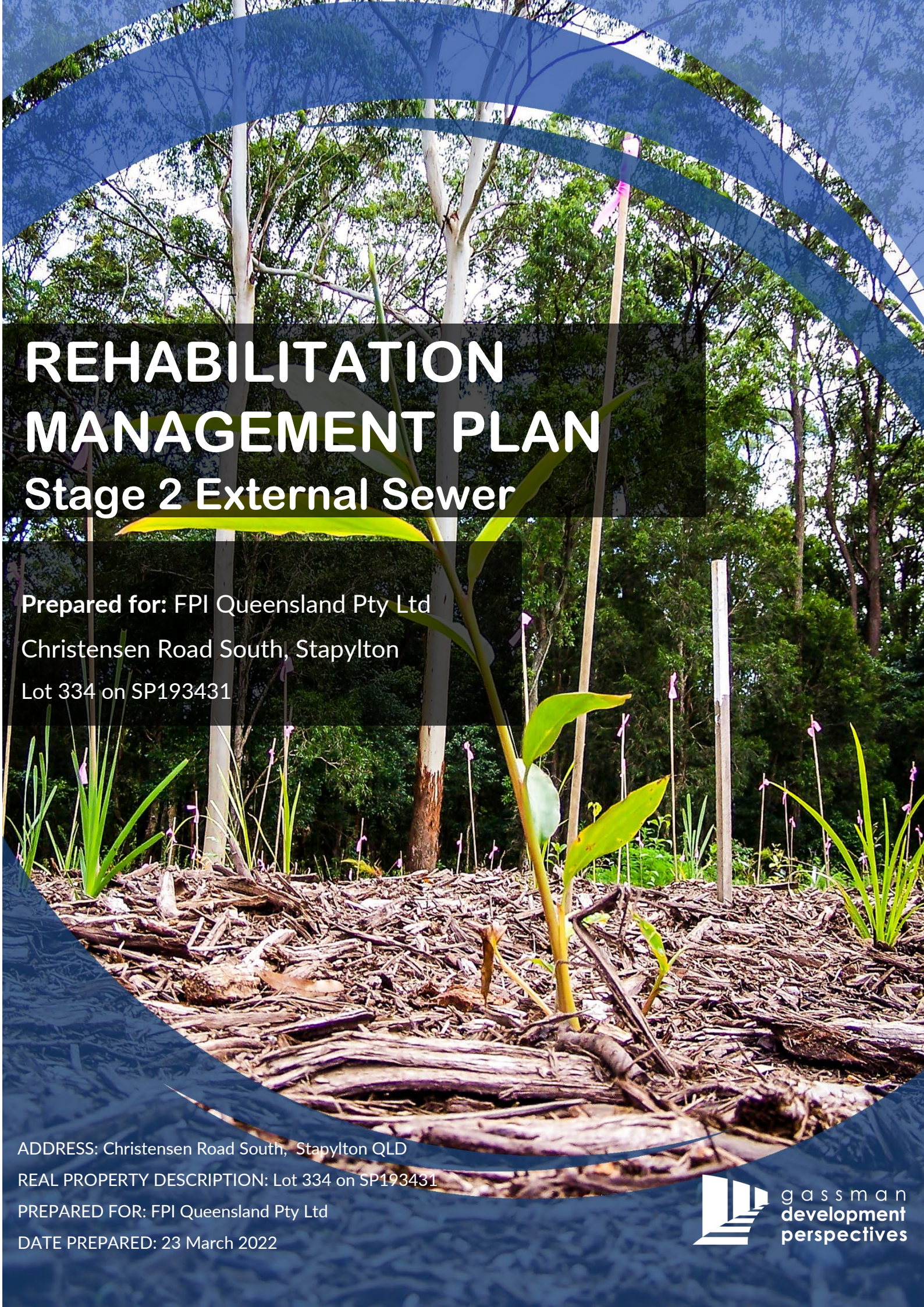




REHABILITATION MANAGEMENT PLAN

Stage 2 External Sewer

Prepared for: FPI Queensland Pty Ltd
Christensen Road South, Stapylton
Lot 334 on SP193431

