cut should be made around younger trees, while mature trees may require a cut up to 30 cm wide. Strip barking is another viable method. Applying Timbrel to the frilled stem has proven effective, resulting in dead standing trees.
- Felling: Felling is commonly used for both mature trees and saplings, but it is essential to treat the stump with herbicide to prevent regrowth.

4.3. Herbicide Use Policy

1. Storage

All storage facilities are to comply with the requirements of AVCASA (Association of Veterinary and Crop Associations of South Africa) including the following:

Isolation

- Storage should be in a separate building and not sited near dwellings, livestock buildings, fodder or flammable materials. If located in a complex a completely sealed store is required.
- All stores to be located away from rivers, dams or boreholes
- The store should be located in a area which can be supervised

Accessibility

- Ease of delivery is important

- Accessibility from all sides in fire situations

2. Store construction

Store construction must adhere to specific requirements to ensure safety and functionality. Floors should be non-permeable, with screeded concrete preferred, though steel-sealed containers are acceptable. Walls should be made of brick or concrete and include air bricks for ventilation. Proper ventilation is essential, with vents placed either 200 mm from the floor or at roof level, and containers are permissible if they provide adequate airflow. The roof must be leak-proof and ventilated to manage temperatures. Steel doors with secure locking systems are required, while wooden doors should be reinforced with security gates. Windows must provide enough natural light to read product labels, or sufficient artificial lighting should be installed. Sanitation facilities with running water, soap, and towels must be readily available to staff, along with an eye wash station. Additionally, a shower facility is recommended to enhance safety standards.

3. Equipment

A table should be provided for decanting and measuring purposes. Measuring jugs, funnels, pumps and buckets should be available and used for herbicides only. A broom, spade and a dry fine absorbent material to contain spills should also be available.

4. Handling

Suitable protective clothing must be available and made compulsory. Chemical resistant aprons, gloves and eye protection must be worn when handling concentrates. Adequate hygiene aids such as running water, soap, towels and eyewash must also be available. Spill control methods should be in place. Concentrates should be decanted in a prescribed area and not in the field. All containers into which herbicides are decanted should be clearly marked with a copy of the original label secured to this container.

5. In field handling

Spray mixtures to be leak and spill proof, and kept away from personal belongings, food stuff etc. Containers should stand on suitable absorbent materials (Hessian sack) and out of direct sunlight, containers to be kept at least 20m away from water bodies, storage areas in the field should be marked with hazard tape. Filling sites should be pre-determined to prevent damage to sensitive vegetation. Cleaning of containers to take place at store and not in the field. Suitable protective clothing is required for all handlers.

6. Transportation

Herbicide to be carried on separate vehicle to labor or part of the vehicle which is isolated from people, food and clothing. Vehicles should carry absorbent material for any spillage. Materials should not be left unattended.

7. Disposal of containers

Designated officer to be responsible for correct disposal in accordance with AVCASA guidelines. All containers are to be suitably disposed of and not reused in domestic scenarios.

8. Public safety:

Warning signs should be erected where exposure to the general public can occur. Herbicides to be used in line with label recommendations. Treatment of areas within 50m of habitations or public areas should be avoided and done in consultation with the effected parties.

9. Environmental Safety

Area contamination must be minimised by careful and accurate application with a minimum amount of herbicide to achieve good control. All care must be taken to prevent contamination of any water bodies. This includes care in storage, application, cleaning equipment and disposal of containers, product and spray mixtures. Equipment should be washed where there is no danger of contaminating water sources and washings carefully disposed of in a suitable site. To avoid damage to indigenous or other desirable vegetation, product should be selected that will have the least effect on non-target vegetation (Coarse droplet nozzles should be fitted to avoid drift onto neighbouring vegetation).

10. Application

Equipment to be regularly inspected for leaks and irregular application devices. Rates of application and precautions and the use of adjuvant and water sources for mixing must be known and monitored.

11. Weather

Applications should not be undertaken in unfavorable conditions. Label recommendations for suitable application weather to be followed.

12. Mixing

To be conducted as per label.

13. Calibration

All equipment has to be correctly calibrated and maintained to achieve correct mix ratios.

