

IRR - ATTACHMENT F

AMENDED REHABILITATION MANAGEMENT PLAN



REHABILITATION MANAGEMENT PLAN

Prepared for: FPI Queensland Pty Ltd

Vantage Industrial Estate Stage 3

Lot 504 Homestead Drive STAPYLTON QLD
4207

LOT 504 on SP329485

ADDRESS: Christensen Road South, Stapylton QLD

REAL PROPERTY DESCRIPTION: LOT 504 on SP329485

PREPARED FOR: FPI Queensland Pty Ltd

DATE PREPARED: June 2023



gassman
development
perspectives

“IMPORTANT NOTE”

Apart from fair dealing for the purposes of private study, research, criticism, or review as permitted under the Copyright Act, no part of this report, its attachments or appendices may be reproduced by any process without the written consent of Gassman Development Perspectives Pty Ltd.

We have prepared this report for the sole purposes of FPI Queensland Pty Ltd (“Client”) for the specific purpose of a Rehabilitation Management Plan. This report is strictly limited to the Purpose and the facts and matters stated in it and does not apply directly or indirectly and will not be used for any other application, purpose, use or matter.

In preparing this report we have made certain assumptions. We have assumed that all information and documents provided to us by the Client or as a result of a specific request or enquiry were complete, accurate and up-to-date. Where we have obtained information from a government register or database, we have assumed that the information is accurate. Where an assumption has been made, we have not made any independent investigations with respect to the matters the subject of that assumption. We are not aware of any reason why any of the assumptions are incorrect.

This report is presented without the assumption of a duty of care to any other person (“Third Party”) other than the Client. The report may not contain sufficient information for the purposes of a Third Party or for other uses. Without the prior written consent of Gassman Development Perspectives Pty Ltd:

- a) This report may not be relied on by a Third Party; and
- b) Gassman Development Perspectives Pty Ltd will not be liable to a Third Party for any loss, damage, liability or claim arising out of or incidental to a Third-Party publishing, using or relying on the facts, content, opinions or subject matter contained in this report.

If a Third Party uses or relies on the facts, content, opinions or subject matter contained in this report with or without the consent of Gassman Development Perspectives Pty Ltd, Gassman Development Perspectives Pty Ltd disclaims all risk and the Third Party assumes all risk and releases and indemnifies and agrees to keep indemnified Gassman Development Perspectives Pty Ltd from any loss, damage, claim or liability arising directly or indirectly from the use of or reliance on this report.

In this note, a reference to loss and damage includes past and prospective economic loss, loss of profits, damage to property, injury to any person (including death) costs and expenses incurred in taking measures to prevent, mitigate or rectify any harm, loss of opportunity, legal costs, compensation, interest and any other direct, indirect, consequential or financial or other loss.

GDP Document Control

Originating Office:	Yatala	Job Number:	5941
Physical Address:	76 Business Street Yatala QLD 4207	Job Name:	Vantage Stage 3 Rehabilitation Management Plan (Open Space Area)
Postal Address:	PO Box 392 BEENLEIGH.Q. 4207	Project Manager:	Mitchell Gassman
Phone:	+61 7 3807 3333	Document Title:	Rehabilitation Management Plan
Fax:	+61 7 3287 5461	Author:	Hugh Osborn
Email:	mail@gassman.com.au	Client:	FPI Queensland Pty Ltd
Web:	www.gassman.com.au		

Revision / Checking History

No.	Author	Reviewer
1.0	Hugh Osborn	Fraser Gassman

Version	Name	Position	Signature	Date
V1.0	Brian Gassman	Director		21/04/2023

Approval for Issue

Final Distribution

FPI Queensland Pty Ltd	1 electronic copy
City of Gold Coast Council	1 electronic copy

Table of Contents

1	Introduction	5
1.1	Purpose	5
1.2	Scope	5
1.3	Aims and Objectives	6
1.4	Intended Outcomes	8
2	Rehabilitation Approaches	9
3	Site Assessment	10
3.1	Native Vegetation	10
3.2	Exotic Vegetation	11
3.3	Management objectives	12
3.4	Implementation	12
3.5	Weed control methods	12
3.5.1	Manual Removal	13
3.5.2	Herbicide application	13
4	Site Preparation	15
4.1	Removal of rubbish and debris	15
4.2	Erosion and Sediment Control	15
4.3	Additional Topsoil and Mulch Treatment	15
5	Planting Specifications	16
5.1	Summary of treatments	16
5.2	Planting techniques	17
5.3	Rehabilitation Zone 1 – Active Planting (435m ²)	17
5.4	Rehabilitation Zone 2 – Weed Management (18,568m ²)	19
5.5	Planting requirements	19
5.6	Watering	20
6	Establishment Period	21
7	Maintenance	22
8	Monitoring	23
9	Performance Criteria	25
10	Conclusion	26
	Appendix A - Rehabilitation Management Plan	27
	Appendix B - South East Queensland Ecological Restoration Framework Weed Management Techniques	29
	Appendix C - Example Site Monitoring Form	37

1 Introduction

1.1 Purpose

The purpose of this Rehabilitation Management Plan (RMP) is to provide details of vegetation restoration works to be undertaken within the Open Space (Conservation) area of Lot 504 on SP329485 in order to address requirements of the associated **Open Space Management Plan (OSMP) Conservation Dedication** and provides rehabilitation details to ensure vegetation restoration work can be undertaken that is compliant with Council requirements. It also provides Council with clear expectations of the scope of works and a means of ensuring works are completed according to the approved plan.

This RMP seeks to comply with development conditions for the industrial estate development at Vantage, at Stapylton Jacob Well Road, Yatala. As a development condition of Preliminary Approval (Decision Notice MIN/2020/659) an area of land is to be dedicated to Council as public Open Space. The associated Open Space Management Plan has been prepared to guide the management of the Open Space Area (OSA) and includes the provision of rehabilitation works. The purpose of this RMP is to guide the successful rehabilitation and management of the proposed public open space area which is to be dedicated to Council for conservation purposes to comply with development conditions of Preliminary Approval (Decision Notice MIN/2020/659).

Since this time, a number of Minor Change applications have been approved making changes to the Preliminary Approval with MIN/2020/659, at this time, the most recently approved package. A further Minor Change, MIN/2023/64, is currently undergoing assessment and is expected to result in an amendment of the associated Preliminary Approval, with no impacts anticipated to this Plan.

1.2 Scope

This RMP applies to areas within the proposed Lot 504 on SP329485 (Refer Figure 1.) which corresponds to an area to be created for dedication to Council as Public Open Space as discussed in the Open Space Management Plan (OSMP), following Stage 3 of the proposed development at Vantage, at Stapylton Jacob Well Road, Yatala.. The proposed rehabilitation area is between Sandy Creek and a sixty (60m) metre buffer from the high bank of Sandy Creek to its north, as directed by the decision notice MIN/2020/659. This area is predominantly composed of remnant native vegetation and some smaller disturbed or cleared areas which are thought to have been disturbed as a result of gaining access for the wedge-tailed eagle's nest relocation to an artificial support structure.

