

Request for Variation

Clearing Permit: CPS 1887/2

Condition to be varied: Number 3 Offset Plan

The permit holder must implement and adhere to the Somerville Drive Extension (Robertson Drive Intersection) Project, Bunbury, Western Australia Environmental Offset Management Plan: Commonwealth EPBC Act referral No 2011/6153 and State (WA) Clearing Permit CPS 1887. Issue date 9 November 2012. (Noting that the most recent version of the offset plan is Rev 2.2 which was approved by the Department of Environment Regulation (DER) on 22 September 2013).

Background

The City of Bunbury is currently undertaking environmental offset works associated with the Commonwealth Department of the Environment and Energy (DotEE) and Western Australian Department of Environment Regulation approved Somerville Drive Extension Project (EPBC 2011/615, CPS 1887) Environmental Offset Management Plan (EOMP). Offset works include, inter alia, the closure and revegetation of obsolete fire access tracks as a means to exclude people, pests, weeds and Dieback (*Phytophthora cinnamomi*) from the offset site.

On the 15 January 2015 the City of Bunbury obtained approval from the DotEE and the DER for the Bunbury Airport Hangar Development Project (EPBC 2013/6872, CPS 5589/1) which involved clearing of vegetation for the installation of a Department of Fire and Emergency Services helicopter base and additional hangars.

Fire access track provisions in Manea Park were reviewed as part of the fire management planning for the Airport Development Project and has resulted in the need to reopen (150m or 667m²) of a formerly obsolete fire access track which is currently being revegetated as part of the Somerville Dr offset works, see figure 1. The reopening of this track will in result in a reduction of measures to exclude people, pests, weeds and dieback from the offset site resulting in a potential increase in threats to western ringtail possums at the site.

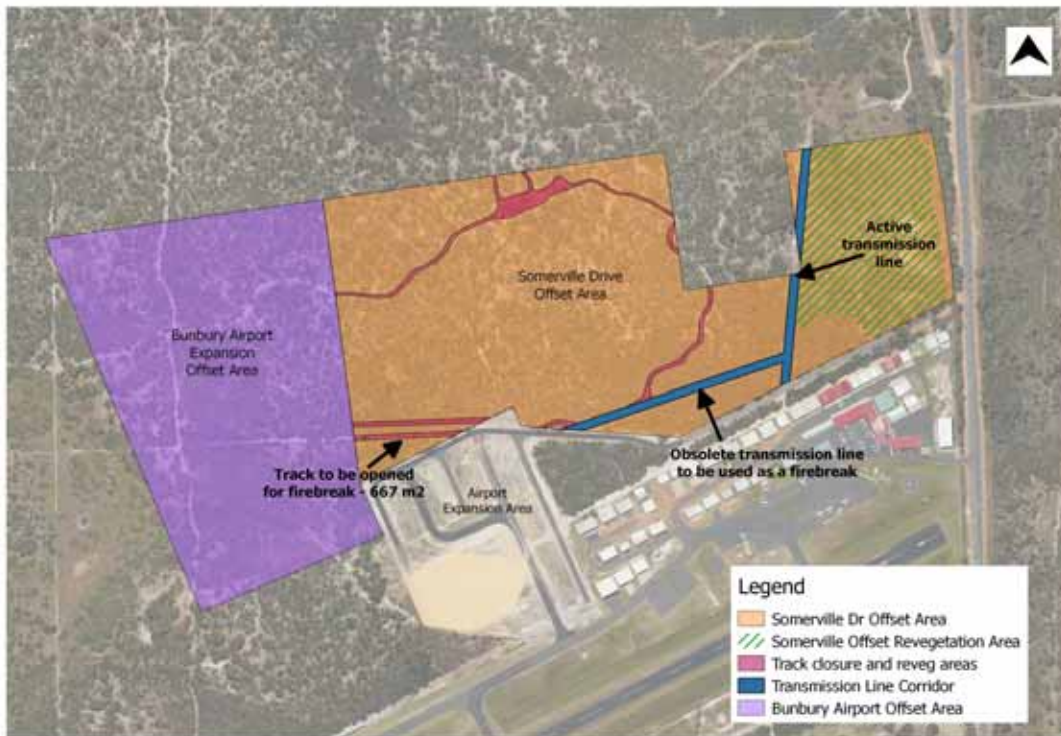


Figure 1. Location of track to be reopened

Proposal

To offset the loss of this measure it is proposed to undertake the full closure and revegetation of 210m or 637 m² of an obsolete access track that is contiguous with a track undergoing revegetation as part of the Somerville Dr offset works, see Figure 2.