**Source: Working for Water Program Herbicide Policy*

4.4. Personal Protective Equipment (PPE)

The use of Personal Protective Equipment (PPE) by staff controlling invasive alien plants in the field is a legal requirement. The PPE specifications differ for the different types of control. The use of chainsaws and brush cutters and will require slightly different PPE from someone hand pulling seedlings. Minimum PPE requirements are as follows: Overall, gloves, safety boots, hard hat, safety glasses, face mask,

4.5. Alternative Approaches for Biomass Clearance

The removal of alien vegetation biomass after clearing is just as critical as the clearing process itself, though often overlooked. Alternative approaches for the use of the biomass of alien vegetation material should be explored for the site in order to prevent the accumulation of debris and dense seed stores in this debris. Accumulated leaf litter and upper foliage not only harbor seeds but also increase fire risk on the site.

For large alien trees, the biomass can be repurposed as firewood, providing local communities with an opportunity to collect and sell it for additional income. Given the size of the property, investing in a chipper should be considered. Chipping the material allows it to be used as mulch or in brushwood packing with de-seeded branches as part of the rehabilitation program. Additionally, chipped material can be utilized for gardening, though care must be taken to avoid spreading alien seeds through the movement of chipped material across the site.

In cases where firewood collection and chipping are insufficient, controlled burns may be necessary, however this should be seen as a last resort. Controlled burns should only be conducted with the appropriate permits, under strict supervision, and with trained personnel and fire-fighting equipment on hand as outlined within the Veld Fire Management Plan compiled for the site (Annexure 5 to the overall EMPr).

Cut material can either be stockpiled for later removal or repurposed as erosion barriers. When larger plants are removed, the branches should be cut into smaller pieces such that they can be carried rather than dragged to their intended stockpile or reuse located. This minimizes disturbance and the potential spread of any seed that may be

present on the plants. Small, hand-pulled stems that do not pose a risk of resprouting can be left on the ground to decompose into mulch or be chipped for further use. Seed-bearing material, once chipped, should be left to compost or allowed to germinate before being considered for reuse. However, stockpiled biomass presents a significant fire hazard due to its high flammability. To mitigate this risk, biomass should not remain on-site for more than a month before being properly utilized or removed entirely.

SECTION 5: MAINTENANCE AND FOLLOW-UP

Effective management of alien invasive vegetation requires not only the initial clearing but also diligent follow-up and maintenance to ensure long-term success. Given the substantial seed bank present in the area, ongoing germination of invasive species is expected to persist for years, demanding strict follow-up measures. Without consistent follow-up, costs and time required to achieve the ultimate clearing goals will escalate significantly. The maintenance and follow-up program are outlined as follows:

5.1. Timing and Frequency of Follow-Up

Initial Follow-Up: The first follow-up clearing should occur four months after the initial clearing. This period is critical to address seedling emergence and early regrowth of invasive vegetation.

Subsequent Follow-Up: After the four-month follow-up, the next intervention should take place one year after the initial clearing. Thereafter, follow-up treatments should occur on an annual basis to prevent re-establishment.

Continuous Rotational Management: Due to the vast size of the site, follow-up activities will need to be carried out on a rotational basis. This will ensure that all sections of the site are revisited within the required timeframes while maintaining steady progress.

As the project advances, the in-house team must establish management units across the property and develop a clearing schedule to monitor initial clearing and follow-up efforts, ensuring alignment with the requirements of the management plan.

5.2. Focus of Follow-Up Treatments

Seedling and Coppice Control: Follow-up efforts will primarily target seedlings and coppice regrowth from stumps or root systems. Controlling these early-stage regrowth is more cost-effective and efficient compared to dealing with fully re-established vegetation.

Short Intervals for Effectiveness: Close attention must be paid to the intervals between follow-up treatments, especially during the first year after initial clearing. Delays in follow-up will result in increased time and labor required, as the vegetation will have had time to re-establish.

5.3. Resource Allocation and Funding

Periodic clearing operations must be ongoing and adequately funded by the Applicant, who holds responsibility for the management of the site. A dedicated and well-planned budget should be set aside to ensure that follow-up work is carried out consistently (see Section 6).

5.4. General Monitoring Requirements

In general, the following principles apply for monitoring:

- Photographic documentation should be maintained for all areas to be cleared. This includes images taken before work begins, as well as at regular intervals during the initial clearing activities. Similarly, photographs should be taken before and after any follow-up clearing, and the progress of rehabilitation efforts should also be documented.
- Basic records must be kept of daily operations. This includes the specific areas or locations cleared, the number of labor units involved, and, if herbicide is used, the quantity applied.
- If invasive alien plants are detected during monitoring, immediate action must be taken to address the issue.

