CLEARING PERMIT APPLICATION FOR PART LOT 5000 SOUTH WESTERN HIGHWAY, WHITBY.

Introduction

Gold Fusion Pty Ltd (Gold Fusion) own a number of land parcels that collectively comprise the area covered by the endorsed Whitby Local Structure Plan (LSP). A copy of the endorsed Whitby LSP has been provided in **Attachment 1**. The Whitby LSP area is located approximately 45km south of the Perth Central Business District (CBD) within the Shire of Serpentine Jarrahdale, as shown in **Figure 1**. Gold Fusion are progressing subdivision of their landholdings in accordance with the endorsed LSP. This letter has been prepared to support the proposed clearing of native vegetation within the central-southern portion of the Whitby LSP area, in an area proposed to be utilised for sand excavation (herein referred to as "the site").

The site forms part of a future school and playing field and is bound by approved subdivision areas to the west and south-west, and future subdivision areas to the north and east, as shown in **Figure 2**. The site has not been subject to subdivision approval, with the proposed clearing to support the excavation of sand material, to be used within the Precinct 2 subdivision area. The extent of sand excavation is shown in **Figure 3**.

Due to the presence of some scattered native trees within the proposed extent of sand excavation, see **Figure 4**, this letter has been prepared to support the clearing permit process pursuant to the *Environmental Protection Act 1986* (EP Act). **Attachment 2** contains the signed clearing permit application form for processing by the Department of Environment and Regulation (DER). A copy of the Certificate of Title is provided in **Attachment 3**. The remainder of this letter contains supporting information to assist the DER in assessing the clearing permit application.

Context for proposed development

The broader area in which the Whitby LSP is located (Mundijong-Whitby area) was identified as being suitable for urban development as early as 1980, within *A Planning Strategy for the South-East Corridor* (Metropolitan Regional Planning Authority 1980), and reconfirmed in 1990 for urban development in *The Metropolitan Strategy* (Metropolitan Regional Planning Authority 1990a) and *The Urban Expansion Policy Statement* (Metropolitan Regional Planning Authority 1990b). More recently, the *South-East Corridor Structure Plan* (Ministry for Planning 1996) clearly identified the Mundijong-Whitby cell, including the Whitby LSP area, as an intended location for future urban expansion.

The *Mundijong-Whitby District Structure Plan* was prepared by the Shire of Serpentine-Jarrahdale (2011) to guide future urban expansion within the area. The plan aims to create a viable and liveable town for around 35,000 residents over the next 30 years, to be a well-connected community that is appropriate to the rural setting of the wider area and the associated natural landscape values (Shire of Serpentine-Jarrahdale 2011).

The Whitby LSP was prepared for Lots 24, 25 (now Lot 5000), 27 and 45 South Western Highway and Lots 302 and 399 Reilly Road, on behalf of Gold Fusion, to provide a more detailed level of land use planning for the 'Precinct A' portion of the *Mundijong-Whitby District Structure Plan* area. The Whitby LSP was adopted by the Shire of Serpentine-Jarrahdale and Western Australian Planning Commission in July 2012 and is provided in **Attachment 1**. As part of the Whitby LSP, approximately 140 hectares of Gold Fusion's landholdings will be retained and/or managed in perpetuity as part of Bush Forever Site No. 354. Bush Forever No. 354 is the outcome of a negotiated planning solution and will include land being vested with either the Shire of Serpentine-Jarrahdale or the Department of Parks and Wildlife for conservation-orientated management.

Various detailed environmental investigations were undertaken to support the LSP, including:

- Flora and Vegetation Survey and Wetland Assessment (Cardno 2006)
- Flora and Vegetation Survey Report (Cardno 2010a)
- Integrated Landscape Management Strategy (Cardno 2010b)
- Fauna Assessment (Level 1) Lots 22 – 27, 29 and 45 South Western Highway and Lots 302 and 399 Reilly Road Whitby (Harewood 2005)
- Fauna Assessment (Level 1) Lots 22 – 27, 29 and 45 South Western Highway and Lots 302 and 399 Reilly Road Whitby (Harewood 2010a)
- Black Cockatoo Habitat Assessment Lots 22 – 27, 29 and 45 South Western Highway and Lots 302 and 399 Reilly Road Whitby (Harewood 2010b)
- Graceful Sun-Moth Habitat Assessment Lots 22 – 27, 29 and 45 South Western Highway and Lots 302 and 399 Reilly Road Whitby (Harewood 2010c)
- Targeted Chuditch Survey Lots 22 – 27, 29 and 45 South Western Highway and Lots 302 and 399 Reilly Road Whitby (Harewood 2010d)
- Whitby Local Structure Plan (Roberts Day 2011)
- Subdivision associated with the Whitby LSP has commenced, with the Precinct 1 and Precinct 2 subdivision areas currently under construction. Precinct 3 is the next proposed stage of subdivision and will be submitted to the Western Australian Planning Commission (WAPC) for approval. The current subdivision areas have been shown in **Figure 2**.

Proposed Clearing Area

The proposed clearing area is located within the future primary school and senior school site, as shown within the Whitby LSP. The clearing will involve the removal of 0.41 ha of scattered native paddock trees to facilitate the excavation of sand fill material. The sand fill is proposed to be removed from an area of approximately 2.34 ha in size (referred to as "extent of sand excavation") and will be used for earthworks within the Precinct 2 subdivision area. The extent of sand excavation and the proposed clearing area are shown in **Figure 4**.

The sand excavation area is located within an area proposed for the oval/playing field within the school site, and the retention of trees within this area in the long-term is unlikely. The sand excavation area has considered the potential for trees to be retained around the perimeter of the oval, and has purposely avoided clearing in this area.

Flora and Vegetation Survey

Various flora and vegetation surveys have been undertaken within the Whitby LSP area by Cardno (2005, 2009 and 2010) and documented in Cardno (2010a), and included consideration of the site. The surveys were undertaken in accordance with Environmental Protection Authority's (EPA's) Guidance Statement No. 51 Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2004a), and included consideration of the presence of Threatened Flora, Priority Flora and/or Threatened Ecological Communities (TEC.

