ENVIRONMENTAL MANAGEMENT PLAN

Old Broadwater Farm Estate Subdivision

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1 INTRODUCTION

1.1 Background

Fairway Developments WA Pty Ltd and Zaph Pty Ltd (herein referred to as Fairway Developments) propose to develop the remainder of Stage 3 of the Old Broadwater Farm Estate, specifically portion of Lot 9005 on Deposited Plan 46853, house 56 New River Ramble/Pickmore Circus, West Busselton (Certificate of Title 2596-970) (herein referred to as the subject site). The subject site is located in the municipality of the City of Busselton, within Western Australia (refer to **Figure 1**). It is bounded to the north by the New River and previously completed stages of the Old Broadwater Farm Estate, the Busselton Highway Bypass to the south, Fairway Drive to the east and undeveloped grazing land to the west.

The development will involve the creation of a 239 lot residential subdivision comprised of private residences, grouped housing, public open space, orchid conservation areas, a redesigned nine hole golf course and a commercial area.

1.2 Development Proposal

Fairway Developments is proposing to implement the final stage of the Old Broadwater Farm, which will involve urban development of the balance of the site (i.e. portion of Lot 9005 on Deposited Plan 46853, house 56 New River Ramble/Pickmore Circus, West Busselton). While the majority of the subject site is comprised of parkland cleared paddocks and fairways, the development will involve clearing of approximately 9.03 hectares (ha) of remnant vegetation. The development will be staged and will ultimately involve the creation of a residential subdivision comprised of the following:

- Provision for 239 single residential allotments of varying sizes to cater for all age groups and lifestyles;
- A large grouped housing site opposite the golf course;
- Provision of larger residential lots (+900m²) along the Busselton Bypass to facilitate the opportunity for bush lifestyle lots with native vegetation;
- A commercial site of 1.09 ha to provide for convenient retail facilities for residents;
- A re-designed nine hole golf course of 7.91 ha to enable the retention of significant remnant vegetation;
- Three orchid conservation areas (1.53 ha) strategically located to enable the retention of a local *Caladenia procera* population;
- The Busselton Bypass Reserve of 0.66 ha to provide visual and noise relief whilst also protecting a stand of significant remnant vegetation; and
- Additional conservation and recreational reserves totalling 4.70 ha.

1.3 Approvals

1.3.1 Commonwealth

Subject to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), Fairway Developments formally referred the proposed development to the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) for assessment in December 2009. The proposal was considered in accordance with Part 9 of the EPBC Act and on 20 September 2011, conditional approval was granted. Pursuant to the conditional approval instrument issued by SEWPaC,

Condition 5 necessitates the preparation of an Environmental Management Plan (EMP) and subsequent approval by the Minister, prior to the commencement of construction. Specifically, Condition 5 of the SEWPaC conditional approval stipulates the following:

5. *To mitigate the potential impacts to the Western Ringtail Possum (*Pseudocheirus occidentalis*) and the Carbunup King Spider Orchid (*Caladenia procera*), the person taking the action must develop an Environmental Management Plan (EMP) for the site.*

   The EMP must include but not be limited to:

   - *Golf Course design;*
   - *Fairway alignment/design;*
   - *Clearing protocols;*
   - *Vegetation retention;*
   - *Management/mitigation measures during construction to avoid impacts;*
   - *Pegging of Orchid locations;*
   - *Tenure of Orchid Conservation Reserves;*
   - *Fencing;*
   - *Signage;*
   - *Weed and disease control;*
   - *Revegetation, rehabilitation and landscaping;*
   - *Access controls;*
   - *Long term management and tenure;*
   - *Written confirmation of ceding reserves to the Shire of Busselton;*
   - *Roles and responsibilities;*
   - *Monitoring and reporting; and*
   - *Timeframes and implementation of the above measures.*

   The EMP must be submitted to and approved by the Minister prior to Construction commencing.

1.4 Purpose and Scope

The purpose of this EMP is to describe procedures that will be implemented on behalf of Fairway Developments to comply with the rehabilitation and environmental objectives associated with Condition 5 of the EPBC Act approval. The EMP is a management tool that details the methods and procedures that will be applied in order to achieve Fairway Developments environmental commitments and regulatory obligations. The specific aims of this EMP are to:

- Summarise the relevant environmental factors potentially affected by the operation;
- Detail prevention, minimisation and mitigation measures for any environmental impacts of the operation;
- Detail site accountabilities and responsibilities for these measures; and
- Detail the monitoring and reporting process.

The management measures provided within this EMP are supported by the following technical studies:

- *Old Broadwater Farm Additional Spring Survey for Caladenia procera* (Cardno WA 2006);
- *Vegetation Condition Survey of the Vegetation Communities in a Corridor Adjacent to the Bussell Highway* (Cardno WA 2008a);
- *Weed Management and Revegetation Plan: Old Broadwater Farm, Busselton* (Cardno WA 2008b);
- *Tree Density Survey within Old Broadwater Farm* (Cardno WA 2009);
- *Flora and Vegetation Review* (Cardno WA 2010);

- *Western Ringtail Possum Survey within Old Broadwater Farm* (Green Iguana 2006);
- *Western Ringtail Possum Survey: Old Broadwater Farm, Broadwater* (Harewood 2010a);
- *Black Cockatoo Assessment: Old Broadwater Farm, Broadwater* (Harewood 2010b); and
- *Wetland Fauna Habitat Assessment, Old Broadwater Farm, Broadwater* (Harewood 2010c).

2 ENVIRONMENTAL SETTING

2.1 Climate

The climate of the Busselton locality can be described as dry Mediterranean with mild wet winters and hot dry summers, with approximately six dry months per year (Beard 1990). Climatic data from the closest weather station (Busselton) indicates an annual rainfall average of 708 mm, with the majority falling between May and September (1998 to 2010). July has the highest mean rainfall, with a mean of 153 mm, and February has the lowest with 7.2 mm. The mean maximum temperature ranges from 29.3°C in February to 17.1°C in July, and mean minimum temperature ranges from 14.7°C in February to 8.0°C in July (Bureau of Meteorology 2010).

2.2 Landforms and Soils

The subject site occurs on the western edge of the Swan Coastal Plain. The Swan Coastal Plain can be described as low lying, often swampy with sandhills comprised of soils predominantly consisting of recent sands or swampy deposits (Beard 1990).

The subject site is located on the interface of the Geographe Coastal Wetland System (GCWS) on the Spearwood Dune System. The Spearwood dunes are characterised by low relief dunes generally less than 10 m in elevation on the landward side of the GCWS (DEC 2009b).

Across the majority of the subject site, soils can be described as yellow deep sands with semi-wet soils. A small elongated area of wet and semi-wet soils and brown deep sands is found in the south eastern portion of the site (DEC 2009b).

2.3 Flora and Vegetation

A series of Declared Rare Flora (DRF) and vegetation surveys (DEC 2003, Coffey 2005, Cardno 2006, DEC 2007 and Cardno 2010) have been undertaken within the subject site. These surveys resulted in a total of 177 species from 41 families being identified within the subject site and the adjacent road reserve. Of these, 47 species (26%) are identified as introduced (weed) species.

From the surveys conducted to date, two species of conservation significance have been recorded. These species were both collected from the golf course and include the DRF species *Caladenia procera* and *Conospermum caeruleum* subsp. Busselton. *Conospermum caeruleum* subsp. Busselton is not listed as either a DRF or Priority Flora species, however is restricted to the Busselton area and is currently recognised by the DEC as a species of conservation significance.

Based on the surveys, the following number of *Caladenia procera* have been identified within the golf course:

- DEC (2003) – 79;
- Coffey (2005) – 73;
- Cardno (2006) – 253;
- DEC (2007) – 125; and
- Cardno (2010) – 80.

The general vegetation condition observed throughout the subject site was categorised as 'Degraded' which can be attributed to the surveys identifying little to no intact remnant vegetation within the paddocks. The mature scattered native trees within the paddock areas were of the species *Corymbia*

calophylla (Marri), *Eucalyptus rudis* (Flooded Gum), *Melaleuca preissiana* (Moonah), *Melaleuca rhaphiophylla* (Swamp Paperbark) and *Agonis flexuosa* (Peppermint) over paddock grasses.

The Cardno (2010) flora and vegetation survey found three vegetation communities inhabiting the subject site, which included:

- CcAfKg- Forest of *Corymbia calophylla* over *Agonis flexuosa*, *Kunzea glabrescens*, *Hakea varia*, *Melaleuca preissiana*, *Acacia saligna* and *Banksia littoralis* over *Lepidosperma striatum*, *Lomandra micrantha*, *Conospermum caeruleum* subsp. Busselton, *Tetraria octandra*, *Xanthorrhoea preissii*, *Schoenus efoliatus* and **Zantedeschia aethiopica*. This community is found within the golf course, ranging from 'Poor' to 'Very Good' condition.
- CcAfLp - Forest of *Corymbia calophylla* over *Agonis flexuosa* over *Leucopogon propinquus*, *Dampiera alata*, *Phyllanthus calycinus* and **Ehrharta longiflora.* This community was found at the northern most region of the golf course. Whilst it contains the same overstorey as CcAfKg, a number of different species were recorded in the understorey, due to the variable soil type.
- ErMrGt - Riparian and floodplain community of *Eucalyptus rudis* over *Melaleuca rhaphiophylla* over *Gahnia trifida*, **Carex divisa*, *Juncus pallidus*, *Baumea articulata*, *Hibbertia cuneifolia*, **Zantedeschia aethiopica* and grasses.

Plant community CcErAf, which is expected to have once occurred across a majority of the subject site, has been identified as the Priority 1 Ecological Community (PEC) - *Eucalyptus rudis*, *Corymbia calophylla* and *Agonis flexuosa* closed low forest over a diverse understorey including the shrubs *Kunzea glabrescens, Hibbertia hypericoides*, *Conospermum caeruleum* over *Lomandra micrantha*, *Tetraria octandra* and *Austrostipa flavescens*.

2.4 Fauna

Remnant vegetation within Old Broadwater Farm is consistent with habitat for WRPs (*Pseudocheirus occidentalis*), Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) and Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) (collectively termed Black Cockatoos). Given that these species are listed under the Western Australian *Wildlife and Conservation Act 1950* (WAWC Act) and the EPBC Act, several targeted surveys have been undertaken.

2.4.1 Western Ringtail Possums

A total of seven WRP surveys have been undertaken within the subject site from 2005 to 2010. **Table 1** provides a summary of the WRP survey results.

Table 1. Summary of WRP survey results.

Date	Night 1	Night 2
August 2005	12	-
June 2006	35	34
January 2010	39	44
June/July 2010	47	43

WRP populations typically peak during the spring to summer months and decline with the onset of winter (DEC 2009b). However, a comparison of the survey results revealed an insignificant increase between January and June/July 2010, denoting minimal seasonal variation in the population levels (Cardno 2011).

The survey results indicate that WRPs are predominately located within the golf course where WRP densities are approximately three times higher than in comparison to the western portion of the subject site. This can be attributed to the absence of understorey, lack of canopy connectivity and relatively small population of *Agonis flexuosa* within the western portion of the subject site. Conversely, the golf course contains excellent quality vegetation in relation to WRP habitat which can be attributed to the ongoing maintenance practices which include fertilizing, irrigating and protecting the remnant vegetation from detrimental activities (such as grazing of livestock).