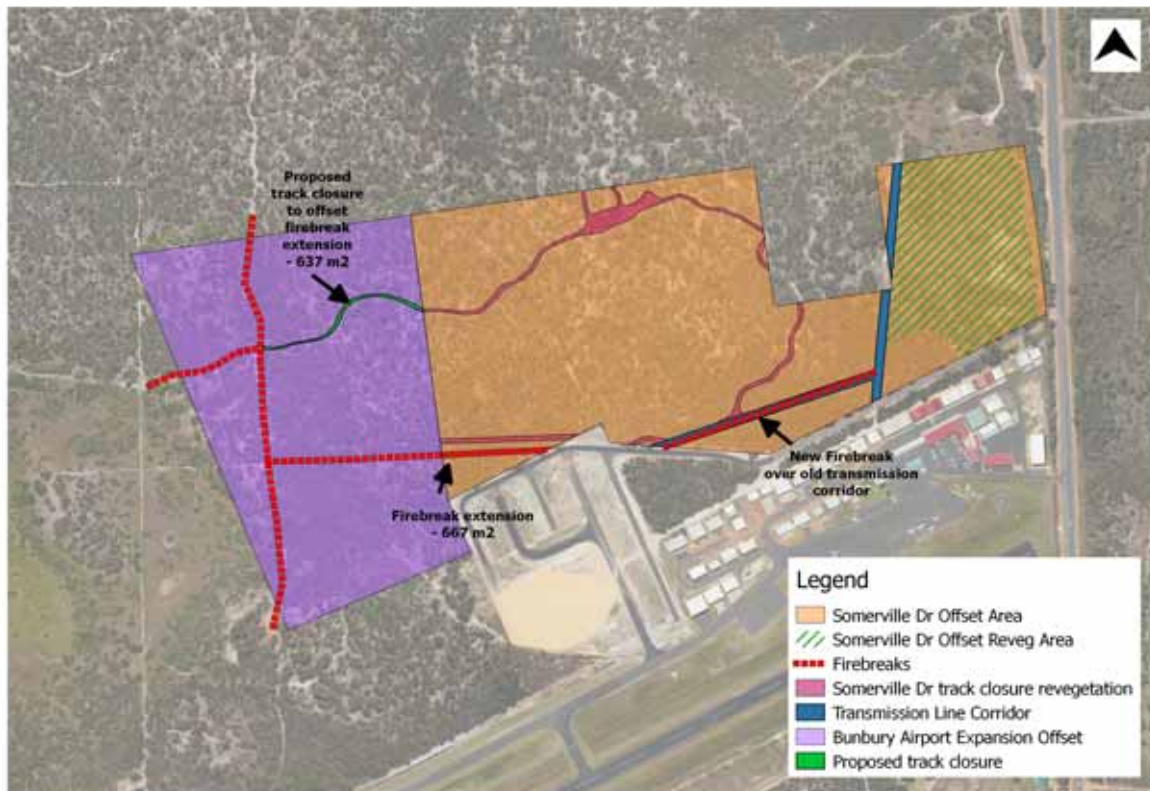


Figure 2. Proposed track closure works.

It is considered that this proposed variation will result in equivalent environmental outcomes to the current offset works overtime because:

- There will be a minimal net loss of tracks closure area as the proposed track closure area is of a comparable size to that being lost; it is only approximately 37 m² smaller in size.
- The closure and revegetation of this portion of track will result in the complete closure of the track which was previously only partially closed.
- The additional vegetation will reduce the potential vectoring of weeds and dieback into the bushland of the offset site.
- The track will likely also provide additional habitat for Western Ringtail Possums (WRP) as the proposed revegetation area is known to provide habitat for WRP with WRPs positively confirmed within 25 m of the track (Opus, 2015¹).
- The track to be closed occurs within a parcel of land scheduled for conservation purposes in perpetuity as it forms part of the approved Airport Development Project offset site

¹ Opus (2015) Bunbury Airport Hangar Development Offset Management Plan, City of Bunbury Commonwealth EPBC Referral No 2013/6872, WA Clearing Permit CPS 5589/1

This measure will also be supported by threat mitigating measures being implemented by the City at and in proximity to the offset site through implementation of both the Somerville Drive and Bunbury Airport Environmental offset projects and ongoing management of the Manea Park precinct area.