Two species of Threatened Flora and one TEC were identified within Bush Forever Site No. 354 in the north of the Whitby LSP area. This area will be retained within conservation reserve. No Threatened Flora, Priority Flora or TECs were identified within the site or proposed clearing area.

The survey identified 13 different local plant communities across the Whitby LSP area. These plant communities are described below and the location and extent of these communities is shown in Figure 5.

1. CcEl - Woodland of *Corymbia calophylla* with *Eucalyptus lane-poolei* over *Kingia australis* and *Xanthorrhoea preissii* over *Borya sphaerocephala* and *Mesomelaena tetragona* on flats with grey clay loam soils.

2. CcEr - Woodland of *Corymbia calophylla* with *Eucalyptus rudis* over *Xanthorrhoea preissii* over pasture grasses in minor channels with orange gravelly clay loam soils.

3. CcKa - Woodland to Open Woodland of *Corymbia calophylla* over *Kingia australis* and *Xanthorrhoea preissii* over *Adenanthos meisneri*, **Watsonia meriana var. bulbillifera* and **Eragrostis curvula* with *Meeboldina decipiens subsp. decipiens* on flats with sandy grey loam soils.

4. EcWm - Grassland of introduced species including **Ehrharta calycina*, **Eragrostis curvula* and **Watsonia meriana var. bulbillifera* with emergent *Xanthorrhoea preissii* and *Corymbia calophylla* on flats with grey sands.

5. AfBm - Open woodland of *Allocasuarina fraseriana* with *Banksia menziesii* over *Melaleuca systena*, *Stirlingia latifolia* and *Hibbertia hypericoides* over *Mesomelaena pseudostygia* and *Cyathochaeta avenacea* on flats with grey sands.

6. AsMp - Shrubland of *Acacia saligna* with *Melaleuca preissiana* over **Watsonia meriana var. bulbillifera* and **Eragrostis curvula* in shallow winter-wet depressions on grey sands.

7. EmAf -Woodland of *Eucalyptus marginata subsp. marginata* with *Allocasuarina fraseriana* over *Tetraria octandra* with pasture grasses on flats with grey-brown sandy loams.

8. EmXo - Woodland of *Eucalyptus marginata subsp. marginata* with *Allocasuarina fraseriana* and *Xylomelum occidentale* over *Xanthorrhoea preissii* over *Tetraria octandra* on flats with yellow brown loamy sands.

9. EmXp - Open woodland of *Eucalyptus marginata subsp. marginata* over *Xanthorrhoea preissii* and *Xanthorrhoea gracilis* over pasture grasses on flats with grey loamy sands.

10. ErMr - Forest of *Eucalyptus rudis* with *Corymbia calophylla* and *Melaleuca rhaphiophylla* over *Juncus pallidus*, **Watsonia meriana var. bulbillifera*, **Gomphocarpus fruticosus* and introduced grass species along a minor creek line with dark-brown sandy clay-loams.

11. TlMp - Low Forest of *Taxandria linearifolia* and *Melaleuca preissiana* over *Astartea scoparia* over *Juncus pallidus*, *Lepidosperma tenue* and introduced grasses.

12. Pc – Cleared paddocks with scattered trees (Parkland Cleared);

13. FP – Fence planting of *Eucalyptus rudis* and exotic eucalypts including **Eucalyptus robusta* and **Eucalyptus camaldulensis*.

Due to historical clearing within the Whitby LSP area for agricultural purposes, the majority of the Whitby LSP area is in 'Completely Degraded' condition consisting mainly of scattered paddock trees (primarily Marri and Jarrah) and an understorey of pasture grasses. The area of highest value in terms of flora is associated with the intact remnant vegetation in the northern extent of the Whitby LSP area (identified as Bush Forever Site No. 354), for which the condition of vegetation ranges from "Good" to "Excellent". The vegetation condition within the Whitby LSP area is shown in **Figure 6**.

The vegetation within the proposed clearing area is described as Parkland Cleared and is in 'Degraded' to 'Completely Degraded' condition, with scattered paddock trees and minimal understorey remaining. The proposed clearing area contains an overstorey of *Eucalyptus marginata* (jarrah) with *Allocasuarina fraseriana* (common sheoak) over *Xanthorrhoea preissii* and *Xanthorrhoea gracilis* over *Tetraria octandra* with pasture grasses and broadleaf weeds on flats with grey-brown sandy loams (Cardno 2010a).

Review of Historic Aerials

A review of historic aerial photography indicates that the site and the proposed clearing area have been historically disturbed, associated with clearing within the broader Whitby LSP area to support grazing and agricultural land uses, as well as more recently for use as a Blue Gum plantation (which was harvested in 2013). Historic aerial photography images from 1953 to 2015 have been shown in **Plate 1** through to **Plate 5** below.

