



# Aldington Road Estate, Kemps Creek SSD-17552047

## Weed Eradication and Control Management Plan

Prepared for

Frasers Property Industrial Pty Ltd

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## Document control

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## Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Background .....	1
1.2	Relevant legislation.....	1
1.3	Purpose of this plan.....	3
<b>2</b>	<b>Existing Environment .....</b>	<b>5</b>
2.1	Subject land.....	5
2.2	Native vegetation .....	5
2.3	Existing weeds .....	5
2.3.1	Priority weeds.....	5
2.3.2	Weeds of National Significance .....	8
<b>3</b>	<b>Weed control and management .....</b>	<b>9</b>
3.1	Priority weeds .....	9
3.2	Weeds of National Significance .....	9
3.3	Weed control.....	9
3.3.1	Mechanical removal methods .....	9
3.3.2	Chemical treatment of weeds.....	10
3.3.3	Disposal of weeds .....	10
<b>4</b>	<b>Mitigation measures.....</b>	<b>11</b>
<b>5</b>	<b>Conclusion.....</b>	<b>12</b>
	 Figure 1-1. Subject area .....	 4
	 Table 1-1. Legislative context .....	 1
	 Table 2-1. Weeds identified with the subject land .....	 6
	 Table 2-2. Priority weed categories within the subject land.....	 7
	 Table 2-3. Weeds of National Significance observed in the subject land .....	 8

# 1 Introduction

## 1.1 Background

Frasers Property Industrial (Frasers) is proposing to construct and operate a warehouse and logistics hub at 155 to 217 Aldington Road, Kemps Creek (the subject land). The proposed development (the proposal) will involve bulk earthworks, vegetation clearing, provision of infrastructure and construction of warehouse and distribution facilities.

The subject land extends over approximately 43 hectares (ha), which is located within the Penrith City Council local government area (LGA) and comprises several allotments as identified below and shown in Figure 1-1.

- 155-167 Aldington Road, Kemps Creek - Lot 33 DP258949
- 169-181 Aldington Road, Kemps Creek - Lot 28 DP255560
- 183-197 Aldington Road, Kemps Creek - Lot 27 DP255560
- 199 Aldington Road, Kemps Creek - Lot 26 DP255560
- 201-217 Aldington Road, Kemps Creek - Lot 25 DP255560

## 1.2 Relevant legislation

Table 1-2 provides a summary of legislation relevant to weed control on the subject land.

Table 1-1. Legislative context

Legislative mechanism	Relevance to proposal
<p>Biosecurity Act 2015</p>	<p>The Biosecurity Act 2015 (the Biosecurity Act) repealed the <i>Noxious Weeds Act 1993</i>, which has provided regulatory controls and powers to manage noxious weeds in NSW. The Biosecurity Act streamlines and modernises the way weeds are managed in NSW as it:</p> <ul style="list-style-type: none"> <li>• Embeds the principle of shared responsibility for biosecurity risks (including weeds) across government, community and industry.</li> <li>• Applies equally to all land in the state, regardless of whether it is publically or privately owned.</li> <li>• Is premised on the concept of risk, so that weed management investment and response is appropriate to the risk.</li> <li>• Supports regional planning and management for weeds.</li> <li>• In keeping with its premise that biosecurity is a shared community responsibility, the Biosecurity Act introduces the legally enforceable concept of a General Biosecurity Duty (GBD).</li> </ul> <p>For weeds, the General Biosecurity Duty (GBD) means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable).</p> <p>The Biosecurity Act and Regulations provide specific legal requirements for high risk activities and state level priority weeds.</p>