ADDRESS: Christensen Road South, Stapylton QLD
REAL PROPERTY DESCRIPTION: Lot 334 on SP193431
PREPARED FOR: FPI Queensland Pty Ltd
DATE PREPARED: 23 March 2022



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perspectives

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GDP Document Control

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Revision / Checking History

No.	Author	Reviewer
1. V1.0	Andrew Humpherys	Mitchell Gassman
2. V1.1	Andrew Humpherys	Mitchell Gassman
3. V2.0	Hugh Osborn	Mitchell Gassman

Approval for Issue

Version	Name	Position	Signature	Date
V2.0	Brian Gassman	Director		27/04/2023

Final Distribution

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

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1. Introduction

1.1 Purpose

The purpose of this Rehabilitation Management Plan (RMP) is to provide details of vegetation restoration works to be undertaken on Lot 334 on SP193431 in order to enable the construction of an external underground sewer for the industrial estate development at Christensen Road South, Stapylton. The construction of the sewer will involve excavation of a trench up to 8 metres deep and 8 metre wide on the length of the sewer alignment, that will be backfilled and allowed to regenerate.

1.2 Scope

This RMP applies to areas within the proposed Lots 334 on SP193431 (Refer Figure 1.) that are on the alignment of the proposed external sewer. The construction of the sewer will involve excavation of a trench up to 8 metres deep and 8 metres wide on the length of the sewer alignment, that will be backfilled and reinstated to provide a maintenance access track. The proposed rehabilitation area is between Sandy Creek and the sewer alignment.

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 within the impacted area of Lot 334 on SP193431 that is part of the OPW 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.

The broad objectives of this RMP are to:

- 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.



Client:

FPI Queensland Pty Ltd

Site Address:

Stapyton-Jacobs Well Road, Yatala

RPD:
Lot: .
Plan: .
Local Authority: City of Gold Coast
Level Datum: .
Meridian: .
Contour Interval: .
PSM: .
RL: .

Associated Consultants:

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Issue	Date	Description	DRN	CHK
S	27/04/23	REVISED EXTENT	SJH	HO
-	21/03/22	ORIGINAL ISSUE	SJH	AH

Scale at A3: AS SHOWN

Date: 27-04-23

Design:

Drawn: SJH

Checked: HO

Drawing Title:

LOCALITY PLAN

Drawing No: 5941 ENV FIG1 STG2 001 A Rev. No:

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.

2. Roles and Responsibilities

2.1 Approved plans and conditions

This document, plus all approved plans and conditions, must be available on site during construction works and be distributed to all relevant personnel such as the project manager, site manager, construction leading hands, relevant contractors, relevant machinery operators and other site personnel.

The Key Contacts and roles and responsibilities will be identified below.

2.1.1Key Contacts

Service type	Name	Phone	Address	Hours
Site Supervisor				
Council Contact	City of Gold Coast Officer	07 5582 8211 07 5582 8866	N/A	
Rehabilitation contractor				
Gassman Development Perspectives	Hugh Osborn Environmental Scientist	07 3807 3333	76 Business St, Yatala QLD 4207	

3. 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 Lot 334 on SP193431 subject to this RMP. Assisted natural regeneration will be utilised in areas with established native vegetation, with some additional infill planting added 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 is degraded, reconstruction planting will be used to actively restore native vegetation.

4. Site Assessment

The site on Lot 334 on SP193431 is close to Sandy Creek, a tributary stream of the Albert River. The riparian areas of the unnamed watercourse are currently in relatively good ecological condition, with large areas of established and mature native vegetation. There are some incursions of common weeds in certain parts of the Rehabilitation Area. Biodiversity values are relatively high due to the existing native vegetation, the presence of large hollow bearing trees, 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.

4.1 Existing Vegetation

The impacted area of Lot 334 on SP193431 is currently mapped as containing some Category B (remnant) vegetation described as partly RE 12.11.3 a riparian vegetation on Sandy Creek, together with some RE 12.11.5 and RE 12.11.24. Examination of desktop imagery indicates that the surrounding vegetation on the site has been heavily modified by historical land uses and now mostly consists of a riparian corridor of remnant vegetation on the Sandy Creek surrounded by large areas of industrial estate development together with exotic grasses and weeds with occasional scattered native and exotic trees.