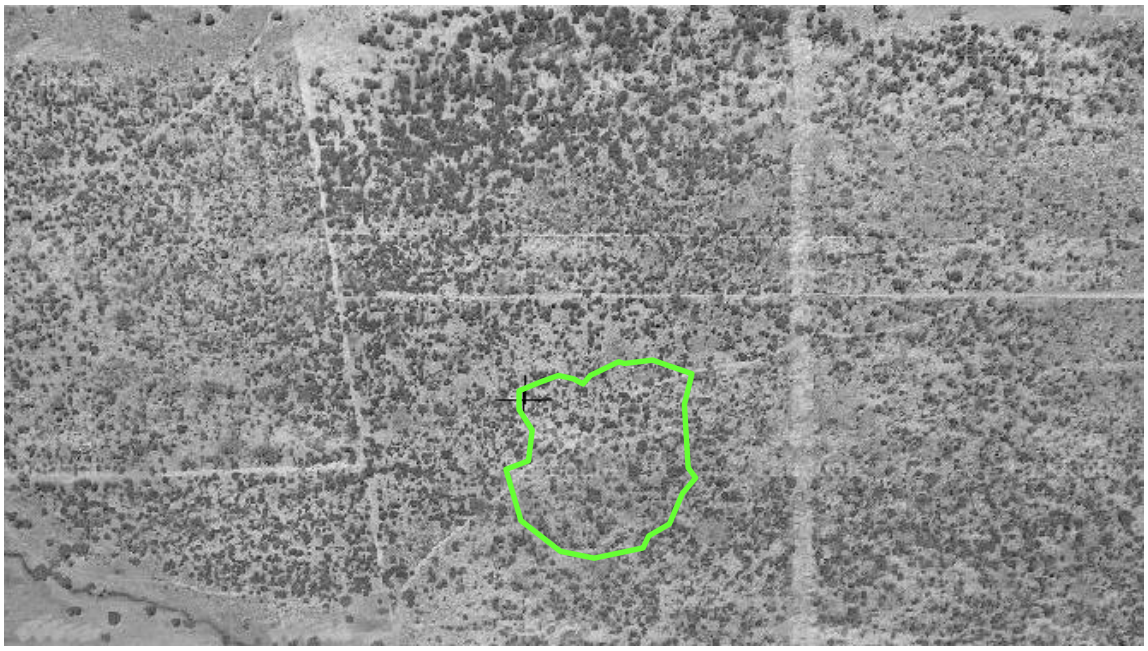

Plate 1: Aerial photography of the site (shown approximately) taken in 1953 showing the area prior to disturbance (Landgate 2015).

Plate 2: Aerial photography of the site (shown approximately) taken in 1995 showing extensive historic clearing and disturbance (Landgate 2015).

Plate 3: Aerial photography of the site (shown approximately) taken in 2000 showing the historic Blue Gum plantation within the proposed clearing area (Landgate 2015)

Plate 4: Aerial photography of the site (shown approximately) taken in 2013 showing a mix of scattered remnant vegetation and Blue Gum regrowth (Landgate 2015).

Plate 5: Aerial photography of the site (shown approximately) taken in 2015 showing earthworks associated with the Precinct 1 subdivision area located to the south-west of the site (Landgate 2015).

Clearing Principles

Under Section 51C of the *Environmental Protection Act 1986* (EP Act) clearing of native vegetation is an offence unless a clearing permit has been obtained or an exemption applies. When assessing clearing permit applications, the DER have regard to the ten clearing principles contained in Schedule 5 of the EP Act so far as they are relevant to the matter under consideration.

In support of this clearing application and the clearing within the site, Emerge have considered and responded to the ten clearing principles, which are detailed below.

Principle (a) - Native vegetation should not be cleared if it comprises a high level of biological diversity.

The proposed clearing area does not comprise a high level of biological diversity. The majority of the proposed clearing area contains dense pasture weeds with scattered remnant trees and shrubs. The predominant native tree species recorded were jarrah and common sheoak, shown in **Plate 7**. Occasional native shrubs were also recorded within this area, including *Xanthorrhoea preissii* and *Tetraria octandra*. Despite the presence of a number of scattered native species, the proposed clearing area is in 'Degraded' to 'Completely Degraded' condition, as shown in **Figure 6**.

Plate 6: Scattered native trees within the proposed clearing area

Due to the high level of historical disturbance (associated with previous cropping and grazing, as well as the use of the Whitby LSP area as a Blue Gum plantation) and the extensive weed invasion, the scattered native trees in 'Degraded' and 'Completely Degraded' condition cannot be considered to comprise a high level of biological diversity. Therefore clearing is not at variance with this principle.

Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

A number of fauna assessments have been undertaken within the Whitby LSP area and included consideration of the site and the proposed clearing area. A level 1 Fauna Survey was undertaken in April 2010 (Harewood 2010a) in accordance with *EPA Guidance Statement No. 56 Terrestrial Fauna Surveys in Environmental Impact Assessment in Western Australia* to support the Whitby LSP. In addition to this, based on the list of fauna species listed as potentially occurring within the Whitby LSP area, a habitat assessment for Graceful Sun-Moth (Harewood 2010d) and a Level 2 Targeted Fauna Survey for Chuditch (Harewood 2010b) and Black Cockatoos (Harewood 2010c) was completed in April 2010.

The majority of the Whitby LSP area is comprised of scattered paddock trees with an understorey of pasture grasses, and as such generally provides limited fauna habitat value. Based on the fauna assessment, eight broadly defined fauna habitats were identified within the Whitby LSP area. These are listed below:

1. Cleared Paddocks with scattered trees (Parkland Cleared) and harvested Blue Gum Plantations. In 'Completely Degraded' condition and covers the majority of the central and southern portion of the Whitby LSP area.
2. Open Woodland of Jarrah. In 'Degraded' condition and occurs in remnant patches adjacent to cleared areas throughout the Whitby LSP area.
3. Woodland of Jarrah and Sheoak. In 'Degraded' condition and also occurs in remnant patches adjacent to cleared areas throughout the Whitby LSP area.

4. Woodland of Jarrah, Sheoak, Woody Pear and Banksia. In 'Excellent' condition and occurs within the intact remnant vegetation in the northern extents of the Whitby LSP area.
5. Woodland of Marri and Flooded Gum. In 'Degraded' condition and occurs along the eastern portion of the central creekline through the Whitby LSP area.
6. Woodland of Marri and *E. lanepoolei.* In 'Very Good' condition with some areas in 'Excellent' condition and occurs within the intact remnant vegetation in the northern extents of the Whitby LSP area.
7. Creeklines.
8. Dam.

The entirety of habitat types 4 , 5 and 6 will be retained within Bush Forever Site No. 354 in the northern portion of the Whitby LSP area and provide suitable habitat for a range of fauna species including the three black cockatoos species identified above. Parts of habitat types 1, 2 and 3 will also be retained in Bush Forever Site No. 354 and other conservation managed areas of public open space within the Whitby LSP area. Portions of habitat type 1 will be retained wherever possible as part of development of the Whitby LSP area, within areas of public open space.

