Bairnsdale Airport Upgrade: Additional information for assessment by Preliminary Documentation (EPBC 2024/09885)

Final Report

Prepared for East Gippsland Shire Council

18 May 2026

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- [redacted] (mapping)
- [redacted] (quality assurance)

Biosis acknowledges the Aboriginal and Torres Strait Islander peoples as Traditional Custodians of the land on which we live and work.

We pay our respects to the Traditional Custodians and Elders past and present and honour their connection to Country and ongoing contribution to society.

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Contents

Contents ii
Declaration of accuracy iv
1 Summary 5
2 Introduction 7
2.1 Background 7
2.2 Location of the action 7
2.3 Description of project area 8
2.4 Description of the proposed action 8
2.5 Relevant guidance material 9
3 Habitat assessment 12
3.1 Survey background 12
3.2 Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland 13
3.2.1 Habitat specific features 13
3.2.2 Determination of community present using key diagnostic characteristics and condition thresholds 13
3.2.3 Total area and quality of Gippsland Red Gum Grassy Woodland and Associated Native Grassland community 14
4 Impact assessment 22
4.1 Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana)* Grassy Woodland and Associated Native Grassland 22
4.1.1 Direct impacts 22
4.1.2 Indirect and cumulative/consequential impacts 22
5 Avoidance and mitigation measures 25
5.1 Avoidance 25
5.2 Mitigation 25
5.3 Mitigation and management actions 26
6 Offsets 29
6.1 Offset search 29
6.1.1 Meerlieu property 29
6.1.2 Alternative offset strategy 29
6.2 Residual impacts 30
6.3 Proposed offsets 30
7 Economic and social impacts 31
7.1 Public consultation 31
7.2 Projected costs 31
7.3 Social impacts 31
7.4 Economic impacts 32

8 Environmental record and other approvals 33
8.1 Environmental record 33
8.2 Other approvals and conditions 33
8.2.1 *Planning and Environment Act 1987* (P&E Act) 33
8.2.2 *Flora and fauna Guarantee Act 1988* (FFG Act) 33
8.2.3 Environmental Effects Act 1988 34
9 Conclusion 35
References 36
Appendices 38
Appendix 1 Further information request 39
Appendix 2 Primary runway design plans 47
Appendix 3 Secondary runway lighting design plans 98
Appendix 4 Construction Management Plan 102
Appendix 5 Offset Management Plan 111

Tables

Table 1 RFI requirements 5
Table 2 Step 1 (key diagnostics) for determining Gippsland Red Gum Grassy Woodland and Associated Native Grassland presence (TSSC 2009; DEWHA 2010; Biosis 2023). 13
Table 3 Step 2 (condition thresholds) for determining Gippsland Red Gum Grassy Woodland and Associated Native Grassland presence (DEWHA 2010). Data from Biosis (2023). 14
Table 4 Vegetation quality assessment scores for patches of native vegetation within the study area (Biosis 2023) 15
Table 5 Environmental management actions 26

Figures

Figure 1 Site locality 10
Figure 2 Proposed works Bairnsdale Airport 11
Figure 3 Ecological features of the project area 16
Figure 4 Proposed vegetation removal 19

Declaration of accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed:

_____

[redacted]

28 / 08 / 2026

East Gippsland Shire Council

1 Summary

The proposed action for a runway extension and lighting upgrade to Bairnsdale Airport located at 345 Bengworden Road, Bairnsdale, Victoria was determined likely to have a significant impact on listed threatened species and communities (Sections 18 and 18A) protected under Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC 2024/09885).

It was also determined that the proposed action is to be assessed by preliminary documentation.

This document provides further information on the impacts of the action and the strategies proposed to avoid, mitigate and/or offset those impacts in accordance with the RFI received on 24 October 2024. The RFI requirements are addressed in this report as outlined in Table 1 below.

Table 1 RFI requirements

RFI requirement	Relevant section in this report
1. Habitat assessment • **Species specific information required:** – **1.1.1 Habitat specific features** – **1.1.2 Vegetation composition and diagnostic characteristics** – **1.1.3 Total area and quality of Gippsland Red Gum community**	Section 3 – Section 3.2.1 – Section 3.2.2 – Section 3.2.3
2. Impact assessment • **Listed community information required:** – **2.1 Direct/indirect loss** – **2.2 Impact of habitat fragmentation**	Section 4 – Section 4.1.1 and 4.1.2 – Section 4.1.2
3. Avoidance, management and management measures • **Information required:** – **3.1 Summary of measures** – **3.2 Best available practice measures** – **3.3 Proposed measures meeting SMART principle**	Section 5 – Section 5 – Section 5 – Section 5.3
4. Offsets • **Information required:** – **4.1 Assessment of residual impacts** – **4.2 Summary of proposed offset** – **4.3 Offset management plan**	Section 6 – Section 6.2 – Section 6.3 – Appendix 4

The project will upgrade the Bairnsdale Airport by lengthening and widening the existing runway to facilitate larger aircraft using the airfield. The upgrades will allow for the airport to be utilised by emergency services and support emergency management response.

The project will result in the direct removal of 10.354 hectares of Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community. This direct impact is unavoidable in delivering the wider benefits offered by the upgrades to the Bairnsdale runway.

There are no indirect impacts on Gippsland Red Gum community expected to occur as a result of the proposed action, based on implementation of the proposed avoidance and mitigation measures.

Removal of the community will be offset in accordance with the offset management plan. 14.75% of the offset requirement will be met through restoration of 5.12 hectares of modified Plains Grassy Woodland, and 90.67% of the offset requirement will be met through restoration of 21.59 hectares of introduced pasture.

We trust this report provides sufficient information to allow the Minister (or delegate) to make an informed decision on the approval of the proposed action, under Part 9 of the EPBC Act.

2 Introduction

2.1 Background

East Gippsland Shire Council (EGSC) (the proponent) is seeking approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the development of a new extension and lighting upgrade at the Bairnsdale Airport (herein referred to as the 'proposed action').

The proposed action was referred to the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) (EPBC 2024/09848) in 2024. On 15 July 2024, the proposed action was determined to be a controlled action for the purposes of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (2024/09885), subject to the controlling provisions – listed threatened species and communities (sections 18 & 18A).

The proposed action is a controlled action due to unavoidable direct and significant impacts to Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community, which is critically endangered and recorded within the project area.

On 30 September 2024 it was determined that the proposed action will be assessed by preliminary documentation. The scope, style and formatting requirements of this report follows the request for additional information as set out by DCCEEW. Requirements for the preliminary documentation report are provided as Appendix 1. The following report seeks to address this request for further information and encompasses the following specific components:

- Habitat assessment.
- Impact assessment, direct/indirect loss and/or disturbance of MNES.
- Avoidance, mitigation and management measures.
- Residual impacts and proposed offset management plan.

Biosis Pty Ltd was commissioned by East Gippsland Shire Council to prepare the preliminary documentation report in response to the scope of assessment requested by DCCEEW.

2.2 Location of the action

Bairnsdale Airport (the 'project area'), located at 345 Bengworden Road, Bairnsdale, Victoria (-37.881830, 147.567260), is sited 7 kilometres south-west of the Bairnsdale township and approximately 300 kilometres east of Melbourne. The Bairnsdale airport (and project area boundary) comprises the nine allotments which is entirely fenced. The site locality is shown in Figure 1.

The site is zoned Transport Zone – Schedule 4 (TRZ4) and has a Design and Development Overlay - Schedule 8 (DDO8) under the East Gippsland Planning Scheme.

The project is located within the:

- Gippsland Plain bioregion.
- Management area of the East Gippsland Catchment Management Authority (CMA).
- East Gippsland Shire Council.

- Traditional lands of the Gurnaikurnai People.

2.3 Description of project area

There are two runways located within the project area, running toward North-east direction (primary runway) and North-west direction (secondary runway). Existing buildings are observed on the north and east of the runway. The project area is generally flat and securely fenced. Majority of the area is covered grassland apart from the sealed runway.

The project area has been subject to previous disturbance for rural land uses and development of various outdoor recreational activities as well as the existing Bairnsdale airport runway and associated operational facilities. The project area is currently managed to support its use as an active airfield which requires regular and prescriptive vegetation management including in accordance with Civil Aviation Safety Authority (CASA) requirements.

The primary land use of the project area is for airport transportation. Secondary land uses that utilise vacant land that are compatible with the project area's primary use include car parking, motor racing recreational outdoor tracks. The proposed use is consistent with the existing uses of the project area.

Topography of the project area is generally flat, with minor (man-made) depressions on either side of the runway attracting some species tolerant of seasonal inundation. Some small, shallow and seasonally wet depressions are indicative of the previous occurrence of gilgai, which would likely have been more widespread across the project area and surrounds prior to landscape modification (Biosis 2023). Also present is a constructed dam near the runway which provides habitat for a range of common waterbird species and amphibians.

The adjacent land use is primarily zoned for farming and contains some dwellings to support this use. The nearest dwellings are located approximately 1 kilometre away from the primary runway.

There are no outstanding natural features unique within the project area. However, the project area is in proximity to the following Crown land parcels/areas:

- Moormurng Flora and Fauna Reserve (Crown Allotment 272A, Parish of Moormung)
- Bengworden Nature Conservation Reserve (Crown Allotment 2002, Parish of Bengworden)
- Gippsland Lakes Ramsar Site

2.4 Description of the proposed action

The proposed action comprises the construction of the proposed extension and widening of the primary runway, and lighting upgrades at Bairnsdale Airport. The primary runway is currently a Code 1B standard, and it is proposed to upgrade to a Code 3C, to enable larger Code 3 aircraft to use the airport.

To facilitate these works, it will require the following:

- Earthworks and pavement work to lengthen, strengthen and widen the runway from 1,101 metres x 18 metres to 1,600 metres x 30 metres and install lighting.
- Associated drainage works include reshaping the existing detention basin on the west side of the taxiway and a new drainage outfall into the detention basin.
- Lighting upgrades to the secondary runway utilising under-boring techniques.

- Extend fencing around the extended runway.
- The removal of native Plains Grassy Woodland Ecological Vegetation Class (EVC) 55, much of which is consistent with the Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana*) Grassy Woodland and Associated Native Grassland threatened ecological community.

The project area of the proposed action is approximately 277.51 hectares and encompasses land surrounding the proposed disturbance area. The proposed disturbance area is 32.10 hectares, thereby avoiding 245.409 hectares of the project area, shown in Figure 2.

The layout plans of the primary runway upgrades are provided in Appendix 1 which provides the primary runway layout and overall plan. The lighting upgrades on the secondary runway are shown in Appendix 1.

The proposed action will improve the safety of aircraft, operators and passengers, the delivery of goods and services and better meet the operational requirements of aeromedical and other emergency services in regional Victoria.

2.5 Relevant guidance material

Documents consulted during Preliminary Documentation preparation are cited throughout and a full reference list is provided at the end of this document.

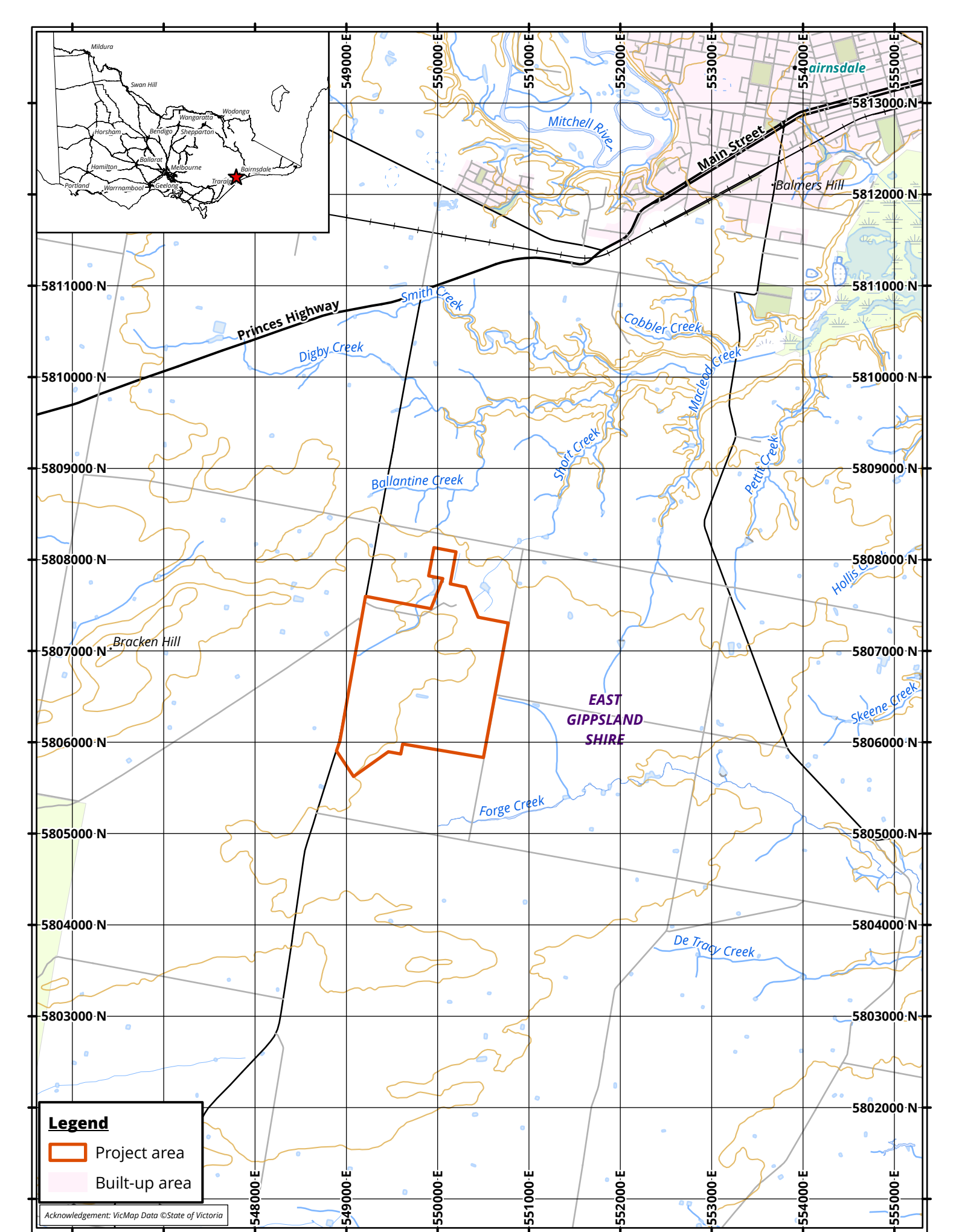


Figure 1 Location of the project area - Bairnsdale Airport, Bairnsdale, Victoria

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Scale: 1:50,000 @ A4
Coordinate System GDA2020 MGA Zone 55

biosis APEM Group

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549000 E
550000 E
551000 E
5808000 N
5807000 N
5806000 N
Humphreys Road
Short Creek
Prendergast Drive
Terminal Access Road
Hangar Access Road
Aerodrome Road
Dahlsens Road
Bengworden Road
Netley Road
2. New outfall to existing drainage basin
3. Upgrade to existing lighting on secondary runway
4. New fencing to extended runway
1. Lengthening and widening of the primary runway
Princes Highway
Bengworden Road
Forge Creek Road
Forge Creek

Legend

- Bairnsdale Airport
- Proposed impact area
- Airside boundary

Hydrology

- Drain/channel
- River or creek
- Lake/Dam

Figure 2 Proposed works Bairnsdale Airport

0 100 200 300 400
Metres
Scale: 1:10,000 @ A3
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Acknowledgements: VicMap BaseMap©State of Victoria

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3 Habitat assessment

3.1 Survey background

A series of ecological investigations have been undertaken to identify and evaluate ecological values within the project area at Bairnsdale Airport. Assessments have been in accordance with departmental guidelines and best-practice methodologies and incorporated both up-to-date desktop review and comprehensive field surveys.

Preliminary ecological survey undertaken by Ethos NRM (2022) identified a significant occurrence of the EPBC-listed Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana*) Grassy Woodland and Associated Native Grassland ecological community within the project area (Figure 3). A subsequent assessment by Biosis (February 2023) confirmed the findings and verified that areas meeting the condition thresholds for this Critically Endangered community are present in a grassland condition state.

Field surveys were conducted on 8–9 February and 21-22 June 2023 and included preliminary and general flora assessments, detailed vegetation mapping, and habitat evaluations. Vegetation Quality Assessments (VQAs) were undertaken in accordance with DEECA's habitat hectare method and the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (DEECA 2025), with mapping thresholds applied at 0.001 habitat hectares. Further field assessments were completed by Biosis within the broader airport precinct area undertaken from 31 October – 2 November 2023. Surveys were informed by desktop review of the Protected Matters Search Tool (PMST), Species Profile and Threats database (SPRAT), the Victorian Biodiversity Atlas (VBA), NatureKit, NVIM and other relevant sources.

The proposed action has potential to have a significant impact on Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana*) Grassy Woodland and Associated Native Grassland. The Gippsland Red Gum Community has been listed in the Critically Endangered category of the threatened species list under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) effective from 07 January 2009. The proposed action will result in a direct impact to 10.354 hectares of Gippsland Red Gum Grassy Woodland and Associated Native Grassland Critically Endangered Community present on site in a grassland condition state (Biosis 2023).

During the Biosis 2023 site assessment Open Marshwort *Nymphoides geminata* was identified growing on the eastern fringe of the farm dam adjacent the runway. The Open Marshwort will not be impacted by the proposed works as no works are planned to the dam.

Green and Golden Bell Frog have been recorded within 10 kilometres of the study area. The farm dam located along the north-western edge of the study area may provide habitat for the species, although there does not appear to be extensive connectivity between the dam and surrounding waterways and wetlands. Regardless, impacts to the farm dam are avoided and as such, it unlikely that the works will impact the Green and Golden Bell Frog.

An updated PMST report has been generated and considered prior to the finalisation of this preliminary documentation, and any other species of significance have been considered in this preliminary documentation, and there are no updates to the ecological values recorded on site.

3.2 Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland

The description and distribution used to inform the assessment of the Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland community is in accordance with current information from the species profile and threats database (SPRAT), accessed 25 November 2025, current approved conservation advice (DEWHA 2008), listing advice (TSSC 2009), and policy document (DEWHA 2010).

3.2.1 Habitat specific features

In accordance with the habitat description in the *Approved Conservation Advice for the Eucalyptus tereticornis subsp. mediana (Gippsland Red Gum Grassy Woodland and Associated Native Grassland)* the ecological community occurs in a grassy woodland form, or a grassland form.

To assess the presence and condition of the Gippsland Red Gum Grassy Woodland and Associated Native Grassland community within the project area, 20 × 20 metre quadrat data and 50-metre point-intercept data was collected (Biosis 2023). Transect data determines the percentage of perennial native cover relative to other vegetation cover.

The condition thresholds for the community specify that an area must have "50 percent or more of the perennial ground layer vegetation, comprising of native species" (DEWHA 2010, p. 13). Transect data collected from surveys confirmed presence of the EPBC-listed community within the project area, all within the grassland form. The areas identified on Figure 3 as Gippsland Red Gum Grassy Woodland community have been confirmed to or are likely to support more than 50 percent perennial native ground layer cover and have seven or more native ground layer species present.

The composition and structure of the grassland form of the community is strongly governed by management history of the site (TSSC 2009). The ground layer of the project area is dominated by grasses or grass like plants, and the floristic composition of the vegetation reflects the site's long-term management history as an active airport.

The project area is comprised of the following habitat specific features.

3.2.2 Determination of community present using key diagnostic characteristics and condition thresholds

An assessment of vegetation condition against the community's key diagnostic characteristics and condition thresholds as described in the approved listing advice (TSSC 2009) is provided in Table 2 and Table 3 below.

Table 2 Step 1 (key diagnostics) for determining Gippsland Red Gum Grassy Woodland and Associated Native Grassland presence (TSSC 2009; DEWHA 2010; Biosis 2023).

Key diagnostic characteristics	Response	Assessment
Is the national community present?		
Does the patch occur within the central Gippsland Plain of Victoria?	Yes	The project area is within the Gippsland Plain Bioregion.
Is the site a native remnant dominated by native species?	Yes	The project area supports remnant native vegetation which is, in some areas, dominant (i.e. more than 50 per cent of

Key diagnostic characteristics	Response	Assessment
		the perennial ground layer cover is made up of native species).
Are trees absent or sparse such that the projective foliage cover of native trees in the patch is 5 per cent or less?	Yes	The projective foliage cover of native trees is less than 5 per cent.
Is the ground vegetation layer dominated by native grasses and grass-like plants?	Yes	The ground layer vegetation is dominated by grasses, with common species including Spear Grass *Austrostipa* spp., Kangaroo Grass *Themeda triandra* and Wallaby Grass *Rytidosperma* spp. Therefore, the grassland form of the community is present.

Table 3 Step 2 (condition thresholds) for determining Gippsland Red Gum Grassy Woodland and Associated Native Grassland presence (DEWHA 2010). Data from Biosis (2023).

Condition thresholds	Response	Justification
Is the patch of sufficient quality to meet the condition thresholds?		
Is the patch bigger than or equal to 0.04 hectares (e.g., 20 m × 20 m)?	Yes	Areas shown on Figure 3 as the community are greater than 0.04 hectares.
Does 50 percent or more of the perennial ground layer vegetation, comprise of native species? (Not including mosses, lichens, litter and bare ground.)	Yes	Data collected demonstrates perennial ground layer vegetation is >50% native. The mean perennial cover across transects that meet the community condition thresholds is 51% native and 13% introduced, which translates to proportional perennial cover being 80% native and 20% introduced.
Does the patch have 7 or more native species present? (Do not include mosses, lichens or trees and tall shrubs over 5 metres tall.)	Yes	Areas shown on Figure 3 as the community have 7 or more native ground layer species present. Species composition varies across patches, however all patches contain these 7 common species: Kangaroo Grass *Themeda triandra,* Wallaby Grass *Rytidosperma* spp., Spear Grass *Austrostipa* spp., Mat Grass *Hemarthria uncinata* var. *uncinata,* Common Bog-sedge *Schoenus apogon,* Centella *Centella cordifolia* and Toad Rush *Juncus bufonius.*

3.2.3 Total area and quality of Gippsland Red Gum Grassy Woodland and Associated Native Grassland community

In accordance with the above, 23.669 hectares of the Gippsland Red Gum Grassy Woodland community in its grassland form was identified within the project area (Figure 3).