Prevalent canopy tree species observed in the nearby riparian corridor on the property include; *Eucalyptus tereticornis*, *E. pilularis*, *E. siderophloia* and *Corymbia citriodora*. Other species such as *Melaleuca quinquenervia* and a variety of native vine forest understorey species and aquatic macrophytes also occur in abundance in specific areas, such as directly adjacent to the tributary stream.

This included on ground planting of native vegetation, which is now established. This area also contains some large mature *Eucalyptus tereticornis* and *E. pilularis* trees.

The area within proposed 334 on SP193431 that will be impacted by the clearing largely consists of the existing access track corridor, some area with rehabilitation planting close to the track and surrounding mature open forest vegetation with large mature trees and a significant amount of natural regeneration. Due to the natural regeneration that has occurred, it is expected that revegetation planting required in this area can be adjusted to facilitate natural regeneration occurring.

4.2 Weed species

A number of exotic species were observed as occurring within or close to the impacted area. These exotic species typically included, but were not limited to:

- Giant Devils Fig

- Siratro
- Wild Tobacco
- Lantana, and
- Exotic grasses

Specific weed control techniques and methods to be used on site are outlined in subsequent sections of this report.

4.3 Erosion and sediment infrastructure

The proposed sediment basins for stormwater will be located outside the 30m buffer to the natural waterway. This accords with Performance Outcome PO5 of the Environmental Significance Overlay Code. This states that all infrastructure is to be located outside the buffer to the wetland and waterway in accordance with Performance Outcome PO5.5. These erosion and sediment basins are not included within the rehabilitation area of this RMP, and will instead be planted and treated in accordance with WSUD principles and detailed Landscape OPW plans. The erosion and sediment infrastructure area within Lot 53 will include existing rock scour protection areas from adjacent basin outlets, and also the installation of new culvert headwalls and minor bank re-grading.

The areas subject to old infrastructure removal will be treated with additional preparation measures to make the areas suitable for planting, as detailed in Section 4.

5. Site Preparation

5.1 Removal of rubbish and debris

Some parts of the impacted area on Lot 334 on SP193431 contain piles of loose debris or other material such as corrugated iron and plastic containers. Any material remaining on the site will need to be removed prior to the commencement of rehabilitation works. 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.

5.2 Erosion and Sediment Control

All earthworks undertaken in, or adjacent to, the impacted area will be done in accordance with a Sediment and Erosion Control Plan at all times. In addition, following the earthworks required to remove the concrete pad infrastructure, temporary stabilisation in the form of hydro mulch will be applied to the area where the old infrastructure has been removed. The hydro mulch species mix is to be consistent with the rehabilitation species outlined in the Section 6 - Planting Specifications. Long-term, the hydro mulch stabilisation in this area is considered a temporary erosion control measure, and therefore this area will still require active restoration planting in accordance with Section 6.

5.3 Additional Topsoil and Mulch Treatment

Additional topsoil and mulch may need to be added to disturbed and compacted areas following ripping, in order to create conditions suitable for revegetation plantings to be successful. The suitably qualified rehabilitation contractor will confirm on ground which areas (if any) require additional topsoil and mulch treatment prior to the commencement of restoration plantings. If additional topsoil and mulch is required to be added to a particular area, this will consist of;

- The application of 100mm of topsoil and 100mm of weed free forest mulch; or
- Any other combination of topsoil and mulch depths as recommended by the suitably qualified rehabilitation contractor.

6. Weed Management

6.1 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.

6.2 Implementation

The weed management processes have been provided below sequentially so 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.

6.3 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.

6.3.1 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.

6.3.2 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 rehabilitation area being a drainage corridor to the Albert River, only registered frog friendly aquatic herbicides such as "Biactive" glyphosate will be used.

7. Planting Specifications

7.1 Summary of treatments

A single rehabilitation treatment zone is nominated and the species palettes and planting treatments individually outlined in the following section and shown in the Rehabilitation Management Plan in Appendix 1. The area cleared for the sewer alignment will be reinstated as a maintenance access track and will not be rehabilitated.