A total of 65 vertebrate fauna species were observed, caught, or evidence of their presence was recorded within the Whitby LSP area. Five fauna species of federal and/or state conservation significance were recorded at the site. These included:

- Carnaby's black cockatoo – observed on site, suitable foraging and breeding habitat recorded. Carnaby's black cockatoo is listed as 'Endangered' pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Forest Red-tailed black cockatoo – observed on site, suitable foraging and breeding habitat recorded. Forest red-tailed black cockatoo is listed as 'vulnerable' pursuant to the EPBC Act
- Baudin's black cockatoo – observed on site, suitable foraging and breeding habitat recorded. Baudin's black cockatoo and the
- Rainbow Bee-eater – observed on site, suitable foraging and roosting habitat recorded. Rainbow Bee-eater is identified as a 'Migratory' species pursuant to the EPBC Act.
- Southern Brown Bandicoot – observed on site, suitable foraging habitat recorded within northern creekline. Southern Brown bandicoot is 'Priority 5' pursuant to the *Wildlife Conservation Act 1950*.

Of the above, native trees present within the site may provide foraging, roosting or nesting habitat for the three species of black cockatoo namely Carnaby's black cockatoo, Baudin's cockatoo and Forest red-tailed black cockatoo (collectively referred to as the 'black cockatoos').

There are three habitat types which are used by black cockatoos which are listed below.

- Foraging: Vegetation with suitable food for black cockatoos.
- Roosting: Tall trees for resting overnight.
- Nesting: Trees with suitable nesting hollows.

The majority of fauna habitat values (particularly for the conservation significant fauna species) within the Whitby LSP area are associated with the large areas of intact remnant vegetation, found within Bush Forever Site No. 354, shown in **Figure 7**. While some of the scattered remnant trees within the proposed clearing area are considered to be suitable foraging and

roosting habitat for the three black cockatoo species, the proposed clearing area is largely cleared with limited or no understorey species and clearing of this area is unlikely to significantly impact the three black cockatoo species.

Separately, and in recognition of the large number of scattered paddock trees proposed to be cleared as part of implementing the Whitby LSP and the potential impact on the three black cockatoo species, Gold Fusion referred the majority of the Whitby LSP area (including the site) for consideration pursuant to the EPBC Act (EPBC Act referral 2014/7185). The federal Minister for the Environment determined that the proposed action, to clear remnant vegetation for residential and commercial purposes (including clearing isolated paddock trees), was 'not a controlled action' and was unlikely to have a significant impact on the relevant Matters of National Environmental Significance (see **Attachment 4**). No further assessment or approval pursuant to the EPBC Act was deemed to be required based on the referral.

Based on the above, while the scattered remnant trees within the proposed clearing area contains plant species identified as potential foraging and roosting habitat for the three black cockatoo species, these trees are unlikely to contribute significantly to the available resources for black cockatoos within the wider area. Bush Forever Site No. 354 in the northern portion of the Whitby LSP area is proposed to be retained in conservation reserve and provides the majority of fauna habitat within the Whitby LSP area. Conservation significant fauna species are unlikely to utilise the proposed clearing area to a high degree and therefore clearing is not considered to be at variance with this principle.

Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Based on the results of the flora and vegetation survey (Cardno 2010a) undertaken for the Whitby LSP area, no Threatened and Priority flora species were found or are considered likely to occur within the site or the proposed clearing area. A number of Threatened and Priority flora species were found within Bush Forever Site No. 354 in the northern portion of the Whitby LSP area, see **Figure 7**, and will be retained in conservation reserve as part of the development of the broader Whitby LSP. The proposed clearing is not considered to be at variance with this principle.

Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.

No Threatened or Priority Ecological Communities were identified within the site as part of the flora and vegetation assessment (Cardno 2010a) completed for the Whitby LSP area.

The vegetation within the proposed clearing area was described as Parkland Cleared which is in 'Degraded' and 'Completely Degraded' condition, with scattered paddock trees and minimal understorey remaining. As previously outlined, the proposed clearing area contains an overstorey of jarrah with common sheoak over *Xanthorrhoea preissii* and *Xanthorrhoea gracilis* over *Tetraria octandra* with pasture grasses and broadleaf weeds on flats with grey-brown sandy loams (Cardno 2010a). The statistical analysis to determine Floristic Community Types (FCTs) undertaken by Cardno (2010a) could not reliably allocate a FCT to the vegetation within the site due to the high level of disturbance, indicated by the high level of weed species and low number of native flora species.

The proposed clearing is not considered to be at variance with this principle.

Principle (e) – native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

The site and the proposed clearing area are located within the Forrestfield vegetation complex as mapped by Heddle *et al*. (1986). This complex is described as "vegetation ranges from open forest for *Corymbia calophylla – Eucalyptus wandoo – Eucalyptus marginata* to open forest of *Eucalyptus marginata – Corymbia calophylla – Allocasuarina fraseriana – Banksia spp*. Fringing woodland of *Eucalyptus rudis* in gullies that dissect this landform". Available information indicates that approximately 11.9% of the pre 1750 clearing extent of remnant vegetation remains of the Forrestfield complex, with 1.24% of this under formal protection (WALGA 2013).

A significant area of Forrestfield complex vegetation occurs in the north of the Whitby LSP area, within Bush Forever Site No. 354 (see **Figure 7**). This area contains intact remnant vegetation in 'Good' or better condition and is proposed to be retained in conservation reserve, as shown in the Whitby LSP (see **Attachment 1**). Vegetation within the site and the proposed clearing area is in 'Degraded' to 'Completely Degraded' condition and is therefore no longer considered representative of the Forrestfield complex.

Due to the already degraded nature of vegetation within the proposed clearing area, the removal of the scattered paddock trees is unlikely to reduce the overall extent of the Forrestfield vegetation complex, thus clearing is not considered to be at variance with this principle.

Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

As shown in **Figure 7**, there are no mapped wetlands within the proposed clearing area. Manjedal Brook is located approximately 400 m south of the proposed clearing area and vegetation within the proposed clearing area is not considered to be associated with the waterway. Clearing is not considered to be at variance with this principle.

Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Landform and soil mapping undertaken by Churchward and MacArthur (1980) indicates that the site is located within the Forrestfield Unit, described as the laterised foothills of the Darling Scarp, dominated by gravelly and sandy soils. During the process of clearing and excavation of sand fill, water trucks (or similar) will be operating to limit wind erosion and dust, with the area to be stabilised with hydromulch or similar following the completion of works. The *Integrated Landscape Management Strategy* (ILMS) (Emerge Associates 2011) prepared to support the Whitby LSP outlines the construction management considerations that will be implemented as part of future subdivision works.

The proposed clearing could bring about some risk of land degradation, with the removal of vegetation potentially resulting in some wind and water erosion, however the risk is not likely to be more significant than that currently posed by the largely cleared nature of the site, and will be further reduced through the future development of a school within the proposed clearing area. The risk of wind erosion can be easily mitigated post clearing through the dust management actions proposed to support the clearing and sand excavation process, outlined above and within the ILMS. Clearing is not considered to be at variance with this principle.

Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

The ILMS (Emerge Associates 2011) prepared to support the Whitby LSP outlines the construction management considerations that will be implemented as part of future subdivision works and considers management of works that interface with conservation areas, such as conservation significant wetlands, Bush Forever Site 354 and waterways.

No conservation areas are located in close proximity to the proposed clearing area. The proposed clearing will not impact on the environmental values associated with any conservation areas, therefore clearing is not considered to be at variance with this principle.

Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

The site and the proposed clearing area is not located within or nearby to a Priority Drinking Water Source Area or other sensitive water resources and is unlikely to affect the water balance or ecology of natural lakes, swamps or wetlands with conservation values.

The proposed clearing is unlikely to have an effect on the quality of surface or underground groundwater as:

- There is no known risk of Acid Sulfate Soils (ASS) occurring within the site.
- The depth to groundwater within the site is between 10 to 20 m, therefore no dewatering is expected to be required as part of the sand fill excavation process within the clearing area.
- Water infiltrating within the site will be by direct rainfall run-off and is not expected to contain potential contaminants.
- Manjedal Brook is located approximately 400 m south of the proposed clearing area, and through the management of works in accordance with the ILMS, clearing is unlikely to affect surface water quality.

In conclusion, the proposed clearing is unlikely to have an effect on the quality of surface or underground water and thus clearing is not considered to be at variance with this principle.

Principle (j) – native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

The site is not subject to flood risk, and the proposed clearing is unlikely to increase the risk of flooding, therefore is not considered to be at variance with this principle.

Planning Context

The wider Whitby LSP area is zoned “Urban” under the Metropolitan Region Scheme (MRS) and “Urban Development” under the Shire of Serpentine-Jarrahdale Town Planning Scheme No. 2 (TPS No. 2).

In accordance with the Whitby LSP, subdivision is progressing, with the Precinct 1 and Precinct 2 subdivision areas approved and subdivision works progressing in these areas (shown in **Figure 2**). Precinct 3 is the proposed next stage of subdivision within the Whitby LSP area, with a subdivision

application in the process of be prepared and submitted to the WAPC for consideration. Precinct 3 will support residential development and areas of public open space.

While the site will be subject to future residential development (as part of implementing the Whitby LSP), this clearing permit application has been prepared in advance of subdivision approval in order to support the excavation of sand fill material for use within the Precinct 2 earthworks and construction. The site forms part of a future primary school and high school site, and every effort has been made to maximise the opportunity for trees to be retained within the future school site, with the proposed sand excavation area found within the future oval location, where the ability to retain trees is minimal. The location of the school site is in accordance with the endorsed Whitby LSP and the likely layout of the school and associated oval has been discussed with and supported by the Department of Education and Training.

Summary and closing

This clearing permit has been prepared to support the excavation of sand fill material, to be used within Precinct 2 of the Whitby LSP area as part of earthworks and construction.

A total of 0.41 ha of scattered native paddock trees are proposed to be cleared to support the excavation of sand. The native vegetation within the proposed clearing area has been identified as Parkland Cleared, comprised of predominantly scattered paddock trees over pasture grasses, with limited understorey. These areas are in 'Degraded' and 'Completely Degraded' condition.

Emerge Associates believe that the proposed clearing is consistent with the clearing principles that have been addressed in detail within this letter. Furthermore, in the future the site will be subject subdivision in accordance with the Whitby LSP and therefore is not at variance to the proposed planning for the broader area. Should you have any questions regarding the content of this letter report please do not hesitate to contact the undersigned on 9380 4988.

Encl: Figures: Figure 1: Location Plan
Figure 2: Whitby Subdivision Precincts
Figure 3: Site Plan
Figure 4: Proposed Native Vegetation to be Cleared
Figure 5: Vegetation Communities
Figure 6: Vegetation Condition
Figure 7: Environmental Features

Attachment 1 – Endorsed Whitby LSP
Attachment 2 – Clearing Permit Application Form
Attachment 3 – Certificate of Title
Attachment 4 – Notification of Referral Decision from the Department of Environment

FIGURES

Figure 1:	**Location Plan**	**Plan Number: EP13-067(14)--F160a**	
Project:	Clearing Permit Application Whitby Estate	Drawn: ADB	Date: 28/07/15
		Approved: KK	Date: 28/07/15
Client:	Gold Fusion Pty Ltd	Checked: KK	Scale: 1:15,000@A4

0 150 300 450 600 Metres

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Figure 2:	**Whitby Subdivision Precincts**
Project:	Clearing Permit Application Whitby Estate
Client:	Gold Fusion Pty Ltd

Plan Number: EP13-067(14)--F166a

Drawn:	ADB	Date:	28/07/15
Approved:	KK	Date:	28/07/15
Checked:	KK	Scale:	1:15,000@A4

0 150 300 450 600 Metres

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Integrated Science & Design

Figure 3:	**Site Plan**
Project:	Clearing Permit Application Whitby Estate
Client:	Gold Fusion Pty Ltd