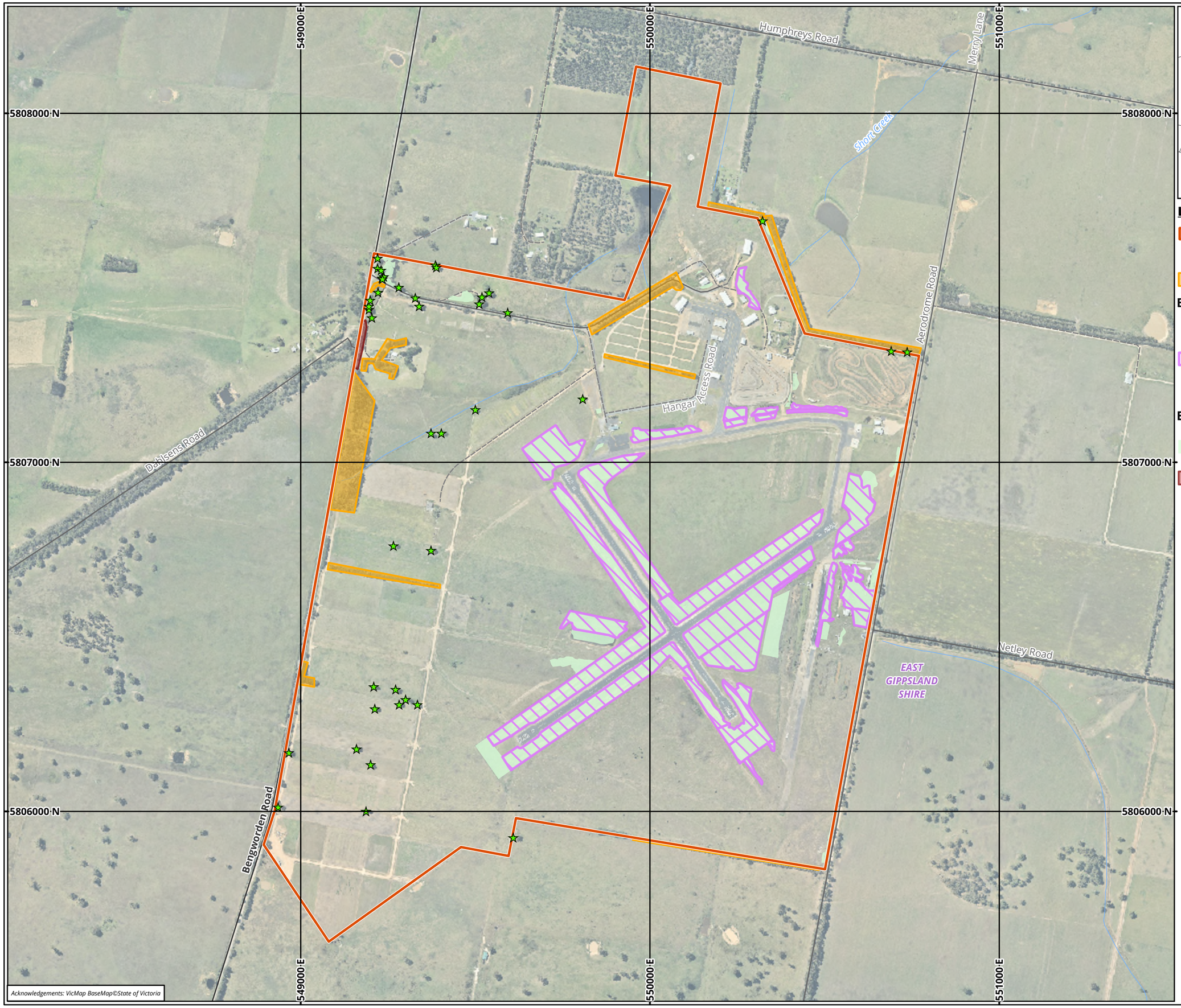
Total area impacted: 10.354 hectares of Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community (Figure 4).

To determine the quality of vegetation, Vegetation Quality Assessments (VQA) were undertaken for all patches of native vegetation identified in the project area (Biosis 2023). This assessment is consistent with DEECA's habitat hectare method (DSE 2004) and the Guidelines (DELWP 2017). The results of the vegetation

quality assessment are provided in Table 4. Conversion of the weighted average VQA score (29.843/100) into a habitat quality score for input into the Offsets Assessment Guide gives a score of 3/10 (per Appendix 3 of the OMP [Appendix 5]).

Table 4 Vegetation quality assessment scores for patches of native vegetation within the study area (Biosis 2023)

EVC #: Name			EVC 55	EVC 55	EVC 55	EVC 55	EVC 55
		Max Score	Score	Score	Score	Score	Score
Site Condition	Large Trees	10	0	0	0	0	0
	Tree Canopy Cover	5	0	0	0	0	0
	Lack of Weeds	15	7	4	0	0	7
	Understorey	25	15	15	5	5	5
	Recruitment	10	1	1	0	1	0
	Organic Matter	5	5	5	2	5	5
	Logs	5	0	0	0	0	0
	Total Site Score		28	25	7	11	17
Landscape Value	Patch Size	10	2	2	2	2	1
	Neighbourhood	10	0	0	0	0	0
	Distance to Core Area	5	1	1	1	1	1
	Total Landscape Score		3	3	3	3	2
Habitat points = #/100		100	31	28	10	14	19
CONDITION SCORE		1	0.31	0.28	0.10	0.14	0.19



Legend

- Project area
- Scattered tree
- Planted vegetation

EPBC listed community

- Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland threatened ecological community (EPBC Act)

Ecological vegetation classes (EVCs)

- (GipP0055) Plains Grassy Woodland
- (GipP0016) Lowland Forest

Figure 3.0 Ecological features of the project area - overview

0 100 200 300 400 500

Metres

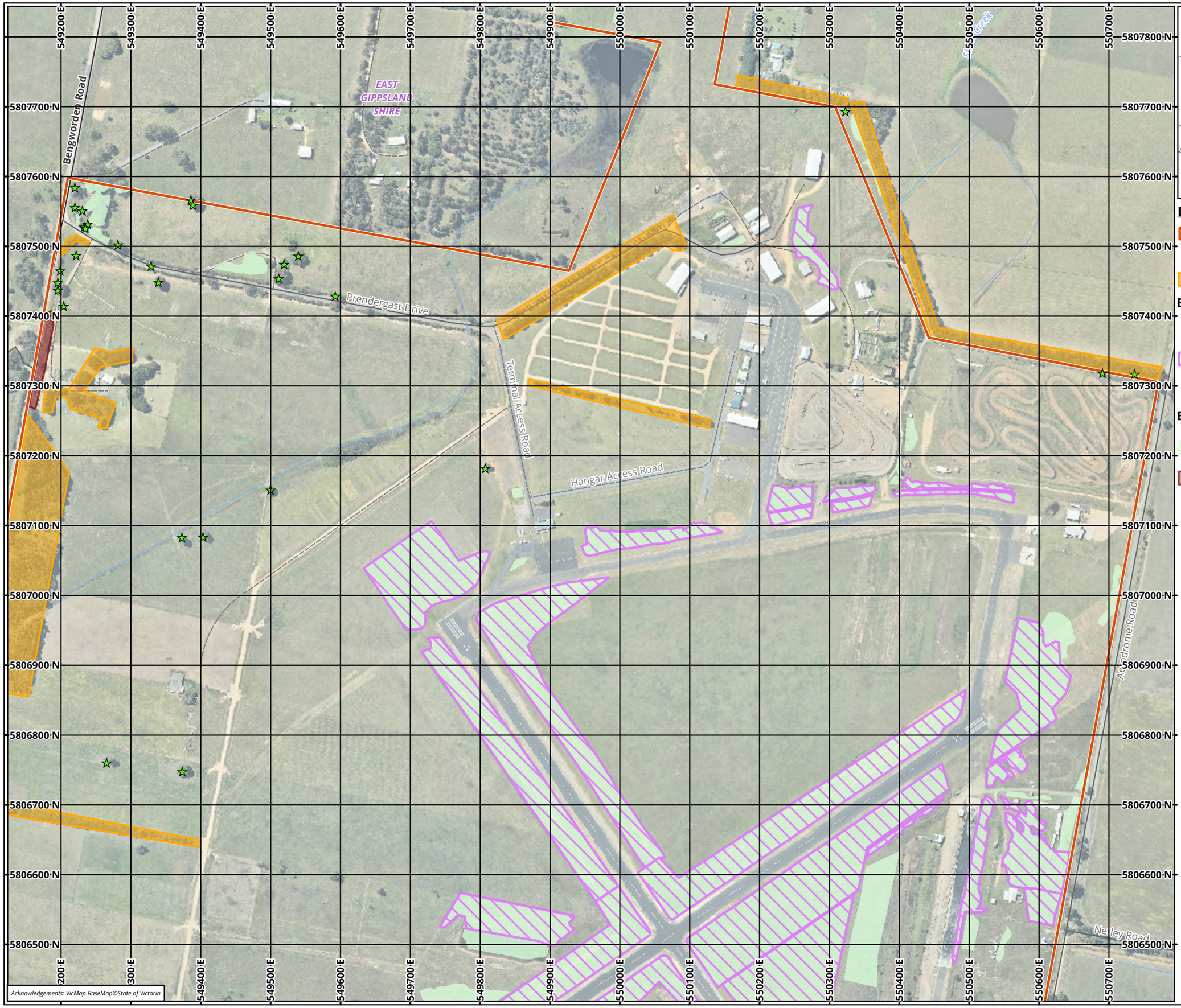
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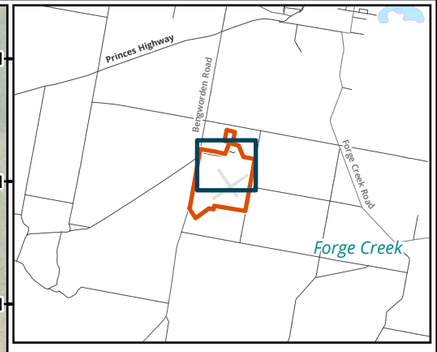
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Legend

- Project area
- Scattered tree
- Planted vegetation

EPBC listed community

- Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland threatened ecological community (EPBC Act)

Ecological vegetation classes (EVCs)

- (GipP0055) Plains Grassy Woodland
- (GipP0016) Lowland Forest

Figure 3.1 Ecological features of the project area - detail (north)

0 50 100 150 200 250

Metres

Scale: 1:5,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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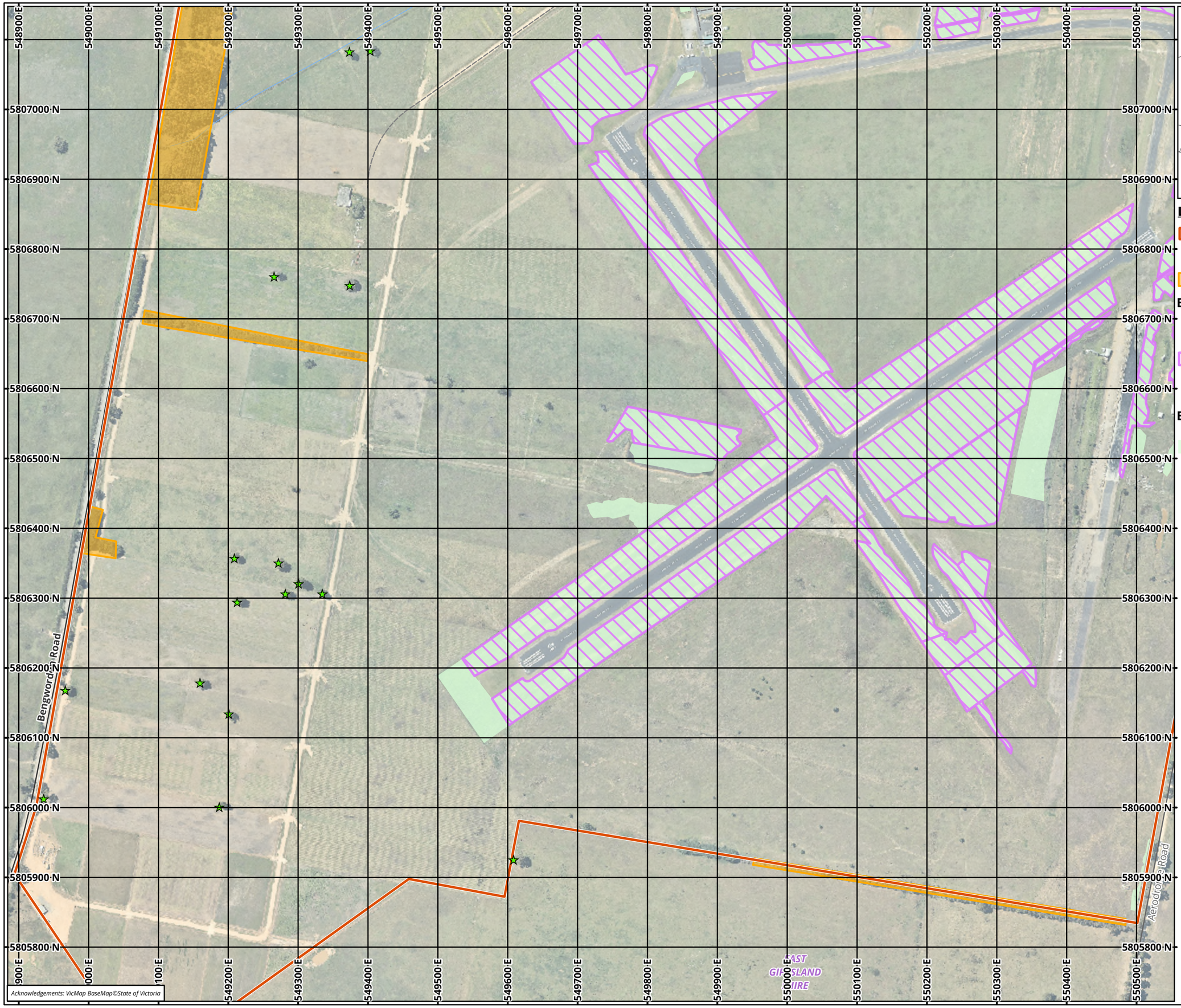
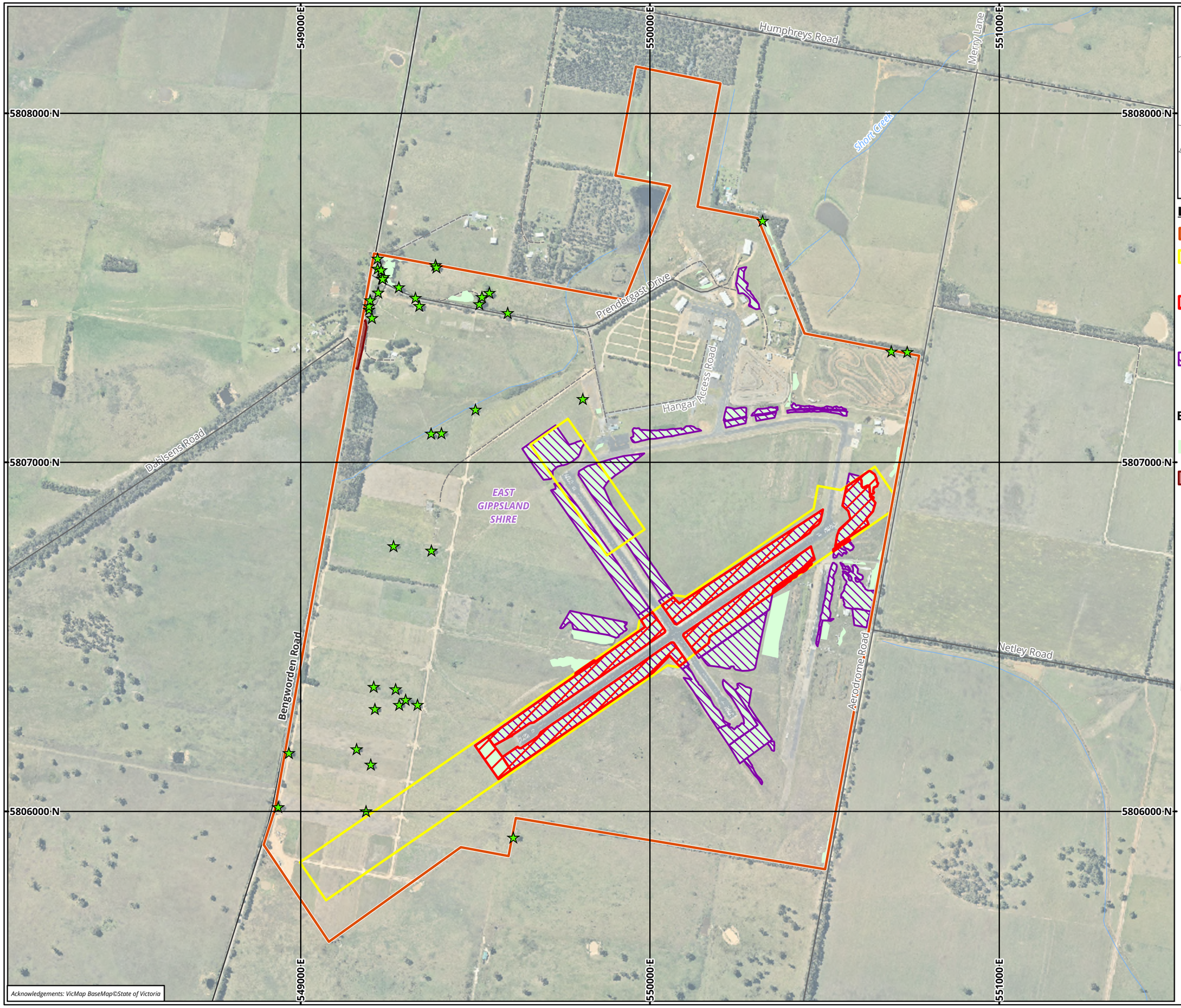


Figure 3.2 Ecological features of the project area - detail (south)



Legend

- Project area
- Proposed impact area
- Scattered tree
- Vegetation proposed for removal
- Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland threatened ecological community (EPBC Act)

Ecological vegetation classes (EVCs)

- (GipP0055) Plains Grassy Woodland
- (GipP0016) Lowland Forest

Figure 4.1 Proposed vegetation removal - overview

0 80 160 240 320 400

Metres

Scale: 1:10,000 @ A3

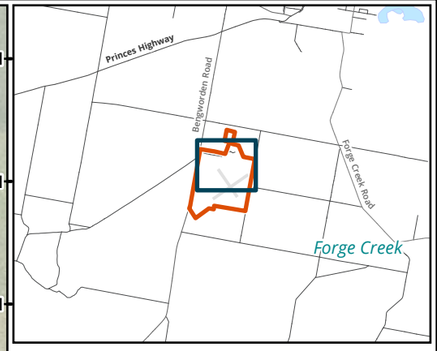
Coordinate System: GDA2020 MGA Zone 55

N

biosis APEMGroup

Matter: 41891,
Date: 09 December 2025 ,
Prepared for: Prepared by: , Last edited by:
Layout: 41891_F4_VegRemoval
Project: P:\41800s\41891\Mapping\41891_BairnsdaleAirport_Prelim.aprx





Legend

- Project area
- Proposed impact area
- Scattered tree
- Vegetation proposed for removal
- Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland threatened ecological community (EPBC Act)

Ecological vegetation classes (EVCs)

- (GipP0055) Plains Grassy Woodland
- (GipP0016) Lowland Forest

Figure 4.2 Proposed vegetation removal - detail (north)

0 40 80 120 160 200

Metres

Scale: 1:5,000 @ A3

Coordinate System: GDA2020 MGA Zone 55

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Matter: 41891,
Date: 09 December 2025 ,
Prepared for: Prepared by: , Last edited by:
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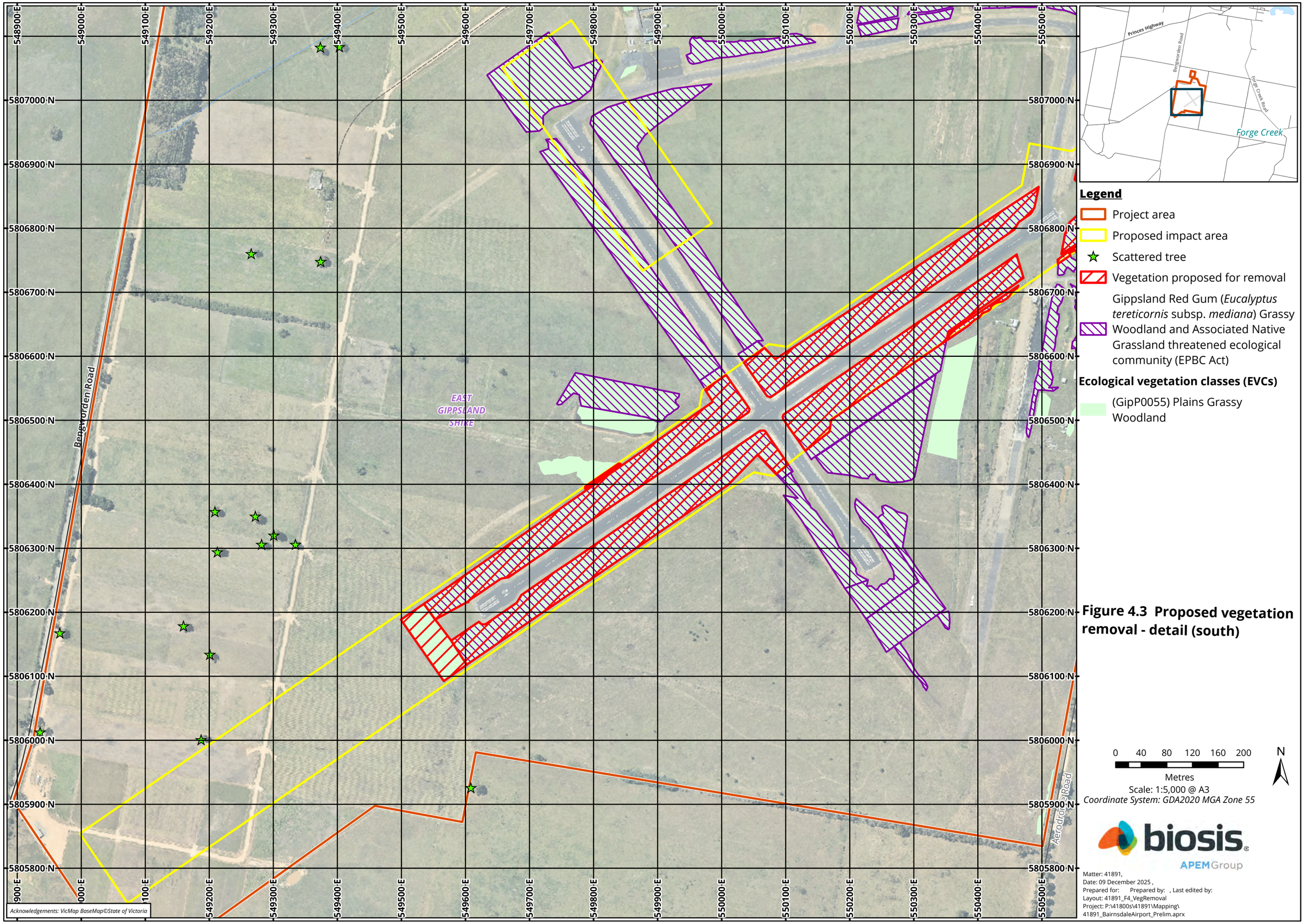


Figure 4.3 Proposed vegetation removal - detail (south)

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APEM Group

Matter: 41891,
Date: 09 December 2025 ,
Prepared for: Prepared by: , Last edited by:
Layout: 41891_F4_VegRemoval
Project: P:\41800s\41891\Mapping\41891_BairnsdaleAirport_Prelim.aprx

4 Impact assessment

A significant impact is considered likely to occur to the Gippsland Red Gum Grassy Woodland Community as the proposed action will adversely affect habitat critical to the survival of this threatened ecological community and reduce its remnant extent.