The planting schedules for the rehabilitation area contains a mix of species known to occur in the mapped Regional Ecosystems, namely RE 12.3.11. The species suggested have been tailored to suit the on-ground location, suitability for Koala habitat and landscape intent of the Rehabilitation Zone. ‘

7.2 Rehabilitation Zone – Undisturbed Waterway Buffer Corridor

The ‘Rehabilitation Zone – Undisturbed Waterway Buffer Corridor is designed to be located as a riparian buffer to Sandy Creek (as shown in Appendix 1).

Planting numbers will need to be adjusted on ground to account for areas that already containing existing native vegetation, and therefore require less planting. However, planting works will still need to ensure that an overall density of 1 plant per 2m² is achieved following the revegetation works. It should also be noted that in some instances more denser groundcover plantings may be required in erosion prone areas, such as at the edge of the maintenance track. Therefore, the canopy, mid storey and groundcover planting ratios specified below can be adjusted on ground by the suitably qualified rehabilitation contractor to suit the specific requirements of particular areas within this rehabilitation zone.

The planting species below have been selected to compliment both the pre-clearing and current regional ecosystem mapping with a focus on RE 12.3.11 to reflect the zone's location near the creek channel. Species observed in this zone during site surveys was also taken into consideration.

The primary management action in the ‘Rehabilitation Zone – Undisturbed Waterway Buffer’ area is to be weed management in order to support natural assisted regeneration, with contingency planting treatments used if assisted natural regeneration does not effectively establish sufficient vegetation.

The following planting specifications outlined below will be implemented within this area if weed management actions are not sufficient to promote natural regeneration. Planting densities and ratios have been specified, however, the actual planting requirements will vary depending on the extent of existing vegetation on the ground. Planting ratios have been adjusted to recognise that the majority for this area already contains established canopy vegetation. The location of this ‘Rehabilitation Zone - Undisturbed Waterway Buffer’ is shown in Appendix 1. Estimates of actual numbers of plant numbers

required are not provided as this zone is intended to be restored primarily through weed management, with the contingency planting below only used if infill planting is required.

The planting species below have been selected to compliment the current regional ecosystem mapping (12.3.11), as well as species that were observed on ground within the rehabilitation zone.

Rehabilitation Zone – Undisturbed Waterway Buffer

Total area: 46,226 m² (approx.)

Density: 1 plant per 2m²

Ratio: 20% canopy, 60% Mid-storey / Shrubs, 20% Groundcovers

10x Tree Species per 100m²

30x Mid-storey / Shrub Species per 100m²

10x Groundcover Species per 100m²

Total = 50 plants per 100m² module

Table 2 – Rehabilitation Zone - Undisturbed Waterway Buffer Species List

Scientific Name	Common Name	Pot size
Tree Species		
<i>Melaleuca quinquenervia</i> *	Coastal Paperbark	Tube
<i>Eucalyptus tereticornis</i> *	Blue Gum	Tube
<i>Eucalyptus pilularis</i> *	Blackbutt	Tube
<i>Lophostemon suaveolens</i> *	Swamp Box	Tube
<i>Lophostemon confertus</i> *	Brush Box	Tube
Mid-storey / Shrub Species		
<i>Glochidion ferdinandi</i>	Cheese Tree	Tube
<i>Acacia fimbriata</i>	Brisbane Wattle	Tube
<i>Breynia oblongifolia</i>	Coffee Bush	Tube
<i>Leptospermum polygalifolium</i>	Wild May	Tube
<i>Trema tomentose</i>	Poison Peach	Tube
<i>Hibiscus diversifolius</i>	Swamp Hibiscus	Tube
Groundcover Species		
<i>Imperata cylindrica</i>	Blady Grass	Tube
<i>Lomandra longifolia</i>	Mat Rush	Tube
<i>Lomandra hystrix</i>	Creek Mat Rush	Tube
<i>Pteridium esculentum</i>	Native Bracken	Tube
<i>Juncus usitatus</i>	Common Rush	Tube

***Koala habitat tree**

7.3 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 6.2-6.4 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 is to 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

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

7.3.1 Jute Mat

Due to the location of batters associated with erosion and sediment management structures within parts of the rehabilitation zone, jute mat squares installed with each plant are considered more appropriate option than mulch in some circumstances. The jute mat squares are to be installed with each tube stock and pinned in accordance with manufactures instructions. The suitably qualified rehabilitation

contractor will confirm which areas within the Rehabilitation Area require jute mat squares, or if some areas may be suited to mulch application.