Plan Number: EP13-067(14)--F161a

Drawn:	ADB	Date:	28/07/15
Approved:	KK	Date:	28/07/15
Checked:	KK	Scale:	1:1,500@A4

0 10 20 30 40 50 Metres

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Figure 4:	**Proposed Native Vegetation to be Cleared**
Project:	Clearing Permit Application Whitby Estate
Client:	Gold Fusion Pty Ltd

Plan Number: EP13-067(14)--F164a

Drawn:	ADB	Date:	28/07/15
Approved:	KK	Date:	28/07/15
Checked:	KK	Scale:	1:1,500@A4

0 10 20 30 40 50 Metres

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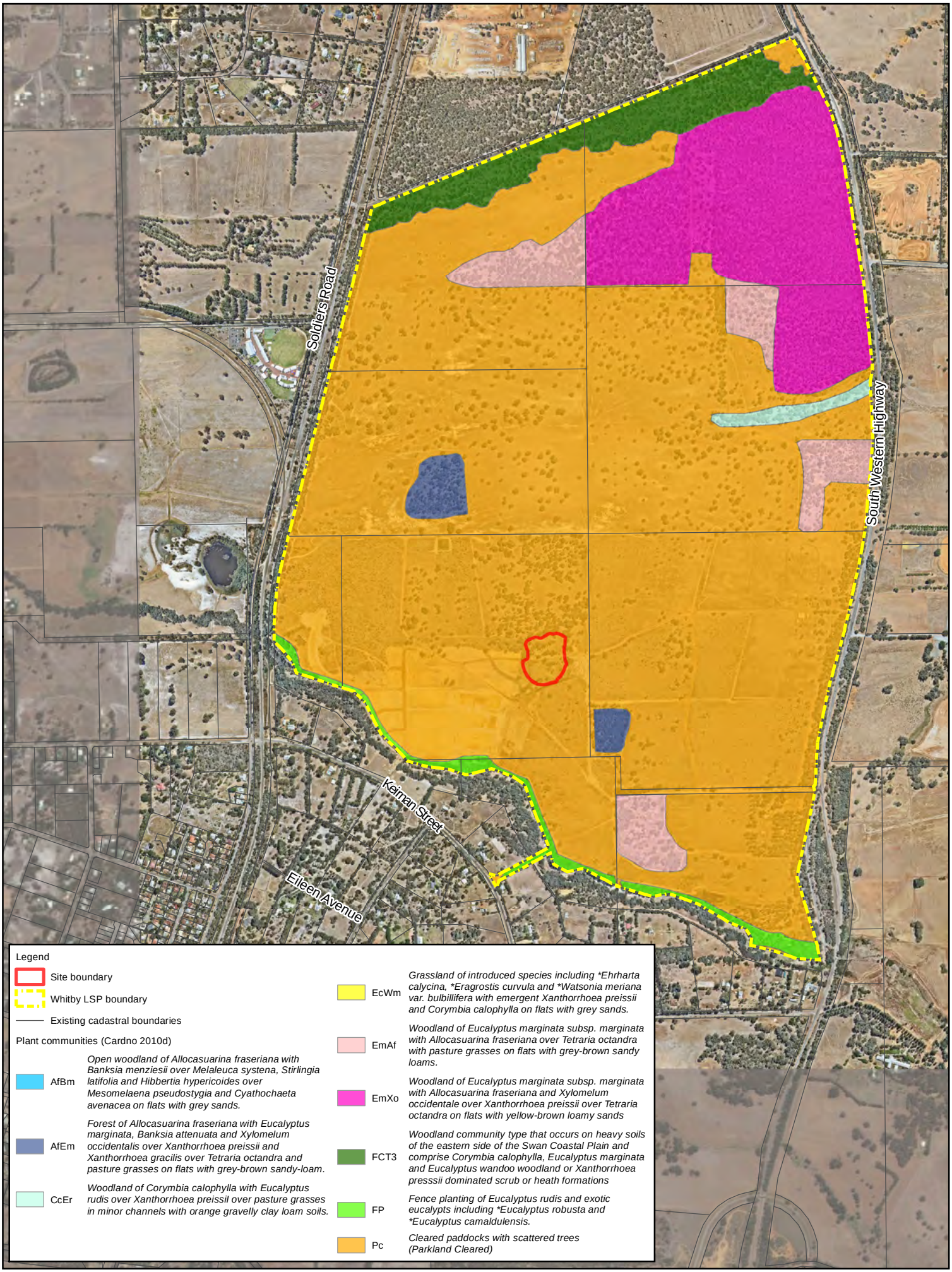

Legend

Site boundary

Whitby LSP boundary

Existing cadastral boundaries

Plant communities (Cardno 2010d)

AfBm — *Open woodland of Allocasuarina fraseriana with Banksia menziesii over Melaleuca systena, Stirlingia latifolia and Hibbertia hypericoides over Mesomelaena pseudostygia and Cyathochaeta avenacea on flats with grey sands.*

AfEm — *Forest of Allocasuarina fraseriana with Eucalyptus marginata, Banksia attenuata and Xylomelum occidentalis over Xanthorrhoea preissii and Xanthorrhoea gracilis over Tetraria octandra and pasture grasses on flats with grey-brown sandy-loam.*

CcEr — *Woodland of Corymbia calophylla with Eucalyptus rudis over Xanthorrhoea preissil over pasture grasses in minor channels with orange gravelly clay loam soils.*

EcWm — *Grassland of introduced species including *Ehrharta calycina, *Eragrostis curvula and *Watsonia meriana var. bulbillifera with emergent Xanthorrhoea preissii and Corymbia calophylla on flats with grey sands.*

EmAf — *Woodland of Eucalyptus marginata subsp. marginata with Allocasuarina fraseriana over Tetraria octandra with pasture grasses on flats with grey-brown sandy loams.*