1.3 Aims and Objectives

This RMP aims to outline the details of work required to achieve restoration outcomes that adequately improve the quality of native vegetation and habitat and ensure its ecological functionality within the designated area of Lot 504 on SP329485 that is part of the development application. The proposed Rehabilitation Area will maintain and improve native vegetation and habitat linkages through Vantage Yatala Industrial precinct, and into the stream waterway corridor of Sandy Creek. It will also provide an ecological buffer and barrier which will assist in separating the man-made processes within the neighbouring industrial zoning from the Sandy Creek waterway.

The broad objectives of this RMP are to:

- Comply with conditions within MIN/2020/659 to detail a rehabilitated sixty (60) metre buffer from the high bank of Sandy Creek.
- Comply with current 'best practice' guidelines and Council guidelines and policies;
- Provide an overview of the environmental conditions in the riparian corridor;
- Ensure the long-term environmental integrity and ecological linkages within the riparian corridor;
- Provide a native vegetation corridor from the impacted area to the Albert River waterway corridor to the north; and
- Improve ecological function and fauna opportunities within the tributary stream riparian corridor.



Figure 1 Locality Plan

1.4 Intended Outcomes

The intended outcomes for successful restoration of the impacted area are:

- The Rehabilitation Area is free from declared weed species;
- The Rehabilitation Area demonstrates a reduction in abundance and diversity of weed species currently present on the site; and
- The Rehabilitation Area contains restored and improved native vegetation to provide enhanced habitat for native flora and fauna, provides and maintains an ecological buffer to Sandy Creek, and improves or maintains ecological processes.

2 Rehabilitation Approaches

There are four generally accepted approaches to rehabilitation as outlined in South-East Queensland (SEQ) Ecological Restoration Framework Manual (2012). These are:

- a. Natural regeneration;
- b. Assisted natural regeneration;
- c. Reconstruction; or
- d. Fabrication.

Of these approaches, assisted natural regeneration and reconstruction planting will be required to facilitate the proposed restoration works within the impacted area on proposed Lot 504 on SP329485 subject to this RMP. Assisted natural regeneration will be utilised in areas with established native vegetation, with some additional infill planting added if and where necessary to establish the required vegetation densities. In areas that have been subject to earthworks, or where no existing native vegetation is present or habitat is degraded, reconstructive planting will be used to actively restore native vegetation. Reconstructive planting may be required throughout the whole of the rehabilitation area, dependant on natural regeneration success. s

3 Site Assessment

The site is located in the northern region of the City of Gold Coast local government area. The vegetation present within the proposed Open Space area consists of Tall and Low Open Forest vegetation and riparian vegetation associated with the waterways. There are some incursions of weed species present throughout the area, particularly *Lantana camara*. Biodiversity values are relatively high due to the existing native vegetation, the presence of large hollow bearing trees, diversity of vegetation and the presence of water habitats for various fauna and flora. Natural habitat features such as logs and instream vegetation are present throughout the stream channel. A small area cleared to accommodate the relocation of the wedge-tailed eagle's nest and construction of the nest pole remains in a degraded state. A Council fire trail is also present along the eastern boundary.

A description of the site constraints and relevant planning instruments is outlined in detail within the Open Space Management Plan associated with this document. The following shall describe the vegetation present on site in order to plan how the site is to be effectively rehabilitated.

3.1 Native Vegetation

The subject site is mapped as containing 'least concern' RE 12.11.5/12.11.24 across the majority of Open Space area, with RE 12.3.11 in a strip directly adjacent to Sandy Creek along the southern boundary of the lot, and RE 12.11.25 in the north west corner of the Open Space area. The surrounding vegetation outside of the Open Space area has been heavily modified through recent clearing in accordance with Vegetation Clearing OPW approvals. On ground observations identified the following predominant species;

Canopy Species

Eucalyptus siderophloia, *Eucalyptus crebra*, *Corymbia intermedia*, *Eucalyptus propinqua* *Angophora leiocarpa*, *Corymbia citriodora* subsp *variegata* and *Eucalyptus pilularis*.

Mid Storey Species

Alphitonia excelsa, *Melaleuca decora*, *Melaleuca nodosa*, *Melaleuca linariifolia*, *Allocasuarina litoralis*, *Acacia leiocalyx*, *Lophostemon saueolens* and *Acacia* spp.

Groundcover / Shrub Layer Species

Lepidosperma laterale, *Ottochloa gracillima*, *Gahnia aspera*, *Cymbopogon refractus*, *Lomandra hystrix*, *Smilax australis*, *Lomandra longifolia*, *Pteridium esculentum*.

Generally, native vegetation in the Open Space area transitions from Eucalypt and Corymbia open forest across the majority of the area, down to a thin strip of more rainforest and riparian species along Sandy Creek along the southern border of the Open Space area. The area also contains some large mature *Eucalyptus tereticornis* and *E. pilularis* trees. Other species such as *Melaleuca nodosa*

and a variety of native vine forest understorey species, bracken fern understorey. and aquatic macrophytes also occur in abundance in specific areas, such as directly adjacent to the tributary stream.

Due to the established nature of vegetation currently present, this rehabilitation plan proposes primarily assisted natural regeneration through weed management in most of the Open Space area. However, planting specifications have been provided for a small area that was required to be disturbed to install the relocated wedge-tailed eagle nest.

3.2 Exotic Vegetation

The area covered by this RMP largely consists of existing remnant vegetation with small areas affected by clearing or access tracks. Some weed incursions exists in edge affected areas and will require weed management to assist with natural regeneration. Due to the proximity of the cleared areas and access track to existing remnant native vegetation, it is anticipated that revegetation can be adjusted in this area to facilitate natural regeneration occurring.

A number of exotic species were observed as occurring on the subject site. In particular, *Lantana camara* is present throughout the understorey in varying densities. *Passiflora subpeltata* and *Passiflora suberosa* are also frequently found within the area. Specific weed control techniques will be outlined in subsequent sections of this report.

3.3 Management objectives

Weed control activities throughout the Rehabilitation Area will aim to achieve the following objectives;

- To reduce the extent of weed species that are threatening or have future threats to diversity levels and ecological processes within the designated rehabilitation areas;
- To remove listed weed (and undesirable exotic) species from rehabilitation areas;
- Allow increased success and establishment of existing natives and rehabilitation plantings; and
- To reduce incidental weed invasion into plant communities within the surrounding areas.

3.4 Implementation

The weed management processes have been provided below sequentially so as to ensure the most successful and efficient method is undertaken. Weed management activities are expected to be required on an ongoing basis for a total of two years in accordance with 12-month establishment and 12-month maintenance periods.

3.5 Weed control methods

Weed control of the subject site will be limited to the Rehabilitation Area, and will focus on the treatment of declared weeds, and the treatment of other exotic species and grasses in order to encourage assisted natural regeneration and to prepare any areas that require reconstructive plantings.

All weed control undertaken on the subject site will be undertaken with the following considerations:

- All weed control methods will be in accordance with the South East Queensland Ecological Restoration Framework Guidelines 2012 (Appendix 2).
- Due consideration of the ecologically sensitive nature of the site must be made when selecting the appropriate weed removal and weed control methods.
- Only registered frog friendly aquatic herbicides such as "Biactive" glyphosate will be used due to the proximity of the Rehabilitation Area to the creek corridor and nearby Albert River.
- Weed control works must be undertaken in a manner which does not promote erosion and instability of soil, specifically in the areas around the impacted area that has been cleared.
- If evidence of excessive spraying or off target damage is observed, additional rehabilitation will be undertaken to ensure that public open space areas are stable and not at elevated risks of erosion due to off target damage.
- Dye mixed with chemical is to be used when treating all weeds within public open space.