For areas where earthworks have occurred, use of a broad application Jute mat product, such as Tech Mat, may be more appropriate.

7.3.2 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), bearing in mind performance criteria relating to plant survival and health.

8. 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

9. 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.

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.

10. 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

11. 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 6, except where subject to stock availability or as agreed with the rehabilitation contractor and council.

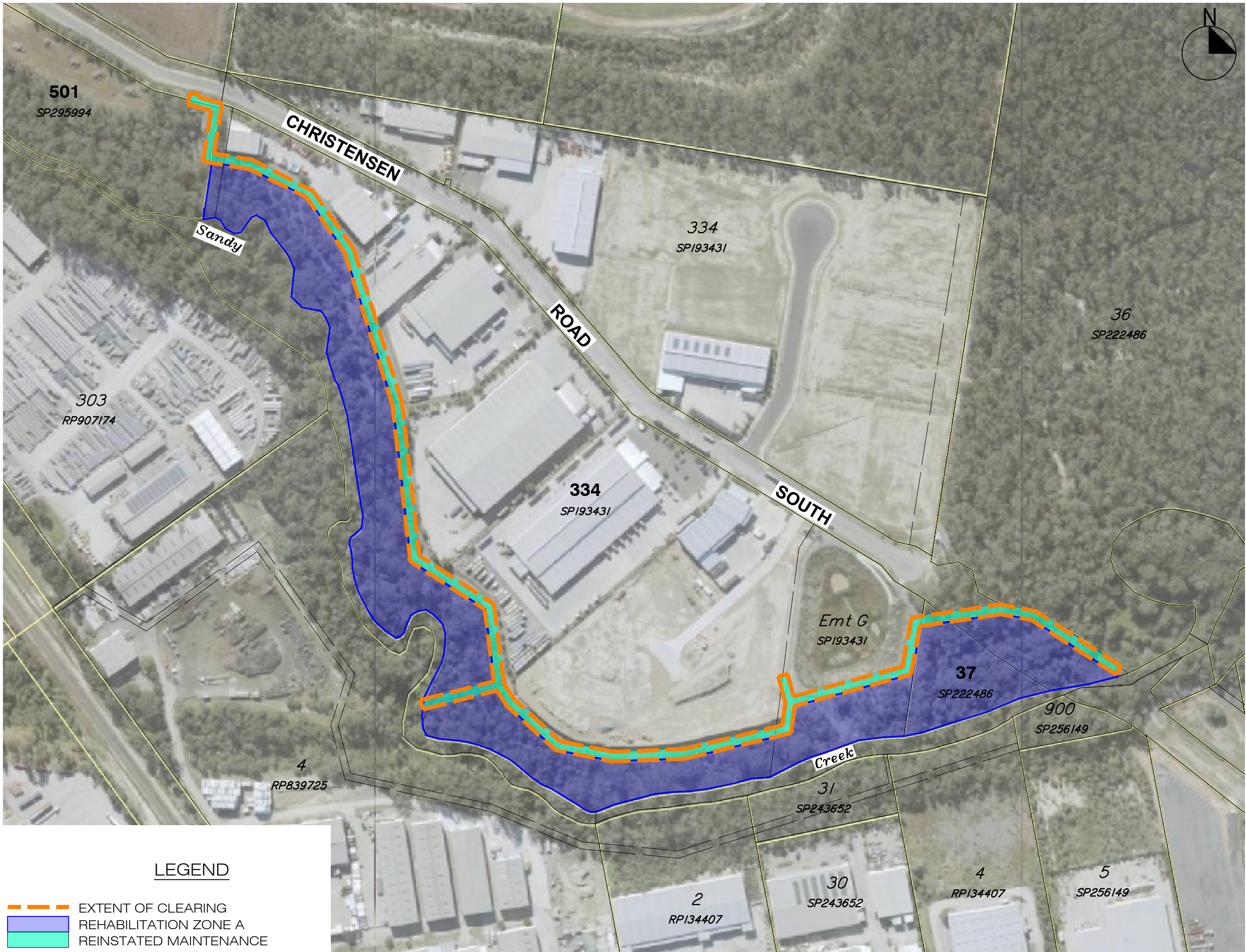
12. Conclusion

This Rehabilitation Management Plan has addressed the objectives that are required to achieve stabilisation of the impacted area of Lot 334 on SP193431 by FPI Queensland Pty Ltd, prior to the OPW application being decided to council.