The proposed action is not considered likely to result in a significant impact to suitable habitat for other threatened fauna species that may occasionally occur within the project area. Additionally, no other MNES have been recorded within the project area and as such potential impacts to any other MNES are not expected and are not considered in this document.

4.1 Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana)* Grassy Woodland and Associated Native Grassland

The main threats to the Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana*) Grassy Woodlands and Associated Native Grasslands ecological community as per the Commonwealth listing advice (TSSC 2009) include vegetation clearing and consequent fragmentation of remnants and invasion of weeds.

4.1.1 Direct impacts

There is a total of 23.669 hectares of Gippsland Red Gum community on site, 10.354 hectares of which is proposed for direct removal (i.e. the residual direct impact). Direct removal represents 43.74 per cent of the community's occurrence at the site.

Direct impacts arising from the proposed action include:

- the permanent clearing of 10.354 hectares of Gippsland Red Gum Grassy Woodland Community in its grassland condition state.

The grassland vegetation includes more than 50% perennial native cover and at least seven native ground-layer species. Vegetation Quality Assessment (VQA) scores (Table 4) against the benchmark for Plains Grassy Woodland EVC 55 indicate the vegetation condition is moderate, with variable (moderate to high) weed cover, reduced understorey structural complexity (i.e. lack of logs, reduced woody species diversity) and limited recruitment. This condition reflects the land management history as an active airport.

Conversion of the weighted average VQA score (29.843/100) into a habitat quality score for input into the Offsets Assessment Guide gives a score of 3/10 (per Appendix 3 of the OMP [Appendix 5]).

Residual impacts to the Gippsland Red Gum community will be offset in accordance with the Offset Management Plan, see Section 6 and Appendix 5.

4.1.2 Indirect and cumulative/consequential impacts

Of the 23.669 hectares of Gippsland Red Gum community on site, 13.330 hectares is outside the impact footprint of proposed works. This extent is divided across several patches, in the northern extent or the project area near the air ambulance hanger area and other existing buildings, and the remaining patches of retained areas are adjacent to the northern and southern edge of the main runway works where the majority of removal is taking place (Figure 4).

While these patches will not be directly removed, they may be affected by indirect impacts such as:

- increased habitat fragmentation.
- erosion, sediment runoff, and alterations to surface water and groundwater levels.
- introduction or spread / exacerbation of additional weeds, pests or pathogens.
- increased interaction with human activity and aviation operations, including air, noise or light pollution, vibrations and dust.

An assessment of the indirect threats to retained areas of the Gippsland Red Gum community and other ecological values is included below.

There is a medium risk that the retained areas of Gippsland Red Gum community could be indirectly impacted during and after construction, however this risk will be managed by strict preventative measures identified in the CMP (and detailed in Table 5 below).

Increased fragmentation

A risk to the remaining Gippsland Red Gum community is clearing and fragmentation of remaining areas of habitat. An example of the community occurs approximately 7 kilometres west of Bairnsdale township within a predominantly agricultural landscape. While the surrounding area would previously have supported large tracts of the community, much of this has been cleared.

Occurrence of the community within the project area is already fragmented by the existing runways and associated airport infrastructure. Consequently, the proposed runway extension will not increase fragmentation of the community because the patches of retained vegetation are already highly fragmented and not contiguous with those patches being directly removed.

Construction and operational mitigation measures and ongoing monitoring outlined in Section 5.3 will be implemented to lower the risk and minimise indirect impacts to the 13.330 hectares of retained Gippsland Red Gum community.

Erosion, sediment runoff and alterations to surface and ground water, including nearby waterways

Drainage works are included in the construction design to improve water runoff and prevent flooding on the runway. However, it is recognised that the increase in the amount of impervious surface associated with the construction of the runway could result in altered drainage patterns and increased surface water.

The project area drains into the Gippsland Lakes Ramsar site approximately 5 kilometres downstream. An unnamed tributary connecting to Forge Creek 1.75 kilometres from the works ultimately connects to the Ramsar site. Given the modest nature of the works and the existing drainage network and retarding basin on site, there is negligible chance there will be any significant impacts to Ramsar sites.

Groundwater is shown to be present at depths of between 30-50 metres below ground surface. There are two creeks, one to the North (Short Creek), and one to the East (Macleod Creek), of the site greater than 500 metre distance. Investigation locations were opened for short period of time and fluctuation of ground water levels cannot be concluded. Groundwater conditions rarely remain constant and can change during the year due to variations such as rainfall, temperature, and permeability of soil. It is noted that the moisture condition of the natural soils (especially near-surface clay) can vary considerably from the time of the investigation compared to at the time of construction.

An artificially created dam lies to the north of the existing runway. Strict sediment control will be put in place to manage soil erosion risks in order to protect any adjacent low-lying drainage areas.

No flood mitigation works are required as part of the works. The runway will drain to the existing drainage network that was augmented in recent years to alleviate localised flooding within the airport.

A Construction Management Plan (CMP) will be implemented to mitigate short term impacts from construction. The commitments from the CMP are outlined in Section 5.

Introduction or spread / exacerbation of additional weeds, pests or pathogens.

There is a medium-high risk that invasive plants could be introduced to the site during construction by vehicles and materials. This risk will largely be managed by the strict implementation of protective and preventative hygiene measures within the CMP, discussed further in Table 5 below.

5 Avoidance and mitigation measures

5.1 Avoidance

The funding provided for the proposed action has particular terms and conditions pertaining to projects that seek to assist with bushfire recovery actions. This airport was selected as most suitable given its current and future expected operations as a key hub for hub for aerial firefighting and the military emergency response.

EGSC evaluated alternative airports and design options for meeting Code 3C runway requirements. Orbost Airport was too small and would still cause significant native vegetation impacts, while Mallacoota Airport serves a much smaller population. Bairnsdale Airport was selected because it is larger, centrally located for most of the shire's population, and already functions as a key hub for aerial firefighting and military emergency response.

Several design alternatives were explored to reduce environmental impact, including narrowing the runway and using the secondary runway, but these were not feasible due to safety standards and space limitations. An alternative location is not viable both financially and from a land use planning perspective.

The secondary runway was looked at for the proposed upgrades as an alternative however there is not enough space within the property to extend the secondary runway and meet the Code 3C requirements and native vegetation would continue to be impacted by the works. There is limited scope to adjust design of a Code 3C runway without compromising its intended purpose. Efforts have been made to ensure that works have as little impact to native vegetation as possible by under boring lighting connections.

Additional avoidance measures are unfeasible due to the constraints surrounding the existing runway in its current location.

5.2 Mitigation

The proposed action includes implementation of best practice adaptive environmental management measures to ensure indirect impacts are avoided and minimised as much as practicable.

Mitigation measures for areas of Gippsland Red Gum community will take the form of several management and monitoring measures during construction of the proposed action which will be implemented through the Construction Management Plan (CMP) (Appendix 1). Mitigation measures relate to:

- Sediment and erosion control.
- Weed and pollution management.
- No-go zones, signage and exclusion fencing (i.e. access management for retained areas).

Further detail relating to each of these measures including roles and responsibilities for their implementation is included in Table 5 below.

5.3 Mitigation and management actions

Table 5 summarises the management measures and monitoring response to be followed by the proponent to avoid and minimise impacts to retained Gippsland Red Gum community. These measures are included in the Construction Management Plan (CMP) prepared for the proposed works (Appendix 1). During construction, the environmental management actions below must be implemented and regularly monitored by the contractor, site manager and EGSC. Fulfilling the reporting requirements in Table 5 below will ensure proper and ongoing compliance with environmental management actions.

Table 5 Environmental management actions

Action	Timing	Responsibility	Reporting requirement	Performance criteria
Construction				
The Contractor has prepared and will implement a Construction Management Plan (CMP) for pre-construction and construction phases. **The CMP was prepared in general accordance with measures outlined in EPA Victoria Publication 1834: Civil construction, building and demolition guide.** **The site manager is responsible for adherence with the CMP.**	Prior to construction commencing.	Contractor, Site manager, EGSC	CMP must be prepared to the satisfaction of the responsible authority of the relevant permit for the development under the Victorian *Planning and Environment Act 1987*.	No direct or indirect impacts to retained GRGGW.
All construction personnel must be given a Site environmental induction outlining their responsibilities under the CMP. The induction must outline and identify sensitive areas within the work zone (i.e. No-Go Zones, threatened ecological communities etc) and the specific measures required to protect these values.	Duration of construction period.	Contractor, EGSC	A suitable log of all inductions will be maintained for the duration of the construction period.	No direct or indirect impacts to retained GRGGW.
Prior to commencement of works all areas of GRGGW approved for removal must be clearly marked and identified by a suitably qualified ecologist. No more than 10.354 hectares of GRGGW may be removed.	Prior to construction commencing.	EGSC, Site manager	Suitable records (including photographs) to confirm compliance will be kept for review by DCCEEW or other authorities as required	Compliance with conditions for the action. No direct impacts to retained GRGGW.
Works (including site access, site facilities, vehicle and equipment storage, waste receptacles) must remain within the construction footprint and permitted vegetation removal footprints. All other	Prior to construction commencing.	EGSC, Site manager	Suitable records (including photographs) to confirm compliance will be kept for	No direct impacts to retained GRGGW.

Action	Timing	Responsibility	Reporting requirement	Performance criteria
areas shall be considered No-Go zones for the entirety of the construction period. The no-go zones will be clearly demarcated in the CMP.			review by DCCEEW or other authorities as required	
Secure high visibility temporary fencing will be installed prior to commencement of works in accordance with the CMP, and maintained throughout the construction period to delineate the extent of the project's construction footprint and restrict all access to retained vegetation.	Prior to construction commencing.	Site manager	Suitable records (including photographs) to confirm compliance will be kept for review by DCCEEW or other authorities as required.	No direct impacts to retained GRGGW.
Sediment and erosion controls (silt and filter fencing, haybale barriers) included within the CMP will be installed prior to commencement of works on site and maintained throughout the construction period and for a minimum of three months following construction completion. Controls must be in accordance with EPA best practice guidelines and be sufficient to prevent surface water run-off or increased sediment loads to areas of retained vegetation.	Prior to construction commencing.	Contractor, EGSC	Suitable records (including photographs) to confirm installation will be kept for review by DCCEEW or other authorities as required.	No water run-off or increased sediment loads to areas of retained GRGGW.
Exposure of erodible surfaces must be minimised where possible. All disturbed areas will be progressively stabilised with stabilising or vegetation cover within 14 days of completion of earthworks. **Stockpiles will be minimised and located within designated stockpile areas, as shown on the CMP.**	Duration of construction period.	Contractor, EGSC	Suitable records (including photographs) to confirm compliance will be kept for review by DCCEEW or other authorities as required	No increased sediment loads or airborne dust.
Strict sediment control will be put in place to manage soil erosion risks in order to protect any adjacent low-lying drainage areas. **Sediment control structures will be inspected after rainfall events, and any potential damage will be reported and remediated immediately.**	Duration of construction period, and after rainfall events.	Contractor, EGSC	Inclusion of measures in CMP. Suitable records (including photographs) will be kept for review by DCCEEW or other authorities if required.	No indirect impacts to drainage network.
Hygiene protocols for the introduction or spread of weeds or soil pathogens will be implemented through the CMP. Protocols include:	Prior to construction commencing and	Contractor	Suitable records will be kept for review by authorities if required.	No indirect impacts to retained areas of native

Action	Timing	Responsibility	Reporting requirement	Performance criteria
Washdown procedure to be followed for vehicles entering and leaving the site. **Implementation of wheel wash system.** **Dust suppression of disturbed areas must be undertaken a minimum of four times a day.**	throughout construction.			vegetation by weed encroachment.
Storage of chemicals and fuels must be minimised, and any kept on site must be in designated bunded areas, shown on the CMP, with contingency plans in place to handle any spills.	Duration of construction period.	Contractor, Site manager	Inclusion of measures in CMP. Any unexpected spills must be reported and remediated.	No chemical spills on site during construction period.

6 Offsets

Using the Department of Climate Change, Energy, Environment and Water's (DCCEEW) offset calculator, it was determined that approximately 38 hectares of the Gippsland Red Gum Grassy Woodland community would be required to offset the proposed removal of 10.354 hectares of the community for the project (based on a raw gain of 2 and confidence of 80%).

6.1 Offset search

Biosis has been assisting East Gippsland Shire Council (EGSC) in the search for a direct offset site (first or third party) for some time. Biosis has also been engaging with Vegetation Link (offset broker) about the need for offsets for this community.

6.1.1 Meerlieu property

EGSC identified a potential first party offset site at [redacted] and Biosis completed a preliminary assessment of the site in May 2024.

The aim of this assessment was to identify listed Gippsland Red Gum (*Eucalyptus tereticornis subsp. mediana*) Grassy Woodland and Associated Native Grassland (Gippsland Red Gum Grassy Woodland) community if present and determine its suitability as an offset site for the Bairnsdale airport project.

Vegetation at the site was assessed against the key diagnostics and condition thresholds of the community (DEWHA 2010, TSSC 2009). A total of 45.7 hectares of the community was identified at the site, in both its woodland and grassland forms, spread across multiple patches of varying size and quality. The disjunct patches occurring across the property were of higher quality than the impact site. Due to the disjunct community distribution, inclusion of additional areas of surrounding native vegetation would need to be explored to determine a suitable offset configuration.

Additional assessment of the site was undertaken in September 2024 to assess areas of other native vegetation (Swamp Scrub EVC 53 and Damp Sands Herb-rich Woodland EVC 3) that might be suitable for inclusion in an offset site configuration. Following completion of this assessment, a report was provided outlining a proposed offset configuration at that property (Biosis 2024).

The property was on the market during completion of the above assessments. Whilst these assessments concluded that the site could satisfy 100% of the offset requirements for the Bairnsdale airport project, unfortunately the site was sold to another party.

EGSC continued to monitor and actively search government owned land and relevant advertisements for suitable offset opportunities.

6.1.2 Alternative offset strategy

Stemming from the difficulties experienced in sourcing suitable direct offsets, EGSC has been having discussions with DCCEEW regarding the feasibility of an alternative offset strategy for the project. Biosis prepared an alternative offset strategy which was delivered to DCCEEW in September 2025.

6.2 Residual impacts

The proposed action will result in a significant residual impact to Gippsland Red Gum community, through direct and permanent removal of 10.354 hectares of the Gippsland Red Gum community in its grassland condition state. This impact is unavoidable in delivering the wider benefits offered by the upgrades to the Bairnsdale runway.

There are no indirect impacts on Gippsland Red Gum community expected to occur as a result of the proposed action, based on implementation of the proposed avoidance and mitigation measures.

6.3 Proposed offsets

In recognition of direct impacts to the Gippsland Red Gum Community, offsets for the 10.354 hectares of the community located within the site will be secured.

An Offset Strategy and Management Plan has been prepared to address impacts to Gippsland Red Gum community and is included in Appendix 1. The document addresses the requirements of the EPBC Act Environmental Offsets Policy (DSEWPC 2012).

The proposed offset site is part of the property at [redacted] kilometres [redacted] of Bairnsdale in Gippsland, and encompassing 80 hectares of private land. Preliminary monitoring data was collected by a team of experienced botanists between 29 and 30 October 2025.

Based on the current indicative offset configuration (per Figure 4 in the OMP [Appendix 1]), 14.75% of the offset requirement will be met through restoration of 5.12 hectares of modified Plains Grassy Woodland, and 90.67% of the offset requirement will be met through restoration of 21.59 hectares of introduced pasture.

7 Economic and social impacts

7.1 Public consultation

EGSC has undertaken consultation with the Department of Transport and Planning (Impact Assessment Unit), Air Ambulance Victoria (AAV) and relevant community stakeholders.

The proponent publishes updates relating to the proposed development regularly via 'YourSay East Gippsland' which has provided adequate opportunity for public feedback as part of the design process completed to date. Summary of consultation completed is made publicly available via the YourSay East Gippsland website.

The Bairnsdale Airport is in the traditional country of the Gunaikurnai people. First People State Relations have reviewed the EPBC referral.

7.2 Projected costs

It is estimated that this project will cost approximately $14 million dollars excluding environmental approvals and application fees. As part of the funding for this project, the EGSC was awarded a grant of $1,546,379 as part of the Regional Airports Program Round 3. A condition of this grant is that the project must be completed by August 2026. In addition, the Department of Industry, Science, Energy and Resources has also provided a grant of $9,963,358.00 to help fund the project.

Funding of the proposed action is provided by the Australian Government through the Department of Industry, Science, Energy and Resources - Black Summer Bushfire Recovery Grants Program.

7.3 Social impacts

The Bairnsdale Airport Masterplan (Rehbein Airport Consulting 2020) highlights the airport's critical role as a major hub for emergency response and medical transport in East Gippsland. The plan sets a long-term direction for protecting the airport's operations and guiding development that allows for larger aircraft, supporting both regional growth and emergency capability.

The Gippsland region is projected to grow by approximately 25% by 2046 (EGSC 2025). The airport improvements will also ensure that the growing Gippsland community have options available for potential commercial airport growth into the future. When contemplating requirements of this projected population growth, it is incumbent upon East Gippsland Shire Council to provide for a prosperous and sustainable regional economy by ensuring that regional community services can accommodate future populations.

Bairnsdale Airport is the busiest airport in the Gippsland region, with around 3000 aircraft movements annually, and is the leading regional Victorian base for Air Ambulance Victoria (AAV). It served as the central hub for aerial firefighting and military operations during the 2019–2020 Black Summer bushfires, when 90–110 aircraft per day used the facility. Since then, it has remained essential to community recovery, enabling access for medical staff, psychologists, and disaster-recovery specialists.

Upgrades to the runway and associated infrastructure will increase capacity for larger aircraft, including AAV's new Code C fleet, which the current runway cannot safely accommodate. These improvements will ensure that critical health services and emergency operations remain viable for the region's growing population.

The airport's expansion, supported by the Black Summer Bushfire Recovery Grants Program, is considered necessary to strengthen public safety and regional resilience. Enhancing the airport's capabilities will secure its long-term function as East Gippsland's primary airport and emergency hub, ensuring it can continue to act as a health, crisis-response, and resource-delivery centre for south-east Victoria for decades to come.

7.4 Economic impacts

Upgrading the runway to accommodate larger aircraft will deliver significant and long-lasting economic benefits for East Gippsland. Enhanced aircraft capacity will improve amenity for both the local community and visitors, increasing the attractiveness of the Gippsland region for residents, visitors and investors.

The project will generate local employment during construction and support ongoing aviation, logistics, and emergency-service roles once completed. These jobs will also create flow-on benefits for local businesses such as accommodation, hospitality, fuel suppliers, and contractors, contributing to broader economic growth.

Allowing larger aircraft will open new public and commercial uses of the airport, including charter services, specialist aviation training, and expanded freight operations. The improved capability may also attract aviation-related businesses to the precinct, supporting investment and diversifying local industry.

Tourism will benefit through improved access and more reliable services, enabling the region to reach new visitor markets. Increased traveller numbers will support local tourism operators, accommodation providers, and hospitality venues, strengthening the visitor economy.

Key priorities of the East Gippsland Economic Development Strategy 2022-2032 (EGSC 2022) include fostering growth for businesses and tourism. Tourism plays an important role in the East Gippsland economy, so ensuring the airport can accommodate potential future commercial opportunities is an important strategy which can assist in business and tourism growth for the region. Enhanced runway capacity will improve business productivity by providing faster and more efficient access to major Victorian and interstate centres. Better air transport links support key industries such as agriculture, forestry, and health services, and encourage investment by improving the region's overall connectivity.