EmXo — *Woodland of Eucalyptus marginata subsp. marginata with Allocasuarina fraseriana and Xylomelum occidentale over Xanthorrhoea preissii over Tetraria octandra on flats with yellow-brown loamy sands*

FCT3 — *Woodland community type that occurs on heavy soils of the eastern side of the Swan Coastal Plain and comprise Corymbia calophylla, Eucalyptus marginata and Eucalyptus wandoo woodland or Xanthorrhoea presssii dominated scrub or heath formations*

FP — *Fence planting of Eucalyptus rudis and exotic eucalypts including *Eucalyptus robusta and *Eucalyptus camaldulensis.*

Pc — *Cleared paddocks with scattered trees (Parkland Cleared)*

Figure 5: Vegetation Communities

Project: Clearing Permit Application
Whitby Estate

Client: Gold Fusion Pty Ltd

Plan Number: EP13-067(14)--F162a

Drawn:	ADB	Date:	28/07/15
Approved:	KK	Date:	28/07/15
Checked:	KK	Scale:	1:17,500@A4

0 150 300 450 600 Metres

emerge ASSOCIATES
Integrated Science & Design

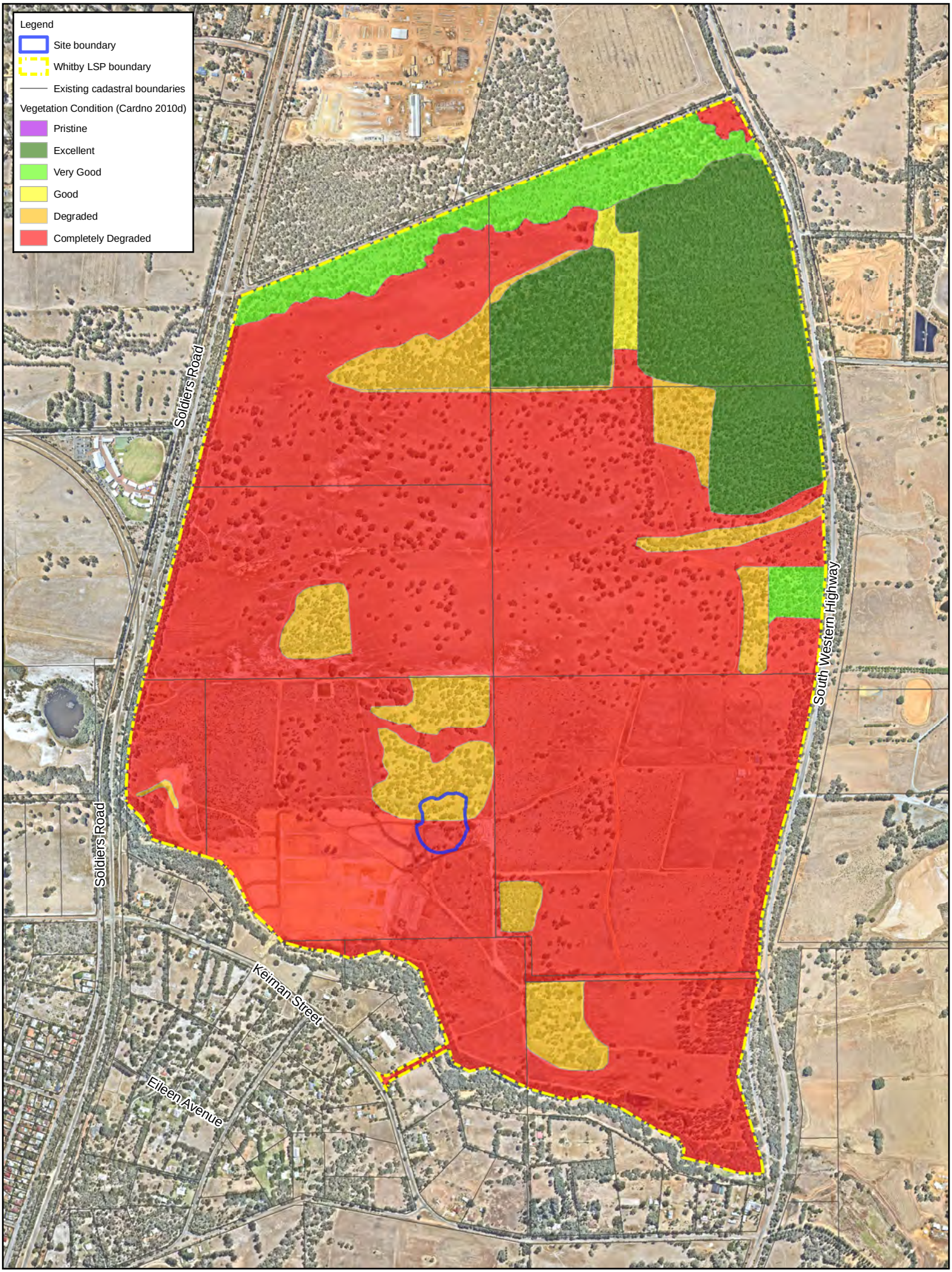

Figure 6: Vegetation Condition

Project:	Clearing Permit Application Whitby Estate
Client:	Gold Fusion Pty Ltd

Plan Number: EP13-067(14)--F163a

Drawn:	ADB	Date:	28/07/15
Approved:	KK	Date:	28/07/15
Checked:	KK	Scale:	1:15,000@A4