SECTION 6: BUDGETING

Successful alien clearing requires an ongoing and long term approach and is labor and time intensive and therefore becomes a costly exercise. When planning a budget for alien vegetation management, several key factors must be considered to ensure effective and sustainable control:

Vegetation

- Species – require different methods or control applications
- Density – coverage / stems per ha (for woody species)
- Area (ha)
- Height (m)
- Growth stage – vegetative, flowering, fruiting
- Location

Terrain

- Slope / Access
- Carrier volume for herbicides
- Transport (c/km)
- Equipment
- Method

Labour

- Type – skilled / unskilled
- Number
- Task Rate (person days/ha)
- Unit cost
- Availability

Technique

- Chemical(Spot treatment, Frilling, Stump treatment)
- Mechanical (Stem treatment, Ringbarking, Hand pulling)
- Biological (Soil treatment , bio control)
- Overall – Foliar / Soil Felling Compliments

Equipment

- Knapsacks, Foam sprayer, Stem injection, Nozzles
- Manual / mechanical (Slashers / Brush cutters)
- Maintenance (cost)

Herbicide

- Type
- Rate Spray volume (1/ha or %)
- Carrier
- Technical limits, Environment, Climatic factors, Timing

Costs

- Salaries / wages
- Other benefits / bonuses
- Training
- Overheads - Transport (c/km), Maintenance
- Other
- Allowance for downtime
- Environmental factors – slope, accessibility (WT), obstructive vegetation

Programme

- Duration
- Number of treatments
- Total cost for programme
- Budgeted cost / treated ha / situation / season

SECTION 7: MONITORING AND COMPLIANCE

7.1. Reporting and Record Keeping

The appointed ACO is responsible for submitting monthly reports to the ECO overseeing the site. The ECO should conduct a monthly site inspection of the site. These reports must detail the following (refer to temple provided in Appendix A):

- A summary of all clearing undertaken during the month, specifying whether it involved initial clearing or follow-up treatments.
- Clear identification of the areas on the site where clearing has taken place.
- The total area (in hectares or square meters) that was cleared.
- The specific clearing methods employed (e.g., mechanical clearing, manual removal, herbicide application).
- The number of workers involved in the clearing activities.
- Any difficulties or problems faced during the clearing operations (e.g., access issues, safety concerns, or weather delays).

In addition to the monthly reports, the applicant is required to maintain comprehensive records of all reports submitted by the ACO. These records should also include documentation of any reviews or amendments to the AVMP. This documentation is essential for tracking progress, ensuring compliance with the management plan, and adjusting strategies as needed. Records should be kept and must be made available for review on request, based on adequate motivation.

7.2. Environmental Monitoring and Audits

Throughout the construction phase, monthly ECO reports must be compiled and submitted to DEADP. Throughout the operational phase, monthly ECO reports must be compiled and submitted to the site's EM.

During the construction phase a qualified Environmental Auditor, appointed at the Applicant's expense, must conduct six-monthly compliance audits of the Environmental Management Plans (EMPs) in place for the site, including the AVMP. Once the project transitions fully to the operational phase, annual compliance audits of the same EMP suite, including the AVMP, must be undertaken.

The audit should aim to:

1. Assess compliance with the key components of the EMPrs.

2. Identify critical areas requiring attention.
3. Recommend priority actions for improvement.

The audit must cover a range of issues, including the implementation of environmental controls, environmental management practices, and environmental monitoring.

Audit findings should guide any necessary updates or additions to the EMPrs to address new or unresolved environmental issues on site. National, provincial, and local authorities must be provided access to the facility for audit or inspection upon request.

7.3. Record Keeping

The Applicant should keep records of the following:

- Monthly monitoring reports submitted by the onsite ACO
- 6-monthly audit reports
- Annual audit reports
- Reviews and amendments of the VFMP
- Incident reports for all fire related incidents that occur onsite

Records should be kept and must be made available for review on request, based on adequate motivation.

APPENDIX A: ALIEN VEGETATION CLEARING REPORT TEMPLATE

Alien Vegetation Clearance Report

Name:	**File reference number:**
Reporting Period:	
Total area (in ha) cleared/followed-up during reporting period:	
Number of workers involved in the clearing activities:	

Section 1: Provide a summary of all clearing undertaken during the month, specifying whether it involved initial clearing or follow-up treatments.

Section 2: Provide a map indicating the areas on the site where clearing has taken place.

Section 3: Outline the clearing methods employed (e.g., mechanical clearing, manual removal, herbicide application).

Section 4: Any difficulties or problems faced during the clearing operations (e.g., access issues, safety concerns, or weather delays).

Section 5: Signatures

ACO:	Date: .....
ECO:	Date: .....