- Weed control is to be undertaken under drip lines of existing native plants in a manner which promotes regeneration and reduces competition for native species and which limits the potential for off target damage.

3.5.1 Manual Removal

This method physically removes any existing or re-establishing weed species from around the existing plants, thus limiting competition and increasing health of native plants and allowing the new plantings to establish. Manual removal may include hand pulling, or the use of other tools such as a weed plough, or targeted brush cutting and chainsaw use as required to remove the target weed species with no damage to surrounding native vegetation.

3.5.2 Herbicide application

Herbicide should be applied by qualified personnel with experience in bush regeneration and native plant species identification. It is recommended that spray operators have undertaken accredited training through a nationally accredited program such as Chemcert. All weed control techniques will be in accordance with the South East Queensland Ecological Restoration Framework Guidelines 2012 (Appendix 2).

Power operated spray equipment must only be undertaken or supervised by ACDC accredited operators and must comply with the ACDC Act. This Act also specifies limitations of certain herbicides and applications in Queensland Districts.

Spray operators have a legal responsibility to themselves and the public. Employers and employees have obligations under the Work Place Health and Safety Act to provide a 'Duty of Care'.

In Queensland, the 'off-label' permit allows bush regenerators to apply herbicide on plant species that are not listed on the label under Permit 7485. The off-label permit is administered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). This relates to the ground distribution control of weeds in Non-Agricultural Areas, Bushland, Forests and Wetlands.

It is a requirement of this permit, that all persons using the products covered by this off-label permit comply with the details and conditions listed in the permit. In addition, read the herbicide label carefully before use and always use the herbicide in accordance with the label directions. Chemical control of various weeds mentioned in this document will comply with permit 7485.

The operator is responsible to comply with environmental considerations, especially working in riparian areas. It is important to become familiar with the product MSDS, in particular aspects of soil residuality, translocation, breakdown in water, and impact on amphibians (for example, Glyphosate herbicides are chelated with salts which can build up in the soil, changing the Ph and soil conditions). To ameliorate the impact of salt and modified ph, fulvic acid can be used in conjunction with herbicide. As a microbial stimulant fulvic acid increases the plants uptake of the herbicide and reduces soil residues, therefore minimizing environmental harm.

Due to the proximity to Sandy Creek, only registered frog friendly aquatic herbicides such as "Biactive" glyphosate will be used.

4 Site Preparation

4.1 Removal of rubbish and debris

There are some piles of rubbish and old concrete material that have previously been disposed in the Open Space area and roadside rubbish entering the side where it adjoins the road reserve. All rubbish is required to be removed prior to rehabilitation works beginning in accordance with the Rehabilitation Management Plan.

This unwanted material will need to be removed from the site and disposed of appropriately. Material may need to be separated prior to disposal off-site by a suitably qualified waste management contractor.

4.2 Erosion and Sediment Control

Monitoring and maintenance of the construction phase sediment and erosion control measures implemented on the adjacent development site will be in accordance with IECA's Best Practice Guidelines, the City of Gold Coast Council's Schedule 6 City Plan Policy SC6.9.3.2 Design Objectives – SC6.9.3.2.2 Erosion and Sediment Control (Construction Phase), Relevant Healthy Waterways guidelines and documents, and the Urban Stormwater Planning Guideline (Queensland State Government).

4.3 Additional Topsoil and Mulch Treatment

Mulch is to be used on all active planting areas within the rehabilitation area. The mulch shall consist of 100mm of weed-free forest mulch spread in a 30cm radius around each plant to ensure that natural regeneration is not impeded. The application of blanket mulch to areas, as an alternative, to assist with weed suppression, plant growth and natural regeneration, should be applied where it is deemed appropriate to achieving the aims and objectives of this RMP such as within the active planting zone.

5 Planting Specifications

5.1 Summary of treatments

The primary rehabilitation management action in the Open Space area is to be weed management in order to support natural regeneration, with a small area of active reconstruction planting proposed around the area used to install the wedge-tailed eagle nest. The planting around this area will be done in a way that maintains an existing 4m wide access track to the relocated wedge-tailed eagle nest. Planting techniques and a planting schedule has been provided for the area requiring active planting in the following sections. The planting schedule can also be used to provide contingency planting species for the area subject to assisted natural regeneration if weed management activities do not result in sufficient native regeneration occurring.

Contingency plantings will only be enacted (post establishment period) if agreement between the proponent and City of Gold Coast Council is made that natural regeneration has not been effective and direct plantings are required to ensure that rehabilitation in the open space park area is completed to the satisfaction of council. Effective coverage required has been addressed in the specifics of Rehabilitation Zone 2 (Section 5.4).

The two (2) distinct rehabilitation zones are nominated and are individually outlined in the following sections.

5.2 Planting techniques

The Rehabilitation Management Plan in Appendix 2 depicts the section of the Open Space area that will require planting, after taking into account existing native vegetation.

Plants are to be supplied in 75mm native tube stock or equivalent, and are to be planted according to Figure 2 below.

Plant stock is to be sourced from local nurseries, using local provenance parent material. Stock is to be free of defects and pathogens and should show good root structure and vigour.

A survival rate of at least 90% is to occur within the rehabilitation area for the duration of the 12-month establishment and 12-month maintenance periods. Failure to achieve these targets will require plant replacement.

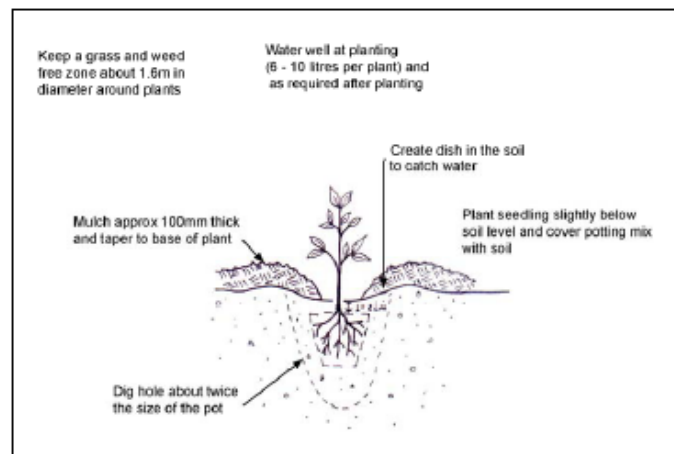


Figure 2 Planting Detail

5.3 Rehabilitation Zone 1 – Active Planting (435m²)

The location of this 'Rehabilitation Zone 1 - Active Planting' is shown in Appendix 2. This area was disturbed in order to allow the required machinery access to install the relocated wedge-tailed eagle nest. The area would contain significant seed bank, and would be expected to regenerate naturally, however some active reconstruction planting is proposed to help this area re-establish more rapidly. A 4m wide access track, which previously existed through the area, is intended to be maintained clear of vegetation, to allow ongoing access to the relocated wedge-tailed eagle nest.

