

### Native Vegetation Clearance

# Residential Subdivision Mentone Road, Hayborough

### Data Report

Clearance under the Native Vegetation Regulations 2017

30 September 2022

Prepared by JS Ayre & Associates

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# 1. Application information

**Application Details** 

Mentone Road, Hayborough	1		
City of Victor Harbor	Hundred:	Goolwa	
CT/5254/975	Parcel ID	F139612 A1	
	City of Victor Harbor	·	City of Victor Harbor Hundred: Goolwa

**Summary of proposed clearance** 

Purpose of clearance	Clearance required for a residential subdivision, including new allotments and all associated infrastructure likely to be necessary as part of the subdivision.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 35, Residential Subdivision
Description of the vegetation under application	<u>Size, type and general condition</u> – 21 scattered trees including 9 River Red Gums ( <i>Eucalyptus camaldulensis var camaldulensis</i> ); 8 SA Blue Gums ( <i>E. leucoxylon ssp leucoxylon</i> ) 1 Golden Wattle ( <i>Acacia pycnantha</i> ), 2 Coastal Wattle ( <i>Acacia longifolia ssp sophorae</i> ) and 1 Common Boobialla ( <i>Myoporum insulare</i> ).
Total proposed clearance - area (ha) and number of trees	21 scattered trees are proposed to be cleared.
Level of clearance	Level 4
Overlay (Pl and Des Code)	Native Vegetation Overlay

Map of proposed clearance area



Mitigation hierarchy	Creation of allotments and services precludes retention of vegetation.
SEB Offset proposal	Payment of <b>\$37,888.98</b>

# 2. Purpose of clearance

#### 2.1 Description

A residential subdivision is proposed for a block of land off Mentone Road at Hayborough, south of Adelaide. Allotments and associated infrastructure is planned for the site on which several remnant trees occur. The proponent seeks approval to remove the scattered trees to facilitate development of the site.

#### 2.2 Background

The site appears to have been grazing and/or cropping land for many years. The surroundings, between Adelaide Road, Waterport Road, Ocean Road and Mentone Road are slowly being developed with housing and commercial enterprises, leaving a small area of around 15 hectares undeveloped. The site assessed, of approximately 2.15ha, retains many of the few remaining scattered trees on the broader site.

Development of the area to the north of the current site, known as 'The Rise' has begun. This assessment covers a stage of the broader development. Figure 4. shows future stages associated with this, adjacent Ocean Road north of Mentone Road, and south of the already developed area, north of the current assessment site. There is little native vegetation present that might be impacted by these future stages.

#### 2.3 General location maps



Figure 1. The area within which scattered trees were assessed

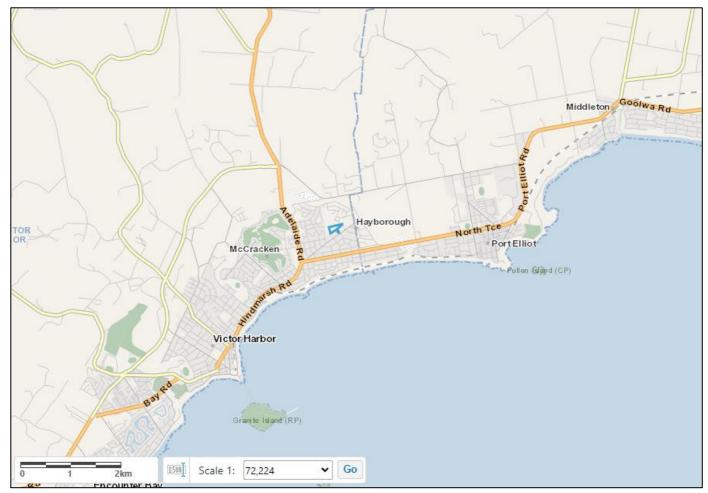


Figure 2. The site in context, in blue

#### 2.4 Details of the proposal

Land Australia proposes to subdivide and develop the 2.15ha parcel of land, located on the northern side of Mentone Road between Ocean Road and Adelaide Road, Hayborough, for the purpose of creating housing allotments for sale.

A land division plan is at Figure 2, showing the proposed layout of allotments within the area assessed. The proponent intends clearing all vegetation remaining on the site, including 21 remnant scattered trees and shrubs consisting of River Red Gum, SA Blue Gum, Golden Wattle, Coastal Wattle and Boobialla. A range of planted amenity trees and shrubs are also proposed for clearance.