The majority of the WRPs were located within the eastern portion of the site, within the area proposed to be set aside under the DGP as the golf course and the orchid conservation areas.

2.4.2 Black Cockatoos

A significant tree assessment was undertaken to determine the nesting and foraging potential of the vegetation within the subject site (Harewood 2010b). The assessment aimed to locate all trees within the subject site that had a diameter at breast height (DBH) of 50cm or greater. Trees of this size are regarded by the SEWPaC as Black Cockatoo breeding habitat, regardless of the presence of hollows (SEWPaC 2011).

A total of 187 significant trees were found within the subject site. The majority of these trees were Marri with a small number of unknown dead trees also recorded. No hollows were observed within the significant trees, with only one dead tree exhibiting a potential hollow. However, its full characteristics could not be determined from ground level (Harewood 2010b).

Opportunistic observations of Black Cockatoo foraging activity were made during the survey of the site. Freshly chewed Marri nuts were commonly encountered, the majority of which was attributed to activities of the Forest Red-tailed Black Cockatoo. Evidence of Baudin's Black Cockatoo and to a much lesser extent Carnaby's Black Cockatoo was also found (Harewood 2010b).

3 ROLES AND RESPONSIBILITIES

The overall responsibility for the implementation of this EMP rests with the Fairway Developments' Construction Manager and Project Manager.

All employees and contractors shall meet the requirements of this EMP and associated procedures. Responsibility for some management actions stated in this EMP may be delegated to specific contractors if appropriate, which will be determined by the Project Manager.

Key project personnel including the Construction Manager, Project Manager and Supervisors will ensure that all management actions are undertaken to a satisfactory standard and that all personnel are aware of their responsibilities.

Project Manager

- Overall accountability for the auditing and assessment of compliance with this EMP and ensure it is maintained on site.
- Provide support to all project personnel as required ensuring this EMP is implemented and complied with.
- Provide advice to all key parties to ensure compliance with legal requirements, achievement of environmental objectives and improving environmental performance.
- Obtain relevant approvals for vegetation and flora disturbance, as required.
- Review the effectiveness and implementation of this EMP.
- Report as required to regulatory authorities.
- Conduct audits, inspections and raise corrective actions as required.

Construction Manager / Project Manager

- Overall accountability to ensure this EMP is implemented, reported and maintained on site.
- Ensure all personnel attend inductions and are aware of the requirements of this EMP and related procedures.
- Provide support to contractors and on site project personnel required during the construction phase.
- Ensure appropriate resources and personnel are made available to meet the requirements of this EMP.
- Liaise with contractors to identify flora and/or fauna issues associated with day-to-day construction and pre-commissioning activities.
- Undertake inspections in liaison with site supervisors.
- Assist with investigating flora and fauna incidents and co-ordinating corrective actions, if required.
- Report any non-compliances with the EMP.

Contractors

- Comply with all legal requirements and the requirements specified in this EMP.
- Ensure all personnel are adequately trained in flora and fauna management (as required).
- Seek advice from Project Manager when in doubt of their requirements.

All Personnel

- Comply with all legal requirements and the requirements of this EMP.
- Report vegetation and flora incidents to the Project Manager.

4 MANAGEMENT PLANS

To ensure that significant flora and fauna species are managed appropriately within the subject site during the construction of the development and in the long term, appropriate mitigation and management measures will be implemented. These measures are discussed below and will specifically include:

- Vegetation clearing and construction;
- Golf course design;
- WRPs;
- *Caladenia procera*;
- Revegetation and rehabilitation;
- Weed and disease control; and
- Reserve management.

4.1 Vegetation Clearing and Construction

4.1.1 Background

The development will involve clearing of approximately 9.03 ha of remnant vegetation. The required clearing will be separated into three stages. Stage A will involve clearing of approximately 2.96 ha and is proposed to commence in May 2013. Stage B clearing will commence at least one year following the completion of Stage A and will involve clearing of approximately 1.41 ha. Stage C clearing will commence approximately one and a half years from Stage B and will entail clearing of approximately 4.66 ha (refer to **Figure 2**). This approach will allow for the completion of the revegetation program associated with Stage A and a substantial growing period, prior to the commencement of the Stage B and C clearing.

All practicable measures have been implemented to reduce the clearing footprint. This is specifically evident within the proposed reserves, where clearing will be limited to 1.10 ha which is required to enable the installation of infrastructure and firebreaks.

4.1.2 Environmental Management

In order to ensure that the potential impacts associated with vegetation clearing is minimised as far as practicable, the following management measures are proposed.

EMP – 01 Vegetation Clearing and Construction
Responsibility • Project Manager. • Contractors. • Golf Course Manager. • Property Owner (of Golf Course).
Objectives • Prevent clearing outside of the designated clearing envelope. • Conserve and optimise reuse of vegetation and topsoil that contains seed, nutrients and organic matter necessary for establishing vegetation on rehabilitated areas. • Minimise soil erosion and sedimentation.
Potential Impacts

- Clearing of 9.03 ha of native vegetation.
- Inadvertent additional clearing of vegetation.
- Impacts on significant flora and fauna species.
- Potential loss of biodiversity.
- Weed and disease invasion.

Management Strategies	**Timing**
• All site personnel will be inducted on the clearing controls for this project.	• Prior to all clearing Stages.
• Areas containing threatened flora are to be marked and are not to be disturbed.	• Prior to Stage B clearing.
• The clearing line is to be marked by the surveyor with white flagging tape attached to either pegs or tied to vegetation with each peg/marker clearly visible from the last. Trees to be retained will be marked so that they are clearly recognised by clearing contractors. This is specifically to include the interfaces between development areas and reserve areas to ensure the prevention of any inappropriate clearing. These interfaces will be clearly marked with brightly coloured rope flagging.	• Prior to each clearing Stages.
• Clearing will be undertaken in accordance with the WRP clearing procedures provided within **Section 4.3**.	• During all clearing Stages.
• The flagging tape which demarcates the clearing areas will be checked on a daily basis to ensure that the clearing boundaries remain clearly visible.	• During all clearing Stages.
• No movement of vehicles or personnel within the vegetation retention areas will be allowed.	• During all clearing Stages.
• No stockpiling of topsoil or other material is to occur outside of the clearing boundary.	• During all clearing Stages.
• Cleared vegetation will be removed and stockpiled offsite.	• During all clearing Stages.
• Where practicable, topsoil will be stripped and stockpiled and vegetation debris, logs and leaf litter will be retained for reuse during rehabilitation.	• During all clearing Stages.
• The location and area of vegetation cleared will be checked on a daily basis.	• During all clearing Stages.

Performance Indicators

- No unauthorised clearing is undertaken.
- Topsoil correctly stockpiled for subsequent use and cleared vegetation removed from the subject site.
- No DRF or significant fauna are impacted during clearing.

Monitoring

- Daily checks to ensure that clearing is consistent with approved clearing boundaries.
- Daily checks to ensure that no DRF or significant fauna have been impacted.

Reporting

- The DEC and SEWPaC will be notified if clearing beyond the approved clearing boundaries occurs, or if any *Caladenia procera* or WRP individuals are impacted.
- An annual report which will document compliance with the relevant approvals will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.

4.2 Golf Course Management Plan

4.2.1 Background

The subject site contains an operational nine hole golf course which will be retained as a component of the subdivision. However, in order to provide access to Fairway Drive for future residents located within the residential area adjacent to the Busselton Bypass, a road intersecting the existing golf course is required. Modifications to the golf course will also include a strip of residential lots abutting its northern boundary. In consideration of the proposed modifications, the golf course design will require alterations which will entail the realignment of the nine fairways and the relocation of the kiosk and clubhouse. The redesign of the golf course has involved detailed consideration regarding the alignment of the new fairways to coincide with existing cleared areas to reduce impacts to *Caladenia procera* and habitat associated with WRPs.

The golf course contains the highest percentage of *Agonis flexuosa* canopy coverage throughout the subject site which supports the high densities of WRPs. As a result, vegetation within the golf course is considered high quality habitat for WRPs. On this basis, the re-design of the golf course has been undertaken in a manner whereby approximately 72% of remnant vegetation will be retained, canopy connectivity and habitat linkages have been retained and will subsequently be improved following revegetation works. As per the *Preliminary Documentation* (Cardno 2011), clearing within the golf course will be restricted to 0.35 ha, which entails the realignment of the fairways and relocation of the club house. The clearing locations and areas have been approved by SEWPaC on 20 September 2011.

The proposed location of the fairways has been designed to avoid potential impacts to *Caladenia procera* as far as practicable. While the realignment of the fairways will not directly impact any individuals, the location of the proposed road is anticipated to impact two individuals. The golf course will contain two orchid conservation areas which contain habitat associated with the species and have been developed to enable the persistence of the species. The road will not affect the most southern sub-population of *Caladenia procera* as it will be captured within an independent orchid conservation area. Furthermore, this sub-population will not experience further fragmentation from any other population, as it is currently isolated due to the presence of degraded understorey and existing pathways.

4.2.2 Design

The new golf course will be approximately 7.91 ha in size and will include nine fairways, two orchid conservation areas, remnant vegetation and a hardstand area comprised of a clubhouse which will incorporate office administration, function areas, car parking and other potential recreational facilities.

The golf course shall be developed so that all buildings, structures, roads, paths and associated infrastructure are sympathetically integrated into the landscape both physically and visually. This will primarily be achieved through the sensitive siting and design of buildings and facilities and integration into the surrounding landform. As far as practicable impacts to remnant vegetation will be avoided during the installation of infrastructure as per the specifications provided within **Section 4.1**. Amenity plantings using indigenous vegetation shall be used to visually integrate the development into its surrounds while continuing the overall aim of enhancing the habitat value where possible.

4.2.3 Agreement to Reserve

The golf course and the two orchid conservation areas within the golf course will be subject to an Agreement to Reserve pursuant to the *Soil and Land Conservation Act 1945*. An Agreement to Reserve enables the permanent protection of remnant vegetation via a Memorial over the property's title.

The Agreement to Reserve will be prepared by Fairway Developments and will restrict the amount of clearing that can occur within the protected areas and will specify that clearing can only occur for:

- Pathways;
- Firebreaks;
- Relocation of fairways; and
- The hardstand area including buildings, car park and other potential recreational areas.

In particular, the Agreement to Reserve will specify the retention of significant trees (as identified within the Black Cockatoo habitat assessment (Harewood 2010b)) that are able to be incorporated into the proposed development. The Agreement to Reserve will also state that if clearing in excess of the nominated amounts occur, then revegetation of the cleared area will be required.

The Commissioner of Soil and Land Conservation has commenced preparatory work in association with the Agreement to Reserve (refer to **Appendix A**). Given that the Agreement to Reserve can only be implemented once subdivision approval has been obtained from the WAPC, the associated documents and mapping will be finalised by the 30th June 2014.