Additional supporting measure to manage threats to WRP include:

- Gating of the firebreak to be reopened (Airport expansion project).
- regulatory signs on gates advising park users of permitted and unauthorised activities (Airport expansion project).
- Implementation of a Phytophthora Dieback Protocol (Somerville and Airport expansion project).
- Environmental weed control (Somerville and Airport expansion project).
- Ongoing collection and removal of rubbish (Somerville and Airport expansion project).
- Foxes and feral cats control on lands immediately adjacent to the Somerville Drive offset site (Airport expansion project)
- Fencing of the entire Manea Park precinct in order to further restrict access to the reserve (General park management)

It is possible that, if permitted, this proposed variation could be implemented within the time remaining to implement the Somerville Dr EOMP, scheduled for completion in 2017. However any delays or planting failures will result in the City having to implement subsequent planting and reporting on this requirement until this condition is met. It is therefore requested that this variation be processed as soon as possible so that the City may commence revegetation measures prior to the onset of the 2016/2017 summer season.

The proposed variation involves modifications of Attachment 1, Attachment 7 and Table 4 of the EOMP. These modifications are summarised in table 1 below and presented in full in Attachment One of this report and in the attached revised EOMP.

Table 1 Summary of proposed modifications to the EOMP.

Item to be revised	Proposed variation Comments
Table 4. Site Actions and Monitoring Program for the offset site within Reserve 40664	Revisions to monitoring schedule for year 4 and 5 of offset implementation. The success of the proposed revegetation measures will be via assessment of a monitoring transect installed within the proposed revegetation area in the fourth and fifth years of implementation of offset measures, see Table 4 in Attachment One.
Attachment One: Location of the Environmental Offset Site	The revised map shows the area of revised environmental offset works.
Attachment Seven: Offset Site Management Plan	The maps shows the revised firebreak area the propopsed tracks to be closed and revegetated.

ATTACHMENT ONE

Table 4 Variation Proposal: Site Actions and Monitoring Program for the offset site within Reserve 40664

Action	Target Objectives	Monitoring Measures	Frequency	Completion Criteria
PROPOSED VARIATION includes NO CHANGE TO ITEM 1, BELOW				
1. Revegetation of Degraded Area	To enhance the degraded area with native plants selected from those that would have originally occurred within it and provide for Western Ringtail Possum habitat.	<p><u>Permanent Monitoring</u></p> <p>Establish three (3) permanent 10 x 10 m monitoring quadrats within the degraded revegetation area.</p> <p>Information to be collected from these quadrats:</p> <p>The total number of plants.</p> <p>The number of each species planted.</p> <p>Observed percentage cover of native plants as either <10%, 11 – 30%, 31-70% or >70%.</p> <p>Average seedling / plant height.</p> <p>The percentage of over storey, middle storey and understorey species within each quadrat area.</p> <p>Observed health of native vegetation within the quadrat – as either: poor/good/excellent. Provide comment on any observed plant deaths and the likely cause.</p> <p><u>Temporary Monitoring</u></p> <p>Undertake monitoring from five (5) 20 m x 2 m wide random transects:</p> <p>Information to be collected from these transects:</p> <p>Total number of planted plants</p> <p>Total number of each species planted</p>	<p>Permanent monitoring quadrats are to be established at completion of planting. Monitoring should be undertaken at establishment of quadrats and during the first two weeks of *November in year 1, year 2 and year 5.</p> <p>Monitoring of temporary quadrats is to be undertaken in the first two weeks of *November in year 1, year 2 and year 5.</p> <p>* Monitoring in November will allow time to make a plant order in December with nurseries for seedlings to be ready for the following planting season.</p>	<p>Target composition/diversity to be 70% remaining of all species planted at the end of 2 and 5 years within the degraded area per random hectare monitored and along closed tracks respectively.</p> <p>Planting survival rate of 80% within quadrats and along closed/obsolete tracks at the end of 2 and 5 years.</p> <p>Photographic evidence demonstrates that plant health is ranked as good or excellent within the degraded area, plus along the planted closed/obsolete tracks.</p> <p>The target structure completion criteria for the proposed revegetation within the degraded area is 55% overstorey species, 35% midstorey and 10% understorey based on the site condition, mapped vegetation, reference site and what can realistically be achieved.</p>