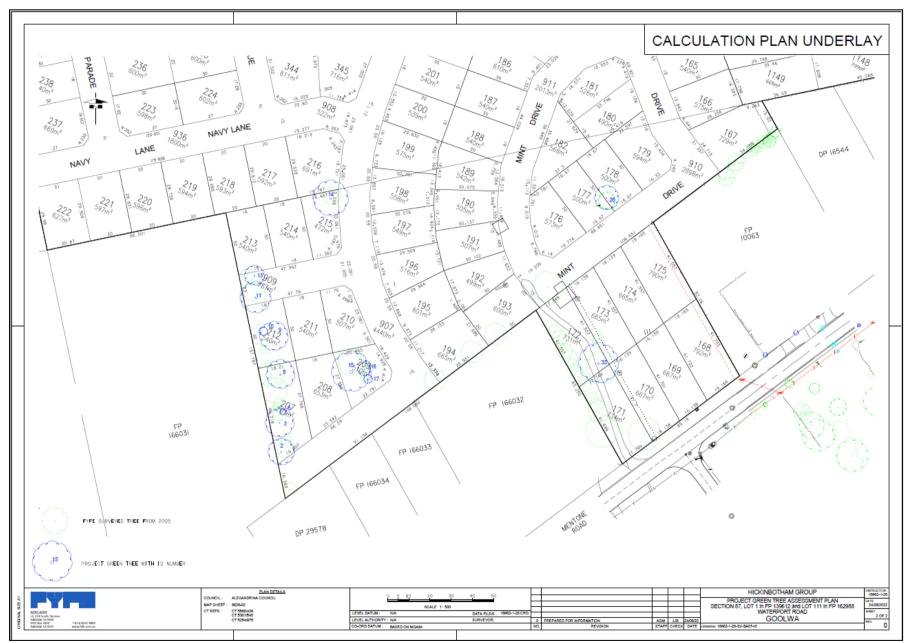


Figure 3. Land division plan

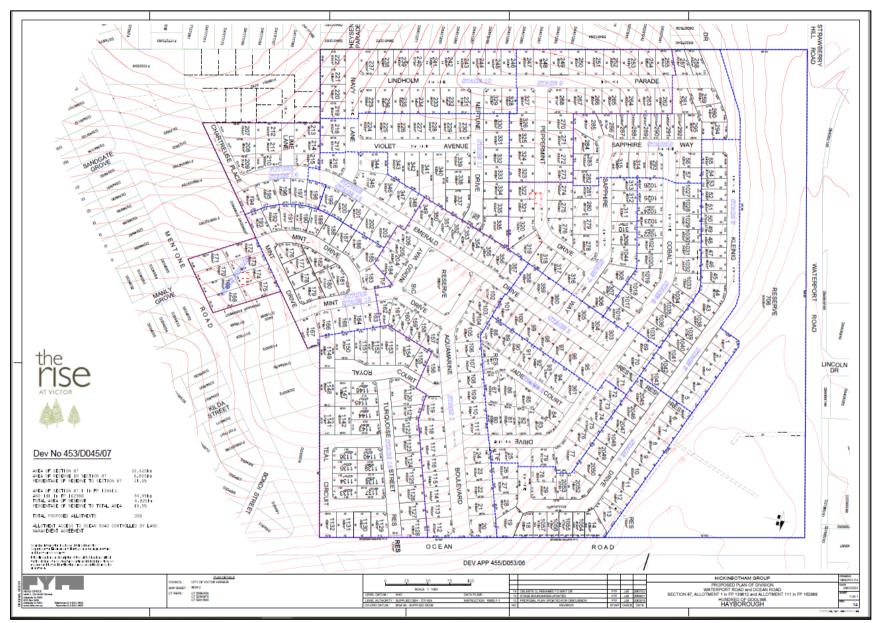


Figure 4. the broader 'The Rise' subdivision in relation to the current assessment

#### 2.5 Approvals required or obtained

Provide details of the following approvals or applications under the follow legislation, where relevant:

- Native Vegetation Act 1991 this report is in partial fulfilment of this Act. Naturemaps shows no previous clearance approvals in the vicinity
- Planning, Development and Infrastructure Act 2016 (Development Application No TBA)
- Aboriginal Heritage Act 1988 the site is within previously cleared and heavily disturbed farmland and not
  considered to pose a high risk of encountering Aboriginal sites or objects. If any objects, sites or remains are
  disturbed during construction, works will cease until relevant advice and approval is obtained.

#### 2.6 Native Vegetation Regulation

Regulation 12, Schedule 1; clause 35, Residential Subdivision

#### 2.7 Development Application information

Zone – Suburban Neighbourhood; Subzone – N/A; and Overlay – Native Vegetation Overlay.

### 3. Method

#### 3.1 Flora assessment

Following a review of background information and literature, a 2 hour field survey was undertaken on 21<sup>st</sup> September 2022 by Jackie Ayre of JS Ayre & Associates. The scope of works was outlined by the client prior to the field survey and informed by research using NatureMaps and Google Earth street view. The survey involved a general assessment of the remaining scattered trees on the site, including identification of possible habitat for species of conservation significance.

An online search was undertaken for Environment Protection and Biodiversity Conservation (EPBC) Act "Matters of Environmental Significance" and an interrogation of the Atlas of Living Australia (AoLA) and the BDBSA databases was completed as background to the field assessment. Twenty seven threatened plant species, including 2 EPBC listed Vulnerable, were recorded in the database search. No listed species were observed on site, and given the historic use of the land, its degraded condition and the lack of remnant vegetation communities present, none are likely to be present.

#### 3.2 Fauna assessment

A review of databases including the EPBC Act "Matters of Environmental Significance", AoLA and BDBSA was undertaken prior to the site visit to establish fauna species known, or considered likely, to occur at the site. All observations, calls and evidence of presence were recorded as field notes. Bird species were recorded when heard calling, or when observed within, adjacent to, or flying over the site. Evidence of fauna species presence was searched for and recorded when observed. If hollows were found, closer inspection with binoculars was undertaken. Twenty five listed species were recorded within 5km since 1995, however, fifteen were excluded as they are subspecies not occurring in the area, or species with particular habitat requirements not present at the site (wetlands, coastal, etc.) see Part 4.2 and Appendix 1 for further details.