4.2.4 Environmental Management

In order to ensure that the potential impacts associated with vegetation clearing and the realignment of the fairways are minimised as far as practicable, the following management measures are proposed (refer to **Figure 3**).

EMP – 02 Golf Course	
Responsibility • Project Manager. • Golf Course Manager. • Property Owner. • Town Planner. • Contractors.	
Objectives • Protect ecological communities and the local population of *Caladenia procera*. • Enhance existing habitat functions within the golf course in relation to WRPs and *Caladenia procera*. • Enable the long term protection of the onsite *Caladenia procera* population.	
Potential Impacts • Over clearing of remnant vegetation. • Reduction and/or extinction of the onsite *Caladenia procera* population. • Fragmentation and the reduction of WRP habitat.	
Management Strategies	**Timing**
• Visibly demarcate the clearing boundary as per the specifications provided within **Section 4.1.**	• Prior to Stage B clearing.
• Install temporary signage on the borders of the orchid conservation areas which indicate that access is prohibited.	• Prior to Stage B clearing.
• Revegetate approximately 1.71 ha within the golf course with species consistent with vegetation community CcAfKg (as per Cardno 2010). Revegetation will be undertaken in accordance with **Section 4.6**.	• Post Stage B clearing.
• The structure of planting/revegetation mixes will be consistent with and enhance the requirements of habitat creation for *Caladenia procera* and WRPs.	• Post Stage B clearing.

• Permanent signs will be installed on the borders of the orchid conservation areas which will indicate that access is prohibited • Signage will be installed throughout the golf course which requires players to remain on designated pathways and limit impacts to native vegetation. • Nutrient application rates on the fairways will be consistent with the Urban Water Management Plan (UWMP) (Cardno 2008c), which requires regular soil and tissue testing to determine nutrient requirements. No nutrients will be applied within the orchid conservation areas. • During maintenance of the golf course, green waste will be removed and disposed. If green waste is only comprised of native vegetation then it may be mulched and used in landscaping or revegetation areas.	• Post Stage B clearing. • Prior to re-opening the golf course to the public. • During operation of the golf course. • During operation of the golf course.
Performance Indicators • Persistence and increase of *Caladenia procera* population. • Persistence and increase of WRP population.	
Monitoring • Daily visual inspections during clearing. • Record number of *Caladenia procera* directly impacted. • Record any WRP deaths or relocations. • Record area and location of vegetation cleared. • Monitor WRP numbers in accordance with **Section 4.3**. • Monitor *Caladenia procera* in accordance with **Section 4.4**. • Monitor revegetation in accordance with **Section 4.6**.	
Reporting • Clearing of more than two *Caladenia procera* individuals will be reported to the DEC and SEWPaC within 24 hours of the event. • Clearing of vegetation within the orchid conservation areas will be reported to the DEC and SEWPaC within 24 hours of the event. • An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.	

4.3 Western Ringtail Possums

4.3.1 Background

As discussed within **Section 2.4.1**, the WRP survey results (Harewood 2006 and 2010a) "*clearly indicate that Western Ringtail Possums are favouring the vegetation within the golf course*", where numbers are significantly higher than in the western portion of the subject site. Only one or two WRPs were spotted in the central portion of the site during the June 2006 surveys and only one during the January 2010 surveys. Given that the majority of high quality habitat associated with WRPs will be retained and in consideration of the following management plan, potential impacts to WRPs are considered minimal.

4.3.2 Maintaining WRP Carrying Capacity

On average, the subject site supports approximately 38 WRPs. Results from the various WRP surveys indicate an obvious preference for the vegetation within the existing golf course, with WRP densities approximately three times higher than in comparison to anywhere else within the subject site. The low

densities of WRPs within the remainder of the subject site are likely to be a direct result of the absence of understorey, lack of canopy connectivity and reduced densities of *Agonis flexuosa*. With the lack of canopy connectivity and understorey vegetation throughout the majority of the proposed development area, WRP linkages and corridors for the provision of protected movement are absent.

The proposed development will involve retention of the large majority of the golf course and associated vegetation, and revegetation of the reserve areas to provide canopy connectivity to allow movement between habitat areas. As a result, the proposed development will enhance the habitat function of the subject site for WRPs given that the quality of habitat will be improved and continuous connectivity will be provided. It is on this basis that it is not expected that there will be any significant impacts to the local or wider WRP population.

Notwithstanding this, there is the potential that in the long term, the subject site can be managed to contribute positively to the WRP carrying capacity. With the appropriate management, in the long term, the site will be capable of supporting increased numbers of WRPs and potentially exceed pre-development densities across the subject site. In this context, it is important to consider that the remnant vegetation across the subject site has been subject to considerable historic disturbance and the resultant vegetation communities are not dominated by *Agonis flexuosa* or representative of a mature successional community structure.

Increasing the WRP carrying capacity of the remnant vegetation within Old Broadwater Farm is proposed to be achieved through selective management of the vegetation, which will include the following:

- Providing infill planting throughout the reserve areas with *Agonis flexuosa* and sedge species;
- Stage plantings of trees so that a healthy canopy of older trees is maintained;
- Annual weed control; and
- Fertilising *Agonis flexuous* trees with nitrogen and phosphorus.

In summary, while the subject site supports on average approximately 38 WRPs, the majority of these individuals are located within the golf course. This is due to the high quality vegetation located within the golf course and the fact that the remainder of the vegetation is not primarily comprised of *Agonis flexuosa* and does not provide continuous canopy connectivity. The density of WRPs throughout the subject site is 0.86 WRPs per hectare which is relatively a low and can be attributed to the WRPs being primarily located within the golf course. The clearing of 9.03 ha of degraded vegetation which is not associated with core WRP habitat will not result in WRP translocations given that the area which supports the majority of the WRP population will be subject to minimal clearing (0.35 ha). Furthermore, in consideration of previous guidance provided by the DEC (*Peppermint Park Western Ringtail Possum Management Plan*, Cardno 2010) the requirement for translocations may be triggered at six WRPs per hectare, a density which is extremely unlikely to occur within the subject site as a result of the proposed clearing.

4.3.3 Environmental Management

In addition to the above, a series of management and mitigation measures have been developed, as documented below, which will further support the protection of WRPs and the persistence of their population within the subject site.

EMP – 03 Western Ringtail Possums
Responsibility • Project Manager. • Contractors.

• Golf Course Manager. • Property Owner (of Golf Course).	
Objectives • Long term preservation of WRPs within the subject site. • Enhance existing habitat functions within the subject site in relation to WRPs.	
Potential Impacts • Reduction in available habitat and increased competition for resources. • Decline in quality of habitat due to increased grazing pressure. • Reduction and/or extinction of the onsite WRP population.	
Management Strategies	**Timing**
• Clearing will be undertaken in three stages, as per Section **4.1.2,** with at least one year between Stage A and B and one and a half years between Stage B and C. This approach will allow for the commencement of the revegetation program within Stage A and also avoid the requirement for obligate (pre-development) translocation of WRPs, as displaced individuals will readily relocate into surrounding refuge habitat. Furthermore, this clearing approach will avoid creating islands of remnant vegetation which have limited connectivity to surrounding remnant vegetation, increasing the risk of predation.	• During all clearing Stages.
• The following clearing protocols will be implemented to avoid impacts to WRPs: o Immediately prior to any clearing commencing a qualified expert will undertake a pre-clearing inspection of the clearing zone and nearby areas to confirm the location of dreys and tree hollows currently or likely to be occupied by WRPs and mark these trees as necessary. o The suitably qualified expert will be onsite when clearing is being undertaken. o Prior to clearing commencing, the clearing operators will be briefed by the same qualified expert who will explain to operators which areas of the subject site are more sensitive in relation to the presence of WRPs and the techniques and approaches that will need to be employed during the clearing operations. An agreed means of communication between the operators and the qualified expert will be established prior to clearing commencing to ensure the safety of the WRPs. Operators will be required to abide by this agreed means of communication at all times. o The operators will develop a spatial approach to clearing that does not result in isolated patches of remnant vegetation and that generally achieves a progression of clearing in the direction towards the areas of remnant vegetation to be retained. If there is suitable habitat adjoining the development site, a clearing pattern that encourages movement of WRPs to this habitat will be adopted. o During clearing, the qualified expert will be present on the subject site to direct clearing operators, particularly when clearing trees are occupied by WRPs to ensure that these are cleared in a way that allows the animals to safely mobilise to adjacent areas. In addition, they will supervise any animal handling and the rescue of	• Prior to and during each clearing Stage.

injured animals should this be required. o In the event that a WRP is observed in a tree that is about to be cleared and there is a tree/area marked for retention near the tree which is to be cleared then the tree will be gently lowered to the ground to enable the animal to safely evacuate. The animal/s will be encouraged to move towards and occupy the trees to be retained. o If there are no trees/areas to be retained within the proximity of a tree occupied by a WRP but needs to be cleared, then the qualified expert will rescue the animal prior to the tree being pushed down. o Dreys will be inspected prior to clearing and possibly removed. o Operators need to take care when clearing under any midstorey vegetation as WRPs may be located within these areas. This can be achieved by undertaking a check by foot prior to machines entering the areas and clearing the vegetation. o If operators encounter injured WRPs during clearing then the qualified expert will make arrangements for the care and welfare of the injured animals. o Operators will be advised that displaced WRPs may shelter within stockpiled vegetation. To minimise any accidental injury or death of WRPs, personnel involved in the removal or disposal of stockpiles need to be made aware of and be prepared for the potential presence of WRPs. If WRPs are encountered they need to be removed by the qualified expert. Cleared vegetation will be removed from the site.	
• In relation to the qualified expert, the following requirements need to be met: o They need to have appropriate equipment to administer emergency care to any injured or displaced WRPs. o They need to have a suitable care facility of their own or have made prior arrangements with an appropriate carer who can rehabilitate any injured WRPs. o They need to be able to recognise suitable WRP habitat adjacent to the clearing.	• Prior to all clearing Stages.
• Prospective landowners will be provided with *The Western Ringtail Possum, a threatened species in our backyards* (GeoCatch) brochure (refer to **Appendix B**) which provides the following information: o What WRPs are and what they look like. o Why they are significant. o How to assist in the preservation of the species within the area. o Who to contact should they see any injured animals or need animals removed from their roof cavities.	• Post completion of each construction Stage.
• Nine reserves will be created throughout the subject site. These reserves have been strategically positioned within the subdivision to maintain connectivity and enable the retention of high quality vegetation. It is estimated that 9.28 ha of remnant vegetation will be retained within the reserves.	• Post construction.
• Within the reserves a total area of 3.70 ha will be revegetated in accordance with **Section 4.6**.	• Post construction of each Stage (where

applicable).
Performance Indicators • Persistence and increase of onsite WRP population. • Increase in WRP habitat and canopy connectivity.
Monitoring • To provide a final set of pre-clearing population data, a WRP survey will be undertaken prior to the commencement of any ground disturbing activities. • Following completion of the first clearing event, two WRP surveys will be undertaken at four week intervals. • The WRP monitoring and reporting described above will be replicated for Stage B and C of the proposed clearing program. • Revegetation monitoring will be undertaken in accordance with **Section 4.6**.
Reporting • A brief report will be provided to the DEC on the impact of WRP during the habitat removal process within 28 days of completion of vegetation clearing. • The survey results will be supplied to the DEC who will notify the proponent should it be deemed that the implementation of contingency actions is necessary. • An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.