Legislative mechanism	Relevance to proposal
SEPP (Western Sydney Employment Area) 2009	<p>The subject land forms part of the Western Sydney Employment Area (WSEA) and is situated under the Land Application Area, Precinct 12 - Mamre Road of SEPP WSEA.</p> <p>The WSEA SEPP and the Mamre Road Precinct Structure Plan provide the statutory planning controls for development in the Precinct.</p>
Mamre Road Draft Development Control Plan (DCP)	<p>The Draft DCP has been prepared by Penrith City Council (Council) in accordance with the <i>Environmental Protection and Approvals Act</i> (EP&amp;A Act) and provides additional objectives, controls and guidance for development in the Precinct.</p> <p>Relevant to weed control management is as follows:</p> <ul style="list-style-type: none"> <li>• Weeds of National Significance (WONS) and on the National Environmental Alert List under the National Weeds Strategy are to be managed and eradicated. The proponent to reference NSW Weed Wise for current weed identification and management approaches.</li> <li>• All subdivision design and bulk earthworks are to consider the need to minimise weed dispersion and promote weed eradication. A Weed Eradication and Management Plan, outlining weed control measures during and after construction, is required for all subdivision DAs.</li> <li>• Pest control techniques implemented during, and post construction are to be in accordance with regulatory requirements for chemical use and address the relevant pest control strategy and are to reduce the risk of secondary poisoning.</li> </ul>

### 1.3 Purpose of this plan

This Plan details the procedure to identify, manage and control the potential for introduction and/or spread of weeds during the construction of the proposal and addresses Frasers' General Biosecurity Duty (GBD) and the Draft Mamre Road Precinct DCP (DCP) controls with the respect to management of Weed of National Significance.

For the purposes of this plan a weed is defined as:

- A Weed of National significance or WONS (these species are agreed by Australian governments based on an assessment process that prioritises these weeds based on their invasiveness, potential for spread and environmental, social and economic impacts);
- A State and /or Regional priority weed as defined within the Greater Sydney Regional Weed Management Plan (Local Land Services, Greater Sydney Region 2019); and
- Other weeds of concern as defined within the Greater Sydney Regional Weed Management Plan (Local Land Services, Greater Sydney Region 2019).

A number of other weed species occur within the subject site that are not defined as WONS or priority weeds. These are predominately introduced pasture grasses and common non-grass pasture weed species that are not subject to legislated requirements. However, the weed control and management requirements described within this Plan encompass the control of all weed species within the subject area. .

# Aldington Estate Kemps Creek

Figure 1.1. Subject  
land weeds



### Legend

#### Weed type

- Juncus acutus
- Shrubs
- Groundlayer
- Exotic



Coordinate System: MGA Zone 56 (GDA 94)  
Image sources: Nearmap 15 April 2021

## 2 Existing Environment

### 2.1 Subject land

The subject land is characterised by cleared pasture, market gardens and rural residences (and associated buildings), several farm dams, isolated patches of native vegetation, scattered paddock trees and areas in which exotic and/or mixed exotic/native trees have been planted.

Approximately 10 ha of the subject land comprises market gardens and 21 ha comprises cleared pasture land, along with a further approximate 4 ha of planted exotic areas and areas identified as dominated by introduced weeds. This equates to over 80% of the subject land.

The landscape of the subject land is of gently undulating topography sloping from to north / north east to the south / south west. Ground levels of approximately 96 m Australian Height Datum (AHD) are present in the north eastern site extent falling to approximately 56 m AHD in the south western site extent.

Consequently, development of the subject land for industrial purposes will require substantial earthworks (cut and fill) to achieve level construction pads and facilitate construction of both estate roads and public access roads proposed in the Precinct Structure Plan and Draft DCP.

### 2.2 Native vegetation

Native vegetation within the subject land is limited to three small patches of regenerating communities ranging from 0.2 to 0.4 ha in extent along with scattered paddock and planted native trees.

Native vegetation within the subject land has been assessed in accordance with the *Biodiversity Conservation Act 2016* (BC Act) and will be appropriately offset under the NSW Biodiversity Offset Scheme.

Notwithstanding, most of the shrub and groundlayer in these patches comprise weed species, for which management considerations are provided in this plan.

### 2.3 Existing weeds

Weed species within the subject land are predominantly introduced pasture grasses and groundlayer weeds that typically invade pasture.

However, a number of weed species within the subject land are categorised as priority weeds under the Biosecurity Act and/or are Weeds of National Significance.

#### 2.3.1 Priority weeds

Under the Biosecurity Act, priority weeds are categorised in accordance with State level and regionally determined priorities. Weed species are generally listed in a hierarchical order based on management objectives, with Prevention the highest priority followed by Eradication, Containment and Asset Protection.