### 4. Assessment Outcomes

#### 4.1 Vegetation Assessment

#### General description of the vegetation, the site and matters of significance

- Landform, geography and soils the site is within the Victor Harbor Lad System, which is described as gentle slopes abutting the ranges in the Victor Harbor Port Elliot area. Topography is a gently inclined outwash fan skirting ranges and funning down to Encounter Bay. The soils are hard setting sandy loam texture contrast profiles with dispersive clayey subsoils formed on alluvium.
- Landform feature of significance (rivers, creeks, rocky outcrops, etc.) the site is devoid of any significant landform features. A small stream runs SE of the site, and a larger creek (stream order 3) flows from north to south, east of the area.
- General overview of the vegetation under application as a whole the area surrounding the site has been cleared of vegetation and is almost entirely urban development. An exception is a recent development to the east, known as the Beyond Estate, where a significant portion of the development has been revegetated in an attempt to restore woodlands and wetlands. The estate is considered a model of sustainable and responsible development in the industry and has a range of plant communities within the revegetated zones, understood to have been sourced from local provenance stock.
- General description of the vegetation relating to type and condition (i.e. is the vegetation relatively homogeneous, or there significant variation) there is very little remaining vegetation to describe in the area. Coastal shrublands survive within a strip along the coastal dunes, but elsewhere only scattered trees of a former woodland survive, some of which can be described as 'isolated' under the Scattered tree Assessment Guidelines.
- Provide a description of the landscape context for the vegetation the scattered trees are isolated amongst developed land, where they occur alongside a range of native and non-native amenity species apparently planted in association with the former land use (farming). There is one Heritage Agreement 2.3km to the west, and Pullen Island Conservation Park lies to the ESE.

#### Details of the scattered trees proposed to be impacted

Tree ID – Tree 1
Tree spp: Eucalyptus leucoxylon
ssp leucoxylon
Number of trees: 1
Height (m): 14

Hollows: 0

Diameter (cm): 80

Canopy dieback (%): 10

Total Biodiversity Score: 3.66



Photo 1. A large and very healthy Blue Gum. Good structure. No hollows evident but approaching the age of hollow formation. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon. Located on the western boundary of the site.

Tree ID – Tree (cluster) 2	* 10				
Tree spp: Eucalyptus					
leucoxylon ssp leucoxylon					
Number of trees: 4					
Height (m): 2.5		Weight and			
Hollows: 0					
Diameter (cm): 5					
Canopy dieback (%): 0					
Total Biodiversity Score:		65个种的特殊	<b>"规制"和总统</b>	MALE IN THE	
0.84			Made		

Photo 2. A small group of young Blue Gums, one regenerated from a cut stump, others self-sown from adults nearby. Limited potential habitat for threatened species until maturation. Located beneath tree 1, on the western boundary of the site.

Tree ID – Tree 3	
Tree spp: Eucalyptus	
leucoxylon ssp leucoxylon	
Number of trees: 1	
Height (m): 10	
Hollows: 0	
Diameter (cm): 75	
Diameter (cm). 75	
Canopy dieback (%): 10	
Total Biodiversity Score:	
2.31	

Photo 3. A large healthy Blue Gum. Fair structure. No hollows evident but approaching the age of hollow formation. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum. Located on the western boundary of the site.

Tree ID – Tree 4

Tree spp: *Eucalyptus* 

camaldulensis var camaldulensis

Number of trees: 1 Height (m): 16

Hollows: 1 medium

Diameter (cm): 90

Canopy dieback (%): 20

Total Biodiversity Score: 4.15



Photo 4. A large River Red Gum of fair health and structure. One medium hollow evident, further hollow formation potential. Likely perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon. Located on the western boundary of the site.

Tree spp: Eucalyptus leucoxylon

ssp leucoxylon

Number of trees: 1

Height (m): 10

Hollows: 0

Diameter (cm): 100

Canopy dieback (%): 20

Total Biodiversity Score: 2.48



Photo 5. A large healthy Blue Gum with fair structure. No hollows evident but approaching the age of hollow formation. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon. A stick nest of approximately 300mm diameter was observed in the canopy. Located on the western boundary of the site.

Tree ID – Tree 6

Tree spp: Acacia pycnantha

Number of trees: 1

Height (m): 2.5

Diameter (cm): 3

Hollows: 0

Canopy dieback (%): 0

Total Biodiversity Score: 0.33



Photo 6. A small Golden Wattle of good health and poor structure. Limited potential habitat for threatened species but adds to the diversity of the site. Located on the western boundary of the site.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1 Height (m): 16

Hollows: 2 small

Diameter (cm): 90

Canopy dieback (%): 20

Total Biodiversity Score: 4.15



Photo 7. A large and reasonably healthy Blue Gum with good structure. Two small hollows evident, further hollow formation likely with age. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon. Located on the western boundary of the site.

Tree spp: Eucalyptus leucoxylon

ssp leucoxylon

Number of trees: 1

Height (m): 12

Hollows: 0

Diameter (cm): 70

Canopy dieback (%): 30

Total Biodiversity Score: 2.11



Photo 8. A large Blue Gum of poor health and fair structure. No hollows evident. Some potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Greyheaded Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon, limited by its condition and amount of dieback. Located on the western boundary of the site.