The upgrade will also ensure critical health and emergency services remain viable, including accommodating Air Ambulance Victoria's new Code C fleet. Strengthened emergency-response capability reduces long-term health and disaster recovery costs and enhances community resilience.

The project aligns with East Gippsland Shire's strategic economic objectives by improving essential infrastructure, supporting tourism and industry development, and enhancing access to services (Rehbein Airport Consulting 2020). It safeguards the long-term viability of Bairnsdale Airport as the region's primary aviation and emergency hub.

8 Environmental record and other approvals

8.1 Environmental record

There are no known proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the proponent.

The proponent has developed an Environmental Sustainability Strategy 2022-2032 (see link below), which outlines East Gippsland Shire Council's role in maintaining, protecting and enhancing the region's natural environment. The decade-long Strategy provides a framework for a sustainable future within Council's Circle of Control, Influence and Concern.

The Strategy has been written to address those environmental and sustainability challenges most prevalent across the municipality. It also demonstrates alignment with the United Nations Sustainability Development Goals (SDGs).

- Conservation of the natural environment and biodiversity.
- Sustainable management of natural resources (includes climate mitigation).
- Community participation in the climate response.
- Respect and alignment with the rights of Traditional Owner Groups.
- Environmental sustainability supports sustainable economic growth and new job opportunities.
- Growth in the circular economy.
- Community resilience to respond to increasing climate risk and natural disasters.

The full strategy is available at https://www.eastgippsland.vic.gov.au/environment-and-waste/environmental-sustainability-strategy

8.2 Other approvals and conditions

8.2.1 *Planning and Environment Act 1987* (P&E Act)

The P&E Act controls the planning, use and development of land in Victoria and provides for the development of planning schemes for all municipalities. The site is subject to the controls within the East Gippsland Planning Scheme (planning scheme).

Under clause 52.17 (Native vegetation) planning permit is required for the removal of native vegetation. The project falls under the detailed assessment pathway in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DEECA 2025). A planning permit will be lodged for native vegetation removal and will be referred to DEECA.

8.2.2 *Flora and fauna Guarantee Act 1988* (FFG Act)

Areas of native vegetation within the site meet the definition of the FFG Act listed Central Gippsland Plains Grassland Community threatened ecological community. In addition, the site was found to contain multiple protected flora species and one listed threatened species (Biosis 2023).

The proposed action is on land owned by or vested in a public authority (EGSC) and the project area is public land under the FFG Act. As such, an FFG permit will be required to be obtained from DEECA prior to construction commencing.

8.2.3 Environmental Effects Act 1988

The project was referred in September 2024 to the Minister for Planning for a decision on the need for assessment under the *Environmental Effects Act 1988* (2024-R08). The referral was based on an assessment of the criteria in the 'Ministerial Guidelines for Assessment of Environmental Effects under the Environment Effects Act 1978' (DTP 2023).

The Minister for Planning handed down the decision on 27 January 2025 that an Environment Effects Statement is not required.

9 Conclusion

The Bairnsdale Airport upgrade is proposed to improve safety and build the resilience of local community by lengthening and widening the existing runway to allow for larger aircraft which will create a key hub for emergency response operations in the region. The project is intended to have a long-term benefit for the current and future generations in Bairnsdale and the East Gippsland Region.

The proposed works are located within the existing boundary of the Bairnsdale Airport, the surrounding landscape has been significantly modified to be consistent with the land use as an airport since it began its operations.

Updated habitat assessments have been undertaken to confirm conditions of Gippsland Red Gum Community present within the project area, these assessments were undertaken by suitably qualified ecologists to inform the EPBC assessment. The outcomes of these assessments have informed several mitigation and management measures developed in conjunction with project ecologists to avoid and minimise direct and indirect impacts to the retained Gippsland Red Gum community.

Direct impacts of the project to Gippsland Red Gum Community have been avoided where possible, remaining impacts will be offset. An offset management plan was prepared in accordance with requirements of the EPBC Act Environmental Offsets Policy.

Based on implementation of the proposed mitigation measures, the CMP and securing offsets for 10.354 hectares of direct impacts to Gippsland Red Gum Community, it is considered the action will result in an environmentally acceptable outcome and approval is recommended.

References

Biosis 2023. *Bairnsdale Airport air ambulance and runway extension project: Flora and fauna assessment*, Report prepared for East Gippsland Shire Council. Authors: [redacted] and [redacted] Biosis Pty Ltd, Wangaratta, VIC. Project no. 39221.

Biosis 2024. *Meerlieu offset strategy, including Victorian (state) offset site assessment and gain scoring*, Report prepared for East Gippsland Shire Council. Author: [redacted] Biosis Pty Ltd, Wangaratta, VIC. Project no. 41334.

DEECA 2025. 'Guidelines for the removal, destruction or lopping of native vegetation', Victorian Government Department of Energy, Environment and Climate Action, Melbourne, Vic. Version 1.1. https://www.environment.vic.gov.au/__data/assets/pdf_file/0021/91146/Guidelines-for-the-removal,-destruction-or-lopping-of-native-vegetation,-2017.pdf.

DELWP 2017. 'Guidelines for the Removal, Destruction or Lopping of Native Vegetation [Superseded]', Victorian Government Department of Environment, Land, Water and Planning, Melbourne, Vic. https://www.environment.vic.gov.au/native-vegetation/native-vegetation-removal-regulations.

DEWHA 2008. 'Approved Conservation Advice for Gippsland Red Gum (Eucalyptus tereticornis subsp. mediana) Grassy Woodland and Associated Native Grassland', accessed 25 November 2025, http://www.environment.gov.au/biodiversity/threatened/communities/pubs/73-conservation-advice.pdf.

DEWHA 2010. 'Gippsland Red Gum Grassy Woodland and Associated Native Grassland. A nationally threatened ecological community Environment Protection and Biodiversity Conservation Act 1999 Policy Statement 3.22', https://www.environment.gov.au/system/files/resources/1251b430-f8b8-47c9-bf1d-c5c787771589/files/gippsland-red-gum.pdf.

DSEWPC 2012. *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Department of Sustainability, Environment, Water, Population and Communities, Canberra, ACT. https://www.dcceew.gov.au/sites/default/files/documents/offsets-policy_2.pdf.

DTP 2023. 'Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978 (Eighth edition, 2023)', https://www.planning.vic.gov.au/__data/assets/pdf_file/0028/682453/DTP0497-Ministerial-Guidelines-8th-edition-web-FA44.pdf.

EGSC 2022. *East Gippsland Economic Development Strategy 2022-2032*, East Gippsland Shire Council, Bairnsdale, VIC. https://www.eastgippsland.vic.gov.au/council/economic-development-strategy.

EGSC 2025. *East Gippsland Shire Population forecast*, *.id community demographic resources*, accessed 10 April 2026, https://forecast.id.com.au/east-gippsland/about-forecast-areas?WebID=100.

Ethos NRM 2022. *Bairnsdale Aerodrome Preliminary vegetation survey results 2022*,.

Rehbein Airport Consulting 2020. *Bairnsdale Airport Master Plan*, Report prepared for East Gippsland Shire Council. Author: Rehbein Airport Consulting, Bairnsdale, VIC.

TSSC 2009. 'Commonwealth listing advice on Gippsland Red Gum (Eucalyptus tereticornis subsp. mediana) Grassy Woodland and Associated Native Grassland', accessed 3 April 2025, https://www.environment.gov.au/biodiversity/threatened/communities/pubs/73-listing-advice.pdf.

Appendices

Appendix 1 Further information request

Request for additional information – assessment by preliminary documentation

Bairnsdale Airport Upgrade (EPBC 2024/09885)

On 15 July 2024 the delegate to the Minister for the Environment determined the proposed action for a runway extension and lighting upgrade to Bairnsdale Airport located at 345 Bengworden Road, Bairnsdale, Victoria was a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The controlling provisions were Listed threatened species and communities (section18 & section18A).

On 30 September 2024 the delegate to the Minister for the Environment determined that the proposed action will be assessed by preliminary documentation. Preliminary documentation for the proposal will include:

- The information contained in the original referral.
- The further information you provide on the impacts of the action and the strategies you propose to avoid, mitigate and offset those impacts (as described below); and
- Any other relevant information on the matters protected by the EPBC Act.

The preliminary documentation should be sufficient to allow the Minister (or delegate) to make an informed decision on whether to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

The preliminary documentation must address the matters set out below and follow the content, style and formatting requirements set out in Appendix A.

1. HABITAT ASSESSMENT

Background

Based on the information provided in your referral, and other available information, the department considers that the listed species and communities identified below may be significantly impacted by the proposed action.

- Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community – critically endangered

It is the proponent's responsibility to be aware of any changes to the distribution of listed threatened species and ecological communities, and information available in the Species Profile and Threats (SPRAT) Database. The proponent must ensure that a recent Protected Matters Search Tool (PMST) report has been generated and considered before finalising the draft preliminary documentation. This report should be generated within a 4-week period before date of lodgement of the draft preliminary documentation.

Habitat assessments must be informed by desktop and field surveys (in accordance with departmental guidelines or as defined by best practice surveys), and with reference to relevant departmental documents (e.g., approved Conservation Advices, Recovery Plans, draft referral guidelines and Listing Advices, and SPRAT Database), including published research and other relevant sources.

1.1 Species specific information required

Information required	
1.1.1	Provide a summary of the habitat specific features available in the proposed action area as per the habitat description in the *Approved Conservation Advice for the Eucalyptus tereticornis* subsp. m*ediana* (Gippsland Red Gum Grassy Woodland and Associated Native Grassland).
1.1.2	An assessment (in a cross-reference table) of vegetation composition against the key diagnostic characteristics and condition.
1.1.3	The total area (in hectares) of each identified habitat type (e.g., shelter/refuge, foraging, dispersal, etc, and quality of habitat suitable for input into an offset calculator.

2. IMPACT ASSESSMENT

The proposed action is considered likely to have impacts to threatened species and communities (section 18 and section 18a). An assessment of direct, indirect, and consequential impacts as a result of the proposed action must be provided in accordance with relevant departmental policies and guidelines including the SPRAT Database.

The proposed action will clear 11.087 ha of critically endangered Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community.

Consideration of impacts should include the consideration of the nature, likelihood, and severity of the impacts.

The department considers the proposed action may result in, but is not limited to, the following impacts:

- Decrease in habitat quality or quantity for species.
- Permanent removal of plant individuals and threatened ecological communities in particular the critically endangered Gippsland Red Gum (*Eucalyptus tereticornis* subsp. *mediana*) Grassy Woodland and Associated Native Grassland ecological community.

Listed Threatened Species and Communities

Information required	
2.1	Include the direct and indirect loss and/or disturbance of Matters of National Environmental Significance (MNES) individuals and habitat as a result of the proposed action. This must include the quality of the habitat impacted and quantification of the individuals and habitat area (in hectares) to be impacted, suitable for input into an offset calculator.

2.2	An assessment of the impacts of habitat fragmentation in the proposed action area and surrounding areas, including consideration of species' movement patterns. Include consideration of the landscape context, including connectivity with other patches of habitat and information on the long-term viability of local populations if the proposed action were to proceed.

3. AVOIDANCE, MITIGATION AND MANAGEMENT MEASURES

Background

Avoidance and mitigation measures are the primary methods of eliminating and reducing significant impacts on MNES. Where possible and practicable, it is best to avoid impacts. If impacts cannot be avoided, then they should be minimised or mitigated as much as possible. Avoidance and mitigation measures must be investigated thoroughly as a part of the assessment and be supported by evidence to demonstrate likely success.

Management commitments by the person proposing to take the action must be clearly distinguished from recommendations or statements of best practice made by the document author or other technical expert.

The SPRAT Database, and associated statutory documents, may provide relevant mitigation measures for listed threatened species and ecological communities and listed migratory species.

Information required	
3.1	A detailed summary of measures proposed to be undertaken by the proponent to avoid, mitigate and manage relevant impacts of the proposed action on relevant MNES, including within adjacent areas. This should include for each measure: i. A statement of the objectives, ongoing management and monitoring, and locations and timing ii. The party responsible iii. The policy basis. iv. Development and implementation of a Construction Environment Management Plan (CEMP).
3.2	The proposed measures must be based on best available practices, appropriate standards, evidence of success for other similar actions and supported by published scientific evidence.
3.3	All proposed measures for MNES must be drafted to meet the 'S.M.A.R.T' principle: • S – Specific (what and how) • M – Measurable (baseline information, number/value, auditable)

	• A – Achievable (timeframe, money, personnel) • R – Relevant (conservation advice, recovery plans, threat abatement plans) • T – Time-bound (specific timeframe to complete)

4. OFFSETS

Background

Environmental offsets are measures that compensate for the residual significant impacts of an action on the environment. Offsets provide environmental benefits to counterbalance the impacts that remain after consideration of avoidance and mitigation measures. It is important to consider environmental offsets early in the assessment process. Correspondence with the department regarding offsetting is highly encouraged. The department's *EPBC Act Environmental Offsets Policy* (2012) (Offsets Policy) is available at: www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.

Information required	
4.1	An assessment of the likelihood of residual significant impacts occurring on relevant MNES, after avoidance, mitigation and management measures have been applied.
4.2	If residual impacts are likely to be significant, please provide a summary of the proposed environmental offset and key commitments to achieve a conservation gain for each protected matter with residual significant impacts.
4.3	Where offset area/s have been nominated, include a draft Offset Area Management Plan (OAMP) as an appendix to the PD. The draft OAMP must meet the information requirements set out in Appendix B and must be prepared by a suitably qualified ecologist and in accordance with the department's *Environmental Management Plan Guidelines* (2014), available at: www.environment.gov.au/epbc/publications/environmental-management-plan-guidelines.

APPENDIX A: Preliminary documentation content, style and formatting requirements

A1. Content requirements	
A1.1	Be a stand-alone document containing sufficient information to avoid the need to search out previous or supplementary reports.
A1.2	Enable interested stakeholders and the Minister to easily understand the consequences of the project on matters of national environmental significance (MNES).
A1.3	Be written so that any conclusions reached can be independently assessed. Include all key claims, findings, proposals, and undertakings in the main document.
A1.4	Refer to all relevant standards, policies and other guidance material published by the department. Any instances where published guidance is not followed must be justified. Where no Commonwealth standards exist, state government and industry standards may be useful.
A1.5	Include the names, roles and qualifications (where relevant) of all persons involved in preparing the preliminary documentation.
A1.6	Include a copy of this request for information and a cross-reference table indicating where the information fulfilling this request is included in the preliminary documentation (e.g., Section 4.2.2 and Appendix A, Chapter 2.1).
A1.7	The preliminary documentation must state the following for all information provided: • The source and date of the information. • How the reliability of the information was tested. • The uncertainties (if any) in the information. • The guidelines, plans, and/or policies considered.
A2. Format and style requirements	
A2.1	Be in a suitable format to be published in hardcopy (A4 or A3 size, with maps and diagrams in A4 or A3 size and in colour) and published in electronic format (e.g., MSWord or PDF) on the internet.
A2.2	Include detailed technical information, studies, or investigations necessary to support the information in the stand-alone document as appendices.
A2.3	Be objective, clear, succinct, avoid technical jargon and, where appropriate, be supported by maps, plans, diagrams, data or other descriptive detail.

A2.4	Reference all sources using the Harvard standard of referencing. Ensure that other supporting documents (e.g., academic studies, regulatory standards) are publicly accessible, with electronic links provided where possible.
A2.5	Redact the contact details of departmental officers.
A2.6	Not contain any commercial in confidence markings. If the preliminary documentation contains sensitive information, please discuss this with the assessment officer.

APPENDIX B: Information Requirements for EPBC Act Offset Proposals

B1. Minimum Requirements for a draft Offset Area Management Plan:	
B1.1	Specific, committal and measurable environmental outcomes which detail the nature of the conservation gain to be achieved for relevant MNES, including the creation, restoration and revegetation of habitat in the proposed offset area/s.
B1.2	Details, with supporting evidence, to demonstrate how the environmental offset/s compensate for residual significant impacts of the proposed action on relevant MNES, and/or their habitat, in accordance with the principles of the Offsets Policy and all requirements of the Offsets Assessment Guide including: • time over which loss is averted (max. 20 years). • time until ecological benefit. • risk of loss (%) without offset. • risk of loss (%) with offset; and • confidence in result (%).
B1.3	A description of the offset area/s, including location, size, condition, environmental values present, ongoing threats and surrounding land uses.
B1.4	Baseline data and other supporting evidence that documents the presence of the relevant MNES, and the quality of their habitat within the offset area/s.
B1.5	An assessment of the site habitat quality for the offset area/s
B1.6	Details of how the offset area/s will provide connectivity with other habitats and biodiversity corridors and/or will contribute to a larger strategic offset for the relevant MNES.
B1.7	Maps and shapefiles to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes (e.g., physical address of the offset area/s, coordinates of the boundary points in decimal degrees, the relevant MNES that the environmental offset/s compensates for, and the size of the environmental offset/s in hectares).
B1.8	Specific offset completion criteria derived from the site habitat quality to demonstrate the improvement in the quality of habitat in the offset area/s over a 20-year period.
B1.10	Interim milestones that set targets at 5-yearly intervals for progress towards achieving the offset completion criteria.

B1.11	Details of the nature, timing and frequency of monitoring to inform progress against achieving the 5-yearly interim milestones (the frequency of monitoring must be sufficient to track progress towards each set of milestones, and sufficient to determine whether the offset area/s are likely to achieve those milestones in adequate time to implement all necessary corrective actions).
B1.12	Proposed timing for the submission of monitoring reports which provide evidence demonstrating whether the interim milestones have been achieved.
B1.13	Timing for the implementation of tangible, on-ground corrective actions to be implemented if monitoring activities indicate the interim milestones have not been achieved.
B1.14	Risk analysis and a risk management and mitigation strategy for all risks to the successful implementation of the OAMP and timely achievement of the offset completion criteria, including a rating of all initial and post-mitigation residual risks in accordance with a risk assessment matrix.
B1.15	Evidence of how the management actions and corrective actions take into account relevant approved conservation advice and are consistent with relevant recovery plans and threat abatement plans.
B1.16	Details and execution timing of the mechanism to legally secure the proposed offset area/s, such that legal security remains in force over the offset area/s for at least 20 years to provide enduring protection for the offset area/s against development incompatible with conservation.
B1.17	All proposed management actions, monitoring approach and corrective actions must be written using committed language (e.g., 'will' and 'must').
B1.18	Justification of how the offset/s meet the EPBC Act Environmental Offsets Policy.

Appendix 2 Primary runway design plans

BAIRNSDALE AERODROME
RUNWAY UPGRADE

345 BENGWORDEN ROAD, BAIRNSDALE



LOCALITY PLAN
NOT TO SCALE

EAST GIPPSLAND SHIRE COUNCIL

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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APPROVED:	M.S.	SURVEY REF:	
SCALE:	NOT TO SCALE	PLAN No:	-

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

LOCALITY PLAN

DATE: AUGUST 2021
SHEET 1 OF 51
DRAWING No: 2466/1100 B
Rv.