The Greater Sydney Regional Strategic Weed Management Plan 2017-2022 (Local Land Services, September 2019) provides specific regulatory requirements and guidance for management of priority weeds in the Greater Sydney region.

Table 2-1 lists all weed species observed within the subject land and relevant priority weed category.

Table 2-1. Weeds identified within the subject land

Scientific name	Common name	Priority weed category
Woody weeds		
<i>Arundo donax</i>	Giant reed	Regional Priority Weed Objective - ASSET PROTECTION
<i>Cestrum parqui</i>	Green cestrum	Regional Priority Weed Objective - ASSET PROTECTION
<i>Lantana camara</i>	Lantana	State Priority Weed Objective - ASSET PROTECTION (Whole of State)
<i>Ligustrum lucidum</i>	Broad-leaf privet	Other weeds of regional concern
<i>Ligustrum sinense</i>	Narrow-leaf privet	Other weeds of regional concern
<i>Lycium ferocissimum</i>	African boxthorn	State Priority Weed Objective - ASSET PROTECTION (core area)
<i>Olea europaea</i> subsp. <i>cuspidata</i>	African olive	Regional Priority Weeds objective - CONTAINMENT
<i>Pinus radiata</i>	Pine tree	Other weeds of regional concern
<i>Ricinus communis</i>	Castor oil plant	n/a
<i>Rubus fruticosus</i>	Blackberry	State Priority Weed Objective - ASSET PROTECTION
Ground layer		
<i>Asparagus aethiopicus</i>	Asparagus weed	State Priority Weed Objective - ASSET PROTECTION
<i>Cenchrus clandestinum</i>	Kikuyu	n/a
<i>Chloris gayana</i>	Rhodes grass	Other weeds of regional concern
<i>Cortaderia jubata</i>	Pampas grass	Regional Priority Weed Objective - ASSET PROTECTION:
<i>Cyperus eragrostis</i>	Umbrella sedge	n/a
<i>Eragrostis curvula</i>	African love grass	Other weeds of regional concern
<i>Ehrharta erecta</i>	Panic veldt grass	n/a
<i>Foeniculum vulgare</i>	Fennel	n/a
<i>Juncus acutus</i>	Spiny rush	Other weeds of regional concern
<i>Nassella trichotoma</i>	Serrated tussock grass	State Priority Weed Objective - ASSET PROTECTION, and

Scientific name	Common name	Priority weed category
		Regional Priority Weed objective - CONTAINMENT (exclusion zone).
<i>Opuntia stricta</i>	Prickly pear	State Priority Weed Objective - ASSET PROTECTION
<i>Paspalum dilatatum</i>	Paspalum	n/a
<i>Senecio madagascariensis</i>	Fireweed	State Priority Weed Objective - ASSET PROTECTION
<i>Solanum pseudocapsicum</i>	Jerusalem cherry	n/a
<i>Verbena</i> spp.	Purple top	n/a
Vines/scramblers		
<i>Anredera cordifolia</i>	Madeira vine	State Priority Weed Objective - ASSET PROTECTION
<i>Araujia sericifera</i>	Moth vine	Other weeds of regional concern
<i>Asparagus asparagoides</i>	Bridal creeper	n/a
<i>Cardiospermum grandiflorum</i>	Balloon vine	Other weeds of regional concern

As listed in Table 2-1, four categories of priority weeds occur within the subject land. Table 2-2 provides the relevant GBDs required by the landowner for each of these categories.