Tree spp: Eucalyptus camaldulensis var camaldulensis

Number of trees: 1

Height (m): 20

Hollows: 0

Diameter (cm): 120

Canopy dieback

(%): 10

Total Biodiversity Score: 6.16

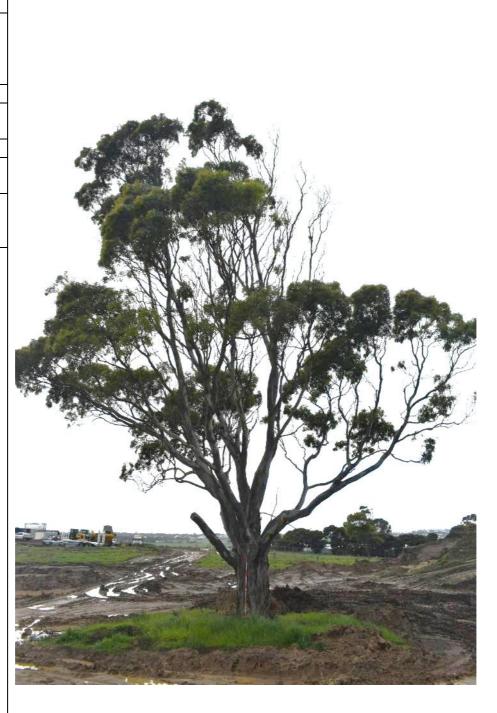




Photo 9, 10 and 11. A large Blue Gum. Fair structure, impacted by recent poorly executed pruning leaving three branch stubs (arrowed) with potential for epicormic response growth and subsequent high failure likelihood. Pruning appears to have been for height clearance for excavation equipment. Significant disturbance within the Tree Protection Zone with resulting compaction, waterlogging and potential root impact. No hollows evident but approaching the age of hollow formation. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and possible nesting site for Grey Falcon. Located on the northern boundary of the site.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1 Height (m): 16

Hollows: 1 medium

Diameter (cm): 130

Canopy dieback (%): 10

Total Biodiversity Score: 6.22



Photo 12. A large and healthy River Red Gum with fair structure. One medium hollow evident, further hollow formation likely with age. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum. Located amongst a small group on the central west portion of the site.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1 Height (m): 16

Hollows: 0

Diameter (cm): 50

Canopy dieback (%): 5

Total Biodiversity Score: 2.35



Photo 13. A large and healthy River Red Gum with good structure. No hollows evident, hollow formation potential as it matures. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and potential future nesting site for Grey Falcon as the tree grows Located amongst a small group on the central west portion of the site.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1

Height (m): 14

Hollows: 0

Diameter (cm): 30

Canopy dieback (%): 15

Total Biodiversity Score: 1.09



Photo 14. A small River Red Gum with good structure, but somewhat suppressed by trees adjacent. No hollows evident. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum. Located amongst a small group on the central west portion of the site.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1

Height (m): 6

Hollows: 0

Diameter (cm): 15

Canopy dieback (%): 5

Total Biodiversity Score: 0.34



Photo 15. A small River Red Gum with fair structure but suppressed by trees adjacent. No hollows evident. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum. Located amongst a small group on the central west portion of the site.

Tree ID – Tree 14 Tree spp: Acacia longifolia var sophorae Number of trees: 1 Height (m): 2 Hollows: 0 Diameter (cm): 5 Canopy dieback (%): 0 **Total Biodiversity Score:** 0.31

Photo 16. A Coastal Wattle of good health and structure. Limited potential habitat for threatened species but adds to the diversity of the site. Located on the western boundary of the site. NOTE - nominated as *Acacia pycnantha* in the scattered tree scoresheet in the absence of Coastal Wattle as a selection option. Normally encountered as part of a shrubland community rather than a single specimen, but not part of a shrubland community in this case.

Tree spp: Eucalyptus

camaldulensis var camaldulensis

Number of trees: 1

Height (m): 10

Hollows: 0

Diameter (cm): 60

Canopy dieback (%): 20

Total Biodiversity Score: 1.32



Photo 17. A large River Red Gum in fair condition with good structure. No hollows evident, hollow formation potential as it matures. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and potential nesting site for Grey Falcon. Located in the central part of the site.

Tree ID – Tree 16

Tree spp: Eucalyptus camaldulensis var camaldulensis

Height (m): 22

Hollows: 0

Diameter (cm): 120

Canopy dieback (%): 10

Total Biodiversity Score: 7.42



Photo 18. A large, healthy River Red Gum with good structure and very high amenity value. Very dense canopy of low diameter scaffold branches, may explain the lack of hollows. Potential perching, feeding, roosting habitat for Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Yellow-tailed Black Cockatoo, Grey-headed Flying Fox, Common Brushtail Possum, and potential nesting site for Grey Falcon. Located at the southern part of the site, visible from Mentone Road.

Tree spp: Acacia longifolia var

sophorae

Number of trees: 1

Height (m): 4

Hollows: 0

Diameter (cm): 5

Canopy dieback (%): 0

Total Biodiversity Score: 0.51



Photo 19. A Coastal Wattle of good health and structure. Some potential habitat for threatened species, adds to the diversity of the site. Located on the western boundary of the southern portion of the site. NOTE - nominated as *Acacia pycnantha* in the scattered tree scoresheet in the absence of Coastal Wattle as a selection option. Normally encountered as part of a shrubland community rather than a single specimen, but not part of a shrubland community in this case.

Tree spp: Myoporum insulare

Number of trees: 1 Height (m): 2

Hollows: 0

Diameter (cm): 2

Canopy dieback (%): 0

Total Biodiversity Score: 0.24



Photo 20. A small healthy Common Boobialla. Not a hollow bearing species. Limited habitat for threatened species. Located on the western boundary of the southern portion of the site. NOTE – nominated *Myoporum platycarpum* in the scoresheet in the absence of this species as a selection option.

#### Site map showing areas of proposed impact



Figure 5. Scattered trees as described above

### 4.2 Threatened Species assessment

#### **Flora**

While there were twenty seven listed species recorded within 5km since 1995, none were observed during the site assessment. Tree and shrub species such as Pink Gum, Manna Gum, Silver Daisy-bush, Hop-bush Wattle, Flinders Ranges Wattle and Tate's Grass-tree would have been obvious had they been present.