4.4 *Caladenia procera*

4.4.1 Background

The presence of *Caladenia procera* within the subject site is restricted to three discrete areas within the existing golf course. In accordance with the DGP, these sub-populations will be captured within three orchid conservation areas, two being located within the golf course and one independently located within the proposed commercial area (refer to **Figure 5**).

While the inclusion of these reserves within the DGP has resulted in a reduction of residential lots from 273 to 239, a sustainable outcome has been achieved as only two individuals will be impacted by the development, as opposed to 105 (as per the previously approved DGP).

In order to ensure the persistence of the onsite *Caladenia procera* population, various management measures will be implemented as described below.

4.4.2 Agreement to Reserve

The golf course (which contains two orchid conservation areas) and the orchid conservation area located within the commercial area will be subject to an Agreement to Reserve pursuant to the *Soil and Land Conservation Act 1945.* An Agreement to Reserve enables the permanent protection of remnant vegetation via a Memorial over the property's title.

The Agreement to Reserve will be prepared by Fairway Developments and will restrict the amount of clearing that can occur within the protected areas and will specify that clearing can only occur for:

- Firebreaks; and
- Relocation of fairways, pathways and the hardstand area, including buildings, car park and potential recreational facilities.

The Commissioner of Soil and Land Conservation has commenced preparatory work in association with the Agreement to Reserve (refer to **Appendix A**). Given that the Agreement to Reserve can only be implemented once subdivision approval has been obtained from the WAPC, the associated documents and mapping will be finalised by the 30th June 2014.

4.4.3 Environmental Management

In order to ensure the long term protection of *Caladenia procera* within the subject site, Fairway Developments will implement a number of management and mitigation measures prior to, during and post construction.

EMP – 04 *Caladenia procera*	
Responsibility • Project Manager. • Contractors. • Property Owner (of Golf Course). • Golf Course Manager.	
Objectives • Long term preservation and enhancement of onsite *Caladenia procera* population.	
Potential Impacts • Direct loss of two individuals. • Decline in quality of habitat associated with *Caladenia procera*. • Introduction and spread of weeds and diseases. • Reduction and/or extinction of the onsite *Caladenia procera* population.	
Management Strategies	**Timing**
• Delineation of three orchid conservation areas (with an area of approximately 1.53 ha) to enable the protection of the core sub-populations of *Caladenia procera* located within the subject site. No clearing will be undertaken within these protected areas. This approach will provide for the preservation of the ecological integrity of the orchid populations.	• Prior to Stage B clearing.
• Where DRF have been identified and cannot be avoided during clearing, obtain a licence prior to disturbance in accordance with the *Wildlife Conservation Act 1950*.	• Prior to Stage B clearing.
• The locations of the tagged *Caladenia procera* individuals will be checked against the GPS coordinates within the flora report (Cardno 2010) to ensure that their locations remain tagged. Orchid locations which are untagged will be re-tagged.	• Prior to Stage B clearing.
• Clearing will be undertaken in accordance with **Section 4.1**. Clearing boundaries will be surveyed and clearly marked within the subject site prior to the commencement of ground disturbing activities. Clearing boundaries will also be clearly marked on all plans to aid in interpretation on site.	• Prior to Stage B clearing.
• Staff and contractors will be made aware of the location of significant flora onsite and their responsibility to ensure they are protected.	• Prior to and during Stage B clearing.
• Vehicles and machinery shall only use designated roadways and tracks	• During Stage B

and will be parked in designated parking areas only. • Vehicles and machinery used for ground disturbing activities (clearing and grubbing) will be cleaned before mobilisation to site and prior to demobilisation from site. • No clearing will occur in any of the orchid conservation areas and 5.94 ha of remnant vegetation will be retained within the golf course. • The orchid conservation areas will be protected through the provision of permanent boundary fencing around the perimeter of the golf course and a separate boundary fence will be provided around the perimeter of the protected area located within the commercial area. • Signage will be installed along the front of each orchid conservation area to supply information to the surrounding community. The signs will detail that the protected area is for the protection of flora but will not specifically reference the presence of DRF. These signs will be developed to the City of Busselton specifications.	clearing. • During all clearing Stages. • During Stage B clearing. • Post Stage B clearing. • Post Stage B construction.
Performance Indicators • The total number of individuals within the identified populations and the distribution of these populations will remain stable upon completion of the development, taking into consideration natural fluctuations. • No significant decrease in the condition of the populations as a result of the development, taking into account natural fluctuations.	
Monitoring • The *Caladenia procera* population and location will be surveyed during the first spring post construction of Stage B and then again two years later. • Revegetation monitoring will be undertaken in accordance with **Section 4.6**.	
Reporting • Clearing of more than two *Caladenia procera* individuals will be reported to the DEC and SEWPaC within 24 hours of the event. • Clearing of vegetation within the orchid conservation areas will be reported to the DEC and SEWPaC within 24 hours of the event. • The survey reports will be provided to the DEC upon their completion. • An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.	

4.5 Weeds and Disease

The invasion of weeds and disease is a key threat to the conservation values of the golf course and various reserves throughout the subject site. Subsequently, the implementation of measures to limit or control the degradation process is necessary.

4.5.1 Weed Control

Based on previous flora and vegetation surveys undertaken within the subject site, it has been identified that 26% of the flora is comprised of weed species (Cardno 2010). The primary objective of a weed control program is to prevent weed species competing with native plants for light, nutrients and moisture. Weeds within the subject site include both pasture species and woody weeds. The two

methods of weed control are chemical and non-chemical. Chemical controls can be applied by water spraying (from small backpacks to large machinery operated systems), wiping and pasting (used in conjunction with manual cutting of woody weeds). Methods of non-chemical weed control include using steam, manual removal (mainly for woody weeds using either machinery or hand implements), soil scalping, soil cultivation and mulching.

In consideration of the weed species identified within the subject site (refer to Weed list within Appendix B of the Flora and Vegetation Report (Cardno 2010)) the most suitable method for weed control is chemical spraying. Based on the location and species of weeds present, the weed control methodology detailed in **Table 2** will be undertaken. Weed control will be undertaken between June to September and will commence upon completion of the first clearing event.

Table 2. Weed control treatment.

Treatment	Suggested Constituents	Target Species
Glyphosate spray	2% Glyphosate including Pulse®, wetting agent and Chlorsulfuron	Broadleaf species e.g. *Pelargonium capitatum*
Selective grass spray	Fusilade and approved adjuvant (e.g. Pulse®)	Grass species e.g. *Ehrharta longifolia*
Geophyte spray	0.5g/100L metsulfuron and approved adjuvant (e.g. Pulse®)	Spring active bulb species e.g. *Asparagus asparagoides*
Cut and paint	Cut into vascular tissues apply Garlon and diesel to wound	Woody weeds e.g. *Zantedeschia aethiopica*

4.5.2 Weed Hygiene

The following weed hygiene practices will be employed during the construction and maintenance of the development:

- Machinery will be cleaned prior to entering each section to ensure that weed seeds and propagules are not transported between sections;
- All weed plant material containing seed heads, weeds that have allopathic properties and weeds that are able to reproduce vegetatively, including topsoil containing weed propagules will be disposed of to an appropriate waste management facility. Local council should be contacted for a list of disposal facilities within the local area; and
- Weed free fill is to be used for on-site earthworks.

4.5.3 Environmental Management

The following weed and disease controls will be implemented within the subject site to assist in the control of invasive species and enhance the outcomes of the proposed revegetation works.

EMP – 05 Weed and Disease Control
Responsibility • Project Manager. • Contractors. • Property Owner (of Golf Course). • Golf Course Manager.
Objectives • To prevent the introduction and spread of weeds and disease within the subject site.

- Control and/or reduce any existing infestation of target weed species within the subject site.

Potential Impacts

- Introduction and spread of weeds and disease (Phytophthora spp).
- Ecosystem collapse due to introduction and/or spread of disease and weeds.
- Herbicide application to non-target species.

Management Strategies	Timing
• Training and education with regard to the identification of weeds onsite will be made available to all personnel involved in or managing clearing activities.	• Prior to and during all clearing Stages.
• All earthmoving and ground engaging equipment will be inspected and cleaned of vegetation, mud and soil prior to entry and exit of the subject site.	• During all clearing Stages.
• Weeds are to be sprayed annually within reserve areas that are contained within the cleared areas for two years following the completion of clearing.	• During and post each clearing Stage.
• Spot spraying and hand pulling of emergent weed species within reserve areas will be carried out to gradually deplete seed stocks and reduce or eliminate any new colonies generated by construction activities.	• Post clearing of each Stage.
• Weed management will target declared weeds under the *Agriculture and Related Resources Protection Act 1976*, which includes *Zantedeschia aethiopica* (Arum Lily) and *Asparagus asparagoides* (Bridal Creeper) for the subject site.	• During and post clearing of each Stage.

Performance Indicators

- No persistent new introductions or spread of weeds or pests.
- Reduction or elimination of existing weed infestations.

Monitoring

- New infestations of weeds or pests will be identified and recorded.
- An initial assessment of the weed infestations will be completed in spring following planting to provide a set of baseline data.
- The monitoring assessments will be undertaken annually during the spring months for a period of two years following the completion of the revegetation works.

Reporting

- An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.

4.6 Revegetation and Landscaping

4.6.1 Background

There are 14.77 ha of reserves that are to retain remnant vegetation across the site (refer to **Figure 4**). Given that the reserves only contain approximately 9.28 ha of remnant vegetation, it is proposed to undertake 3.70 ha of revegetation within these reserves (refer to **Table 3**).

Table 3. Revegetation within the reserves.

Reserve	Total Area	Vegetated Area	Revegetation Area	Total Area Vegetated Post Development
Golf course	7.91ha	5.94ha	1.71ha	6.70ha
Linear Park (POS 4)	1.29ha	0.78ha	0.49ha	1.27ha
Foreshore Reserve (POS 2)	0.69ha	0.00ha	0.57ha	0.57ha
Lime Kiln Park (POS 1)	1.72ha	1.50ha	0.10ha	1.60ha
Orchid Conservation Areas	1.53ha	0.45ha	0.18ha	0.63ha
POS 3	0.25ha	0.10ha	0.05ha	0.15ha
POS 5	0.10ha	0.00ha	0.06	0.06ha
Busselton Bypass Reserve	0.66ha	0.25ha	0.54ha	0.64ha
Conservation Corridor	0.62ha	0.26ha	0.00ha	0.26ha
Total Area	**14.77ha**	**9.28ha**	**3.70ha**	**11.88ha**

In addition, within the reserves of the developed Stages 1 and 2 of the Old Broadwater Farm estate, approximately 0.86 ha is available for landscaping. The client has used these opportunities for revegetation and landscaping to improve the degraded or previously cleared areas in order to enhance the quality of WRP habitat throughout the entire estate.