The following planting specifications will be implemented within this rehabilitation zone. Planting densities have been specified; however the planting densities required may vary depending on the extent of existing vegetation on the ground, and any natural regeneration that occurs.

The species below have been selected from RE 12.11.5 which is the existing RE type occurring in the area, and from species observed on ground within the rehabilitation zone.

Table 1 Rehabilitation Zone 1 – Active Planting – 435m²

Type	Botanical Name	Common Name	Pot
Canopy	<i>Eucalyptus propinqua</i>	Small Fruited Grey Gum	Tube
	<i>Corymbia citriodora</i> subsp. <i>variegata</i>	Spotted Gum	Tube
	<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark	Tube
	<i>Eucalyptus siderophloia</i>	Grey ironbark	Tube
	<i>Eucalyptus fibrosa</i>	Broad-leaved Ironbark	Tube
	<i>Corymbia intermedia</i>	Pink bloodwood	Tube
	<i>Angophora leiocarpa</i>	Smooth Barked Apple	Tube
Mid-storey	<i>Melaleuca linariifolia</i>	Snow in Summer	Tube
	<i>Lophostemon suaveolens</i>	Swamp box	Tube
	<i>Lophostemon confertus</i>	Brush Box	Tube
	<i>Melaleuca decora</i>	Whitefeather Honeymyrtle	Tube
	<i>Alphitonia excelsa</i>	Red Ash	Tube
	<i>Breynia oblongifolia</i>	Coffee Bush	Tube
	<i>Callistemon viminalis</i>	Red Bottlebrush	Tube
Groundcover	<i>Cymbopogon refractus</i>	Barbwire Grass	Tube
	<i>Dianella caerulea</i>	Blue Flax Lily	Tube
	<i>Lomandra hystrix</i>	Creek matrush	Tube
	<i>Lomandra longifolia</i>	Spiny headed matrush	Tube
	<i>Gahnia aspera</i>	Rough Saw-Sedge	Tube
	<i>Themeda triandra</i>	Kangaroo Grass	Tube

Total area: 435m² (approx)

Density: 1 plant per 1m²

Ratio: 70% canopy, 20% Mid-storey, 10% Shrubs

70x Canopy Species per 100m²

20x Mid-storey Species per 100m²

10x Shrub Species per 100m²

Total = 100 plants per 100m² module

5.4 Rehabilitation Zone 2 – Weed Management (18,568m²)

The location of the 'Rehabilitation Zone 2 - Weed Management' is shown in Appendix 2 and includes most of the proposed Open Space area. This area was observed to contain some areas of weed infestation, particularly of *Lantana camara*. This area extends from the northern boundary of the Open Space area, all the way back to the southern boundary with Sandy Creek. Weed management activities in this area will occur in accordance with Section 3.5 of this report, and Appendix 3.

Appropriate weed management will result in opportunistic natural recruitment to occur within the area. The existing condition of the area demonstrates a strong alignment with the density requirements for the relevant remnant Regional Ecosystems mapped over the area, although infested with weed species in some areas. Given this, and considering the controlled absence of competitive weed species due to the management prescribed, and the existing presence of fast-growing canopy species (*Acacia spp.*, some *Corymbia spp.*, and *Lophostemon spp.*), it is likely natural recruitment resulting would achieve the desired outcome.

If, following weed removal and control, some areas struggle to regenerate, some active planting may be considered as a contingency measure. If required, contingency planting species can be drawn from the planting schedule prescribed for Rehabilitation Zone 1 (**Table 1**), or as determined by the suitably qualified rehabilitation contractor undertaking the works. If the contingency planting is required, planting will occur in areas with open canopies up to and exceeding 5m², at a rate of one canopy species per 5m². This contingency planting seeks to ensure the overall open space area achieves ensures ecological success where natural recruitment had not yet occurred.

5.5 Planting requirements

Active revegetation planting within the Rehabilitation Zone will be in accordance with the following requirements:

- A suitably qualified rehabilitation contractor is to be engaged.
- Boundaries of the rehabilitation area must be temporarily fenced to exclude people and vehicle impacts during the initial rehabilitation weed control and planting.
- Plant stock is to be grown from local provenance, where possible.
- Plants are to be supplied in tube stock, 75mm native tube or equivalent;
- A survival rate of at least 90% for active planting is to occur within the rehabilitation areas for the duration of the 12-month establishment and 12-month maintenance periods. Failure to achieve these targets will require plant replacement.
- The plants species specified in Section 5.3 are to be used as a priority, however, if a plant species is not available at the time of planting, a suitable substitute can be made.

- Plant out areas and species locations should be located and clearly marked.
- Replanting areas should be monitored for exotic weed growth during plant out and spot treated accordingly.
- The boundaries of the planting areas will be located and marked or clearly visible.
- Temporary markings on existing native species can be removed during the plant out.
- The planting could include the addition of a long-term slow release fertilizer to increase establishment potentials and rates of the plant.
- Where possible plants should be planted the day they arrive on site, if this not feasible, they will require a shaded location with sufficient watering provided.
- All planted species should be immediately watered after planting. If this is between the hours of 9am and 4pm specific attention should be given to avoiding leaves during watering to limit epidermis burning.
- Planting is not to occur in extreme weather conditions i.e. strong winds, extremely high temperatures.
- The planting hole should be dished to maximise water catchment and retention
- Where contingency planting is required, a density of 1 canopy species per 5m² is prescribed in areas where open canopy exceeds 5m².

5.6 Watering

All plant stock is to be watered onsite prior to planting and as soon as practical after planting (within several hours). Water is to be sourced locally or is to be recycled non-potable water.

The watering regime for planted areas will consist of:

- Weekly for the first month following planting;
- As required for the remaining 12-month period (i.e. to finished the establishment period or maintenance period for contingency plantings), bearing in mind performance criteria relating to plant survival and health.

6 Establishment Period

The rehabilitation works are to have an Establishment Period of 12-months, allowing 6 weeks for adequate preparation of planting areas if required. Rehabilitation works should be staged as follows:

Table 4 - Staging of works (Establishment Phase)

<i>Step</i>	<i>Activity</i>	<i>Timing</i>
1	Locate and delineate the rehabilitation area	Week1
2	Remove all rubbish and foreign debris from rehabilitation area	Week 1
3	Undertake initial weed treatment. Locate, mark out and prepare areas for planting.	Week 1
4	Undertake follow up weed control and plant the specified species according to the planting module	Week 7 – 10
5	Scheduled maintenance of planting areas during establishment period and follow up weed control.	6-weekly cycle: Week 16,22,28, 34 - 52

7 Maintenance

The Maintenance Period will be for 12 months, following the 12-month plant establishment phase, and shall consist of:

- Weed Management - hand weeding and spot spraying in rehabilitation areas.
- Watering of planted plants if required.
- Replacement and repair of jute matting if required.
- Replacement planting of individual plants which have died if required.
- Contingency plantings as prescribed below, if required.