Exotic herbs and grasses dominate the understorey layer, including several declared and environmental weeds such as Bridal Creeper, Boxthorn, Apple of Sodom, Capeweed, Soursob, Kikuyu and Couch. The ground layer was dense and up to knee high in paces, obscuring any smaller native species potentially present, however the degraded nature of the site and its historic land use (grazing, cropping) suggests that it is unlikely that any rare species would have endured.

#### <u>Fauna</u>

Species observed on site during the assessment (or recently, and opportunistically from similar habitat in the surrounding area) include the Australian White Ibis, Straw-necked Ibis, Maned Duck, Australian Magpie, Welcome Swallow, Masked Lapwing, Red Wattlebird, Thornbills, Pacific Black Duck, Fan-tailed Cuckoo, Silver Gull, Grey Shrike-thrush, Black-faced Cuckoo Shrike, Little Raven, Black Swan, White-faced Heron, Laughing Kookaburra, Black-shouldered Kite, Nankeen Kestrel, Galah, Singing Honeyeater, Magpie Lark, Superb Fairywren, Noisy Miner, Crested Pigeon, Common Bronzewing Pigeon, Adelaide Rosella, White-plumed Honeyeater, Willie Wagtail, Rainbow Lorikeet,

Silvereye, Red-browed Firetail Finch, Yellow-tailed Black Cockatoo, Brown Treefrog, Brown Snake, Common Blackbird, Feral Pigeon, European Greenfinch.

Of the twenty-five species recorded within 5km and since 1995, only eleven were considered in this assessment (others were species requiring habitat not present, or of a subspecies not occurring in the area). Of the eleven, two are considered highly likely/known to find habitat in/around the assessed vegetation; six, possible, and 3 unlikely. See below and Appendix 1 for further information.

Species observed on site, or recorded within 5km of the application area since 1995, or the vegetation is

considered to provide suitable habitat

Species (common name)	NP&W	EPBC	Data	Date of	Species known	Likelihood of use for
	Act	Act	source	last record	habitat preferences	habitat – Comments
Coturnix ypsilophora australis (Brown Quail)	V		3	2000	Prefers dense grasslands, often on the edges of open forests, and bracken. May sometimes be seen alongside roads.	Unlikely - no suitable habitat resources available on or near the site
Falco hypoleucos (Grey Falcon)		VU	5	(2006)	Shrubland, grassland and wooded watercourses.	Possible. Naturemaps has one record 8km away off West Island in 2006, and north of Middleton in 1982, but no records occur within the search criteria.
Falcunculus frontatus frontatus (Eastern Shriketit)	R		3	2016	Eucalypt forests and woodlands, forested gullies and along rivers in drier areas.  Sometimes seen in parks and gardens, on farms with scattered trees, and on pine plantations.	Possible, limited habitat for the species is present.
Melithreptus gularis (Black-chinned Honeyeater)	ssp		3	2010	Upper levels of eucalypt forests and woodlands with box and ironbarks, sometimes gardens and street trees	Possible but limited habitat available.
Petroica boodang boodang (Scarlet Robin)	R		3	2005	Open forests and woodlands; open habitats such as grasslands, farmland and urban parks and gardens	Possible but limited habitat available.
Zoothera lunulata halmaturina (SA Bassian Thrush)		EN	3	1996	Damp, densely forested areas and gullies usually associated with a thick canopy and leaf litter below	Unlikely, no suitable habitat available.

Pteropus poliocephalus (Grey-headed Flying- fox)	R	VU	3	2019	Remnant native vegetation patches as well as in urban areas. Also take advantage of new resources, including the fruits of cultivated trees, especially when their preferred food resources are limited	Highly likely, opportunistic habitat is present around the area.
Trichosurus vulpecula (Common Brushtail Possum)	R		3	2000	Found in Eucalyptus and Sheoak woodlands, nesting in tree hollows or other dark confined spaces such as hollow logs, dense vegetation or roof crevices. Have adapted to life in the suburbs.	Possible, suitable habitat exists for more adaptable individuals.
Egernia cunninghami (Cunningham's Skink)	E		3	2011	Forests and open woodlands with rock outcrops	Unlikely, no suitable habitat exists.
Varanus rosenbergi (Heath Goanna)	V		3	2014	Variety of habitats from coastal and desert heaths to humid woodlands	Possible but considered unlikely unless in transition from between habitat resources.
Zanda funerea whiteae (Yellow-tailed Black Cockatoo)	V		4	2022	Stringybark forest and woodland, with Sheoaks, Banksias and Hakeas. Plantation Pine forests and individual Pines	Known, small flocks observed (2022) flying over and in Eucalypts within 500m to the east, adjacent Ocean Road. Will roost in large trees between feeding forays.

Source; 1- BDBSA, 2 - AoLA, 3 - NatureMaps 4 - Observed/recorded in the field, 5 - Protected matters search tool, 6 - others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	Criteria
Highly	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is
Likely/Known	present and falls within the known range of the species distribution or;
	The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species.  Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present,
	and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter.
	Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area.
	No records despite adequate survey effort.