0 150 300 450 600 Metres

emerge ASSOCIATES
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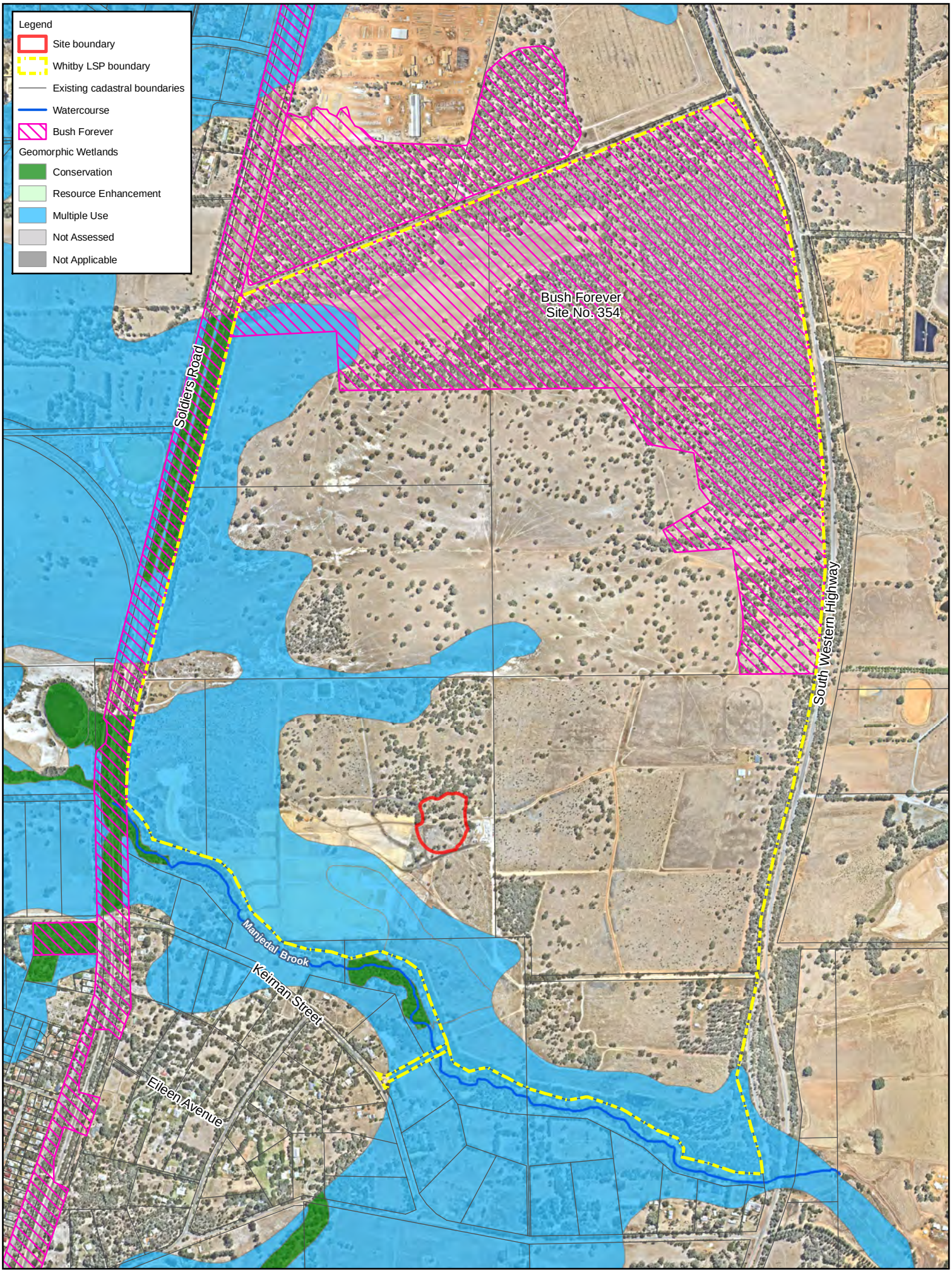

Figure 7:	**Environmental Features**	**Plan Number: EP13-067(14)--F165a**	
Project:	Clearing Permit Application Whitby Estate	Drawn: ADB	Date: 28/07/15
		Approved: KK	Date: 28/07/15
Client:	Gold Fusion Pty Ltd	Checked: KK	Scale: 1:15,000@A4

0 150 300 450 600 Metres

emerge ASSOCIATES
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Attachment 1

ENDORSED WHITBY LSP

Community Design Principles

- The LSP is intended as a guide for future urban development with the objective of generally identifying appropriate locations for housing types and densities whilst permitting flexibility to ensure the delivery of a diverse range of lot sizes;
- The neighbourhood structure should be sufficiently robust to facilitate diversity of land use (mixed use development) which is flexible and adaptable to change.

Activity Centre Principles

- The District Centre precinct is the identified activity centre and is envisaged to be a highly functional mixed use precinct comprising transit facilities; district and local retailing, mixed use development (including residential) within a high quality public domain;
- The District Centre will be subject to the preparation of a Activity Centre Structure Plan to determine design content including allocation of uses, final design layout, community and civic uses, retail floor space, transit provision, parking and general development standards, in accordance with WAPC policy;
- The District Centre precinct offers the opportunity for development in accordance with main street principles;
- The District Centre precinct is reliant on the adjacent rail crossing as depicted in the DSP and LSP, and is subject to change in commercial floorspace area should this not be provided
- Local activity nodes are identified on the LSP where mixed use development comprising residential, retail and/or civic uses will be permitted, subject to the preparation and approval of a Area Specific Plan.

Biodiversity and Resource Efficiency Principles

- Development and lot layout is to be oriented to maximise opportunities for energy efficient house design including passive solar design
- Development is to respect existing landforms and where practicable provide opportunities to retain the natural topography
- Design and implementation is to retain vegetation of local and regional significance where practicable

Housing Diversity (Lot Layout) Principles

Final residential densities will be determined at subdivision application stage; however will generally comply with the lot sizes and densities as identified on the LSP:

- Larger Residential Lots (Indicative density: R5-R10) 1000m² - 2500m²
- Residential Lots (Indicative density: R15-R30) 250m² - 700m²
- Local Activity Node Lots (Indicative density: R20-R50) 150m² - 500m²

Residential Density Code Plans are to be prepared, allocating density codes for individual lots subject of a subdivision application. Approved subdivision applications which identify residential coding generally consistent with the principles outlined in the LSP shall be deemed to be an approved modification to the LSP.

Figure 1: Statutory Local Structure Plan

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SCALE 1:5000 SHEET A1

REFERENCE NUMBER	DRAWING NUMBER	ISSUE
URB WIT	RD1 005	A