As previously mentioned, contingency planting may be required. Any contingency planting will be undertaken within this maintenance period. Assessment of the success of the natural recruitment that occurred within the Establishment Period will be undertaken at the beginning of the Maintenance period. This brief assessment will seek to identify what areas (if any) do not meet the desired canopy coverage parameters, ultimately culminating in a requirement to undertake reconstructive planting at the listed rate of 1 canopy tree per 5m². If a juvenile or seedling of a canopy species has recently recruited in one of these areas, no planting would be required in this instance. If contingency planting is required, it is to be undertaken at the same time as any required replacement planting (where applicable).

The performance of maintenance activities will be assessed as part of allocated monitoring inspections.

Table 5 – Measurement of Health

<i>Time scale</i>	<i>Growth and development processes</i>	<i>Key indicator for species health</i>	<i>Maintenance Issues that may arise</i>	<i>Description of maintenance period</i>
0 – 12 Months (establishment period)	Growth rate and establishment	Seedling heights, foliage growth and colour, weed presence.	Weed removal, water requirements, impacts from unforeseen destruction, attrition rates.	90% success in establishing the planted species. Minimal weeding required.
12 – 24 Months (Maintenance period)	Continued growth and establishment General health Minor habitat use	Increasing height and trunk diameter increasing, Canopy growth and density Weed presence, Canopy closure	Weed removal, possible impacts from past weed invasion measures.	Healthy foliage growth rates and characteristics corresponding with individual species.

8 Monitoring

The rehabilitation works are to be monitored by routine site inspections by a qualified professional. Refer to Appendix 3 for an example monitoring inspection form.

Photo Monitoring Points should be established in suitable locations of each rehabilitation zone, to monitor changes over time.

The following inspections are recommended:

Table 6 – Monitoring Schedule (Establishment and On Maintenance Phase)

<i>Inspection</i>	<i>Timing</i>	<i>Purpose</i>	<i>Evidence</i>
1	Weeks 1-2	Confirm location of rehabilitation area & planting areas. Install permanent photo monitoring points (N/E/W/S images to be taken). Take images of site prior to commencement of initial weed treatment.	Site visit and photographs
2	Weeks 6-7	Inspection following initial and follow up weed management treatments.	Site visit and photographs
3	Weeks 8	On Establishment Inspection: Complete inspection with Council following practical completion of reconstructive active plantings.	Site visit, photographs and On Establishment Inspection with Council
4 to 11	Each following month	Monthly inspection of planting areas. Replace any dead plants. Monthly inspection of weed control areas.	Inspection form & photographs
12	Week 52	On Maintenance inspection: assess ecological integrity of site; • Plant establishment and vigour • Effectiveness of weed control activities	Site visit, photographs and On Maintenance Inspection with Council

<i>Inspection</i>	<i>Timing</i>	<i>Purpose</i>	<i>Evidence</i>
13 to 22	Every 6 weeks following	Inspection of planting areas and of weed control areas.	Inspection form & photographs
23	Week 104 or 12 months following 'On Establishment'	Off Maintenance inspection to assess ecological integrity of site; • Plant establishment and vigour • Effectiveness of weed control activities	Site visit, photographs and On Maintenance Inspection with Council

9 Performance Criteria

1. All environmental weeds including woody weeds, vines and Declared Class 1 and 2 weeds (pursuant to the Land Protection (Pest and Stock Route Management) Act 2002) must be controlled on all lands proposed for transfer to Council.
2. No declared Class 1 or Class 2 weeds are to be present on site at the Off-Maintenance inspection.
3. Pasture grass weeds and other perennial weed species are managed and impacts are minimised as much as possible.
4. A survival rate of 90% of active plantings is to be achieved, with any replants displaying good growth and form.
5. Species diversity of the active planting area is reflective of the species detailed within Section 5, except where subject to stock availability or as agreed with the rehabilitation contractor and council.

10 Conclusion

This Rehabilitation Management Plan has addressed the objectives that are required to achieve a rehabilitated sixty (60) metre buffer from the high bank of Sandy Creek in accordance with MIN/2020/659 and in accordance with rehabilitation components of Council's Open Space Management Guideline: Guideline for the preparation of Reports and Plans associated with the dedication of Public Open Space (November 2007, Version 1);.

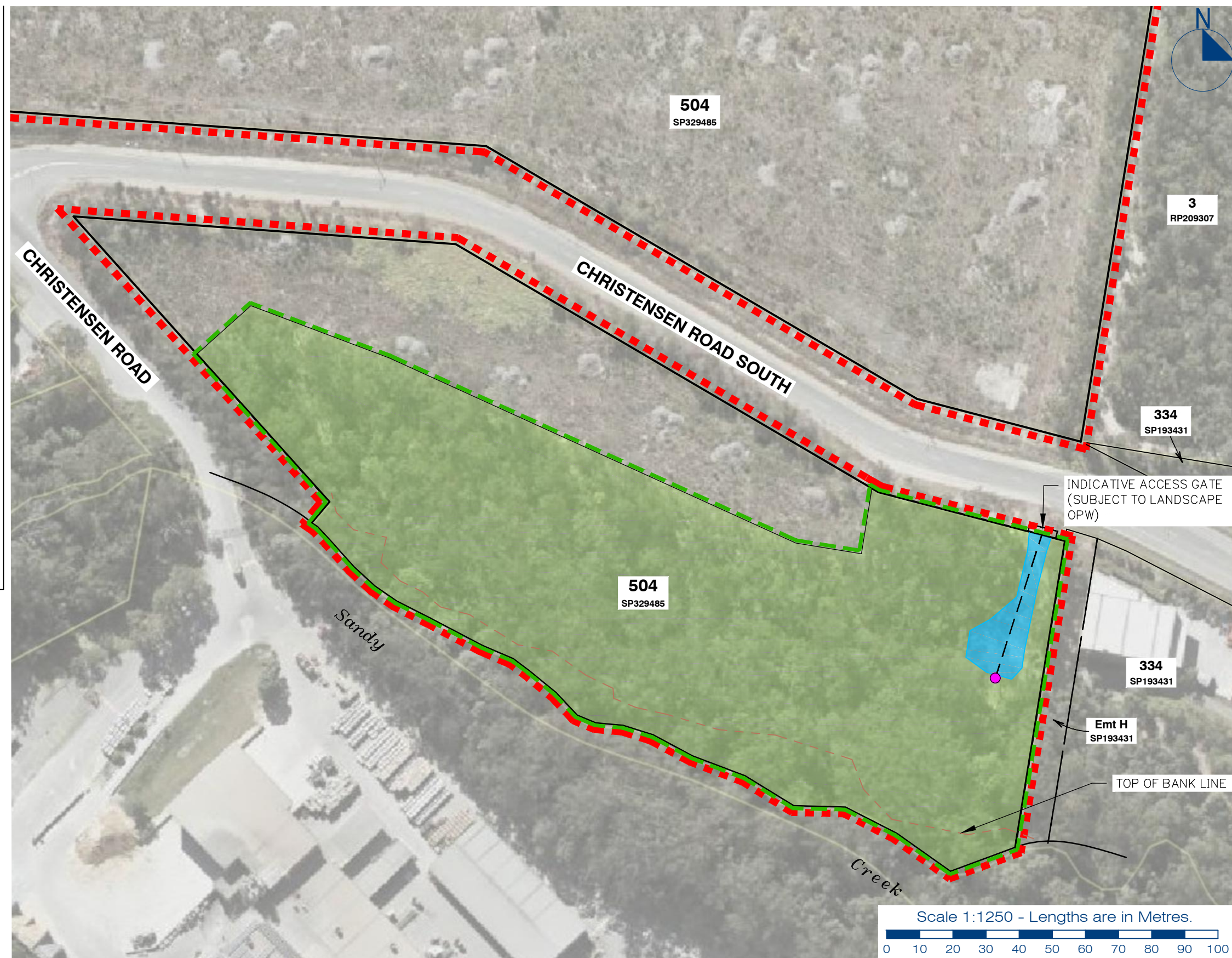
This report also provides the various strategies and responses required to achieve Council objectives by protecting important habitat, and effectively managing environmentally sensitive areas during the construction and operation of the proposed development. In particular, the proposed restoration works will involve assisted natural regeneration of the 60m Sandy Creek buffer area through weed management, and active reconstruction plantings. Specifications for weed management activities and reconstructive plantings have been provided as part of this Rehabilitation Management Plan.