#### 4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

The cumulative impacts must consider all the clearance that is likely to result from the application, including the following;

- clearance directly required for the development (e.g., access, building footprints, associated infrastructure –
  power and water, etc.),
  - The requirement for assessment of residential subdivisions to include all remnant vegetation potentially impacted means that all trees within the site boundary, or adjacent the perimeter, have been included in this report. All trees that may be impacted by perimeter or internal fencing and access, as well as for housing and infrastructure, have been assessed and included.
- subsequent clearance that will be permitted or required (e.g., 10m around a building, 20m around a dwelling, clearance for fire protection),
  - This type of clearance has been included in the assessment.
- indirect clearance that may occur as a result of the development (e.g., dust generation smoothing vegetation, altered hydrology inundating or drying vegetation, impacting on tree root zones (the application of fill) impacting on tree health),
  - Also included. Dust suppression methods are likely be used during construction.
- future stages or associated components of a development (noting, the clearance for future stages of a development does not need to be assessed as part of this application, only discussed to provide the NVC with the full context of the proposed clearance).
  - This assessment covers a stage of the broader 'The Rise' development adjacent. Future stages are shown on the broader subdivision plan at Figure 4. The block assessed is one of the few in the vicinity with remnant vegetation present.

#### 4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

- a) Avoidance outline measures taken to avoid clearance of native vegetation
  - To facilitate effective development and allotment access, services, etc., all trees on the site require removal. There are no mitigation measures proposed to avoid impact.
- b) Minimization if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).
  - As above, the effective development of the site requires removal of all vegetation. There are no impact minimisation strategies proposed.
- c) Rehabilitation or restoration outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation. Not applicable at this site. The required SEB offset payment will be made.
- d) Offset any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.
  The required SEB offset payment will be made.

# 4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act* 1991)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of clearance	Considerations
Principle 1a -	Relevant information
it comprises a	N/A – the vegetation is scattered trees, not a patch. Five remnant species were recorded.
high level of diversity of plant species	Assessment against the principles  N/A  At Variance –  N/A  Moderating factors that may be considered by the NVC  N/A
Principle 1b -	Relevant information
significance as a habitat for wildlife	List of threatened species that were recorded or may use the vegetation – see Appendix 1 and Part 4.2 for details. Eight threatened species are considered to have potential to find habitat within the survey area (Grey Falcon, Eastern Shriketit, Black-chinned Honeyeater, Scarlet Robin, Grey-
	headed Flying-fox, Common Brushtail Possum, Heath Goanna and Yellow-tailed Black Cockatoo).  Detail if the vegetation supports a high diversity of animal species – the vegetation is scattered trees of varying health and condition, few with hollows (only 2 medium and 2 small were noted). There is no native understorey to speak of, and the site has been continually grazed and possibly cropped for many years. It is not considered likely to support a wide range of species.  Detail if the vegetation provide a corridor for movements between other areas of native vegetation, or a habitat refuge, especially in heavily cleared areas - the vegetation may provide short term habitat refuge for mobile species as the majority of vegetation in the area has been cleared. Given the isolation and limited species diversity, this feature is unlikely to be significant. It does not provide a corridor to link other patches.  Scattered Trees; Fauna Habitat Score – 1.8  Biodiversity Score – ranging from 0.24 (tree 18) to 7.42 (tree 16)
	Assessment against the principles Seriously at Variance All scattered trees assessed are SAV with this principle.  At Variance – N/A  Moderating factors that may be considered by the NVC Common species – two of the species likely to find habitat at the site are relatively common (Common Brushtail Possum and Yellow-tailed Black Cockatoo).

#### Principle 1c plants of a rare, vulnerable or endangered species

#### Relevant information

List threatened species that were recorded for the site or that may be present but undetectable at the time of assessment (e.g. orchids) – see Appendix 1 for full list. None of the listed threatened species were noted, and none are likely to be present given the degraded site, lack of diversity, and historic cropping and grazing.

Threatened Flora Score(s) - 0

Assessment against the principles

Seriously at Variance

N/A

At Variance -

N/A

Moderating factors that may be considered by the NVC

N/A

#### Principle 1d -

the
vegetation
comprises the
whole or
part of a
plant

#### **Relevant information**

Identify any threatened communities under the EPBC Act or threatened ecosystems under the DEW Provisional list of threatened ecosystems present - the searches did not identify any threatened plant communities or ecosystems likely to occur in the area. The scattered trees assessed represent a River Red Gum/Blue Gum Woodland, which is not a threatened community.

Threatened Community Score – N/A

communitythat is Rare,Seriously at Variance

Vulnerable or N/A

vulnerable or endangered:

NI /Λ

Moderating factors that may be considered by the NVC

N/A

#### Principle 1e -

it is significant as a remnant of vegetation in an area which has been

extensively cleared.

#### Relevant information

Provide remnancy figures for IBRA Association and IBRA Subregion – IBRA Association Inman Valley – 11%; IBRA Subregion Fleurieu – 34%

Discuss the health and likely longevity of remnants - The scattered trees, with the exception four juveniles and two young trees, are semi-mature to mature, and as such have potential to offer increasing habitat value as they grow larger, or age further and develop more hollows. Located in an area where subdivision and development pressure is intense, their future is not secure.

Total Biodiversity Score – 45.36

Assessment against the principles

Seriously at Variance

N/A

At Variance

at the local level and subregional level, clearance is at variance

Moderating factors that may be considered by the NVC

N/A

Retention of many of the trees assessed would not conclusively ensure their survival to old age nor guarantee regeneration of replacement trees. Their ability to regenerate and provide ongoing habitat resources is doubtful given the current and proposed land use and pressure for urban development. Retention within well-designed and adequately sized open space reserves could secure current and future habitat and amenity values until revegetation (on this site or elsewhere, such as that already undertaken within the Beyond Estate) matures enough to provide viable replacement habitat.