4.6.2 Soil Preparation

There will be shallow contour scarification of the revegetation surfaces located within POS 5, the Foreshore Reserve and the western portion of the golf course to reduce the potential for surface erosion and promote a seed bed for establishing plants. Given that the remainder of the reserves are vegetated and contain significant flora species, scarification and/or ripping will not be undertaken. Contour scarification will be completed with an appropriately sized grader to a maximum depth of 0.2 m prior to direct seeding and planting of nursery raised seedlings.

4.6.3 Planting Densities and Species Diversity

Planting densities are based on the purpose of the reserve, either conservation or recreation. Seedlings and seed should be planted throughout the revegetation area at the densities described below:

- Conservation, which will include areas of the Foreshore Reserve, areas of the golf course, orchid conservation areas, Busselton Bypass Reserve and the revegetation areas in Stages 1 and 2 of the existing Old Broadwater Farm estate:
    - Trees – 1 plant per four (4) square metres;
    - Shrubs – 5 plants per square metre;
    - Sedges – 4 to 8 plants per square metre.
- Recreation, which will include areas of the Foreshore Reserve, areas of the golf course, POS 5, Linear Park and Lime Kiln Park:
    - Trees – 0.2 plants per square metre;
    - Shrubs – 1 plant per square metre.

Revegetation will be undertaken with a variety of species and will be based on the vegetation communities mapped within the flora and vegetation report (Cardno 2010). The species associated with

each vegetation community are provided with Appendix C of the flora and vegetation report (Cardno 2010). The reserves will be revegetated based on the following vegetation communities:

- **Golf course and orchid conservation areas** – CcAfKg: Forest of *Corymbia calophylla* over *Agonis flexuosa*, *Kunzea glabrescens*, *Hakea varia*, *Melaleuca preissiana* and *Acacia saligna* over *Lepidosperma striatum*, *Lomandra micrantha*, *Conospermum caeruleum* subsp. Busselton, *Tetraria octandra*, *Xanthorrhoea preissii* and *Schoenus efoliatus*.
- **Linear Park, POS 5 and Busselton Bypass** – CcErAf: *Eucalyptus rudis, Corymbia calophylla* and *Agonis flexuosa* closed low forest over a diverse understorey including the shrubs *Kunzea glabrescens, Hibbertia hypericoides, Conospermum caeruleum* over *Lomandra micrantha*, *Tetraria octandra* and *Austrostipa flavescens*.
- **Foreshore Reserve, POS 3 and revegetation areas in Stage 1 and 2 of the existing Old Broadwater Estate** – ErMrGT: Riparian and floodplain community of *Eucalyptus rudis* over *Melaleuca rhaphiophylla* over *Gahnia trifida, Juncus pallidus, Baumea articulate and Hibbertia cuneifolia.*
- **Lime Kiln Park** – CcAfLp**:** Forest of *Corymbia calophylla* over *Agonis flexuosa* over *Leucopogon propinquus*, *Dampiera alata, Phyllanthus calycinus* and **Ehrharta longiflora*.

Depending on availability, a mix of seed and seedlings will be used to enhance the success of the revegetation program.

The planting of seedlings will be undertaken between the months of May to July after substantial rain has saturated the soil profile. Non-phosphorous fertiliser granules will be used at the time of planting and seedlings will not be staked for support. Free standing plants have increased durability and strength as opposed to staked plants. Seedlings will be randomly clumped or spaced to achieve a natural effect.

Each seedling planted will have a biodegradable tree guard placed around them to reduce predation from rabbits and kangaroos. The tree guards will be held in place with three 60cm to 80cm bamboo sticks. These tree guards will be removed after one year which will prevent damage to the growing seedlings caused by constriction of outward growth.

4.6.4 Revegetation Maintenance

Revegetation works will require ongoing maintenance with the key elements being water, prevention of feral animals and suppression of smothering weeds. The prevention of damage or loss of plantings by rabbits will require maintenance of stakes and tree guards until plants are established. Ongoing weeding will also be required as previously discussed. This will entail spot spraying with the addition of mulch and fertiliser as required.

It is expected that following revegetation there will be a maximum loss of 20% of the original plantings. Subsequently, replacement plantings are required to maintain the original planting numbers at a minimum of 80% survivorship.

4.6.5 Landscaping

In addition to the revegetation outlined above, landscaping will be undertaken within the previously developed Stages 1 and 2 of the Old Broadwater Farm Estate with *Agonis flexuosa* seedlings. The road verge seedlings will be irrigated and fertilised and hence the survival rate of these should be high and these will be monitored and managed as part of the landscape contract by the appropriate contractor. The contractor will be required to demonstrate that at the end of the landscape maintenance period at

least 95% of the planted trees have survived, and this may require some additional planting after the two year maintenance period has ended.

4.6.6 Environmental Management

Revegetation and landscaping will be undertaken within the subject site to enhance habitat associated with WRPs and *Caladenia procera*. This will be achieved by implementing a series of management measures as provided below.

EMP – 06 Revegetation and Landscaping

Responsibility

- Project Manager.
- Contractor.
- Golf Course Manager.
- Property Owner (of Golf Course).

Objectives

- To establish sustainable vegetation communities compatible with regional ecological communities and capable of preserving local biodiversity.
- To successfully revegetate reserves within the development, enhancing habitat for flora and fauna species of conservation significance and improving the aesthetic values.

Potential Impacts

- Poor revegetation success.
- Loss of local biodiversity and habitat values.
- Impacts on significant flora and fauna species.
- Weed and disease invasion.

Management Strategies	Timing
• Disturbed areas will be revegetated within six months of completion of construction works.	• Post clearing of each Stage.
• Revegetation will occur progressively (i.e. revegetation within the Stage A clearing event will be undertaken as soon as practicable) to ensure that the rate of revegetation is similar to the rate of clearing.	• Post Stage A clearing.
• Where required the use of local provenance seed and seedlings will be utilised.	• Post clearing of each Stage.
• Management of weeds will be in accordance with **Section 4.5**.	• Post clearing of each Stage.
• Ground preparation, species selection and planting densities will be in accordance with Section **4.6.2**, **4.6.3** and **4.6.4**.	• Post clearing of each Stage.
• Landscaping of the areas within Stage 1 and 2 of the Old Broadwater Farm Estate will be undertaken in accordance with **Section 4.6.5**.	• Post all clearing Stages.
• Revegetated areas will be monitored and managed until the criteria for relinquishment are met.	• Post revegetation in each Stage.
• Weed control will be undertaken on an as needs basis following completion of the revegetation program.	• Post all clearing Stages.
• Revegetated areas will be signed and vehicles will be excluded	• Prior to revegetation in

from these areas.	each clearing Stage.
Performance Indicators • An 80% survivorship is achieved within the revegetation areas. • A 95% survivorship is achieved in landscaped areas.	
Monitoring • All revegetation monitoring will include an assessment of seedling survival and health, weed impacts, pest attack and tree guard condition, and a photo record. This assessment will be undertaken in randomly selected monitoring quadrats within each of the revegetation areas throughout the whole subject site. The dimensions of the monitoring plots will be five metres by five metres and will be pegged on each corner. GPS recordings will be taken in the quadrats and referred back to if pegs are removed or lost. An average of the revegetation success within each revegetation area will be determined based on the results from the monitoring quadrats. The results will be mapped on an aerial map to provide an overview of the success of the revegetation for the whole site. • An initial assessment will be completed in spring following planting to provide a set of baseline data. • The monitoring assessments will be undertaken twice a year during the autumn and spring months for a period of two years following the completion of the revegetation works.	
Reporting • An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.	

4.7 Reserve Purpose and Management

In order to reduce potential impacts associated with uncontrolled access to the golf course and the various reserves throughout the subject site, control measures will be implemented. It will also be necessary to implement long term management measures within the various reserves to ensure that their biological and ecological integrity is conserved and improved, where practicable.

4.7.1 Tenure

There will be a management period of a minimum of two years beyond the completion of the development works. Within this two-year period, Fairway Developments will undertake monitoring of orchids, weed management, revegetation, rubbish removal and general maintenance. Subsequently, the golf course and two orchid conservation areas within the golf course will remain within private tenure while the following reserves will be ceded to the City of Busselton (subject to the achievement of the revegetation targets provided within Section 4.6):

- Lime Kiln Park (POS 1) – Reserve for Landscape Protection;
- Foreshore Reserve (POS 2) – Reserve for Landscape Protection;
- POS 3 – Reserve for Recreation;
- Linear Park (POS 4) – Reserve for Landscape Protection;
- POS 5 – Reserve for Recreation;
- Orchid Conservation Area (within the commercial area)– Reserve for Landscape Protection; and
- Busselton Bypass Reserve – Reserve for Landscape Protection.

On this basis, management of these reserves will be the responsibility of the City of Busselton (refer to **Appendix C**). The City of Busselton will not however be responsible for any SEWPaC or DEC reporting requirements in relation to the relevant approval conditions.

4.7.2 Memorials on Title

In relation to the Conservation Corridor located on the larger lots adjacent to the Busselton Bypass Reserve, restrictive covenants will be implemented in accordance with Section 129B of the *Transfer of Land Act 1893.* The restrictive covenants will be used to notify the future landowners that their lot contains significant tree/s and/or remnant vegetation within the Conservation Corridor of which clearing is prohibited.

Restrictive covenants will be placed on lots during the subdivision phase in accordance with the Western Australian *Planning and Development Act 2005*.

4.7.3 Environmental Management

In order to ensure the long term protection of remnant vegetation within the reserves the following management measures will be implemented.

EMP – 07 Reserve Management	
Responsibility • Project Manager. • Town Planner. • Property Owner (of Golf Course). • Golf Course Manager.	
Objectives • Conserve and enhance the biodiversity, ecology and conservation values of the golf course and reserves. • Prevent unauthorised vehicular access into reserves and public access into conservation areas. • Limit potential anthropogenic impacts to significant flora and fauna species.	
Potential Impacts • Introduction and spread of weeds and disease (Phytophthora spp). • Indiscriminate dumping of waste. • Potential destruction of remnant vegetation and significant flora species.	
Management Strategies	**Timing**
• Permanent fencing will be installed and constructed to a height of at least 1.5 m using black coated PVC galvanised posts and top rail with black PVC galvanised wire mesh. The fence will be installed around the entire boundary of the golf course and the orchid conservation area located within the commercial area.	• Post Stage B construction.
• Permanent chain mesh fencing will be installed between the wetland and passive recreational areas within the foreshore reserve.	• Post Stage C construction.
• Bollards will be installed around the perimeter of linear park, foreshore reserve, lime kiln park and POS 3 and POS 5.	• Post construction of each Stage.
• Gates will be installed within all of the reserves to enable access to authorised personnel to conduct weed control and revegetation	• Post construction of each Stage.

works. • Any waste within the reserves and golf course will be removed during inspections of the reserves. • Annual weed control will be conducted within the reserves for two years upon the commencement of construction which will target *Zantedeschia aethiopica* (Arum Lily) and *Asparagus asparagoides* (Bridal Creeper). • Maintenance plantings will be conducted to infill any plants where there has been a poor survival rate (upon completion of the revegetation program). • Designate a purpose of Landscape Protection which recognises the value of the reserves for this purpose.	• During and post all construction Stages. • Post all construction Stages. • Post all clearing Stages. • Post all clearing Stages.
Performance Indicators • No unauthorised access into reserve areas. • No new anthropogenic impacts identified within the reserves. • Improved biodiversity and ecological values within the reserves.	
Monitoring • Incidental inspections of fencing and bollards to ensure that infrastructure is secure and intact and identify any incidents of uncontrolled access. • Annual inspections of weed cover and requirement for maintenance plantings.	
Reporting • An annual report which will document compliance with the relevant approvals and this management plan will be provided to the SEWPaC on the 12 month anniversary of the commencement of the action.	