The rehabilitation of the waterway buffer area will benefit council and the natural environment by enhancing a habitat corridor between the riparian vegetation on Sandy Creek and the adjoining habitat corridors surrounding the industrial estate. A vegetation restoration buffer in conjunction with proposed erosion and sediment management measures will allow the impacted area of the subject site to function as a buffer to Sandy Creek, while facilitating other benefits such as vegetation conservation, habitat enhancement, and waterway protection.

Appendix A - Rehabilitation Management Plan



- SUBJECT SITE
- OPEN SPACE AREA BOUNDARY
- LOT BOUNDARY
- EXISTING 4m WIDE ACCESS TRACK TO BE MAINTAINED
- REHABILITATION ZONE 1 (435m²):
ACTIVE PLANTING -1 PLANT PER 1m²
- REHABILITATION ZONE 2 (18,568m²):
WEED MANAGEMENT
- RELOCATED WEDGE TAILED EAGLE NEST



Scale at A3:		1:1250	
Date:		10-07-23	
Design:		MG	
Drawn:		SH	
Checked:		HO	
B	10/07/2023	BOUNDARY REALIGNMENT	TGP HO
-	25/01/2023	ORIGINAL ISSUE	SJH HO
Issue	Date	Description	DRN CHG

VantageYatala



© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

This plan has been prepared for the exclusive use of the client as stated on this plan for the purpose of application to the relevant local authority for material change of use and/or reconfiguration of the land as described and should not be used by any other person or corporation and for any other purpose.

All dimensions and area's are approximate only and subject to survey.

Gassman Development Perspectives Pty. Ltd. hereby grants permission for the local authority as noted to reproduce all relevant information contained hereon for the purposes stated in the Sustainable Planning Act 2009. It should be noted that granting of this consent by the copyright holder does not sign away copyright approval under the Commonwealth Copyright Act 1968.

REHABILITATION MANAGEMENT PLAN

LOCATION: 60 Stapylton Jacobs Well Road, Stapylton QLD

Drawing No: 5941 ENV OSMP 001

Revision No:

Appendix B - South East Queensland Ecological Restoration Framework Weed Management Techniques

DISCLOSURE

At the time of publication the following chemicals and techniques are registered for use and are commonly utilised. Other chemicals and techniques are used in the ecological restoration industry. Laws and best practice techniques change over time and as such it is best to check with your local government as to the current preferred approach.

Under label or off-label permits 11463 and 9868. Permit 9868 requires that persons who can use the product under the permit are "All persons who are trained in the use and handling of agricultural chemicals and who are performing weed control as part of a bush regeneration/restoration project". Operators are legally obliged to read the label before using any herbicides. If the species you wish to treat is not on the label it will be

necessary to read the off label permit. Always consult the ecological restoration plan for the projects.

Additional useful references include the Weeds of Southern Queensland (Dight et al., 2011) and PUBCRIS (<http://services.apvma.gov.au/PubcrisWebClient/welcome.do>).

HERBICIDE (+ E.G. TRADE NAME)	PRINCIPLE USES	ECOTOXICOLOGY	GROUP	SCHEDULE	UPTAKE AND RESIDUAL AFFECT
Glyphosate 360gl (Weedmaster® or Roundup Biactive®)	Non- selective weed control	Full Aquatic registration (in most formulations),	M	5	Absorbed through the leaf via spraying and through the cambium when applying techniques such as stem injection and cut, scrape and paint. Extremely short-lived and rapidly immobilised (both in soil and water). Degraded within hours in most environments
2,4-D 625 gl amine (Amicide 625)	Selective of broad-leaved weeds in native grasses (limited effect on deep rooted dicots, legumes etc.)	Aquatically registered formulations available	I	5	Mainly absorbed through leaves and stems. Fairly immobile and relatively short-lived in the soil. (degraded within days in most environments)
Fluroxypyr 333gl (Starane advance)	Selective broad-leaf control (particularly effective on undersown legumes weeds)	N (demonstrated toxicity to aquatic organisms)	I	NS	Absorbed through the leaves. Relatively short-lived in the soil though highly persistent in water
Metsulfuron Methyl (Brush-off, Ally, Associate)®	Selective of broad-leaved weeds but also able to control a variety of monocots when applied at higher rates especially Liliaceae and Commelinaceae. Lower rates do affect monocots.	N (demonstrated toxicity to aquatic organisms)	B (potential resistance rotate with other herbicides)	NS	Mainly leaf absorbed. May persist for 3-6 months in the soil profile.
Metsulfuron + Glyphosate	Non-selective weed control and used with particular weeds or combination of weeds.	N (demonstrated toxicity to aquatic organisms)	MB (potential resistance rotate with other herbicides)	5	Mainly leaf absorbed, may persist for 3-6 months in the soil profile.
2,2-DPA	Grass (monocot) selective herbicide suitable for targeting dense weedy grass infestations amongst desirable native vegetation.	Yes (limited)	J	NS	Leaf and root absorbed
*Aquatic reg indicates that formulations of this herbicide may carry and aquatic registration, some formulations do not and individuals should check PUBCRIS prior to assuming they have an aquatically registered formulation. Addition of non-aquatically re...					
Gly	Glyphosate	eg. Weedmaster Duo®, Roundup Biactive®			
MM	Metsulfuron methyl	eg. Brushoff®, Brushkiller®, Associate®			
S	Surfactant	eg. LI700®, Prosil®, Pulse®			
A	Spray Adjuvant	eg. Agral®, Protec®, Codacide®			
D	Colour Marking Dye	eg. Herbi (red or blue) Liquid Dye®			