Proposed variation includes a change to the ITEM 2 below

Current ITEM 2

<p>2. Revegetation of closed tracks</p>	<p>To create treed sections along the cleared and closed/obsolete tracks.</p>	<p><u>Permanent Monitoring</u> Establish one (1) x 20 m x 5 m (average width of track c.a 5 m) monitoring quadrat along closed tracks. Information to be collected from this quadrat:</p> <ul style="list-style-type: none"> • Total number of planted plants. • Total number of each species planted. • Average seedling/tree height. • Observed health of native vegetation within the quadrat – as either: poor/good/excellent. <p><u>Temporary Monitoring</u> Undertake monitoring from one (1) x 20 m x *5 m random transect along closed tracks. Information to be collected from these transects:</p> <ul style="list-style-type: none"> • Total number of planted plants • Total number of each species planted • Approximate average seedling/tree height • Seedling health <p>*average width of track c.a 5 m</p>	<p>Permanent monitoring quadrats are to be established at completion of planting and monitored during the first two weeks of *November in years 1, 2 and 5. Random monitoring of temporal quadrats is to be undertaken in the first two weeks of *November in years 1, 2 and 5. * Monitoring in November will allow time to make a plant order in December with nurseries for seedlings to be ready for the following planting season.</p>	<p>Target composition/diversity to be 70% remaining of all species planted at the end of 2 and 5 years within the degraded area per random hectare monitored and along closed tracks respectively. Planting survival rate of 80% within quadrats and along closed/obsolete tracks at the end of 2 and 5 years. Photographic evidence demonstrates that plant health is ranked as good or excellent within the degraded area, plus along the planted closed/obsolete tracks. The target structure completion criteria for the proposed revegetation within the degraded area is 55% overstorey species, 35% midstorey and 10% understorey based on the site condition, mapped vegetation, reference site and what can realistically be achieved.</p>
--	---	---	---	---

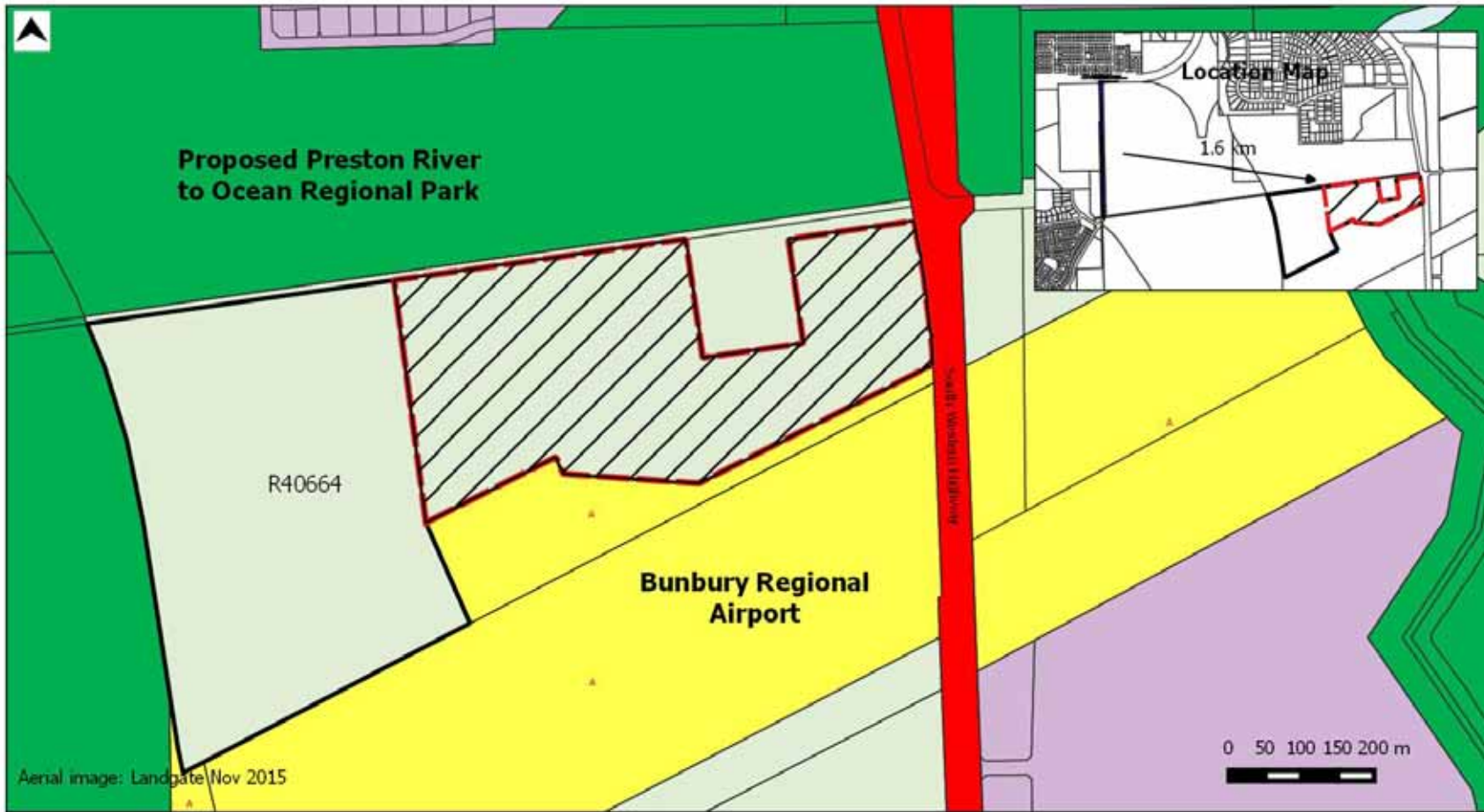
PROPOSED variation to ITEM 2.