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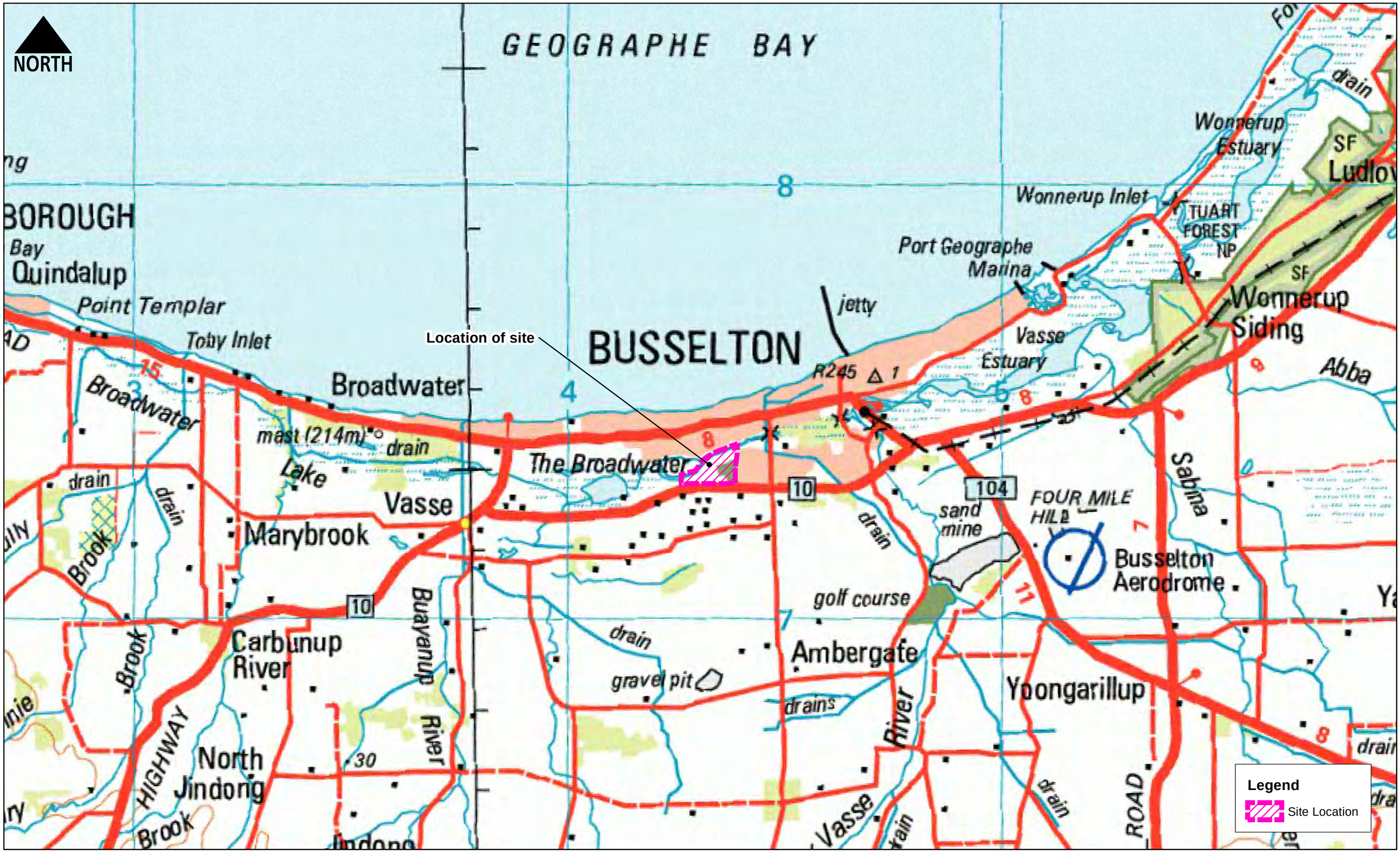
FIGURES



PROJECT	**Old Broadwater Farm**
DRAWING TITLE	**FIGURE 1 : Locality Plan**
PRINCIPAL	**Fairway Developments Pty Ltd**

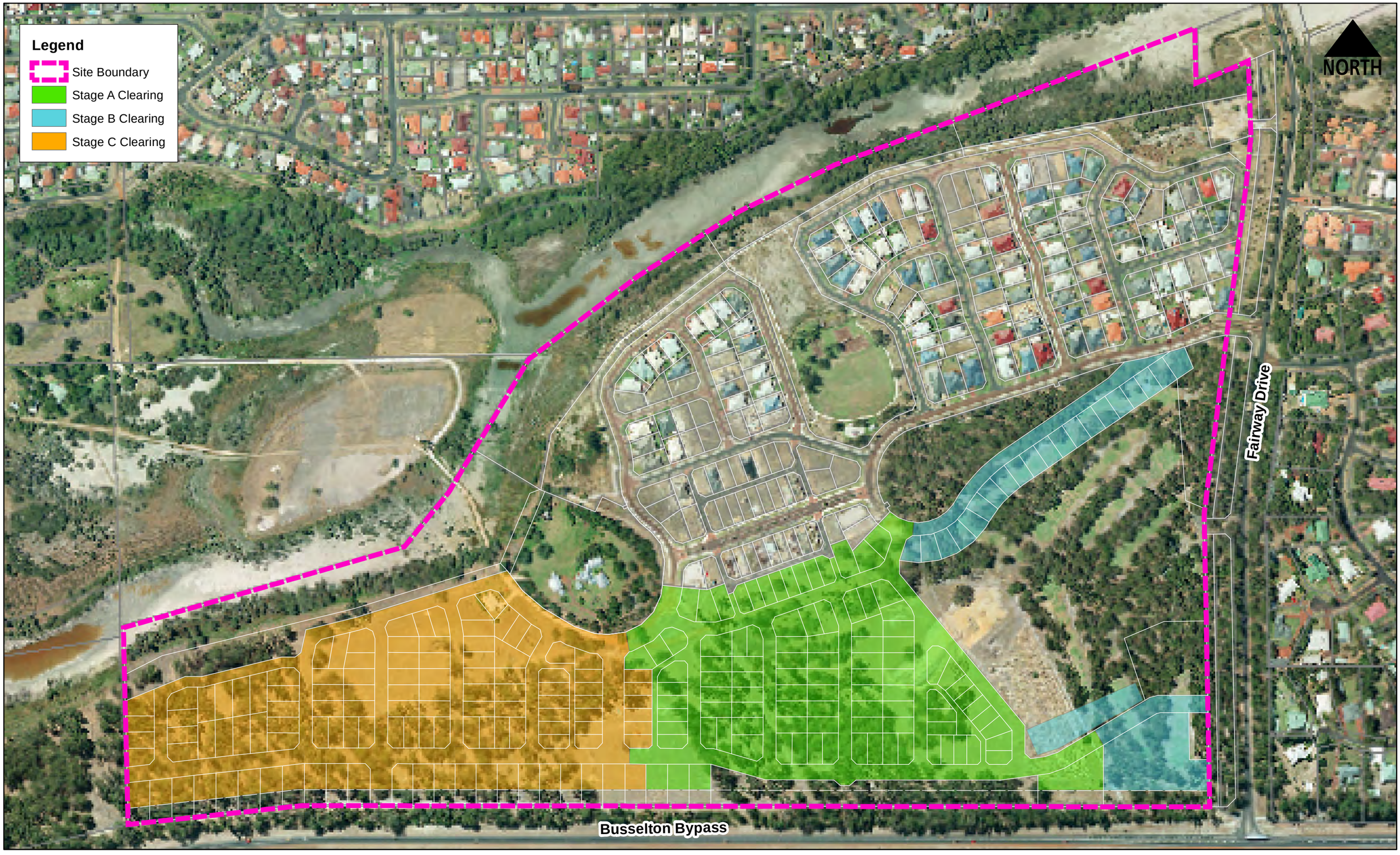
Scale: **1:80,000**

0 950 1,900 3,800 5,700 7,600 9,500 11,400 Metres

accendo AUSTRALIA
PO Box 5178
West Busselton
Western Australia 6280
Telephone (08) 9755 7217
Mobile 0418 950 852

Project Number	Drawing Number	Revision	Original
1260	**01**	**00**	**A3**

Designed	KMT	Checked	Date 18-01-13
Drawn	DTF	Approved	Sheet 1 of 1
Local Authority	City of Busselton		



PROJECT **Old Broadwater Farm**

DRAWING TITLE **FIGURE 2 : Staged Clearing**

PRINCIPAL **Fairway Developments Pty Ltd**

Scale: **1:4,000** 0 50 100 200 300 400 500 600 Metres

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Western Australia 6280
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Project Number	Drawing Number	Revision	Original
1260	**02**	**00**	**A3**

Designed	KMT	Checked	Date 18-01-13
Drawn	DTF	Approved	Sheet 1 of 1
Local Authority	City of Busselton		