DRG. No.	DESCRIPTION
2466/1100	LOCALITY PLAN
2466/1101	DRAWING LIST
2466/1102	OVERALL LAYOUT PLAN
2466/1103	PRIMARY RUNWAY EXISTING FEATURES LAYOUT PLAN
2466/1104	PRIMARY RUNWAY EXISTING FEATURES - SHEET 1 OF 3
2466/1105	PRIMARY RUNWAY EXISTING FEATURES - SHEET 2 OF 3
2466/1106	PRIMARY RUNWAY EXISTING FEATURES - SHEET 3 OF 3
2466/1107	PRIMARY RUNWAY OVERALL LAYOUT PLAN
2466/1108	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 1 OF 6
2466/1109	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 2 OF 6
2466/1110	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 3 OF 6
2466/1111	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 4 OF 6
2466/1112	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 5 OF 6
2466/1113	PRIMARY RUNWAY DETAIL LAYOUT PLAN - SHEET 6 OF 6
2466/1114	PRIMARY RUNWAY & SECONDARY RUNWAY INTERSECTION PLAN
2466/1115	PRIMARY RUNWAY & TAXIWAY INTERSECTION PLAN
2466/1116	PRIMARY RUNWAY PAVEMENT PLAN - SHEET 1 OF 2
2466/1117	PRIMARY RUNWAY PAVEMENT PLAN - SHEET 1 OF 2
2466/1118	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 1 OF 6
2466/1119	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 2 OF 6
2466/1120	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 3 OF 6
2466/1121	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 4 OF 6
2466/1122	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 5 OF 6
2466/1123	PRIMARY RUNWAY LONGITUDINAL SECTIONS - SHEET 6 OF 6
2466/1124	PRIMARY RUNWAY CROSS SECTIONS - SHEET 1 OF 13
2466/1125	PRIMARY RUNWAY CROSS SECTIONS - SHEET 2 OF 13
2466/1126	PRIMARY RUNWAY CROSS SECTIONS - SHEET 3 OF 13
2466/1127	PRIMARY RUNWAY CROSS SECTIONS - SHEET 4 OF 13
2466/1128	PRIMARY RUNWAY CROSS SECTIONS - SHEET 5 OF 13
2466/1129	PRIMARY RUNWAY CROSS SECTIONS - SHEET 6 OF 13
2466/1130	PRIMARY RUNWAY CROSS SECTIONS - SHEET 7 OF 13
2466/1131	PRIMARY RUNWAY CROSS SECTIONS - SHEET 8 OF 13
2466/1132	PRIMARY RUNWAY CROSS SECTIONS - SHEET 9 OF 13
2466/1133	PRIMARY RUNWAY CROSS SECTIONS - SHEET 10 OF 13
2466/1134	PRIMARY RUNWAY CROSS SECTIONS - SHEET 11 OF 13
2466/1135	PRIMARY RUNWAY CROSS SECTIONS - SHEET 12 OF 13
2466/1136	PRIMARY RUNWAY CROSS SECTIONS - SHEET 13 OF 13
2466/1137	TYPICAL SECTIONS & PAVEMENT COMPOSITE DETAILS
2466/1138	DETENTION BASIN IMPROVEMENT WORKS
2466/1139	DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 8
2466/1140	DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 OF 8
2466/1141	DRAINAGE LONGITUDINAL SECTIONS - SHEET 3 OF 8
2466/1142	DRAINAGE LONGITUDINAL SECTIONS - SHEET 4 OF 8
2466/1143	DRAINAGE LONGITUDINAL SECTIONS - SHEET 5 OF 8
2466/1144	DRAINAGE LONGITUDINAL SECTIONS - SHEET 6 OF 8
2466/1145	DRAINAGE LONGITUDINAL SECTIONS - SHEET 7 OF 8
2466/1146	DRAINAGE LONGITUDINAL SECTIONS - SHEET 8 OF 8
2466/1147	STANDARD DETAILS
2466/1148	LINEMARKING LAYOUT PLAN - SHEET 1 OF 2
2466/1149	LINEMARKING LAYOUT PLAN - SHEET 2 OF 2
2466/1150	LINEMARKING DETAIL PLAN

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

DRAWING LIST

DATE: AUGUST 2021
SHEET 2 OF 51
DRAWING No: 2466/1101 B
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POINT No.	EASTING	NORTHING	RL.
PM 77	549568.382	5806165.881	49.602
STN. 1	548995.587	5805867.294	50.262
STN. 2	549213.972	5805826.973	49.767
STN. 3	549180.462	5806003.523	50.400
STN. 4	549338.696	5805913.703	49.838
STN. 5	549369.374	5806123.693	50.170
STN. 6	549529.967	5806045.344	49.764
STN. 7	549551.813	5806247.211	49.775
STN. 8	549725.892	5806179.352	49.244
STN. 9	549741.397	5806377.694	49.233
STN. 10	549913.490	5806306.336	48.851
STN. 11	549947.563	5806515.529	48.799
STN. 12	550063.925	5806413.780	48.645
STN. 13	550151.163	5806475.517	48.089
STN. 14	550138.509	5806649.104	48.228
STN. 15	550349.446	5806613.392	47.625
STN. 16	550344.038	5806787.796	48.312
STN. 17	550522.986	5806731.528	46.633
STN. 18	550555.019	5806924.652	46.717
PM 66	550575.864	5806859.060	46.112



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N

LEGEND:

- PROPOSED FULL DEPTH PAVEMENT
- PROPOSED STORMWATER
- PROPOSED STORMWATER PIT
- 1 PROPOSED STORMWATER PIT No.
- PROPOSED SWALE DRAIN
- 22 PROPOSED LINEMARKING
- SWD EXISTING STORWATER DRAINAGE
- D EXISTING TABLE DRAIN
- 18 EXISTING CONTOURS (0.2m INTERVAL)
- EXISTING EDGE OF SEAL
- EXISTING RUNWAY CONE
- EXISTING RUNWAY MARKER
- EXISTING ELECTRICITY POLE
- EXISTING EDGE OF GRAVEL
- EXISTING GABLE
- 15 22 EXISTING LINEMARKING
- BOREHOLE LOCATIONS

NOTES:

1. DESIGN HAS BEEN UNDERTAKEN IN ACCORDANCE WITH CASA MANUAL OF STANDARDS PART 139- AERODROMES
2. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION.
3. COORDINATES FOR SETOUT WILL BE SUPPLIED TO THE CONTRACTOR IN ELECTRONIC FORMAT.
4. CHAINAGES ARE CENTRE-LINE CHAINAGES UNLESS OTHERWISE NOTED.
5. ALL STATIONS ARE STEEL PICKETS UNLESS OTHERWISE STATED.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH OCCUPATIONAL HEALTH AND SAFETY GUIDELINES.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND ENSURE AIR CONTROL REQUIREMENTS ARE MET AND MAINTAIN FOR DURATION OF ONSITE WORKS
8. SEDIMENT CONTROL STRUCTURES TO BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATION AND TO THE APPROVAL OF THE SUPERINTENDENT.

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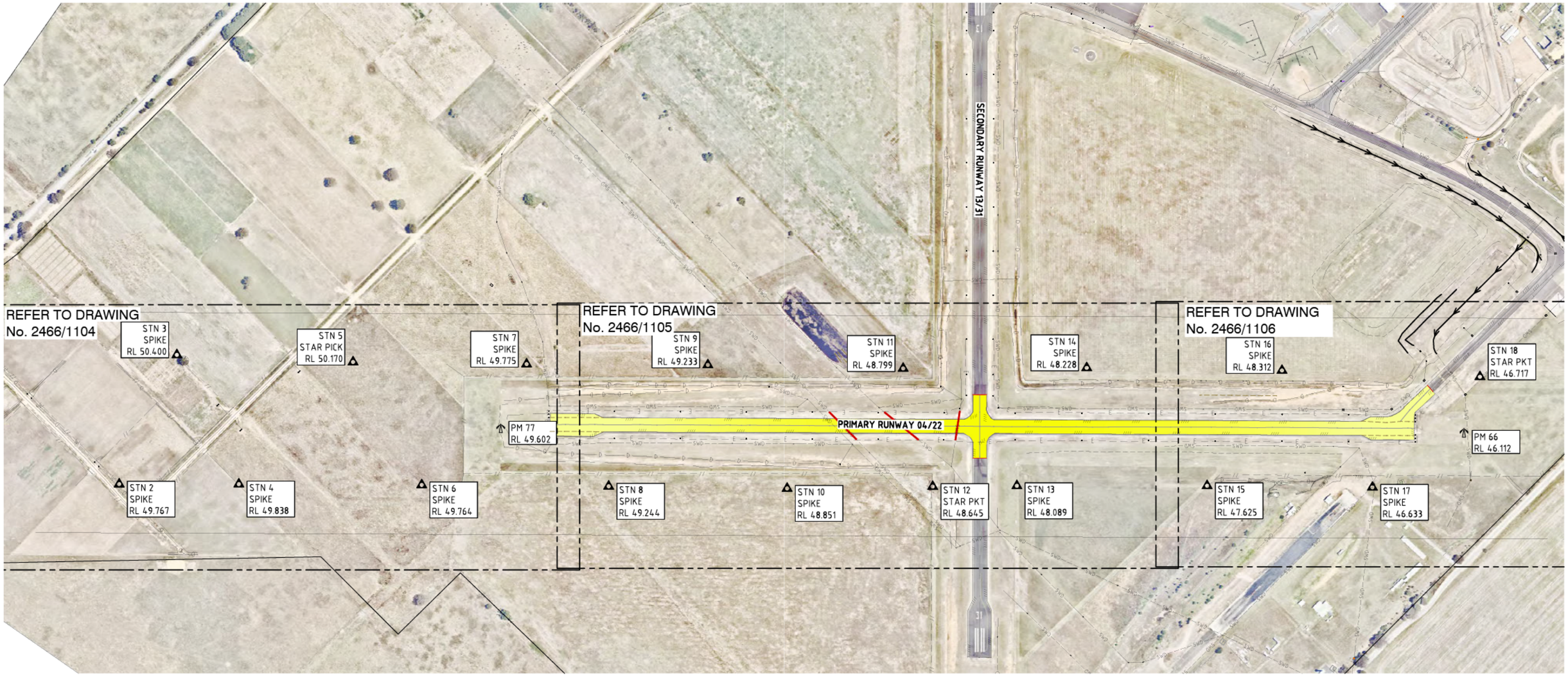
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

OVERALL LAYOUT PLAN

DATE: AUGUST 2021
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1 : 2500 AT A1
1 : 5000 AT A3

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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY LAYOUT
EXISTING FEATURES LAYOUT PLAN

DATE: AUGUST 2021
SHEET 4 OF 51
DRAWING No: 2466/1103 Rv. B

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FOR CONTINUATION REFER TO DRAWING No. 2466/1105

20 10 0 20 40 60 80
1 : 1000 AT A1
1 : 2000 AT A3

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CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS

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APPROVED:	M.S.		SURVEY REF:
SCALE:	1:1000		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1104 B.dwg

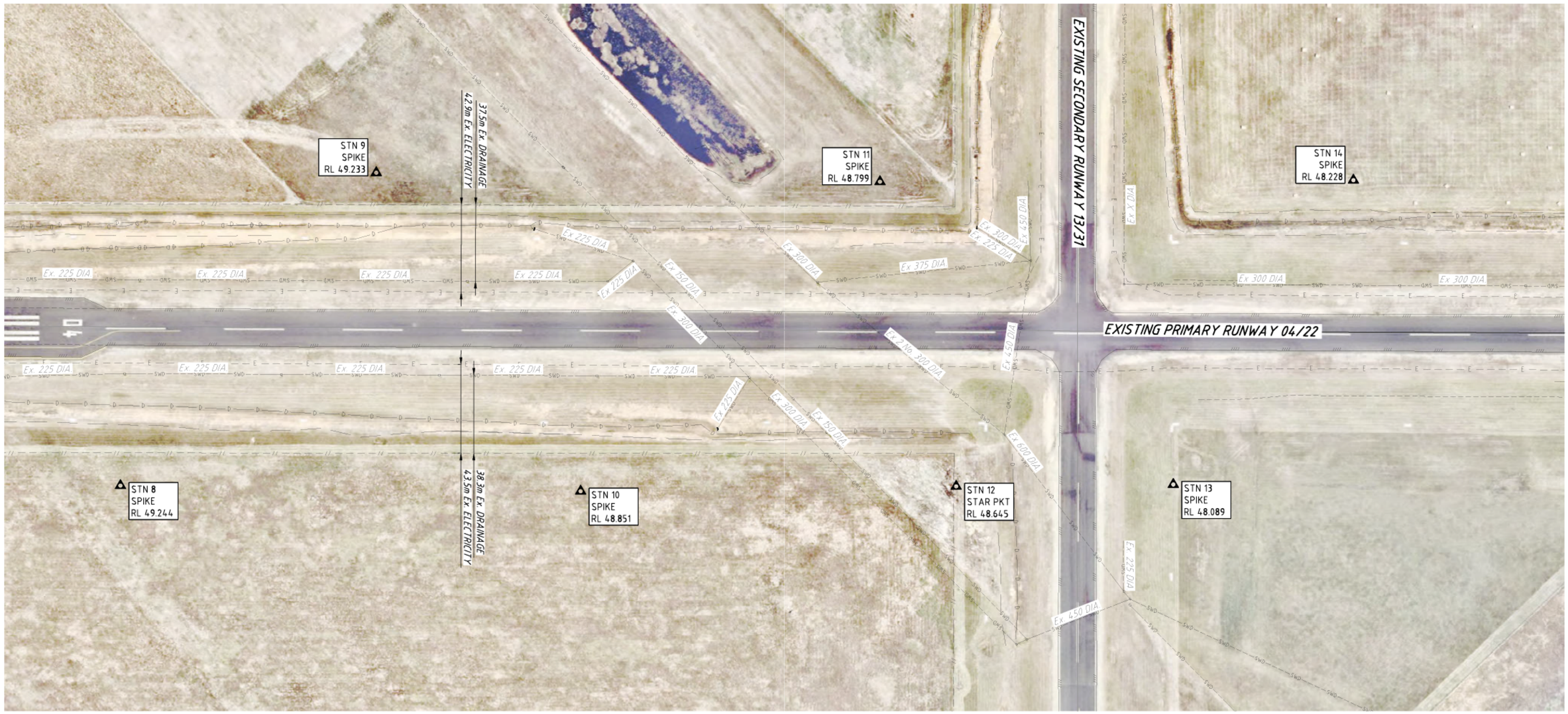
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
EXISTING FEATURES - SHEET 1 OF 3

DATE: AUGUST 2021
SHEET 5 OF 51
DRAWING No: 2466/1104
Rv. B

WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.



FOR CONTINUATION REFER TO DRAWING No. 2466/1104

FOR CONTINUATION REFER TO DRAWING No. 2466/1106

20 10 0 20 40 60 80
1 : 1000 AT A1
1 : 2000 AT A3

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
EXISTING FEATURES - SHEET 2 OF 3

DATE: AUGUST 2021
SHEET 6 OF 51
DRAWING No: 2466/1105
Rv. B

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20 10 0 20 40 60 80
1 : 1000 AT A1
1 : 2000 AT A3

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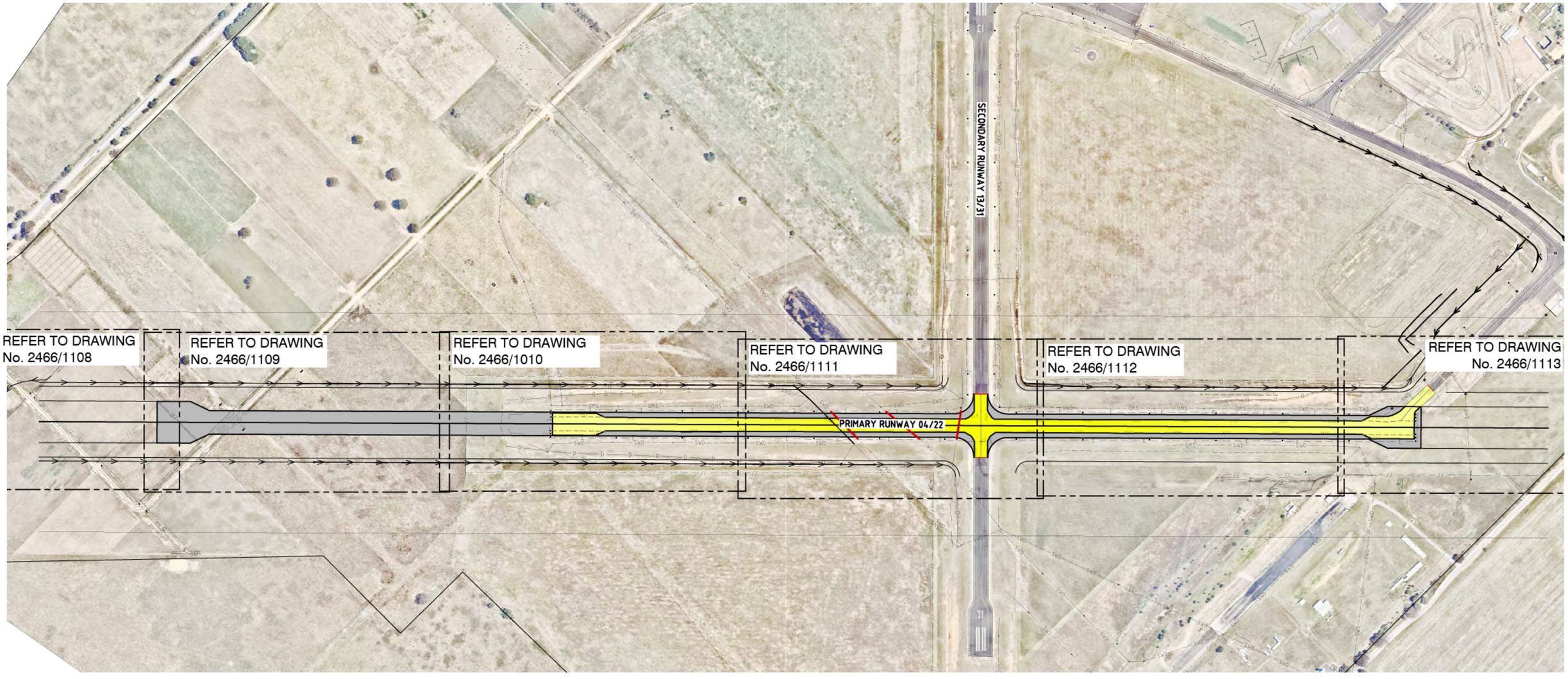
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
EXISTING FEATURES - SHEET 3 OF 3

DATE: AUGUST 2021
SHEET 7 OF 51
DRAWING No: 2466/1106
Rv. B

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100 50 0 100 200
1 : 2500 AT A1
1 : 5000 AT A3

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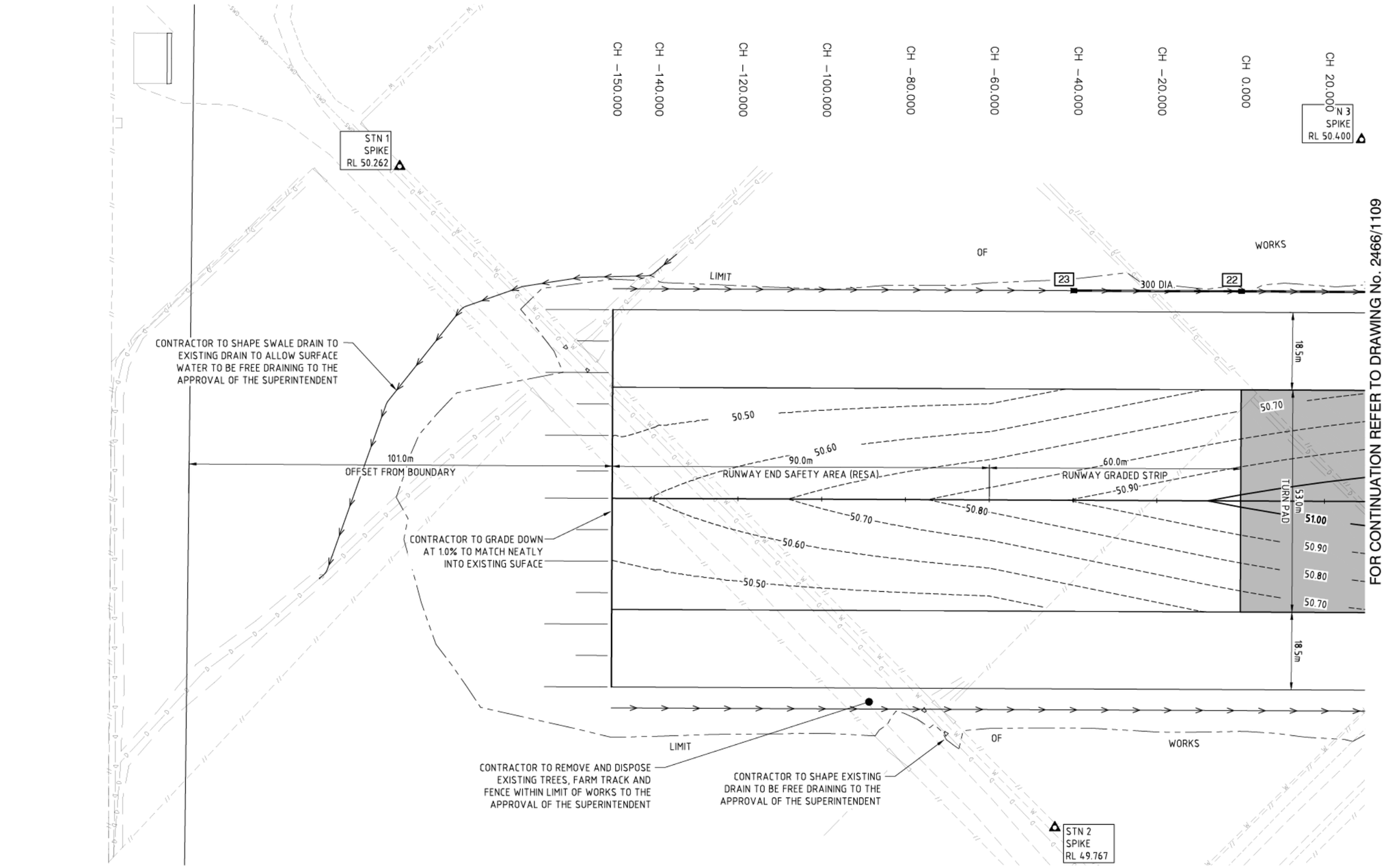
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY LAYOUT
OVERALL LAYOUT PLAN

DATE: AUGUST 2021
SHEET 8 OF 51
DRAWING No: 2466/1107 B
Rv.

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NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40 1 : 500 AT A1
1 : 1000 AT A3

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 1 OF 6

DATE: AUGUST 2021
SHEET 9 OF 51
DRAWING No: 2466/1108 B
Rv.

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N

CH 0.000 CH 20.000 CH 40.000 CH 42.385 CH 60.000 CH 66.566 CH 80.000 CH 100.000 CH 120.000 CH 140.000 CH 160.000 CH 180.000 CH 200.000 CH 220.000 CH 240.000 CH 260.000 CH 280.000 CH 300.000 CH 320.000 CH 340.000 CH 360.000

N 3
SPIKE
RL 50.400

CONTRACTOR TO REMOVE AND DISPOSE EXISTING TREES, FARM TRACK AND FENCE WITHIN LIMIT OF WORKS TO THE APPROVAL OF THE SUPERINTENDENT

STN 5
STAR PICK
RL 50.170

FOR CONTINUATION REFER TO DRAWING No. 2466/1108

FOR CONTINUATION REFER TO DRAWING No. 2466/1110

22 — 300 DIA. — 21 — 300 DIA. — 20 — 300 DIA. — 19 — 300 DIA. — 18 — 300 DIA.