<p>2. Revegetation of closed tracks</p>	<p>To create treed sections along the cleared and closed/obsolete tracks.</p>	<p><u>Permanent Monitoring</u> Establish one (1) x 20 m x 5 m (average width of track c.a 5 m) monitoring quadrat along closed tracks. Information to be collected from this quadrat:</p> <ul style="list-style-type: none"> • Total number of planted plants. • Total number of each species planted. • Average seedling/tree height. • Observed health of native vegetation within the quadrat – as either: poor/good/excellent. <p><u>Temporary monitoring</u> Years 1 and 2 : Undertake monitoring from one (1) x 20 m x *5 m random transect along closed tracks. Years 4 and 5 : Undertake monitoring from two (2) x 20 m x *5 m random transects along closed tracks. One of these monitoring transects must be conducted in the western-most 200m of the closed track revegetation area as identified in Attachment 7.</p> <p>Information to be collected from these transects:</p> <ul style="list-style-type: none"> • Total number of planted plants • Total number of each species planted • Approximate average seedling/tree height • Seedling health <p>*average width of track c.a 5 m</p>	<p>Permanent monitoring quadrats are to be established at completion of planting and monitored during the first two weeks of *November in years 1, 2 and 5. Monitoring of randomly placed temporal quadrats is to be undertaken in the first two weeks of *November in years 1, 2, 4 and 5. * Monitoring in November will allow time to make a plant order in December with nurseries for seedlings to be ready for the following planting season.</p>	<p>Target composition/diversity to be 70% remaining of all species planted at the end of 2 and 5 years within the degraded area per random hectare monitored and along closed tracks respectively. Planting survival rate of 80% within quadrats and along closed/obsolete tracks at the end of 2 and 5 years. Photographic evidence demonstrates that plant health is ranked as good or excellent within the degraded area, plus along the planted closed/obsolete tracks. The target structure completion criteria for the proposed revegetation within the degraded area is 55% overstorey species, 35% midstorey and 10% understorey based on the site condition, mapped vegetation, reference site and what can realistically be achieved.</p>
--	---	--	---	---

PROPOSED VARIATION includes NO CHANGES TO ITEMS 3 TO 7 BELOW

3. Weed Control	To maintain the revegetation area free of significant targeted environmental weeds that may adversely affect revegetation success.	Inspect all revegetation areas and record the locations, type and coverage (m ²) of any significant weeds requiring control. Record approximate % cover – weeds within degraded area quadrats.	Pre-planting, then at two and five years. (N.B. the City will comply with its responsibilities to control any Declared Pests in accordance with the WA <i>Biosecurity and Agriculture Management Act 2007</i>).	No significant environmental weed infestations within the degraded (revegetation) area or along closed/obsolete tracks at the end of 2 and 5 years. The target weed cover completion criteria is <15% of targeted weed cover remaining within the degraded area at the end of 5 years.
4. Dieback Management	Avoid and minimise the risk of introduction and/or spread of the Dieback pathogen <i>Phytophthora cinnamomi</i> to vulnerable areas of vegetation.	Documented Dieback protocols have been implemented.	Annually until implemented across stakeholder agencies within 5 years.	Documented evidence that the Dieback protocols have been communicated to key City staff and relevant authorities (i.e. Western Power, DEC and FESA) who may be required to enter the site.
5. Access Management	Implement and maintain track closures for all non-essential internal tracks.	Photographic evidence of track closures referenced against the locations shown on the Site Management Plan.	Annually until all identified tracks are closed within 5 years.	All unnecessary tracks identified on the Site Works Plan have been closed.
6. Fencing	Repair, inspect and maintain the outer perimeter fence as well as any temporary fencing used to limit kangaroo and rabbit grazing.	Record photographs – pre and post fence repairs/installation.	Within first year repair fence. Inspect and maintain fence (ongoing). On or before 5 years when plants are adequately mature – remove temporary fence to allow WRPs/native fauna access.	Offset site perimeter fencing is intact (N.B. along southern and eastern boundaries only – no need to fence common boundaries with Manea Park). Temporary fence has been removed on or before 5 years.
7. Site Rubbish	Maintain site free of rubbish/waste and any that presents a risk to health, the environment or a fire hazard.	Record the location and type of any observed rubbish dumping and any removed.	Annually, as applicable up to 5 years.	No rubbish/waste materials present on site at 5 years.