### Principle 1f - it is growing

#### Relevant information

Discuss if any of the vegetation is associated with a wetland – N/A

in, or in	Assessment against the principles
association	Seriously at Variance
with, a wetland	N/A
environment.	At Variance –  N/A  Moderating factors that may be considered by the NVC
	N/A
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	Relevant information  Detail the location of trees or vegetation relative to sites frequented by the public (e.g. roads, towns, lookout, etc.) – most the trees have been obscured from public view, behind properties along Mentone Road. Their visibility has recently increased however, to the residents of the new subdivision to the north (The Rise) where some houses have views to south. One tree, tree 16, is visible from Mentone Road and this tree is of extremely high amenity value, with a large spreading form and good health.  Provide details of cultural or historical values – none are evident or expected.  Discuss possible effect on landscape character – removal of these trees will increase homogeneity of the surrounding landscape and contribute to further reduction in amenity, habitat, and amelioration of local climate extremes. New housing blocks tend to be too small to allow planting of large trees and thus once these are gone, it is unlikely that replacement of their values will be possible in the local area.  Assessment against the principles (NVC)  Moderating factors that may be considered by the NVC  N/A

### 4.6 Risk Assessment

Determine the level of risk associated with the application

Total	No. of trees	21
clearance	Area (ha)	-
	Total biodiversity Score	46.00
Seriously at va	ariance with principle	1(b)
1(b), 1(c) or 1	(d)	
Risk assessme	nt outcome	Level 4

# 5. Clearance summary

#### **Scattered trees Summary table**

Tree								
or Cluster	Number	Fauna Habitat	Threatened	Biodiversity	Loss	SEB Points	SEB	
ID	of trees	score	flora score	score	factor	required	Payment	Admin Fee
1	1	1.8	0	3.6585062	1	3.84	\$2,856.55	\$157.11
2	4	1.8	0	0.2102971	1	0.88	\$656.80	\$36.12
3	1	1.8	0	2.3107699	1	2.43	\$1,804.24	\$99.23
4	1	1.8	0	4.1482243	1	4.36	\$3,238.92	\$178.14
5	1	1.8	0	2.4796853	1	2.60	\$1,936.13	\$106.49
6	1	1.8	0	0.3343481	1	0.35	\$261.06	\$14.36
7	1	1.8	0	4.1482243	1	4.36	\$3,238.92	\$178.14
8	1	1.8	0	2.1063329	1	2.21	\$1,644.62	\$90.45
9	1	1.8	0	6.1636307	1	6.47	\$4,812.54	\$264.69
10	1	1.8	0	6.2243597	1	6.54	\$4,859.96	\$267.30
11	1	1.8	0	2.3476216	1	2.47	\$1,833.01	\$100.82
12	1	1.8	0	1.089178	1	1.14	\$850.43	\$46.77
13	1	1.8	0	0.3416172	1	0.36	\$266.73	\$14.67
14	1	1.8	0	0.3091482	1	0.32	\$241.38	\$13.28
15	1	1.8	0	1.3150082	1	1.38	\$1,026.75	\$56.47
16	1	1.8	0	7.4209271	1	7.79	\$5,794.23	\$318.68
17	1	1.8	0	0.5139535	1	0.54	\$401.29	\$22.07
18	1	1.8	0	0.2435745	1	0.26	\$190.18	\$10.46
Total	21			46.00		48.30	\$35,913.73	\$1,975.25

#### **Totals summary table**

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	46.00	48.30	\$35,913.73	\$1,975.25	\$37,888.98

<b>Economies of Scale Factor</b>	0.5
Rainfall (mm)	556

# 6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

#### **ACHIEVING AN SEB**

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

Establish a new SEB Area on land owned by the proponent.

Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No. \_\_\_\_\_

Apply to have SEB Credit assigned from another person or body. The application form needs to be submitted with this Data Report.

Apply to have an SEB to be delivered by a Third Party. The application form needs to be submitted with this Data Report.

Pay into the Native Vegetation Fund.

#### **PAYMENT SEB**

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

Payment amount required (including admin. fee) \$37,888.98

# 7. Appendices

Appendix 1. Flora and Fauna Species Lists

					DATE OF
			NATIONAL	-	LAST
FAMILY NAME	SPECIES	COMMON NAME	RATING	RATING	RECORD
AIZOACEAE	Sarcozona bicarinata	Ridged Noon-flower		V	11-Sep-2004
CENTROLEPIDACEAE	Centrolepis glabra	Smooth Centrolepis		R	22-Mar-1996
CHENOPODIACEAE	Atriplex australasica			R	19-Feb-1996
COMPOSITAE	Olearia pannosa ssp. pannosa	Silver Daisy-bush	VU	V	04-Oct-2009
COMPOSITAE	Picris squarrosa	Squat Picris		R	21-Mar-1997
CRASSULACEAE	Crassula sieberiana	Sieber's Crassula		E	07-Jan-2008
CYPERACEAE	Machaerina laxa	Lax Twig-rush		R	01-Jan-1996
CYPERACEAE	Schoenus laevigatus			R	22-Mar-1996
	Schoenus lepidosperma ssp.				
CYPERACEAE	lepidosperma	Slender Bog-rush		R	22-Mar-1996
DENNSTAEDTIACEAE	Hypolepis rugosula	Ruddy Ground-fern		R	01-Jun-2005
GRAMINEAE	Amphibromus macrorhinus	Long-nosed Swamp Wallaby-grass		R	29-Nov-2000
GRAMINEAE	Austrostipa gibbosa	Swollen Spear-grass		R	26-Nov-2010
GRAMINEAE	Austrostipa tenuifolia			R	01-Nov-2004
GRAMINEAE	Rytidosperma laeve	Smooth Wallaby-grass		R	22-Mar-1996
LABIATAE	Prostanthera chlorantha	Green Mintbush		R	01-Sep-2000
LEGUMINOSAE	Acacia dodonaeifolia	Hop-bush Wattle		R	01-Feb-2006
LEGUMINOSAE	Acacia iteaphylla	Flinders Ranges Wattle		R	01-Feb-2006
LILIACEAE	Dianella longifolia var. grandis	Pale Flax-lily		R	30-Dec-2007
LILIACEAE	Xanthorrhoea semiplana ssp. tateana	Tate's Grass-tree		R	01-Apr-1998
MYRTACEAE	Eucalyptus fasciculosa	Pink Gum		R	01-Feb-2006
MYRTACEAE	Eucalyptus viminalis ssp. viminalis	Manna Gum		R	21-Sep-2001
ORCHIDACEAE	Caladenia vulgaris	Plain Caladenia		R	22-Mar-1996
POLYGONACEAE	Rumex dumosus	Wiry Dock		R	15-Nov-2020
POTAMOGETONACEAE	Potamogeton ochreatus	Blunt Pondweed		R	28-Jan-2019
RHAMNACEAE	Spyridium coactilifolium	Butterfly Spyridium	VU	V	15-Nov-2015
SCROPHULARIACEAE	Gratiola pubescens	Glandular Brooklime		R	06-Apr-1996
ZANNICHELLIACEAE	Zannichellia palustris			R	10-Jan-2019