Table 2-2. Priority weed categories within the subject land

Category	Outcomes to demonstrate compliance with GBD
State Priority Weed Objective - ASSET PROTECTION Madeira vine, Lantana, African boxthorn, Serrated tussock (refer also regional containment), Blackberry and Fireweed	Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017): A person must not import into the State or sell.
Regional Priority Weeds objective - CONTAINMENT Giant reed - <i>Arundo donax</i>	<ul style="list-style-type: none"> <li>The plant should be fully and continuously suppressed and destroyed</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>
Regional Priority Weeds objective - CONTAINMENT Green cestrum - <i>Cestrum parqui</i>	<ul style="list-style-type: none"> <li>The plant should be fully and continuously suppressed and destroyed on grazing land</li> <li>Implement quarantine and/or hygiene protocols.</li> </ul>

Category	Outcomes to demonstrate compliance with GBD
Regional Priority Weed Objective - ASSET PROTECTION	<p>Whole region:</p> <ul style="list-style-type: none"> <li>The plant or parts of the plant are not traded, carried, grown or released into the environment.</li> </ul> <p>Within Core infestation:</p> <ul style="list-style-type: none"> <li>Land managers prevent spread from their land where feasible.</li> <li>Land managers reduce the impact on priority assets.</li> </ul>
Other weeds of regional concern	<p>Most of these weed species are known to occur in the Greater Sydney region and are most likely already so well established that they can only be managed and will never be eradicated from the region.</p> <p>Some species may warrant resources for control or management programs and inclusion on this list may assist Local Control Authorities and/or land managers to prioritise actions in certain circumstances where it can be demonstrated the weed poses a threat to the environment, agriculture and/or the community/ human health.</p>

### 2.3.2 Weeds of National Significance

Thirty-two Weeds of National Significance (WONS) have been identified based on their invasiveness, potential for spread and environmental, social and economic impacts. Eight weed species present within the subject land are categorised as WONS (see Table 2-3).

Table 2-3. Weeds of National Significance observed in the subject land

Scientific name	Common name	WONS Duty
Woody weeds		
<i>Lycium ferocissimum</i>	African boxthorn	Prohibition on dealings
<i>Rubus fruticosus</i>	Blackberry	Prohibition on dealings
<i>Anredera cordifolia</i>	Madeira vine	Prohibition on dealings <sup>#</sup>
<i>Asparagus aethiopicus</i>	Asparagus weed	Prohibition on dealings
<i>Asparagus asparagoides</i>	Bridal creeper	Prohibition on dealings
<i>Nassella trichotoma</i>	Serrated tussock grass	Prohibition on dealings
<i>Opuntia stricta</i>	Prickly pear	Prohibition on dealings
<i>Senecio madagascariensis</i>	Fireweed	Prohibition on dealings

<sup>#</sup> Must not be imported into the State or sold.

## 3 Weed control and management

### 3.1 Priority weeds

As indicated in Table 2-2, the outcomes to demonstrate compliance with the landowners GBD include the following:

- Fully and continuously suppressing and destroying the weed, and implementing quarantine and/or hygiene protocols.
- Fully and continuously suppressing and destroying the weed on grazing land, and implementing quarantine and/or hygiene protocols.
- Preventing the spread of the weed from their land where feasible.
- Reducing the impact on priority assets.
- Prohibition on trading, carrying, growing or releasing the weed species into the environment.

The proposal requires substantial earthworks, which will mechanically remove the majority of weeds from the subject site, with targeted chemical control used for larger / woody weeds as required.

The recommended mitigation measures provided in Section 4, will minimise the risk of introduction or spread of weed species during the construction phase.

The proposed landscaping for the development will be the subject of establishment and maintenance (including weed control) that will minimise the risk of any spread of weed species from the subject site during the operational phase.

Consequently it is considered that the landowners GBD will be met in compliance with the Biosecurity Act.

### 3.2 Weeds of National Significance

As indicated in Table 2-3, WONS present within the subject land are not to be imported into the State or sold. The proposal does not involve the importation or selling of any plant materials.

As per Section 3.1 (Priority Weeds), the earthworks required for the proposed development will remove weeds present within the subject site. The recommended mitigation measures provided in Section 4 will minimise the risk of any spread of WONS from the subject site during the construction phase, and the risk of any spread of WONS from the subject site during the operational phase will be mitigated through the establishment and maintenance of the proposed landscaping.

### 3.3 Weed control

Due to the extensive areas of weed infestations within pasture areas of the subject land, broad scale application of herbicide is not recommended due to the potential for indirect impacts on the environment.

Given the volume of cut and fill (earthworks) required, it is anticipated that most weed control will be undertaken through mechanical methods, with chemical methods used to control larger isolated infestations prior to earthworks.