COMMON NAME	SCIENTIFIC NAME	APPLICATION METHOD	CHEMICAL	RATE	ADJUVANT	SURFACTANT	COMMENTS
TREES							
Chinese Celtis	<i>Celtis sinensis</i>	Stem Inject	Glyphosate	1:1.5 Gly:water			
		Cut, Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Basal Bark (saplings)	Fluroxypyr	210ml:10L diesel			
		spot-spray	Glyphosate	200ml:10L water + A + D			
			Glyphosate + Metsulfuron Methyl	200mL Gly + 1.5g MM in 10L water + S + A			
Camphor Laurel	<i>Cinnamomum camphora</i>	Stem Inject	Glyphosate	1:1.5 Gly:water			
		Cut, Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Basal Bark (saplings)	Fluroxypyr	210ml:10L diesel			
		Spot spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + S + D			
			Glyphosate	200ml:10L water + A + D			
Cadaghi	<i>Corymbia torelliana</i>	Cut, Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Stem Inject	Glyphosate	1:1.5 Gly:water			
		Basal Bark (saplings)	Fluroxypyr	210ml:10L diesel			
		Spot spray	Glyphosate	100ml Gly: 10L water + A + D			
Loquat	<i>Eriobotrya japonica</i>	Basal Bark(sapling)	Fluroxypyr	210ml:10L diesel			
		Spot spray	Glyphosate	200ml Gly:10L water +			
		Cut Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Stem Inject	Glyphosate	1:1.5 Gly:water			
Cockscomb Coral Tree and Coral Tree	<i>Erythrina crista-galli</i> and <i>E. x sykesii</i>	Spot spray	Glyphosate	200ml Gly:10L water + S+ A			
		Basal Bark (sapling)	Fluroxypyr	210ml/10L diesel			
		Cut Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Stem Inject	Glyphosate	1:1.5 Gly:water			
Brazilian cherry	<i>Eugenia uniflora</i>	Cut Scrape and Paint	Glyphosate	neat (undiluted)			
		Stem Inject	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
		Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + S + D			
Golden Rain Tree	<i>Koelreuteria elegans; paniculata</i>	Cut Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Stem Inject	Glyphosate	1:1.5 Gly:water			
		Basal Bark (sapling)	Fluroxypyr	210ml:10L diesel			
		Spot spray	Glyphosate	100ml Gly:10L water + A + D			
Privet (Large and Small leaved)	<i>Ligustrum lucidum</i> and <i>L. sinense</i>	Spot Spray	Glyphosate	200ml Gly:10L water + S+ D			
			Metsulfuron methyl	1.5g MM:10L water + A + D			
			Fluroxypyr	30ml:10L water +			
		Cut Scrape and Paint	Glyphosate	1:1.5 Gly:water			
		Stem Inject	Glyphosate	1:1.5 Gly:water			
		Basal Bark (sapling)	Fluroxypyr	210ml:10L diesel			

Mulberry	<i>Morus spp.</i>	Spot Spray	Glyphosate	200ml Gly:10L water + S + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
		Basal Bark (Juvenile)	Fluroxypyr	210ml:10L diesel			
Canary Island Date Palm	<i>Phoenix canariensis</i>	Spot Spray	Glyphosate	200ml Gly:10L water + S + D			
		Stern Inject	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
Guava	<i>Psidium guajava</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + S + D			
		Cut Scrape and Paint	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
		Stern Inject	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
		Basal Bark (sapling)	Fluroxypyr	210ml:10L diesel			
Umbrella Tree	<i>Schefflera actinophylla</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water (do not stem inject when in flower)			
Broad-leaf Pepper Tree	<i>Schinus terebinthifolius</i>	Spot Spray	Glyphosate	200ml:10L water + S + A			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + S + A			
			Fluroxypyr	30ml:10L water			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Basal Bark (sapling)	Fluroxypyr	210ml:10L diesel			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Giant Devils Fig and Wild Tobacco	<i>Solanum chrysotrichum and S. mauritianum</i>	Spot Spray	Glyphosate	150ml Gly:10L water + A + D			
			Fluroxypyr	30ml:10L water			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Basal Bark (Juvenile/ Mature)	Fluroxypyr	210ml:10L diesel			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
African tulip tree	<i>Spathodea campanulata</i>	Spot Spray	Glyphosate	200ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Cocos palm	<i>Syagrus romanzoffiana</i>	Stern Inject	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
		Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Yellow Bells	<i>Tecoma stans</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Basal Bark	Fluroxypyr	210ml:10L diesel			
		Spot Spray	Glyphosate	150ml Gly: 10L water + A + D			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Tipuana	<i>Tipuana tipu</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			

GRASSES							
Creeping Bamboo/ Clumping Bamboo	<i>Arundinaria spp./ Bambusa spp.</i>	Cut and spray (re- growth/seedling)	Glyphosate 2,2-DPA	100ml Gly: 10L water + D 150g:10L water			
		Cut stump and fill segment	Glyphosate	1 Gly:1.5 water			
Broad-leaved carpet grass, Narrow-leaved carpet grass, Para grass, Mosman River grass , Pangola grass, Guinea grass, Rhodes grass, Molasses grass, Sour grass, Paspalum, Bahia grass, Vasey grass, Broad-leaf paspalum, Kikuyu grass, Bana grass, Elephant grass	<i>Axonopus compressus, A. fissifolius, Brachiaria mutica, Cenchrus echinatus, Chloris gayana, Digitaria eriantha, Megathyrsus maximus, Melinis minutiflora, Paspalum conjugatum , P. dilatatum , P. notatum , P. urvillei , P. wetsteinii , Pennisetum clandest</i>	Spot Spray	Glyphosate	100ml Gly:10L water + D			
Herbs							
Agave/Century plant	<i>Agave americana</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1g MM added to 1 Gly:1.5 water			
Crofton weed	<i>Ageratina adenophora</i>	Spot Spray	Glyphosate	100ml Gly:10L water + D			
			Metsulfuron methyl	1/2 - 1g MM: 10L water + D			
Mistflower	<i>Ageratina riparia</i>	Spot Spray	Glyphosate	100ml Gly:10L water + D			
			Metsulfuron methyl	1/2 - 1g MM: 10L water + D			
Blue billy-goat weed	<i>Ageratum houstonianum</i>	Spot Spray	Glyphosate	100ml Gly:10L water + D			
			Metsulfuron methyl	1g MM: 10L water + D			
			Fluroxypyr	30ml/10L water			
			2,4-D	30ml/10L water			
Ragweed	<i>Ambrosia artemisiifolia</i>	Spot Spray	Glyphosate	100ml gly:10L water + A + D			
			Metsulfuron methyl	1.5g MM: 10L water + A + D			
Cobblers pegs	<i>Bidens pilosa var. pilosa</i>	Spot Spray	Fluroxypyr	30ml/10L water			
			2, 4-D	30ml/10L water			
			Glyphosate	100ml Gly: 10L water + A + D			
			Metsulfuron methyl	1g MM: 10L water + A + D			
Mother of Millions; Live Leaf Plant; Resurrection Plant	<i>Bryophyllum delagoense; Pinnatum</i>	Spot Spray	2, 4-D	50ml/10L water			
	<i>Bryophyllum delagoense</i>		Metsulfuron methyl	1.5g MM:10L water + S + D			
Purple/Green Succulent, Inch Plant	<i>Callisia fragran; repens</i>	Spot Spray	Fluroxypyr	90ml/10L water			
			Metsulfuron methyl	1.5g MM:10L water + S + D			
			Glyphosate	200ml Gly:10L water + A + D			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			