					DATE OF	
			NATIONAL	STATE	LAST	
CLASS NAME	SDECIES	COMMON NAME	RATING	RATING	RECORD	
AVES	Actitis hypoleucos	Common Sandpiper	IVATINO	R	21-Sep-2005	
AVES	Anthochaera chrysoptera (halmaturina)	Little Wattlebird (KI)	ssp	IX.	06-May-2016	
AVES	Biziura lobata menziesi	Musk Duck	33 <b>p</b>	R	17-Mar-2016	
AVES	Botaurus poiciloptilus	Australasian Bittern	EN	E	18-Jun-1994	
AVES	Calidris canutus	Red Knot	EN	L	PMST	
AVES	Coturnix ypsilophora australis	Brown Quail	CIN	V	12-Jan-2000	
AVES	Egretta sacra sacra	Pacific Reef Heron		R		
AVES			VU	ĸ	21-Sep-2005	
	Falco hypoleucos	Grey Falcon	VU	<b>D</b>	PMST	
AVES	Falcunculus frontatus frontatus	Eastern Shriketit		R	17-Mar-2016	
AVES	Larus dominicanus dominicanus	Kelp Gull	EN	R	27-Oct-1999	
AVES	Macronectes giganteus	Southern Giant Petrel	EN	V	03-Jun-2006	
AVES	Melithreptus brevirostris	Brown-headed Honeyeater (KI)	ssp		07-Apr-2010	
AVES	Melithreptus gularis	Black-chinned Honeyeater		ssp	07-Apr-2010	
AVES	Numenius madagascariensis	Eastern Curlew	CR		PMST	
AVES	Pachyptila turtur subantarctica	Fairy Prion (Southern)	VU		PMST	
AVES	Petroica boodang boodang	Scarlet Robin		R	28-May-2005	
AVES	Platycercus elegans	Crimson Rosella (KI)	ssp		14-Apr-2010	
AVES	Sternula nereis nereis	Fairy Tern	VU	E	10-Sep-1996	
AVES	Thinornis cucullatus cucullatus	Eastern Hooded Plover	VU		PMST	
		South Australian Bassian Thrush				
AVES	Zoothera lunulata halmaturina	(southern FR, MLR, KI)	EN	SP	29-Jun-1996	
AVES	Zanda funerea whitae	Yellow-tailed Black Cockatoo	VU		2022	
MAMMALIA	Pteropus poliocephalus	Grey-headed Flying-fox	VU	R	31-Dec-2019	
MAMMALIA	Trichosurus vulpecula	Common Brushtail Possum		R	28-Mar-2000	
REPTILIA	Egernia cunninghami	Cunningham's Skink		E	24-Jan-2011	
REPTILIA	Eulamprus heatwolei	Yellow-bellied Water Skink		V	28-Oct-2019	
REPTILIA	Varanus rosenbergi	Heath Goanna		V	04-May-2014	
	Highlighted species excluded from the assessment					

Appendix 2. Scattered Tree Vegetation Assessment Scoresheet

, ipperium = recuttereu rice regetation							
SEB Required for Scattered Trees (Version - 22 Oct 2021)							
Landscapes Region	H&F			Total Biod	iversity Score	46.00	
Mean Annual Rainfall (mm)	556			Total SEB	Points required	48.30	
Economies of Scale factor	0.5			Payment \$ (GST exclusive		\$35,913.73	
				Admin fee	(GST inclusive)	\$1,975.25	
IBRA Association	Inman Valley			Total SEB \$ required		\$37,888.98	
Tree Species	Trees (total)	trees	Number of trees (proposed pruning)	Total SEB Points required	Payment in NV Fund (GST Exclusive)	Administration fee (GST Inclusive)	Total
Eucalyptus leucoxylon ssp leucoxylon	8	8	0	11.97	\$8,898.33	\$489.41	\$9,387.74
Eucalyptus camaldulensis	9	9	0	34.86	\$25,921.48	\$1,425.68	\$27,347.17
Acacia pycnantha	3	3	0	1.22	\$903.73	\$49.71	\$953.44
Myoporum platycarpum	1	1	0	0.26	\$190.18	\$10.46	\$200.64
0	0	0	0	0.00	\$0.00	\$0.00	\$0.00