VARIES — LIMIT OF WORKS

18.5m

24.2m

50.70 50.80 50.90 51.00 51.10

TURN PAD 53.0m

RUNWAY 30.0m

GRADED RUNWAY STRIP 90.0m

PRIMARY RUNWAY 04/22

PAVEMENT CONSTRUCTION
(REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

32 — 225 DIA. — 31 — 300 DIA. — 30

VARIES — LIMIT OF WORKS

CONTRACTOR TO REMOVE AND DISPOSE EXISTING TREES, FARM TRACK AND FENCE WITHIN LIMIT OF WORKS TO THE APPROVAL OF THE SUPERINTENDENT

STN 4
SPIKE
RL 49.838

STN 6
SPIKE
RL 49.764

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

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SCALE:	1 : 500		PLAN No: -

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 2 OF 6

DATE: AUGUST 2021
SHEET 10 OF 51
DRAWING No: 2466/1109
Rv. B

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CH 360.000 CH 380.000 CH 400.000 CH 420.000 CH 440.000 CH 460.000 CH 480.000 CH 500.000 CH 503.000 CH 520.000 CH 540.000 CH 560.000 CH 580.000 CH 600.000 CH 620.000 CH 640.000 CH 660.000 CH 680.000 CH 700.000 CH 720.000 CH 740.000

STN 7
SPIKE
RL 49.775

STN 9
SPIKE
RL 49.233

CONTRACTOR TO CONSTRUCT STORMWATER DRAINAGE PIT TO ALLOW EXISTING STORMWATER TO BE RETAINED. EXISTING STORMWATER DRAINAGE TO BE MADE REDUNDANT

EXISTING DRAINAGE TO BE ABANDONED AND LEFT INSITU TO THE APPROVAL OF THE SUPERINTENDENT

LIMIT OF WORKS

300 DIA. 17 300 DIA. 16 300 DIA. 15 300 DIA. 14 300 DIA. 13 300 DIA. 12 300 DIA.

Ex. 225 DIA. SWD OMS

EXISTING SEAL TO BE RIP AND STOCKPILED TO ALLOW FOR FULL EXCAVATION DEPTH PAVEMENT (REFER TO DRAWING No. 2466/1137 FOR DETAILS).

50.50 50.40 50.30 50.20 50.10 50.00 49.90 49.80

PM 77
RL 49.602

PRIMARY RUNWAY 04/22

30.0m RUNWAY

90.0m GRADED RUNWAY STRIP

18.6m Ex. RUNWAY

PAVEMENT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

EXISTING LIGHTING INFRASTRUCTURE TO BE MADE REDUNDANT AND ABANDONED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DESIGN

EXISTING DRAINAGE TO BE ABANDONED AND LEFT INSITU TO THE APPROVAL OF THE SUPERINTENDENT

300 DIA. 29 300 DIA. 28 300 DIA. 27 300 DIA. 26

LIMIT OF WORKS

STN 8
SPIKE
RL 49.244

FOR CONTINUATION REFER TO DRAWING No. 2466/1109

FOR CONTINUATION REFER TO DRAWING No. 2466/1111

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 3 OF 6

DATE: AUGUST 2021
SHEET 11 OF 51
DRAWING No: 2466/1110 B
Rv.

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N

CH 740.000 CH 760.000 CH 780.000 CH 800.000 CH 820.000 CH 840.000 CH 860.000 CH 880.000 CH 900.000 CH 920.000 CH 940.000 CH 960.000 CH 980.000 CH 1000.000 CH 1020.000 CH 1040.000 CH 1060.000 CH 1080.000 CH 1100.000 CH 1120.000

SECONDARY RUNWAY 13/31

STN 11
SPIKE
RL 48.799

CONTRACTOR TO RECONSTRUCT PAVEMENT AND MATCH NEATLY BACK INTO EXISTING AT SAWCUT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

EXISTING SEAL TO BE RIP AND STOCKPILED TO ALLOW FOR FULL EXCAVATION DEPTH PAVEMENT (REFER TO DRAWING No. 2466/1137 FOR DETAILS).

CONTRACTOR TO ALLOW TO SHAPE DRAINAGE INTO EXISTING HEADWALL TO THE APPROVAL OF THE SUPERINTENDENT.

LIMIT 300 DIA. 11 300 DIA. 10 OF WORKS LIMIT

18.1m EX. RUNWAY

WORKS

8

CONTRACTOR TO BREAK INTO EXISTING STORMWATER DRAINAGE PIT AND MAKE GOOD TO THE APPROVAL OF THE SUPERINTENDENT.

300 DIA 9

SAWCUT 49.30 49.10 49.20

Ex 225 DIA Ex 300 DIA Ex 225 DIA Ex 375 DIA Ex 150 DIA Ex 450 DIA Ex X DIA Ex 600 DIA

49.60 49.70 49.50 49.40 49.20 49.10 49.30 49.00 49.10 49.00 48.90

RUNWAY 30.0m

GRADED RUNWAY STRIP 90.0m

EX. RUNWAY 18.6m

PRIMARY RUNWAY 04/22

9A

PAVEMENT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

375 DIA. 25 375 DIA. 24B 24A LIMIT OF

SAWCUT 48.90

CONTRACTOR TO RECONSTRUCT PAVEMENT AND MATCH NEATLY BACK INTO EXISTING AT SAWCUT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

18.4m EX. RUNWAY

STN 13
SPIKE
RL 48.089

STN 12
STAR PKT
RL 48.645

EXISTING LIGHTING INFRASTRUCTURE TO BE MADE REDUNDANT AND ABANDONED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DESIGN

CONTRACTOR TO CONSTRUCT NEW DRAINAGE PIT OVER EXISTING STORMWATER DRAINAGE PIPE AND MAKE GOOD TO THE APPROVAL OF THE SUPERINTENDENT.

CONTRACTOR TO MATCH NEW DRAIN TO EXISTING DRAIN TO THE APPROVAL OF THE SUPERINTENDENT.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

FOR CONTINUATION REFER TO DRAWING No. 2466/1110

FOR CONTINUATION REFER TO DRAWING No. 2466/1112

LEGEND:

REPLACE EXISTING DRAINAGE PIPES BENEATH NEW PAVEMENT WITH NEW PIPE OF EQUAL DIAMETER WITH AN APPROVED JOINTING METHOD TO THE APPROVAL OF THE SUPERINTENDENT

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 4 OF 6

DATE: AUGUST 2021
SHEET OF 51
DRAWING No: 2466/1111 Rv. B

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N

CH 1120.000 CH 1140.000 CH 1160.000 CH 1180.000 CH 1200.000 CH 1220.000 CH 1240.000 CH 1260.000 CH 1280.000 CH 1300.000 CH 1320.000 CH 1340.000 CH 1360.000 CH 1380.000 CH 1400.000 CH 1420.000 CH 1440.000 CH 1460.000 CH 1480.000 CH 1500.000

STN 14
SPIKE
RL 48.228

STN 16
SPIKE
RL 48.312

LIMIT OF WORKS

300 DIA. | 300 DIA. | 375 DIA. | 375 DIA. | 375 DIA.

7 6 5 4

EXISTING DRAINAGE TO BE ABANDONED AND LEFT INSITU TO THE APPROVAL OF THE SUPERINTENDENT

EXISTING SEAL TO BE RIP AND STOCKPILED TO ALLOW FOR FULL EXCAVATION DEPTH PAVEMENT (REFER TO DRAWING No. 2466/1137 FOR DETAILS).

Ex 300 DIA. | Ex 300 DIA. | Ex 300 DIA. | Ex 300 DIA. | Ex 300 DIA.

48.70 48.80 48.90 48.80 48.70 48.70 48.60 48.50 48.40 48.30 48.20 48.10 48.00

PRIMARY RUNWAY 04/22

30.0m RUNWAY

GRADED RUNWAY STRIP 90.0m

EX. RUNWAY 18.3m

Ex. 150 DIA. | Ex. 225 DIA. | Ex. 225 DIA.

PAVEMENT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

EXISTING LIGHTING INFRASTRUCTURE TO BE MADE REDUNDANT AND ABANDONED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DESIGN

CONTRACTOR TO REMOVE AND DISPOSE EXISTING TREES, FARM TRACK AND FENCE WITHIN LIMIT OF WORKS TO THE APPROVAL OF THE SUPERINTENDENT

STN 15
SPIKE
RL 47.625

FOR CONTINUATION REFER TO DRAWING No. 2466/1111

FOR CONTINUATION REFER TO DRAWING No. 2466/1113

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	1 : 500	PLAN No:	-

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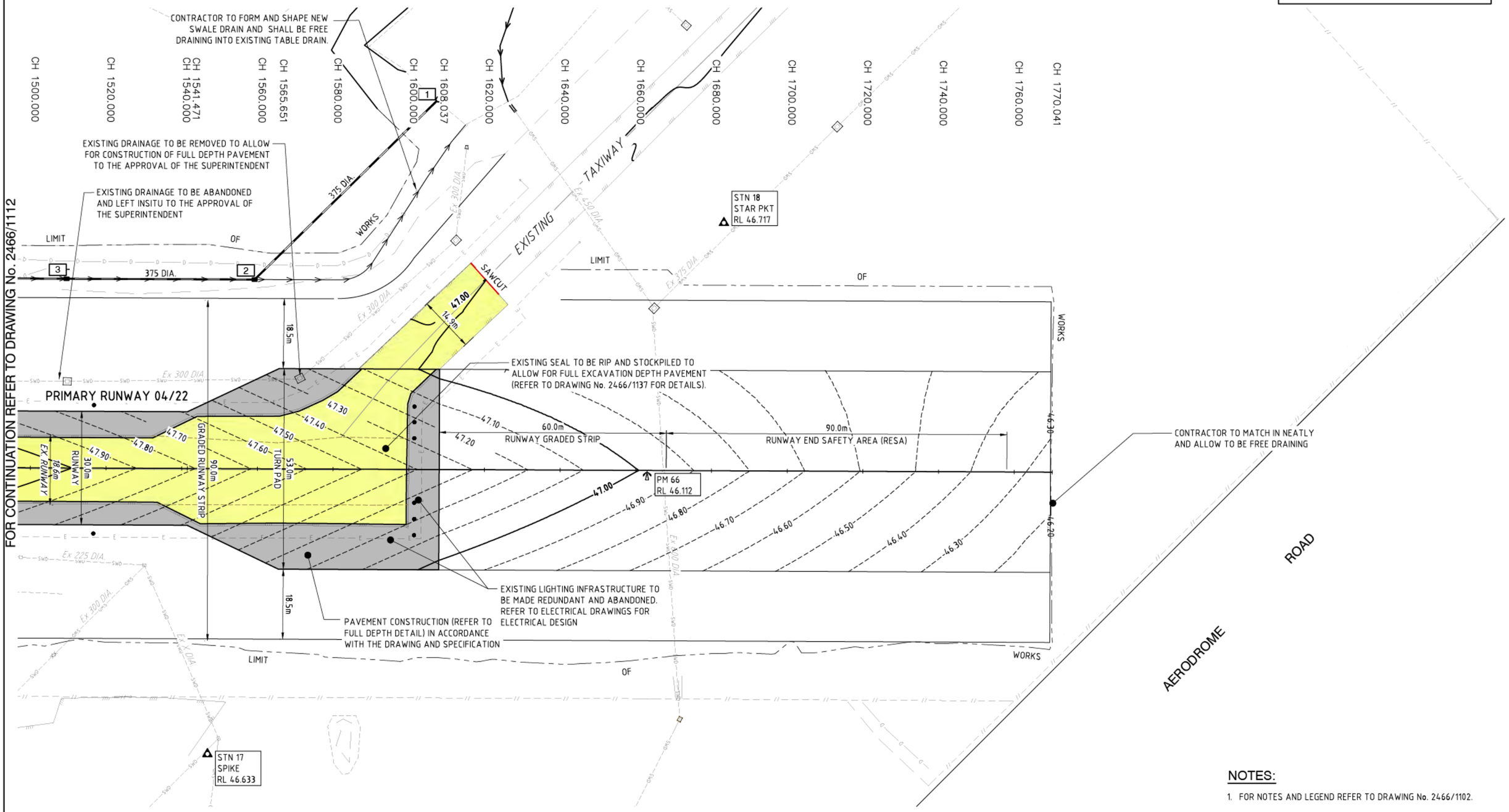
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 5 OF 6

DATE: AUGUST 2021
SHEET 13 OF 51
DRAWING No: 2466/1112
Rv. B

WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.



NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 500

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: ARBITRARY

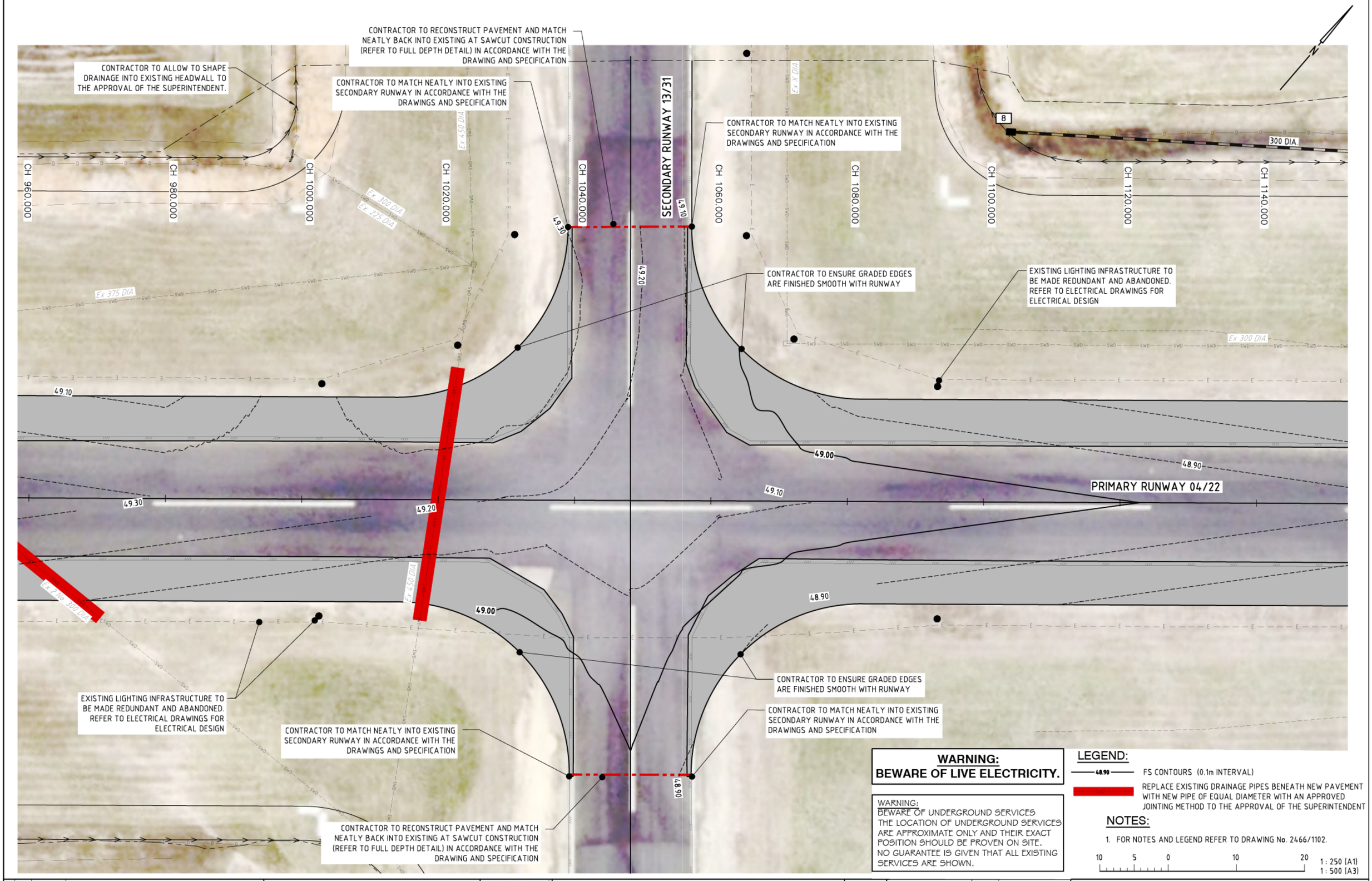
SURVEY REF:
PLAN No: -

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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1113 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
DETAIL LAYOUT PLAN - SHEET 6 OF 6

DATE: AUGUST 2021
SHEET 14 OF 51
DRAWING No: 2466/1113
Rv. B



WARNING:
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LEGEND:

48.90 — FS CONTOURS (0.1m INTERVAL)

REPLACE EXISTING DRAINAGE PIPES BENEATH NEW PAVEMENT WITH NEW PIPE OF EQUAL DIAMETER WITH AN APPROVED JOINTING METHOD TO THE APPROVAL OF THE SUPERINTENDENT

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20
1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	1 : 250	PLAN No:	-

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1114 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

PRIMARY RUNWAY & SECONDARY RUNWAY INTERSECTION PLAN

DATE: AUGUST 2021
SHEET 15 OF 51
DRAWING No: 2466/1114
Rv. B

WARNING:
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CONTRACTOR TO FORM AND SHAPE NEW SWALE DRAIN AND SHALL BE FREE DRAINING INTO EXISTING TABLE DRAIN.

375 DIA.

375 DIA.

EXISTING TAXIWAY

Ex 300 DIA

Ex 450 DIA

Ex 375 DIA

CONTRACTOR TO MATCH NEATLY INTO EXISTING TAXIWAY IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION.

CH 1500.000 | CH 1520.000 | CH 1540.000 | CH 1541.471 | CH 1560.000 | CH 1565.651 | CH 1580.000 | CH 1600.000 | CH 1608.037 | CH 1620.000 | CH 1640.000 | CH 1660.000 | CH 1680.000

47.00

EXISTING DRAINAGE TO BE ABANDONED AND LEFT INSITU TO THE APPROVAL OF THE SUPERINTENDENT

EXISTING DRAINAGE TO BE REMOVED TO ALLOW FOR CONSTRUCTION OF FULL DEPTH PAVEMENT TO THE APPROVAL OF THE SUPERINTENDENT

CONTRACTOR TO ENSURE GRADED EDGES ARE FINISHED SMOOTHLY WITH TAXIWAY

Ex 300 DIA

47.30 | 47.40 | 47.50 | 47.60 | 47.70 | 47.80 | 47.90 | 48.00 | 47.10 | 47.20

PRIMARY RUNWAY 04/22

PM 66
RL 46.112

47.00 | 46.90 | 46.80

Ex 225 DIA

Ex 300 DIA

EXISTING LIGHTING INFRASTRUCTURE TO BE MADE REDUNDANT AND ABANDONED. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DESIGN

PAVEMENT CONSTRUCTION (REFER TO FULL DEPTH DETAIL) IN ACCORDANCE WITH THE DRAWING AND SPECIFICATION

EXISTING SEAL TO BE RIP AND STOCKPILED TO ALLOW FOR FULL EXCAVATION DEPTH PAVEMENT (REFER TO DRAWING No. 2466/1137 FOR DETAILS).

LEGEND:

48.00 — FS CONTOURS (0.1m INTERVAL)

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20
1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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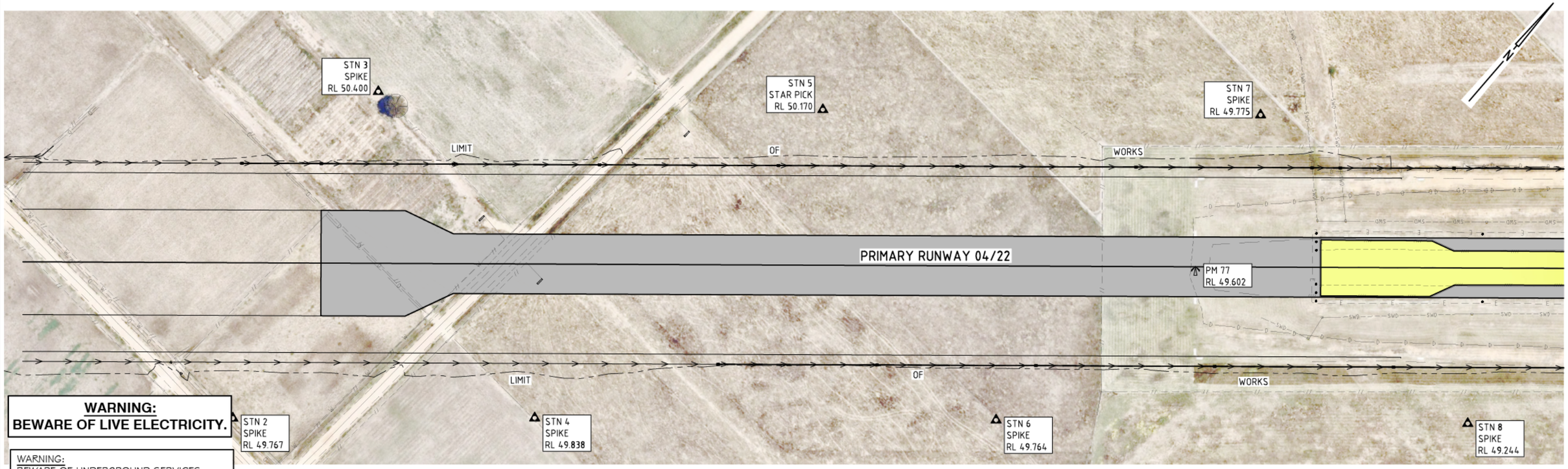
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 250		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1115 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY & TAXIWAY INTERSECTION DETAIL PLAN

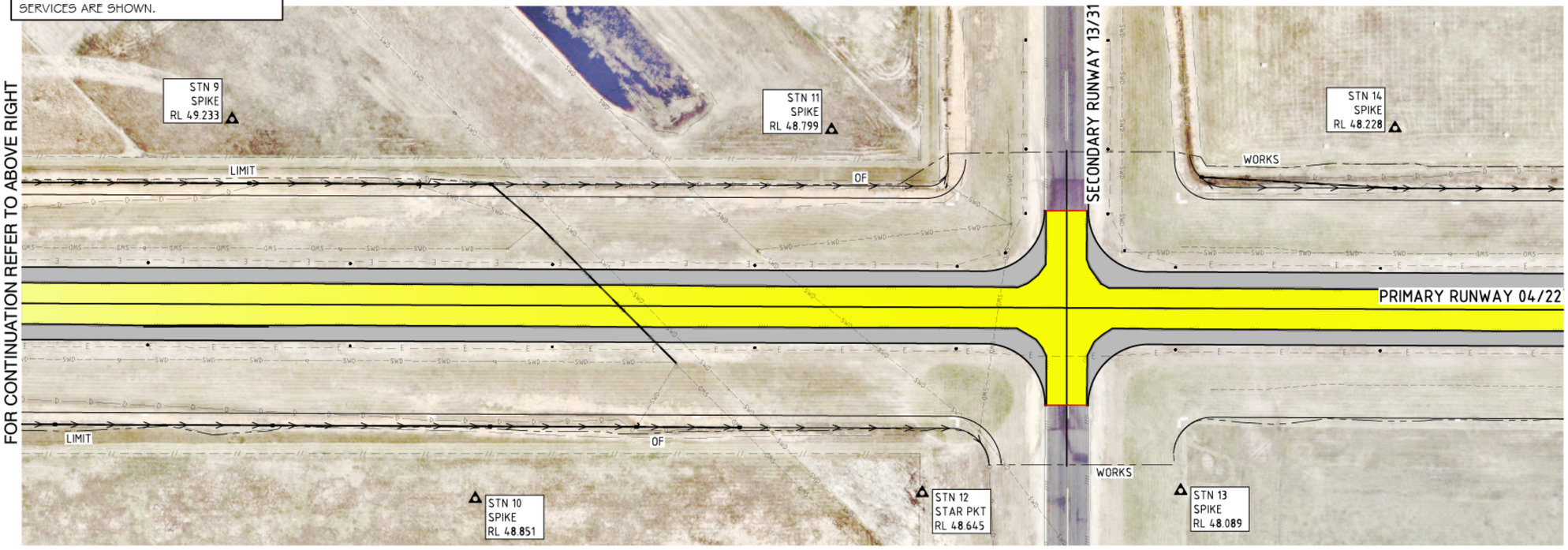
DATE: AUGUST 2021
SHEET 16 OF 51
DRAWING No: 2466/1115 B
Rv.



WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

FOR CONTINUATION REFER TO BELOW LEFT



FOR CONTINUATION REFER TO ABOVE RIGHT

FOR CONTINUATION REFER TO DRAWING No. 2466/1117

LEGEND:

FULL PAVEMENT CONSTRUCTION:

125mm NATURAL GRAVEL SUBBASE WON FROM SITE EXCAVATION

475mm CRUSHED ROCK BASE (MAX 100mm LAYERS)

10mm EMULSION PRIMER SEAL

50mm ASPHALT WITH TACKCOAT IN ACCORDANCE WITH SPECIFICATION

EXISTING PAVEMENT (TO BE RECONSTRUCTED AS FULL DEPTH PAVEMENT)

STRIP EXISTING PAVEMENT TO A DEPTH OF APPROX. 650-700mm AND STOCKPILE EXISTING NATURAL GRAVEL ONSITE.

EXISTING NATURAL GRAVEL TO BE UTILIZED FOR 1ST 125mm SUB BASE PAVEMENT IN FULL DEPTH PAVEMENT CONSTRUCTION

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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Email: consult@crossco.com.au

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CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 500		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1116 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

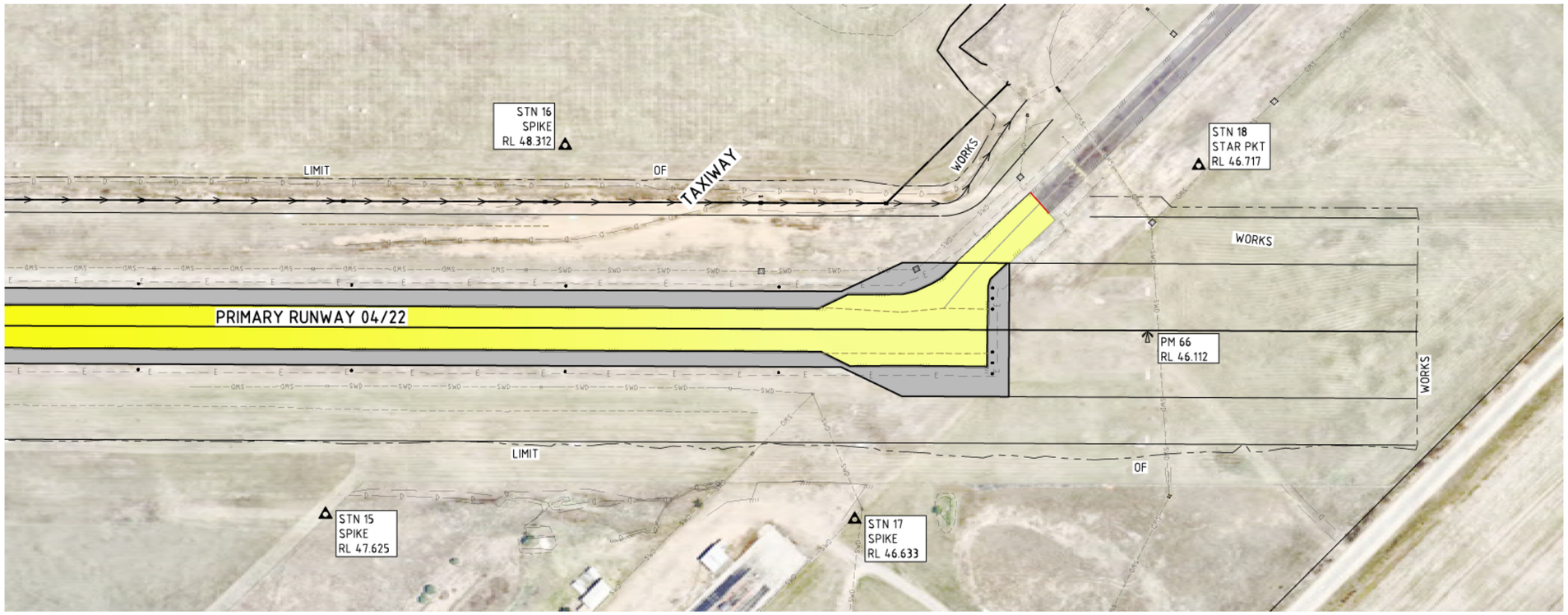
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
PAVEMENT PLAN - SHEET 1 OF 2

DATE: AUGUST 2021
SHEET 17 OF 51
DRAWING No: 2466/1116 Rv. B

WARNING:
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WARNING:
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FOR CONTINUATION REFER TO DRAWING No. 2466/1116



LEGEND:

FULL PAVEMENT CONSTRUCTION:

125mm NATURAL GRAVEL SUBBASE WON FROM SITE EXCAVATION

475mm CRUSHED ROCK BASE (MAX 100mm LAYERS)

10mm EMULSION PRIMER SEAL

50mm ASPHALT WITH TACKCOAT IN ACCORDANCE WITH SPECIFICATION

EXISTING PAVEMENT (TO BE RECONSTRUCTED AS FULL DEPTH PAVEMENT)

STRIP EXISTING PAVEMENT TO A DEPTH OF APPROX. 650-700mm AND STOCKPILE EXISTING NATURAL GRAVEL ONSITE.

EXISTING NATURAL GRAVEL TO BE UTILIZED FOR 1ST 125mm SUB BASE PAVEMENT IN FULL DEPTH PAVEMENT CONSTRUCTION

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20 30 40
1 : 500 AT A1
1 : 1000 AT A3

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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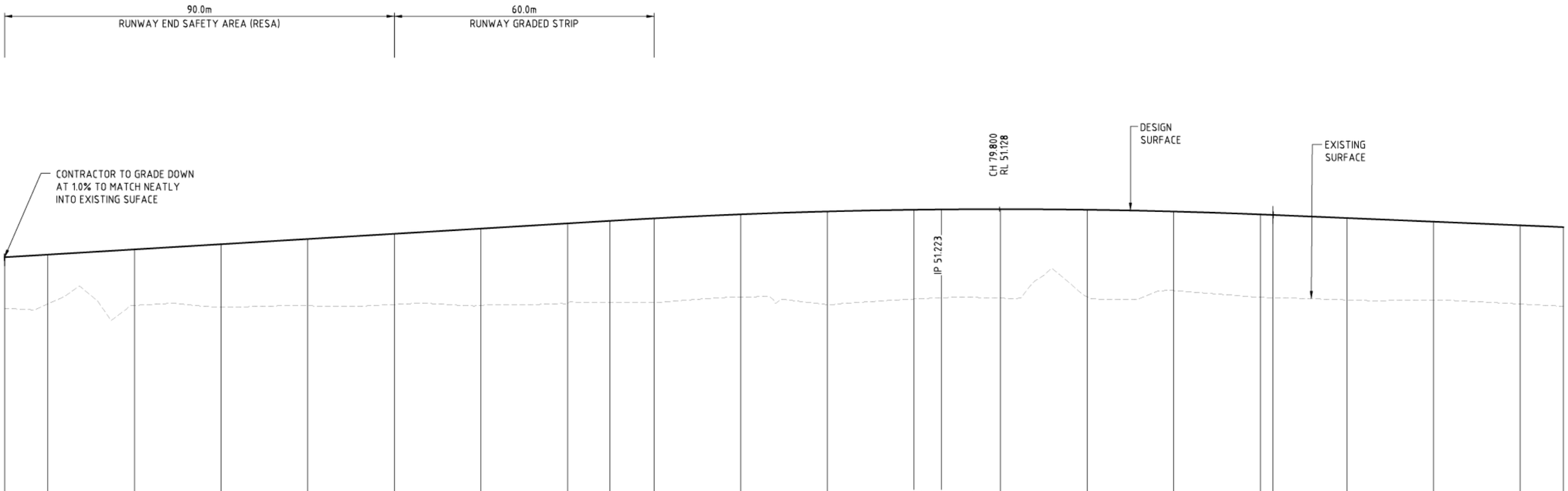
DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 500		PLAN No: -

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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1117 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
PAVEMENT PLAN - SHEET 2 OF 2

DATE: AUGUST 2021
SHEET 18 OF 51
DRAWING No: 2466/1117 Rv. B



DESIGN CENTRELINE	50.574	50.604	50.664	50.724	50.784	50.844	50.904	50.964	50.993	51.022	51.069	51.102	51.122	51.125	51.128	51.121	51.101	51.068	51.062	51.026	50.984	50.942	50.921
EXISTING SURFACE	49.984	50.035	50.017	50.001	50.015	50.028	50.017	50.038	50.051	50.051	50.114	50.026	50.092	50.106	50.103	50.117	50.189	50.109	50.109	50.081	50.081	50.034	50.007
CHAINAGE	-150.000	-140.000	-120.000	-100.000	-80.000	-60.000	-40.000	-20.000	-10.200	0.000	20.000	40.000	60.000	66.359	80.000	100.000	120.000	140.000	142.918	160.000	180.000	200.000	210.000

FOR CONTINUATION REFER TO DRAWING No. 2466/1119

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)

VERT. 0.5 0 0.5 1 1.5 2 — 1 : 25 (A1), 1 : 50 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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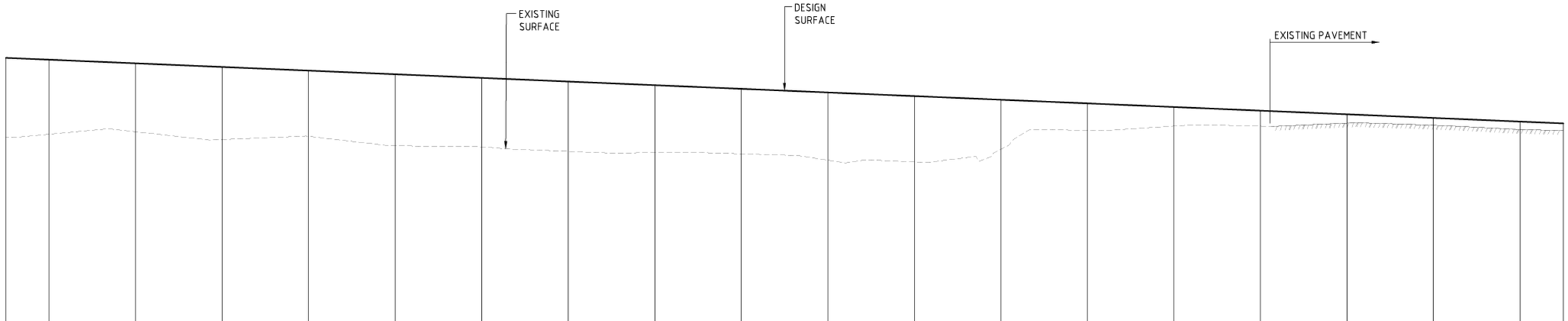
DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	AS SHOWN		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1118 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
LONGITUDINAL SECTION SHEET 1 OF 6

DATE: AUGUST 2021
SHEET 19 OF 51
DRAWING No: 2466/1118
Rv. B



DATUM 46

DESIGN CENTRELINE	50.521	50.900	50.857	50.815	50.773	50.731	50.689	50.647	50.605	50.563	50.521	50.479	50.437	50.395	50.353	50.310	50.268	50.226	50.184	50.163
EXISTING SURFACE	50.007	50.038	50.067	49.977	50.014	49.907	49.891	49.840	49.824	49.811	49.738	49.718	49.864	50.084	50.132	50.131	50.167	50.142	50.094	50.078
CHAINAGE	210.000	220.000	240.000	260.000	280.000	300.000	320.000	340.000	360.000	380.000	400.000	420.000	440.000	460.000	480.000	500.000	520.000	540.000	560.000	570.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)

VERT. 0.5 0 0.5 1 1.5 2 — 1 : 25 (A1), 1 : 50 (A3)

Rv.	APPR.	DATE	REVISIONS
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Tel:(03) 51526298
Email: consult@crossco.com.au

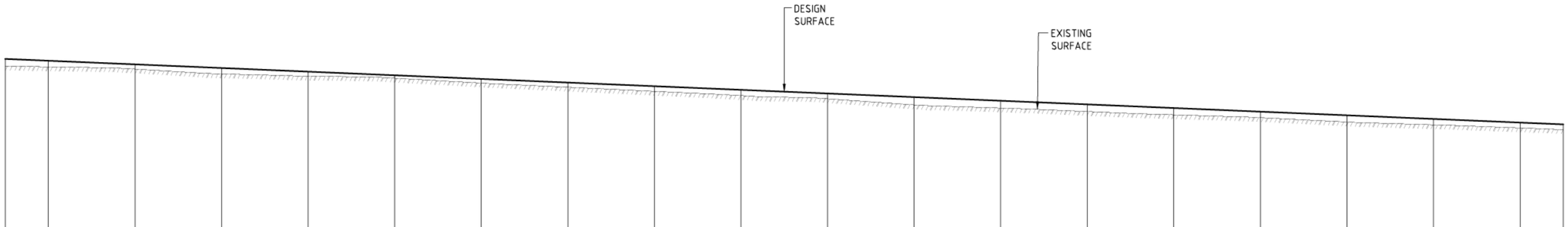
DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No:	-

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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1119 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
LONGITUDINAL SECTION SHEET 2 OF 6

DATE: AUGUST 2021
SHEET 20 OF 51
DRAWING No: 2466/1119
Rv. B



DATUM 46

DESIGN CENTRELINE	50.163	50.142	50.100	50.058	50.016	49.974	49.932	49.890	49.848	49.806	49.763	49.721	49.679	49.637	49.595	49.553	49.511	49.469	49.427	49.406
EXISTING SURFACE	50.078	50.071	50.046	49.990	49.963	49.940	49.884	49.836	49.789	49.739	49.702	49.631	49.595	49.554	49.516	49.484	49.433	49.401	49.365	49.345
CHAINAGE	570.000	580.000	600.000	620.000	640.000	660.000	680.000	700.000	720.000	740.000	760.000	780.000	800.000	820.000	840.000	860.000	880.000	900.000	920.000	930.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)

VERT. 0.5 0 0.5 1 1.5 2 — 1 : 25 (A1), 1 : 50 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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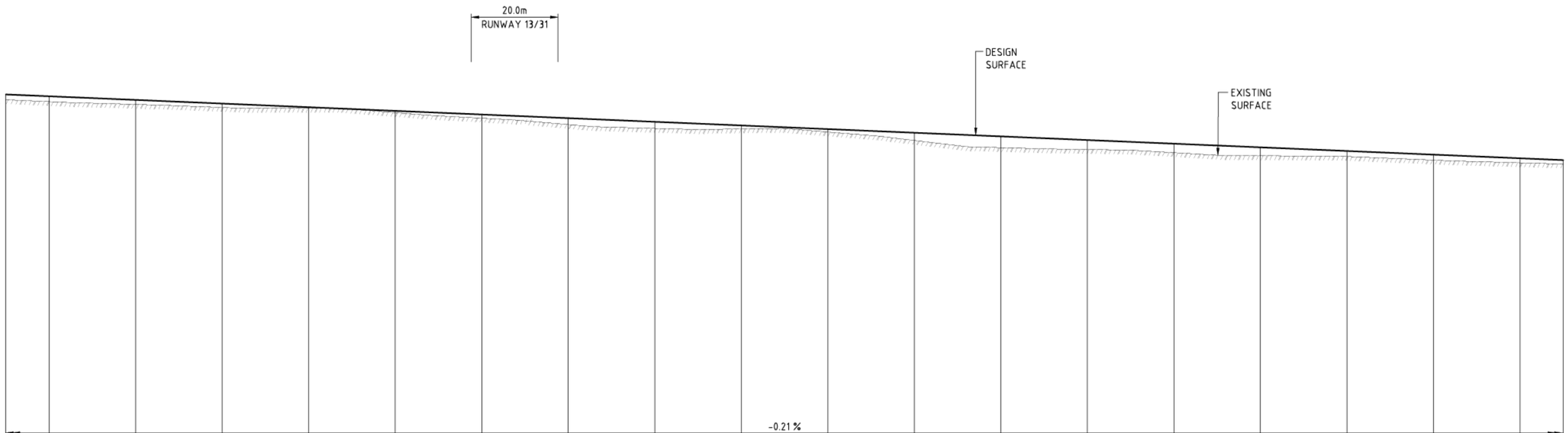
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No: -	

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
LONGITUDINAL SECTION SHEET 3 OF 6

DATE: AUGUST 2021
SHEET 21 OF 51
DRAWING No: 2466/1120
Rv. B



DATUM 45

DESIGN CENTRELINE	49.406	49.385	49.343	49.301	49.258	49.216	49.174	49.132	49.090	49.048	49.006	48.964	48.922	48.880	48.838	48.796	48.754	48.711	48.669	48.648
EXISTING SURFACE	49.345	49.323	49.291	49.255	49.245	49.196	49.132	49.059	49.014	49.008	48.972	48.875	48.792	48.770	48.734	48.697	48.690	48.648	48.617	48.603
CHAINAGE	930.000	940.000	960.000	980.000	1000.000	1020.000	1040.000	1060.000	1080.000	1100.000	1120.000	1140.000	1160.000	1180.000	1200.000	1220.000	1240.000	1260.000	1280.000	1290.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)

VERT. 0.5 0 0.5 1 1.5 2 — 1 : 25 (A1), 1 : 50 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No:	-

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EAST GIPPSLAND SHIRE COUNCIL

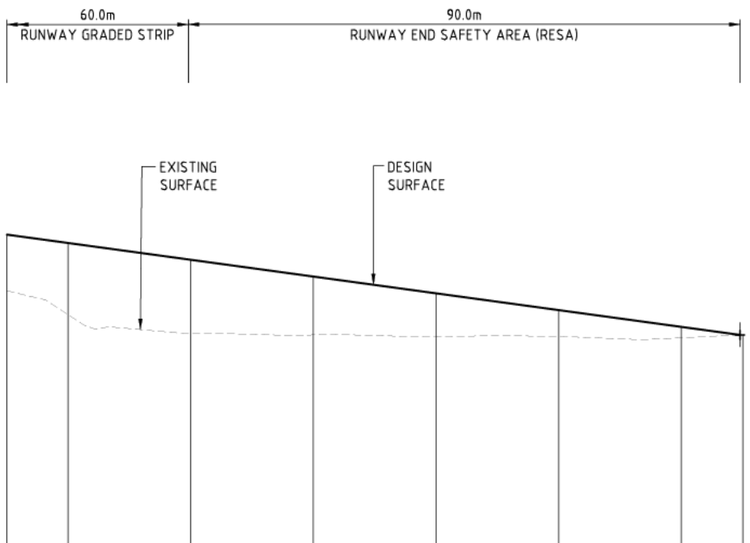
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
LONGITUDINAL SECTION SHEET 4 OF 6

DATE: AUGUST 2021
SHEET 22 OF 51
DRAWING No: 2466/1121 Rv. B


60.0m
RUNWAY GRADED STRIP
EXISTING SURFACE
EXISTING PAVEMENT
DESIGN SURFACE
IP 48.255
FOR CONTINUATION REFER TO DRAWING No. 2466/1121
FOR CONTINUATION REFER TO DRAWING No. 2466/1123
HORIZONTAL GEOMETRY
DESIGN CENTRELINE
-0.21 %
141.894m VC
-0.68 %

DATUM 43

| | | |



DESIGN CENTRELINE					-0.68 %			
DATUM 43								
DESIGN CENTRELINE	47.073	47.005	46.868	46.731	46.595	46.458	46.321	
EXISTING SURFACE	46.616	46.421	46.268	46.256	46.242	46.244	46.233	46.256
CHAINAGE	1650.000	1660.000	1680.000	1700.000	1720.000	1740.000	1760.000	1770.041

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)

VERT. 0.5 0 0.5 1 1.5 2 — 1 : 25 (A1), 1 : 50 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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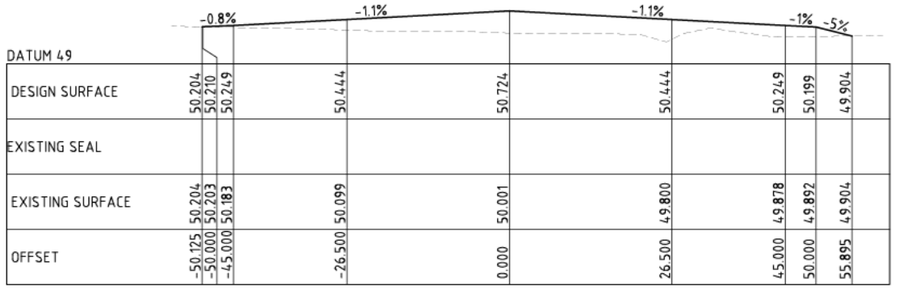
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DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	AS SHOWN		PLAN No: -

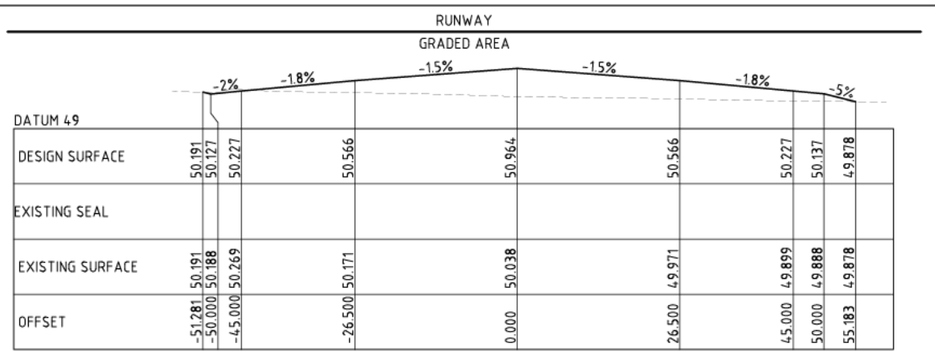
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
LONGITUDINAL SECTION SHEET 6 OF 6

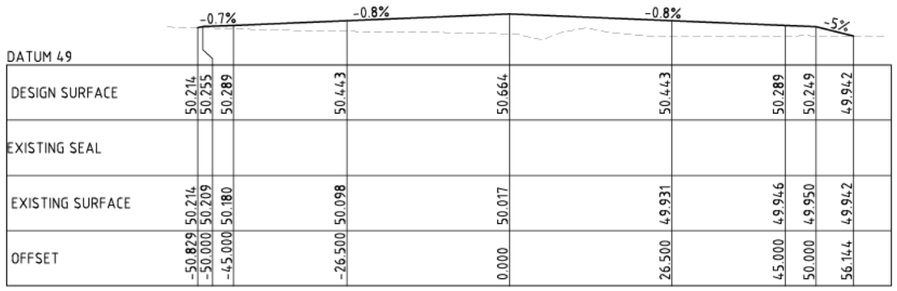
DATE: AUGUST 2021
SHEET 24 OF 51
DRAWING No: 2466/1123 B
Rv.