Current Location Map Attachment 1



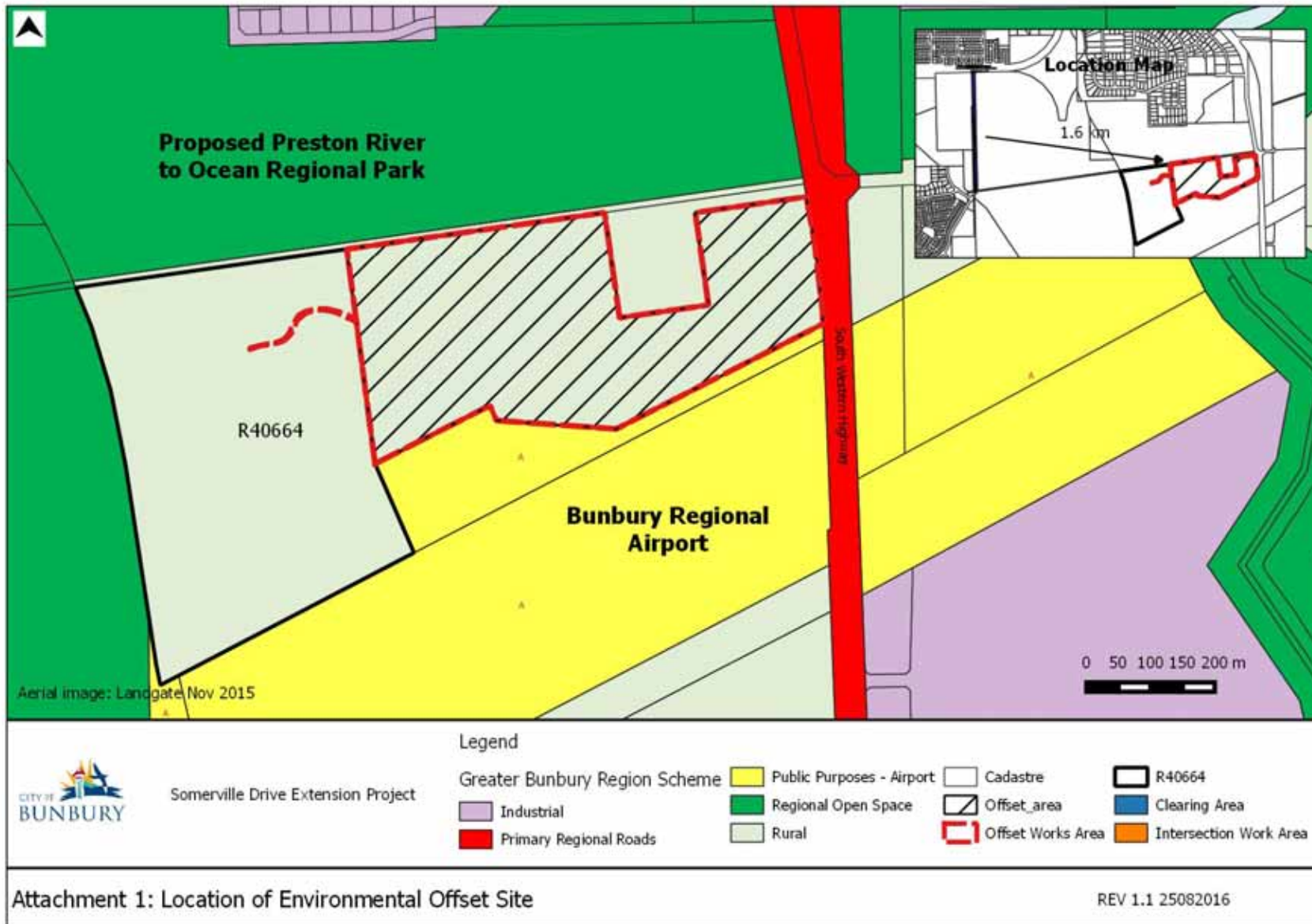
Legend

Somerville Drive Extension Project	Greater Bunbury Region Scheme	Public Purposes - Airport	Cadastre	R40664
Industrial	Regional Open Space	Offset_area	Clearing Area	Intersection Work Area
Primary Regional Roads	Rural	Offset Works Area		