This report also provides the various strategies and responses required to achieve Council objectives by providing compensatory habitat, whilst 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 waterway buffer area for Koala habitat, 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.

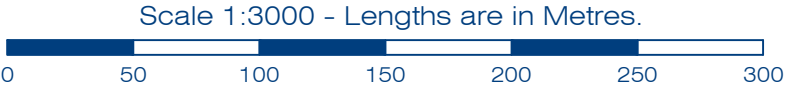
The rehabilitation of the waterway buffer area will benefit council and the natural environment by enhancing a habitat corridor between the riparian vegetation on Sandy Creek and the adjoining habitat corridors surrounding the industrial estate. A vegetation restoration buffer in conjunction with proposed 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 1 – Rehabilitation Management Plan



LEGEND

- EXTENT OF CLEARING
- REHABILITATION ZONE A
- REINSTATED MAINTENANCE ACCESS TRACK



Client:
FPI Queensland Pty Ltd

Site Address:
Christensen Road
South, Yatala

RPD:
Lot: .
Plan: .
Local Authority: City of Gold Coast
Level Datum: .
Meridian: .
Contour Interval: .
PSM: .
RL: .

Associated Consultants:

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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.

The details of this plan have been prepared based on the most current Digital Cadastral Data Base (DODB) information available from Queensland Department of Natural Resources and is subject to survey.

All dimensions are approximate only and subject to survey.

This plan may not be photocopied unless these notes are included.

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Issue	Date	Description	DRN	CHK
A	27/04/23	UPDATED EXTENT	SJH	HO
-	21/03/22	ORIGINAL ISSUE	SJH	AH

Scale at A3: 1:3000

Date: 27-04-23

Design:

Drawn: SJH

Checked: HO

Drawing Title:
**REHABILITATION
MANAGEMENT
PLAN
EXTERNAL SEWER
STAGE 2**

Drawing No: 5941 ENV RMP STG2 001 A Rev. No:

APPENDIX 2 – 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			
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			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Creeping Lantana	<i>Lantana montevidensis</i>	Spot Spray	2,4-D	40ml/10L water			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
			Metsulfuron methyl	1.5g MM : 10L water + A + D			
Cat's Claw Creeper	<i>Macfadyena unguis-cati</i>	Spot Spray	Glyphosate	100ml Gly : 10L water + S + D			
			Glyphosate + Metsulfuron Methyl	100ml Gly + 1g MM:10L water + A + D			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Edible passionfruit; Stinking Passionflower; Corky Passionfruit; White Passionfruit	<i>Passiflora edulis; foetida; suberosa; subpeltata</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	100ml Gly + 1g MM in 10L water + A + D			
			Glyphosate	200ml Gly:10L water + A + D			
			2,4-D	30ml/10L water			
		Cut Scrape and Paint	Glyphosate	1 Gly:1.5 water			
Kudzu	<i>Pueraria lobata</i>	Spot Spray	Glyphosate + Metsulfuron Methyl	100ml Gly + 1.5g MM in 10L water + A + D			
			Fluroxypyr	30ml/10L water			
		Gouge and Paint tubers	Glyphosate	1 Gly:1.5 water			
		Stern Inject	Glyphosate + Metsulfuron Methyl	1/1 (g) + 1g (MM) Per Litre of water			
Climbing nightshade	<i>Solanum seaforthianum</i>	Spot Spray	Fluroxypyr	30ml/10L water			
			Glyphosate	100ml Gly : 10L water + A + D			
		Cut Scrape and Paint	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 3 – 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 5: 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							