PROJECT **Old Broadwater Farm**

DRAWING TITLE **FIGURE 3 : Golf Course Design**

PRINCIPAL **Fairway Developments Pty Ltd**

Scale: **1:2,000**

0 20 40 80 120 160 200 240 Metres

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Western Australia 6280
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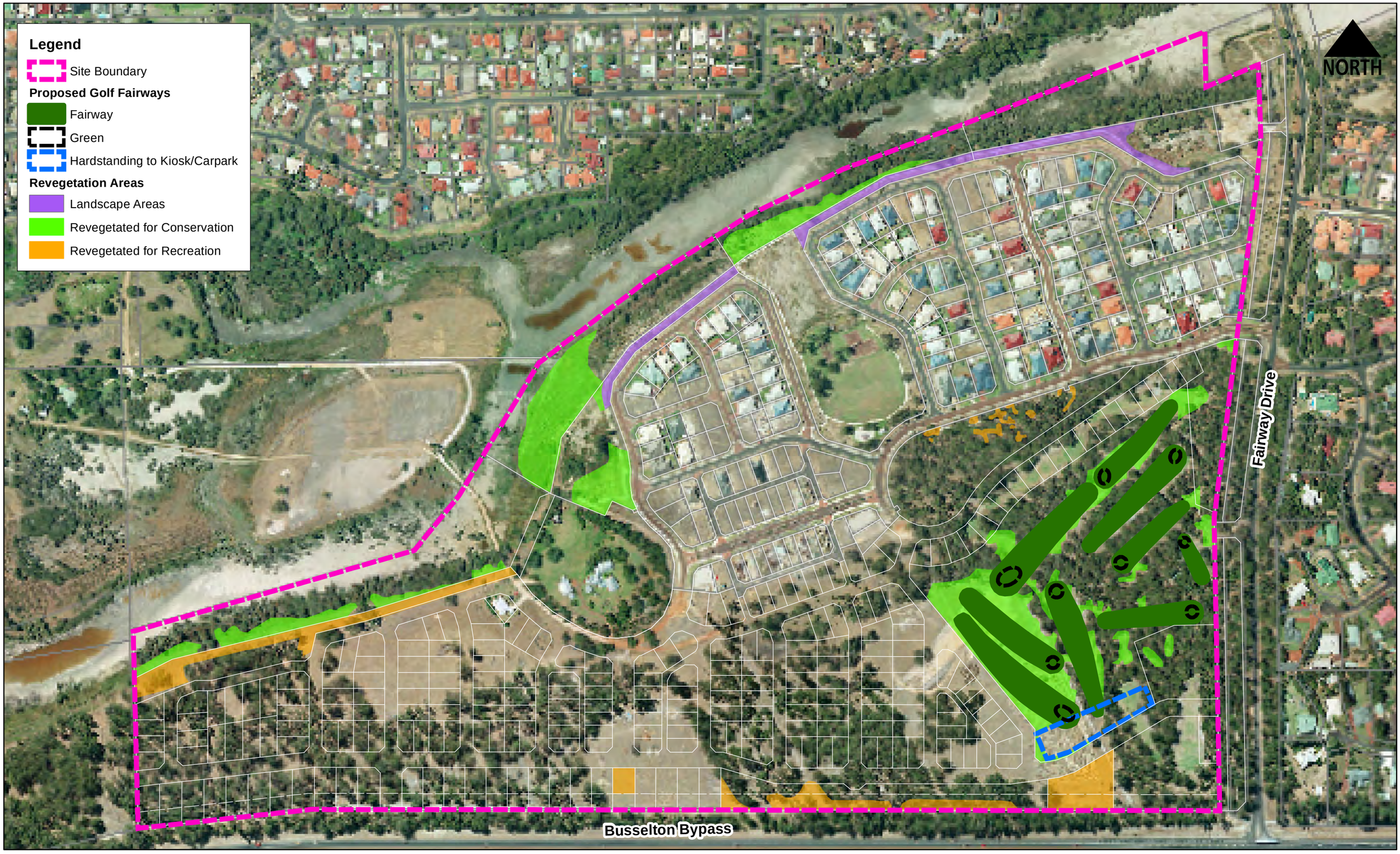
Project Number	Drawing Number	Revision	Original
1260	**03**	**00**	**A3**

Designed	KMT	Checked	Date 18-01-13
Drawn	DTF	Approved	Sheet 1 of 1
Local Authority	City of Busselton		



PROJECT	**Old Broadwater Farm**
DRAWING TITLE	**FIGURE 4 : Revegetation and Landscaping Areas**
PRINCIPAL	**Fairway Developments Pty Ltd**

Scale: **1:4,000** 0 50 100 200 300 400 500 600 Metres

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West Busselton
Western Australia 6280
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Mobile 0418 950 852

Project Number	Drawing Number	Revision	Original
1260	**04**	**00**	**A3**

Designed	KMT	Checked	Date 18-01-13
Drawn	DTF	Approved	Sheet 1 of 1
Local Authority	City of Busselton		

PROJECT **Old Broadwater Farm**

DRAWING TITLE **FIGURE 5 : Location of Reserves**

PRINCIPAL **Fairway Developments Pty Ltd**

Scale: **1:3,500**

0 40 80 160 240 320 400 480 Metres

accendo AUSTRALIA

PO Box 5178
West Busselton
Western Australia 6280
Telephone (08) 9755 7217
Mobile 0418 950 852

Project Number	Drawing Number	Revision	Original
1260	05	00	A3

Designed	KMT	Checked	Date 18-01-13
Drawn	DTF	Approved	Sheet 1 of 1
Local Authority	City of Busselton		

APPENDIX A – CORRESPONDANCE REGARDING THE AGREEMENTS TO RESERVE

Government of **Western Australia**
Department of **Agriculture and Food**

Mr A Bell
Fairway Developments (WA) Pty Ltd
PO Box 27
BUSSELLTON WA 6280

Our Ref:
Enquiries: Andrew Watson (9368 3282)
Email: andrew.watson@agric.wa.gov.au
Date: 21 January 2013

Dear Mr Bell

AGREEMENTS TO RESERVE (STAGE 3-OLD BROADWATER FARM, WEST BUSSELTON)

Please find the attached letter addressed to the Department of Sustainability, Environment, Water, Population and Community, that advises that my office has commenced negotiating agreements to reserve to protect native vegetation with Fairway Developments (WA) Pty Ltd.

Should have any enquiries please contact Ms Monica Coates in the first instance.

Yours sincerely

Andrew Watson
COMMISSIONER OF SOIL
AND LAND CONSERVATION

Att

Government of **Western Australia**
Department of **Agriculture and Food**

Mr S Gaddes
A/g Assistant Secretary
Compliance and Enforcement Branch
Department of Sustainability, Environment, Water,
Population and Community
GPO Box 787
CANBERRA ACT 2601

Your Ref: EPBC 2009/5231
Enquiries: Andrew Watson (9368 3282)
Email: andrew.watson@agric.wa.gov.au
Date: 21 January 2013

Dear Mr Gaddes

OLD BROADWATER FARM ESTATE SUBDIVISION – STAGE 3 BUSSELTON

I am writing to you to advise you that my office has been requested by Fairway Developments (WA) Pty Ltd, to negotiate three agreements to reserve (ATR) on land within this development.

The purpose of the ATRs will be to protect land for the management of vegetation in compliance with your conditions 7-10. The conditions imposed on the proponent require ATRs that are irrevocable and in perpetuity. Please be aware for future reference, that there is an error in the drafting of your conditions.

Under section 30B of the *Soil and Land Conservation Act 1945*, only conservation covenants may be expressed to be irrevocable. The ATRs negotiated in accordance with your condition may be varied or revoked by mutual consent. Both ATRs and conservation covenants may be in perpetuity and both may be registered as memorials on certificate of land title.

Should you have any queries in relation to t his matter, please contact Ms Monica Coates in the first instance on 9368 3282.

Yours sincerely

Andrew Watson
COMMISSIONER OF SOIL
AND LAND CONSERVATION

APPENDIX B – WESTERN RINGTAIL POSSUM BROCHURE

the western **ringtail possum**

A threatened species in our backyards...

People for Possums

Western Ringtail
Action Group

The Western Ringtail Possum

The Western Ringtail Possum, *Pseudocheirus occidentalis*, is a small marsupial, which is native to the southwest region of Western Australia. The Western Ringtail Possum was once widely spread across the south west land area from Perth to Albany. However, due to extensive land clearing for agriculture and urban development, the Western Ringtail Possum has now declined to less than 10% of its original geographical range. Busselton and Dunsborough urban areas support one of the last major populations of Ringtails. Protection of the Ringtails within the coastal strip from Busselton to Dunsborough is therefore essential for the survival of the species.

What do Western Ringtails look like?

The Western Ringtail Possum is a medium-sized nocturnal marsupial up to 1.3 kg in weight and approximately 40 cm in body length. The fur is dark brown above with cream to grey fur underneath. The tail grows to 41 cm long and has a white tip. The western ringtail possum can be distinguished from the Common Brushtail Possum *(Trichosurus vulpecula)* by its smaller rounded ears and thin prehensile tail, which is as long as its body (DEWHA).

Endangered or Abundant? Debunking a local myth...

Residents of the Busselton and Dunsborough urban areas frequently encounter local possums, giving the impression they are an abundant and healthy population. But when we consider that their habitat, the Quindalup vegetation complex has been reduced to 33% of its original land cover (WALGA) to make way for housing and industrial development, the possums have little choice but to find shelter in people's rooves and sheds, backyard trees and remaining peppermint woodlands. In fact, like the Whale Shark, the Red Panda and the Polar Bear, the Western Ringtail Possum is listed internationally as a threatened species (IUCN).

The Western Ringtail Possum is also classified by national conservation agencies as threatened. In Australia the ringtail is listed under the State *Wildlife Conservation Act 1950* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* as threatened and vulnerable to extinction within 10 years.

Why are Western Ringtails threatened in Dunsborough & Busselton?

- Removal of Peppermint trees from private property
- Land clearing for agriculture and urban development
- Excessive pruning of Peppermint trees disrupting the connectivity of the tree canopy
- Logging and burning of south-west forests
- Predation by feral cats and foxes
- Attacks from domestic cats and dogs
- Killed by traffic while crossing roads in search of food & habitat
- Poisoning by rat and snail bait
- Relocation to unsuitable habitat
- Summer/hot fires burning tree canopies and habitat.
- Diseases such a toxoplasmosis, carried by cats and other mammals.

What do they eat?

Western ringtails eat peppermint leaves *(Agonis flexuosa)* and other native leaves such as jarrah *(Eucalyptus marginata)*, marri *(Corymbia calophylla)* and local native plants such as Melaleucas and wattle species *(Acacia sp)* (DEC).

In urban areas possums also feed on a variety of garden species including rose bush leaves and flowers, and a variety of cultivated fruits.

A Western Ringtail's home

Western ringtails are nocturnal. They are active at night and sleep during the day often in dreys (nests). The possums build their dreys in the canopy of Peppermint trees [and other trees] with twigs and leaves they collect using their prehensile tails. Ringtails are also known to nest in hollows of large old trees or in the undergrowth where it is particularly dense and provides protection from predators. In urban areas possums sometimes nest in house or shed rooves when there are suitable openings for them to get in.

How to live happily with possums:

The Western Ringtail Possum is an iconic species in the Busselton and Dunsborough areas. Living so closely with wildlife offers many important opportunities to experience nature but can sometimes cause problems too. Here are some tips to find a happy balance.

1) Learn to appreciate your local wildlife such as possums.
2) Learn to love native gardening – unlike roses and other exotic species, native plants are suited to the local soil type and climate and have less chance of being negatively affected by possums. Possums have a particular liking to new rose buds and shoots and can often feast on these overnight. There are numerous attractive spring and summer flowering native species that will also brighten up your garden
3) Seal house eaves and install one or more possum boxes in your yard to provide an alternative habitat for the possums to encourage them not to nest in your roof.

Domestic Cat with dead possum – *Remember to lock domestic animals in at night (Photo: Mosman Council)*

4) Keep pets indoors at night – domestic dogs and cats have a huge impact on the local possums. Even a harmless scratch from a cat can kill a possum quickly from infection.

5) Possums prefer to eat native leaves rather than roses – give possums an alternative food source to your roses or fruit trees by:
   - Preventing further loss of native vegetation by retaining peppermint trees on your property.
   - Planting new peppermint trees or other native plants in your garden.
   - Planting peppermint trees along the verge. For more information about planting trees on your verge contact the Shire of Busselton.

6) As a last resort - there are some deterrents available such as netting, security lighting and chemical deterrents. However, all of these options can be costly and may have negative outcomes for the possums, your neighbours or other wildlife such as birds. Ask one of the authorities for more advice before using deterrents (see back of this brochure for more details).