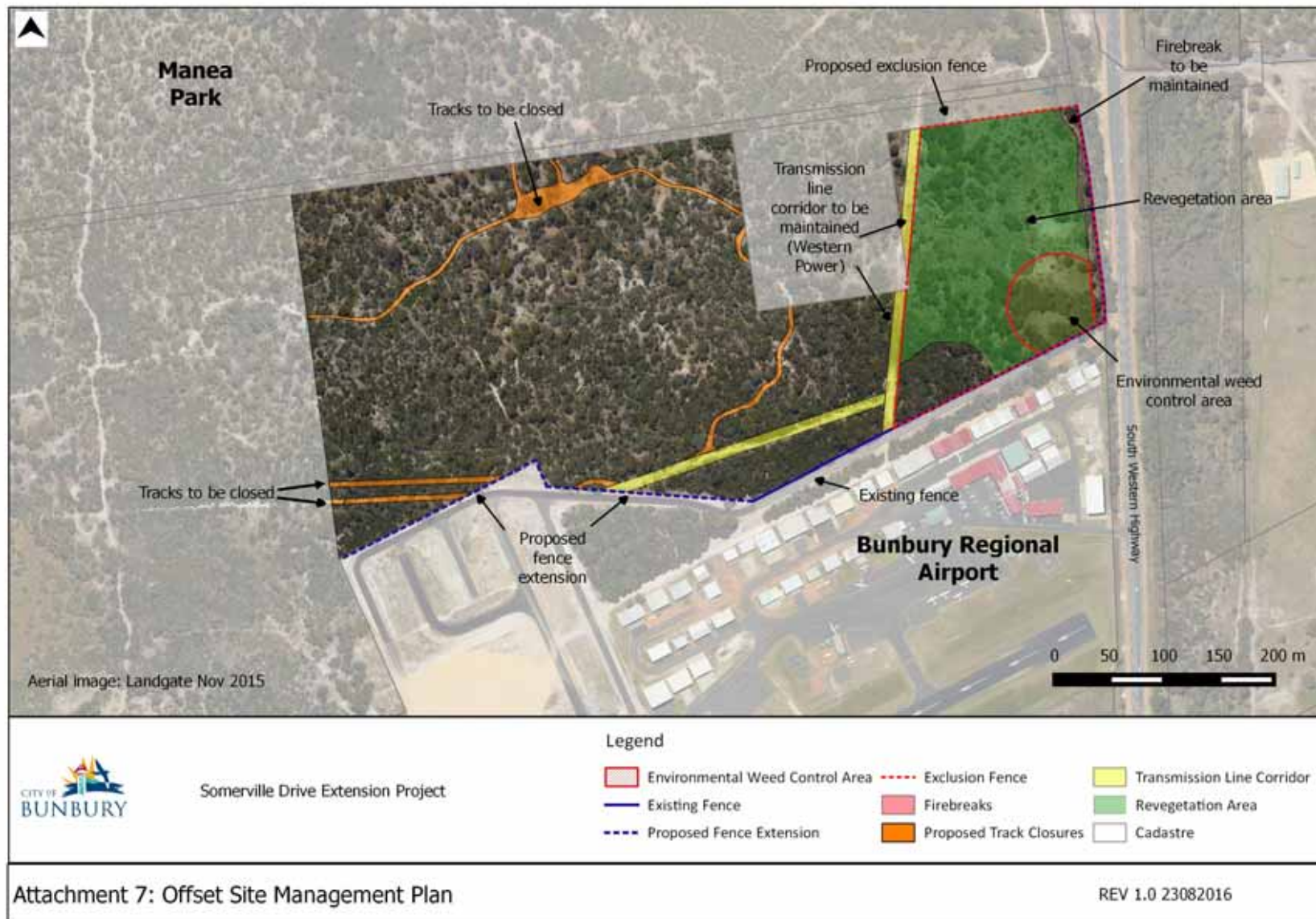
Attachment 1: Location of Environmental Offset Site