#### 3.3.1 Mechanical removal methods

Mechanical removal of weeds will be undertaken within most of the construction footprint. Mechanical techniques include:

- Mowing or slashing used where feasible to reduce biomass.
- Excavators or bulldozers to be used to remove larger trees and root systems. Stumps are to be ground out of the soil.
- Slashers or bulldozers to be used to remove shrubby weeds.

- Seedlings or regrowth of weed species can be slashed.
- Excavators or bulldozers to be used to remove and stockpile topsoil layers containing weeds.

### 3.3.2 Chemical treatment of weeds

- Herbicide application is to be administered by authorised personnel only (ChemCert Accreditation AQF 3), in accordance with Workcover requirements, the *Pesticides Act 1999*, label directions and any relevant industry codes of practice.
- A Records Sheet must be completed within 24 hours of applying the herbicide and a copy submitted to the Project Environmental Representative.
- All personnel managing and using herbicides must receive appropriate training prior to commencing work.
- Only herbicides registered for use near water may be used near water.
- Avoid applying herbicides: (i) on hot days when plants are stressed. (ii) after seed has set. (iii) within 24 hours of rain or when rain is imminent. (iv) when winds will cause drift of herbicides into non-target areas.

### 3.3.3 Disposal of weeds

- Where weeds cannot be effectively destroyed prior to topsoil stripping, contaminated topsoil shall be either encapsulated by deep burying, or disposed of at an approved off-site facility.
- Any exotic vegetation not able to be incorporated into the Works must be removed from the Construction Site.
- Transport must be covered to further reduce the potential for spread of weed propagules.
- Disposal must be in accordance with the Waste Management Plan.
- Mulch or soils generated from locations that contain high-risk weeds should not be reused on the Project site unless encapsulated.
- Encapsulation meaning burial away from any pavement, structure, watercourse or drainage path with a cover of inert fill of a minimum 500 mm compacted thickness covered with fill. Inert fill must be:
  - from the specified earthworks, and
  - free of any material with a particle size exceeding 75 mm
  - spread uncontaminated topsoil over the burial area and revegetate within 7 days

## 4 Mitigation measures

The following mitigation measures should be implemented to ensure that the contractor's biosecurity duty is fulfilled and spread of existing weeds or introduction of new weed infestations is prevented.

- The re-use of topsoil and mulch from areas on site should be guided by constraints mapping which should be prepared in association following pre-clearance surveys (conducted for native vegetation clearing). Constraint mapping will identify locations that contain:
  - Priority weeds that should be controlled prior to earthworks
  - Woody weeds that should not be used for mulching once chipped
  - Habitat areas that may require two staged clearing and be left until after all surrounding vegetation has been cleared
- Control drainage that may contain weed seeds or high levels of nutrients.
- Dye used in herbicide spraying, hydroseeding and hydro mulching applications must be a biodegradable, red or green coloured vegetable dye, as applicable.
- Vegetate stockpiles, stockpile sites and other areas to control erosion and weed invasion.
- Hygiene protocols should be implemented to ensure that plant and machinery enter / leave the site clean to prevent the spread of weed species.
- Monitoring of the site and general surrounds for weed infestations should be undertaken for the duration of the Project.

## 5 Conclusion

The proposed development will involve substantial earthworks to facilitate industrial subdivision. Consequently, the primary method of weed control will be mechanical in association with bulk earthworks. Targeted chemical control will be limited to larger and /or woody weeds as required.

Pre-construction constraint mapping will be undertaken to identify locations that contain weed infestations that should be controlled prior to mechanical clearing and woody or other weeds that should not be used for mulching.

The risk of introducing or spreading weeds will be minimised during construction through the implementation of mitigation measures identified in Section 4 of this Plan.

The risk of weeds re-establishing during the operational phase of the development will be mitigated through the establishment and ongoing maintenance of the proposed development's landscaping.

The proposed development is unlikely to result in the introduction or spread of priority weeds and/or WONS. Providing the mitigation measures recommended in Section 4 of this Plan are implemented, the landowners GBD will be met compliantly.



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