Ringtails in the roof?

It is illegal to catch or trap Ringtails. A $10, 000 fine applies.
If you have one in your roof, the best way to encourage the possum to find a new home is to wait until the evening when it comes out to feed. Whilst they are out, block all potential access points to the roof. Useful materials include sheet metal, vinyl,

A basic Possum box design

(Living with Possums - DEC)

Baton attached to back for fixing to tree with 100mm galvanised nails, screws or plastic coated wire, 3-6m from ground. Hinged-lid and overhanging sides by 25mm

Hole=100mm diameter, near top and to one side

Height of sides 550mm at rear, 400mm at front;

Width of front and back panel = 300mm

Depth = 250mm

wood or wire netting with a mesh size smaller than 20mm, which should be fitted securely and snugly to prevent a possum from getting a claw hold and lifting the cover off the hole (Living with Possums Brochure, Land For Wildlife, DEC, 2009).

Nest boxes can be placed in trees around the area to provide alternative nests or to encourage possums out of rooves and sheds. These may be simple hollow logs with one end blocked, or specially designed waterproof wooden box constructions, placed about four metres above the ground, perhaps in the fork of a tree, but facing south or south-east away from the sun.

Trapping of fauna is illegal; contact your Busselton Department of Environment and Conservation office for further advice on 97525 555.

Why can't we just translocate the possums out of town and into the bush?

Possums are strongly territorial and easily stressed. The relocation of possums to other sites is not a viable option since studies have shown the survival rate of relocated possums is very low. Most are killed by predation or driven away by other territorial possums into unsuitable habitat where they most certainly perish.

Dying Peppermint trees in Busselton (Photo: C.Kemp DEC Busselton)

This is why it is so important to replace the loss of peppermint trees by planting new ones in our front and back gardens, along our road verges and in urban bushland.

Peppermint tree decline

Along with the ringtail's most pressing threat of urbanisation and land clearing, peppermint trees - the possums' homes - are becoming increasingly unhealthy and are in decline. Visible symptoms include yellowing of the leaves followed by a dying back and eventual death of the whole tree. The decline of the peppermint tree seems to affect trees within a wide range of ages and across different landscapes and is having an associated impact of possums through further loss of habitat and food.

How to spot Western Ringtails

The easiest way to find out if there are western ringtails in the area is to check for scats under trees and look for dreys in the canopy. At night take a torch and explore the canopies, looking out for shinning red-orange eyes and listening out for rustles in the branches and roof-tops.

Where to see a Ringtail Possum

Why not find out how many possums are in your local park? Take a torch and explore.

Where? Parks in Busselton and Dunsborough:

Wonnerup

- Captain Baudin's Reserve (Layman Road)
- Geographe
- Guerin Street Reserve (Guerin Street)
- Longlands Park (Willmott)
- Wilmott Park (Cookworthy Street)

Busselton

- Barnard Park (between Georgette St and Ford Road)
- Mitchell Park (Prince Street)
- Breedan Park (Peel Terrace)

West Busselton

- Hospital Foreshore (Foreshore Bicycle Path, Mill Road)
- Lou Western Oval (King Street)
- Glenleigh Road Reserve (Glenleigh Road)
- Hale Street Reserve (Hale Street)
- Dolphin Park (Kingfisher Blvd)

Broadwater

- Lions Park (Barnard Road)
- Minion Park (Little Collins Street)

Abby

- Unnamed Reserve (Cabarita Road)

Kealy

- Locke Nature Reserve (Caves Road)

Siesta Park

- Siesta Park Reserve (Siesta Park Road)
- Ambergate: Ambergate Reserve (Queen Elizabeth Avenue)
- Qunidalup: (Caves Road, next to Quindalup Fauna Park)

Dunsborough

- Melaleuca Park and Rivergum Place (Dugalup Brook pathway, Gifford Rd)
- Centennial Park (Foreshore walk, Geographe Bay Road)
- Meelup Regional Park (Meelup Beach Road)

Identifying different species

Western Ringtail Possum

Quenda (Photo: DEC)

Common Brushtail Possum

Brushtail-Phascogale (Photo: DEC)

What can we do to save the Western Ringtail Possum?

- Plant food for possums in your garden such as *Acacia saligna*
- Prevent clearing of habitat and retain peppermint trees on Shire, Crown and private land.
- Improve planning of urban areas so that more habitat is retained.
- Manage bushland sensitively
- Revegetate habitat corridors to reconnect fragmented bushland
- Revegetate with peppermint trees in suitable areas
- Ensure community members are responsible owners of cats and dogs
- Increase public awareness about the vulnerable status of the Ringtails
- Get involved! Volunteer with one of the local organisations working towards saving our ringtails.

If you would like to get involved in protecting Ringtails, contact one of the local organisations (see back for details).

For injured or orphaned animals:

For any injured or sick wildlife found, please try to wrap them in a towel or put them in a box or bag and take them straight to a vet for examination. In most cases the vet will not charge and when able to, and will hand them over to a carer for rehabilitation and release.

For more advice contact:

- Fostering Assistance for Wildlife Needing Aid Inc (FAWNA Inc): www.fawna.com.au
- Wildcare Helpline: 9474 9055
- Department of Environment and Conservation: 9752 5555
- Busselton Shire ranger: 9781 0444
- The Possum Centre Inc. - www.possumcentre.com.au

For more information or to find out about volunteering contact:

- GeoCatch: 9781 0111, www.geocatch.asn.au
- Busselton and Dunsborough Environment Centre 9754 2049
- Busselton and Dunsborough Volunteers 9754 2047

For advice and help with revegetation or home gardens contact:

- GeoCatch: 9781 0111
- Geographe Community Landcare Nursery 0429 644 885
- Dunsborough Coast & Landcare Inc: 9755 3384
- Toby Inlet Catchment Group Inc: 9755 3384
- Land For Wildlife - Department of Environment and Conservation: 97525533.

Acknowledgements:

We gratefully acknowledge the use of BDEC's (Busselton & Dunsborough Environment Centre) "The Western Ringtail Possum" brochure (2008) as a source of reference.

References:

- DEC. Department of Environment and Conservation
- DEWHA. Department of Environment, Water, Heritage & the Arts
- IUCN. International Union for Conservation of Nature. Red List of Threatened Species
- WALGA. Western Australian Local Government Association.

Photos Courtesy of: DEC Busselton, GeoCatch, Shire of Busselton, Pete Malavisi and Mosman Council.

"This project is supported by GeoCatch, through funding from the Australian Government's Caring for our Country"

GeoCatch

CARING FOR OUR COUNTRY

APPENDIX C – EXPLANATION OF AGREEMENT TO RESERVE FACILITY IN WA

G HAIR & Co

ABN: 83 789 510 773
PH: (08) 9754 1246
Fax: (08) 9752 1447

Post Address:
PO Box 27
Busselton WA 6280

Office Address:
Old Broadwater Farm
New River Ramble
Busselton WA 6280

Web & Email:
www.oldbroadwaterfarm.com
mike@oldbroadwaterfarm.com
carolyn@oldbroadwaterfarm.com

K Muir-Thompson
Principal Consultant
Accendo Australia
PO Box 5178
West Busselton WA 6280

Dear Kirsten

RE: AGREEMENTS TO RESERVE IN WESTERN AUSTRALIA (CASE EXAMPLE: *OLD BROADWATER FARM*, WEST BUSSELTON)

Thank you for your email dated 30 January 2013 in which you asked for an explanation of the agreement to reserve (AtR) facility in Western Australia (WA).

To begin with, it should be noted that I hold a Bachelor of Arts in Urban and Regional Planning (Hons.) from Curtin University. I am also a current member of the Planning Institute of Australia (PIA) and a Certified Practicing Planner (CPP) under this institution. I have 13 years of experience in total, with my time almost equally divided in both public and private practice (including nearly six years in a multi-disciplinary survey, planning and project management consultancy). I am therefore suitably qualified and experienced to provide advice in respect to all matters pertaining to subdivision and development in WA.

Amongst other things, section 30B of the *Soil and Land Conservation Act 1945* allows owners and the Commissioner for Soil and Land Conservation to enter into a written instrument (AtR) to set aside land for the protection and management of vegetation. The written instrument is a memorial document in the form prescribed by Landgate (WA titles office), but containing detailed information and mapping outlining the lot or portions the subject of the AtR. This information and mapping will take many months to prepare, with the majority being prepared by the Commissioner's office and other smaller parts (e.g. mapping) by the owner.

There is also a second part to the AtR process. In order for the memorial document to be registered against the certificate of title of the relevant property, it must be listed in the interests and notifications table of a deposited plan. In order to do this, an interest only deposited plan must be created and lodged, and you will be aware that the *Old Broadwater Farm* (OBF) environmental conditions involve two properties remote from one another. These are:

- Lot 9005 on Deposited Plan 46853, House 56 New River Ramble, West Busselton (Certificate of Title 2596-970). The relevant eastern portions of the OBF parent lot comprise the orchid conservation areas and the golf course containing western ringtail possum habitat.

- Lot 13107 on Deposited Plan 213299, Boyup Brook Cranbrook Road, Tonebridge / Frankland River (Certificate of Title 1765-286). The relevant portions of this farming lot comprise the black cockatoo habitats.

Site works for Stage 3A of OBF (stage of 56 freehold residential lots, the first for over six years) are programmed to commence in April or May 2013.

Under a perfect scenario it may be possible to finalise the memorial documents and create an interest only deposited plan for both lots concerned before the commencement of site works. However, a technical issue has arisen with the parent OBF lot in West Busselton (Lot 9005) that makes it unlikely for a memorial to be created on a deposited plan before the end of the year.

You see, if we were to create a memorial on the certificate of title of Lot 9005, it would inadvertently appear on the title of all residential lots subdivided from it (i.e. automatic carryover of limitations, interests, encumbrances and notifications from former tenure to current tenure). What we then need to do is lodge a subdivision application with the Western Australian Planning Commission (WAPC) to create the golf course / orchid conservation areas on separate standalone lot. A memorial would then be created for this lot alone, thereby leaving the remainder of the OBF estate unaffected.

A subdivision application to create the golf course / orchid conservation lot will take up to 90 days to process even if we start today. Because the golf course has buildings and improvements connected to water and power, the subdivision itself will not be straightforward, as these old service connections will likely need to be upgraded (i.e. required by conditions of WAPC approval). Furthermore, final marking will also need to be undertaken by a licensed surveyor given that new boundaries are to be established, unlike an interest only deposited plan which requires no field survey. Such a subdivision is likely to take up to 11 months to progress because of these requirements.

Notwithstanding this, it is my experience that conservation covenant or agreement to reserve documents can take up to six months or more to prepare and sign off, particularly given the considerable text and mapping to be prepared.

I trust this letter provides a suitable explanation of the situation and why we will be unable to finalise the AtRs prior to the commencement of Stage 3A site works. Should you have any further queries, please do not hesitate to contact the undersigned on (08) 9754 1246.

Yours faithfully

AARON BELL
PROJECT MANAGER (PART-TIME)
G HAIR & Co.

30 January 2013