REV 1.0 25082016

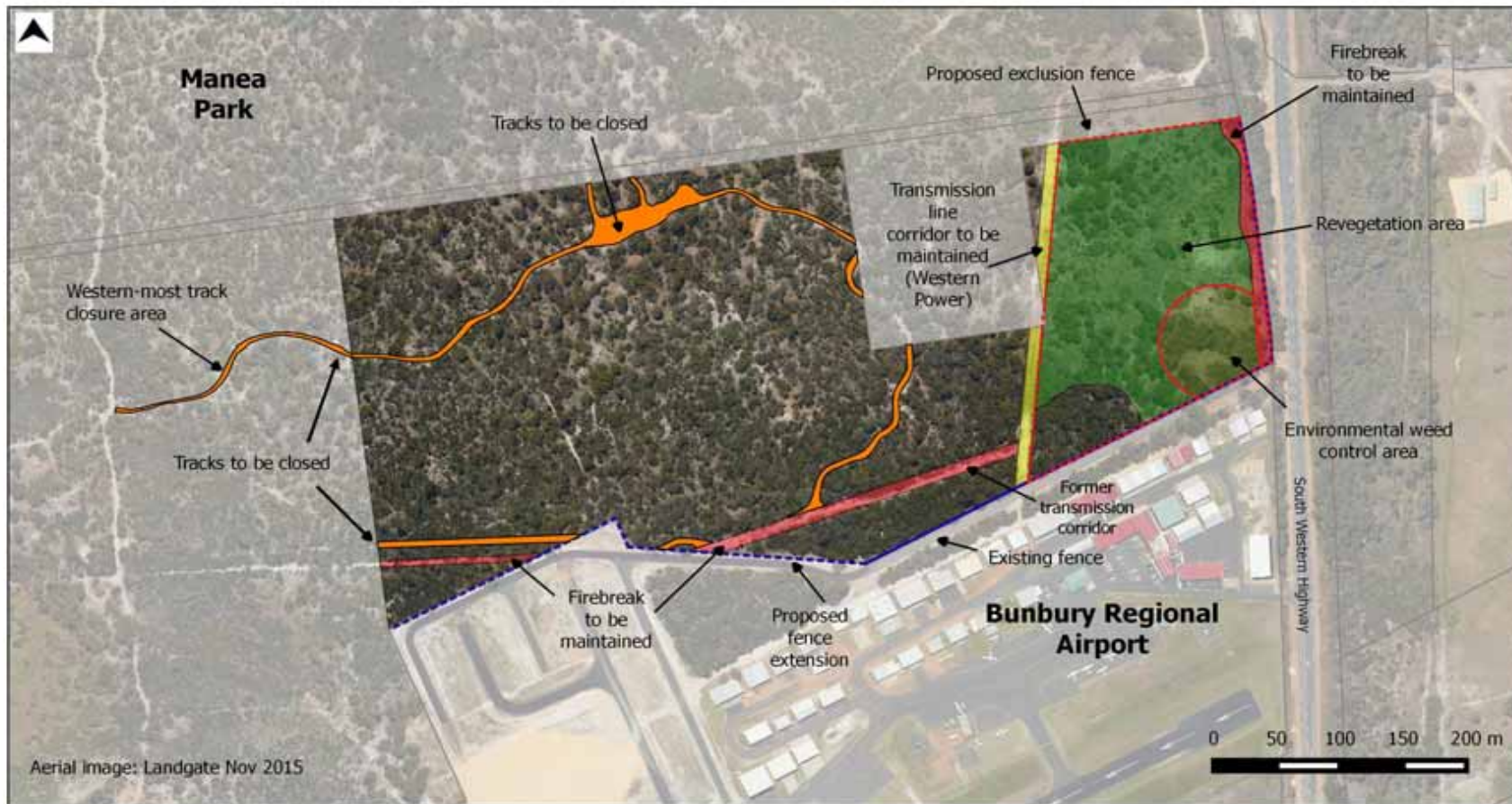
Variation Proposed Location Map Attachment 1.



Current Offset Management Plan Map, Attachment 7.



Variation Proposed Offset Management Plan Map, Attachment 7.



Aerial Image: Landgate Nov 2015



Somerville Drive Extension Project

Legend

- | | | |
|---------------------------------|-------------------------|----------------------------|
| Environmental Weed Control Area | Exclusion Fence | Transmission Line Corridor |
| Existing Fence | Firebreaks | Revegetation Area |
| Proposed Fence Extension | Proposed Track Closures | Cadastre |

Attachment 7: Offset Site Management Plan

REV 1.1 23082016