Hairy Commelina; Trad (wandering Jew); Purple Succulent; Striped Trad	<i>Commelina benghalensis</i> ; <i>Tradescantia fluminensis</i> / <i>albiflora</i> ; <i>Tradescantia pillida</i> ; <i>Zebrina pendula</i> syn <i>Tradescantia zebrina</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
			Glyphosate	200ml Gly:10L water + A + D			
			Metsulfuron methyl	1.5g MM: 10L water + S + D			
			Fluroxypyr	90ml/10L water			
Glory lilly	<i>Gloriosa superba</i>	Foliar Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Polka dot plant	<i>Hypoestes phyllostachya</i>	Spot Spray	Metsulfuron methyl	1.5g MM:10L water + S + D			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Fish bone fern	<i>Nephrolepis cordifolia</i>	Spot Spray	Metsulfuron methyl	1g MM: 10L + A/S + D			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Coral berry	<i>Rivinia humilis</i>	Spot Spray	Glyphosate	100ml Gly: 10L water + A + D			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
Mother-in-law's tongue	<i>Sansevieria trifasciata</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Flannel Weed	<i>Sida cordifolia</i>	Spot Spray	Fluroxypyr	60ml/10L water			
Ground Asparagus	<i>Asparagus aethiopicus</i>	Spot Spray	Metsulfuron Methyl	1.5g MM : 10L water + A + D			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A/S + D			
Singapore Daisy	<i>Sphagneticola trilobata</i>	Spot Spray	Metsulfuron methyl	1.5g MM in 10L water + A + D			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1g MM in 10L water + A + D			
SHRUBS							
Groundsel bush	<i>Baccharis halimifolia</i>	Spot Spray	2,4-D	40ml/10L water			
		Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Green cestrum	<i>Cestrum parqui</i>	Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
			Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
Duranta	<i>Duranta erecta</i>	Overall Spray (re-growth/seedling)	Glyphosate	200ml Gly:10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Lantana	<i>Lantana camara</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Spot Spray	Fluroxypyr	40ml/10L (spring, summer)-60ml/10L water (Autumn, Winter)			
		Spray (spot spray and overspray)	Glyphosate	100ml Gly:10L water + D			
		Spray Red Flowering species	Glyphosate	200ml Gly:10L water + A + D			
		Splatter Gun	Glvphosate	1 Gly:9 water			

Leucaena	<i>Leucaena leucocephala</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Spot Spray	Fluroxypyr	30ml/10L water			
HERBS							
Murraya	<i>Murraya paniculata</i>	Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Mickey mouse bush	<i>Ochna serrulata</i>	Basal Bark	Fluroxypyr	210ml/10L diesel			
		Spot Spray	Fluroxypyr	30ml/10L water			
		Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A/S + D			
		Scrape (lightly) and Paint - juvenile	Glyphosate	neat (undiluted)			
		Cut Drill and Fill - mature	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
Prickly pear	<i>Opuntia Spp.</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint in horizontal cuts across flat stems	Glyphosate + Metsulfuron Methyl	1g MM added to 1 Gly:1.5 water			
Castor Oil Plant	<i>Ricinus communis</i>	Spot Spray	2, 4-D	45ml/10L water			
			Glyphosate	100ml/ 10L water			
		Cut Scrape and Paint	Glyphosate	1g MM added to 1 Gly:1.5 water			
		Stern Inject	Glyphosate	1g MM added to 1 Gly:1.5 water			
Easter Cassia/ Winter Senna	<i>Senna pendula var. glabrata</i>	Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
		Cut and Paint		1 Gly:1.5 water			
		Stern Inject (Mature)	Glyphosate	1 Gly:1.5 water			
Smooth senna	<i>Senna septemtrionalis</i>	Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
		Cut and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Yellow Oleander	<i>Thevetia peruviana</i>	Basal Bark	Fluroxypyr	210ml/10L Diesel			
		Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
VINES							
Madeira Vine	<i>Anredera cordifolia</i>	Spot Spray	Fluroxypyr	30ml/10L water			
		Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A/S + D			
		Scrape and Paint (mature vines)	Glyphosate	Scrape as much stem as possible in 1m lengths on alternate sides. Gouge and paint ground tubers. Scrape and paint roots			
Moth vine	<i>Araujia sericiflora</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate (aerial)	1 Gly:1.5 water			

Dutchman's pipe	<i>Aristolochia elegans</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	200ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Climbing Asparagus	<i>Asparagus africanus; plumosus</i>	Basal Bark	Fluroxypyr	210ml/ 10L diesel			
		Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
Balloon Vine	<i>Cardiospermum grandiflorum</i>	Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
		Spot Spray	Glyphosate	100ml Gly:10L water + D			
Green/ Silver-leaf desmodium; Siratro; Horesgrain; Glycine	<i>Desmodium intortum; Macroptilium atropurpureum; Macrotyloma uniflorum; Neonotonia wightii</i>	Spot Spray	Glyphosate	200ml Gly:10L water + A + D			
			2,4-D	40ml/10L water			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Moon flower; Mile-a-minute; Morning Glory; Blue Morning Glory	<i>Ipomoea alba; I. cairica; I. indica and I. purpurea</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
			2, 4-D	30ml/10L water			
Creeping Lantana	<i>Lantana montevidensis</i>	Spot Spray	Glyphosate	1 Gly:1.5 water			
			2,4-D	40ml/10L water			
Cat's Claw Creeper	<i>Macfadyena unguis-cati</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
			Metsulfuron methyl	1.5g MM : 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	100ml Gly : 10L water + S + D			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1g MM:10L water + A + D			
Edible passionfruit; Stinking Passionflower; Corky Passionfruit; White Passionfruit	<i>Passiflora edulis; foetida; suberosa; subpeltata</i>	Spot Spray	Glyphosate	1 Gly:1.5 water			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1g MM in 10L water + A + D			
		Cut Scrape and Paint	Glyphosate	200ml Gly:10L water + A + D			
			2,4-D	30ml/10L water			
Kudzu	<i>Pueraria lobata</i>	Spot Spray	Glyphosate	1 Gly:1.5 water			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
		Gouge and Paint tubers	Fluroxypyr	30ml/10L water			
		Stern Inject	Glyphosate	1 Gly:1.5 water			
Climbing nightshade	<i>Solanum seaforthianum</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	1/1 (g) + 1g (MM) Per Litre of water			
			Fluroxypyr	30ml/10L water			
		Cut Scrape and Paint	Glyphosate	100ml Gly : 10L water + A + D			
			Glyphosate	1 Gly:1.5 water			
Black eyed susan	<i>Thunbergia alata</i>	Spot Spray	2-4,D	30ml/10L water			
			Glyphosate	200mL in 10L water			
			Metsulfuron methyl	1.5g in 10L water			
		Basal Bark	Fluroxypyr	210ml/ 10L diesel			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			

Appendix C - Example Site Monitoring Form

SITE VISIT DETAILS	
Location: Site Visit No. & Date: Site Visit By: Weather:	
Purpose of the site visit	Tick box
Allocated routine inspection	
Final Inspection	

Score of 1: <5%cover Score of 2: 5-

20% cover Score of 3: 20-50% cover Score of 4: 50-75% cover Score of 3: 75-100% cover

Site visit	Date	Criteria					
		Habitat	Species Diversity Indicators	Indigenous cover (tree, shrub, moss)	Occurrence of natural regeneration	Condition of fences	General Observations (fire, flood, breeding, flowering etc.)
1							
2							
3							
4							
5							
6							
7							
8							