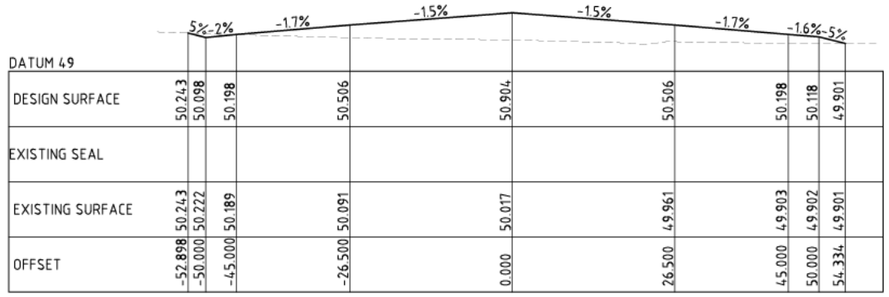
CH -100.000



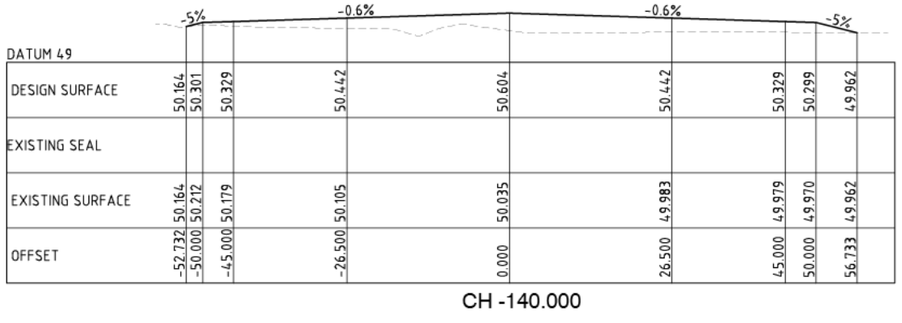
CH -20.000



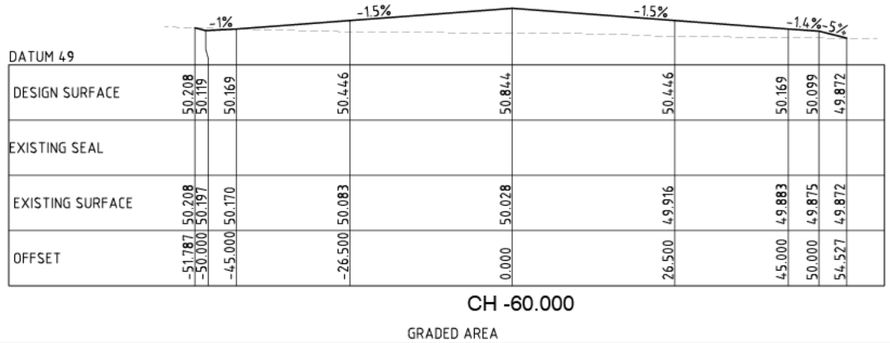
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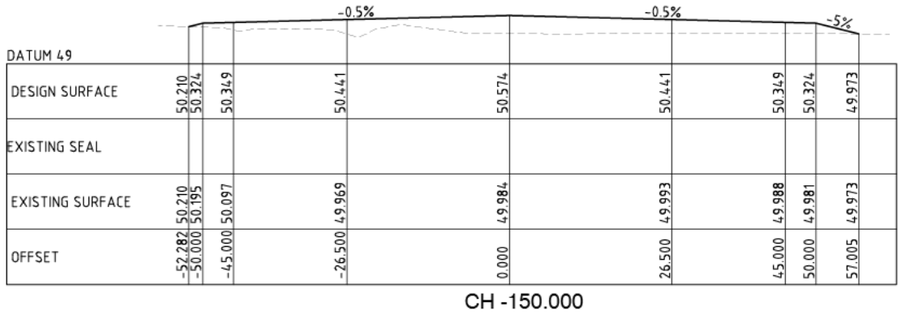
CH -40.000



CH -140.000

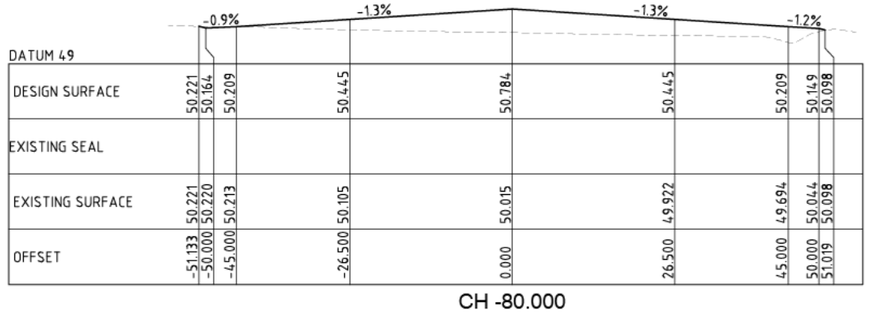


CH -60.000



CH -150.000

GRADED AREA
RUNWAY END SAFETY AREA (RESA)



CH -80.000

2 1 0 2 4 6 8
1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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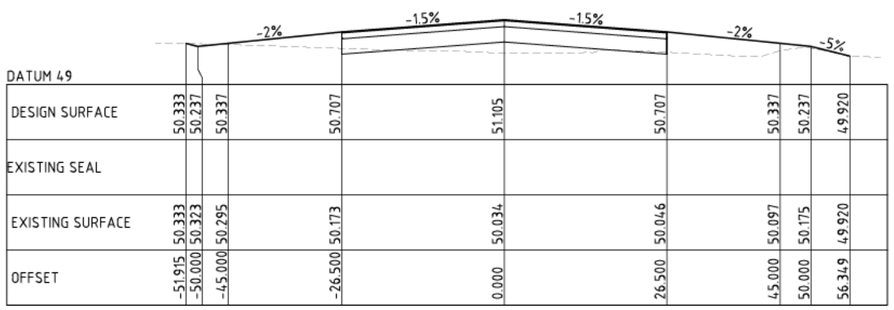
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 100		PLAN No: -

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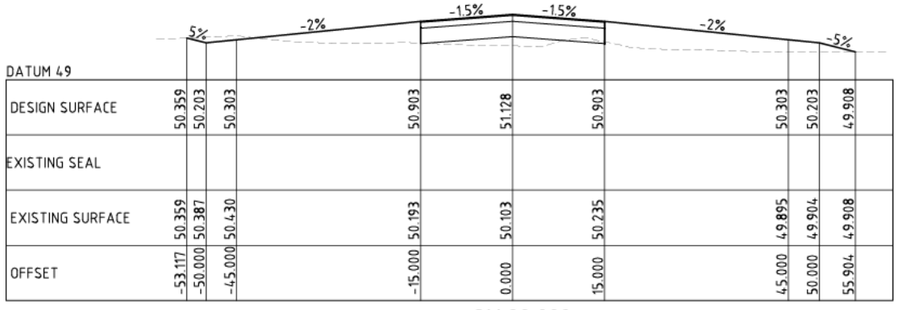
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 1 OF 13

DATE: AUGUST 2021
SHEET 25 OF 51
DRAWING No: 2466/1124 B
Rv.



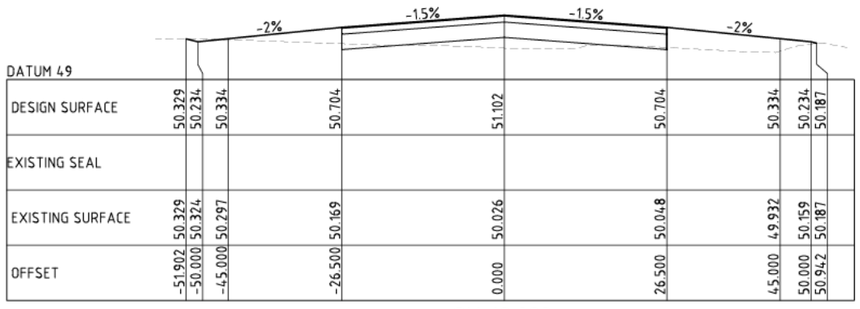
DATUM 49								
DESIGN SURFACE	50.333	50.237	50.337	50.707	51.105	50.707	50.337	50.237	49.920
EXISTING SEAL									
EXISTING SURFACE	50.333	50.323	50.295	50.173	50.034	50.046	50.097	50.175	49.920
OFFSET	-51.915	-50.000	-45.000	-26.500	0.000	26.500	45.000	50.000	56.349

CH 42.385



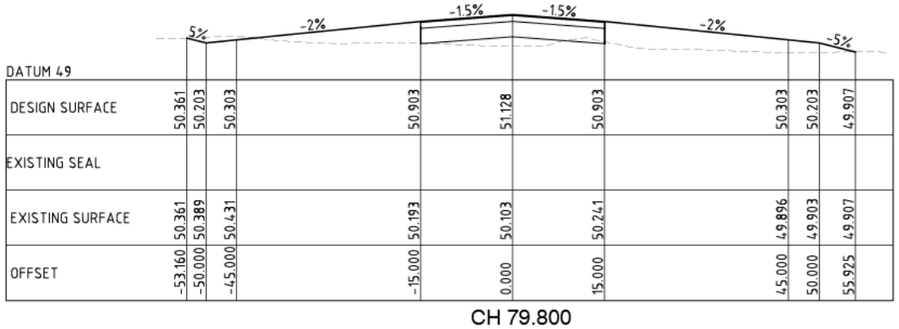
DATUM 49								
DESIGN SURFACE	50.359	50.203	50.303	50.903	51.128	50.903	50.303	50.203	49.908
EXISTING SEAL									
EXISTING SURFACE	50.359	50.387	50.430	50.193	50.103	50.235	49.895	49.904	49.908
OFFSET	-53.117	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	55.904

CH 80.000



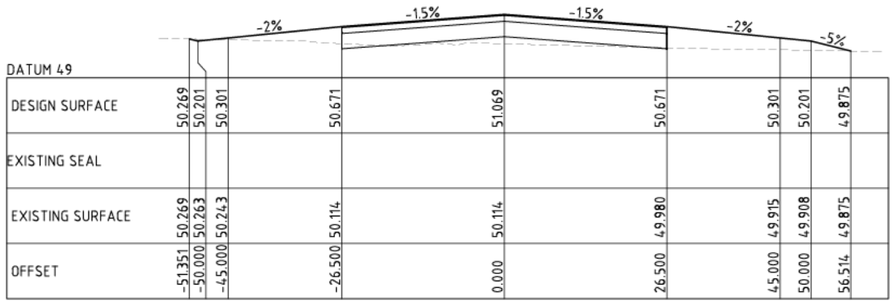
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EXISTING SEAL									
EXISTING SURFACE	50.329	50.324	50.297	50.169	50.026	50.048	49.932	50.159	50.187
OFFSET	-51.902	-50.000	-45.000	-26.500	0.000	26.500	45.000	50.000	50.942

CH 40.000



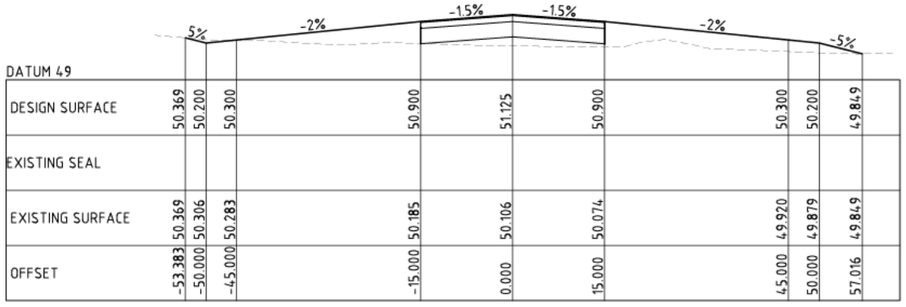
DATUM 49								
DESIGN SURFACE	50.361	50.203	50.303	50.903	51.128	50.903	50.303	50.203	49.907
EXISTING SEAL									
EXISTING SURFACE	50.361	50.389	50.431	50.193	50.103	50.241	49.896	49.903	49.907
OFFSET	-53.160	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	55.925

CH 79.800



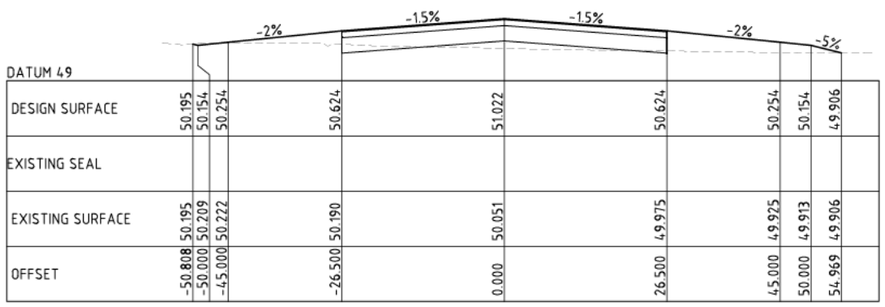
DATUM 49								
DESIGN SURFACE	50.269	50.201	50.301	50.671	51.069	50.671	50.301	50.201	49.875
EXISTING SEAL									
EXISTING SURFACE	50.269	50.263	50.243	50.114	50.114	49.980	49.915	49.908	49.875
OFFSET	-51.351	-50.000	-45.000	-26.500	0.000	26.500	45.000	50.000	56.514

CH 20.000



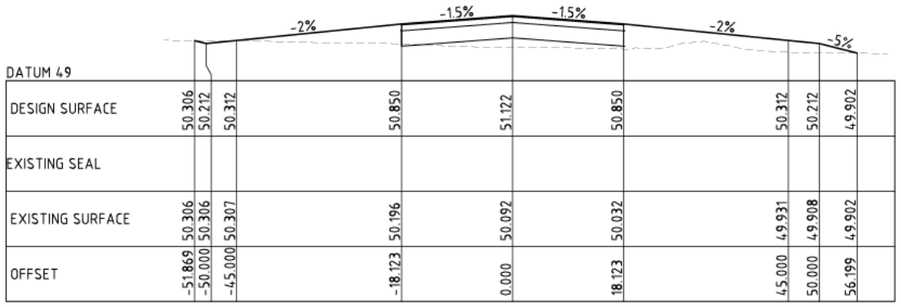
DATUM 49								
DESIGN SURFACE	50.369	50.200	50.300	50.900	51.125	50.900	50.300	50.200	49.849
EXISTING SEAL									
EXISTING SURFACE	50.369	50.306	50.283	50.185	50.106	50.074	49.920	49.879	49.849
OFFSET	-53.383	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	57.016

CH 66.566



DATUM 49								
DESIGN SURFACE	50.195	50.154	50.254	50.624	51.022	50.624	50.254	50.154	49.906
EXISTING SEAL									
EXISTING SURFACE	50.195	50.209	50.222	50.190	50.051	49.975	49.925	49.913	49.906
OFFSET	-50.808	-50.000	-45.000	-26.500	0.000	26.500	45.000	50.000	54.969

CH 0.000



DATUM 49								
DESIGN SURFACE	50.306	50.212	50.312	50.850	51.122	50.850	50.312	50.212	49.902
EXISTING SEAL									
EXISTING SURFACE	50.306	50.306	50.307	50.196	50.092	50.032	49.931	49.908	49.902
OFFSET	-51.869	-50.000	-45.000	-18.123	0.000	18.123	45.000	50.000	56.199

CH 60.000

RUNWAY

GRADED AREA

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 100		PLAN No: -

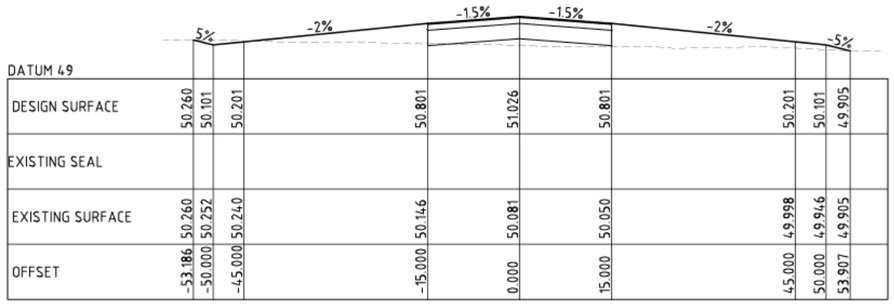
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

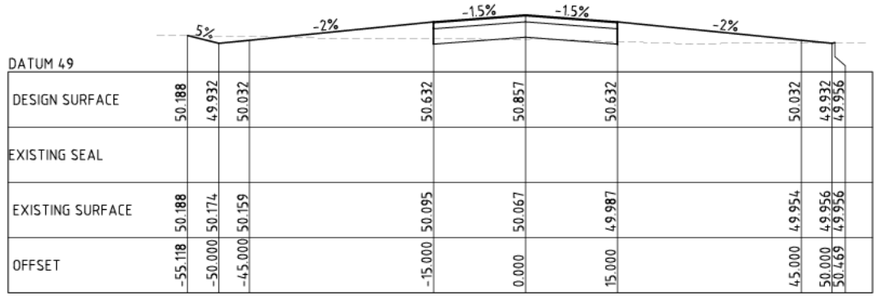
CROSS SECTIONS SHEET 2 OF 13

DATE: AUGUST 2021
SHEET 26 OF 51
DRAWING No: 2466/1125 B
Rv.



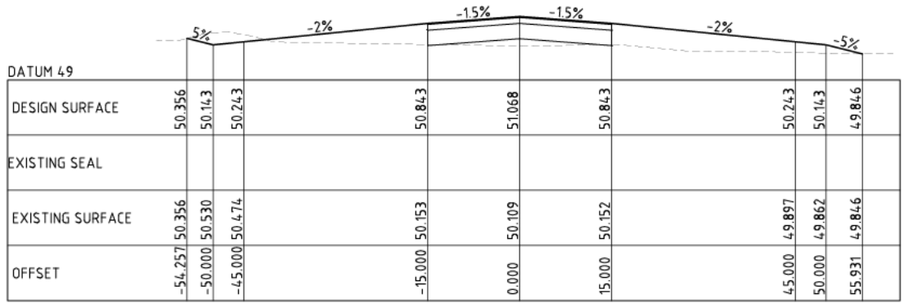
DATUM 49								
DESIGN SURFACE	50.260	50.101	50.201	50.801	51.026	50.801	50.201	50.101	49.905
EXISTING SEAL									
EXISTING SURFACE	50.260	50.252	50.240	50.146	50.081	50.050	49.998	49.946	49.905
OFFSET	-53.186	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	53.907

CH 160.000



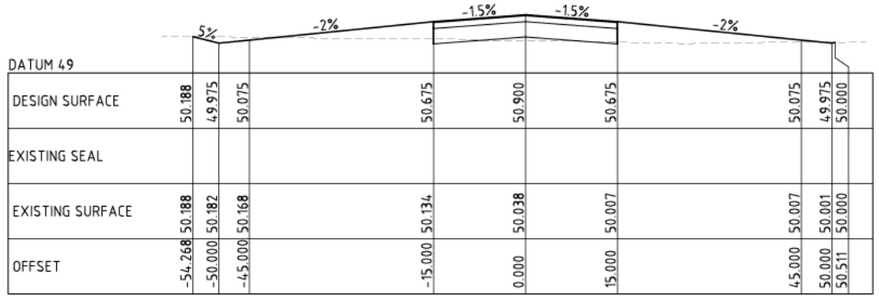
DATUM 49								
DESIGN SURFACE	50.188	49.932	50.032	50.632	50.857	50.632	50.032	49.932	49.956
EXISTING SEAL									
EXISTING SURFACE	50.188	50.174	50.159	50.095	50.067	49.987	49.954	49.956	49.956
OFFSET	-55.118	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	50.469

CH 240.000



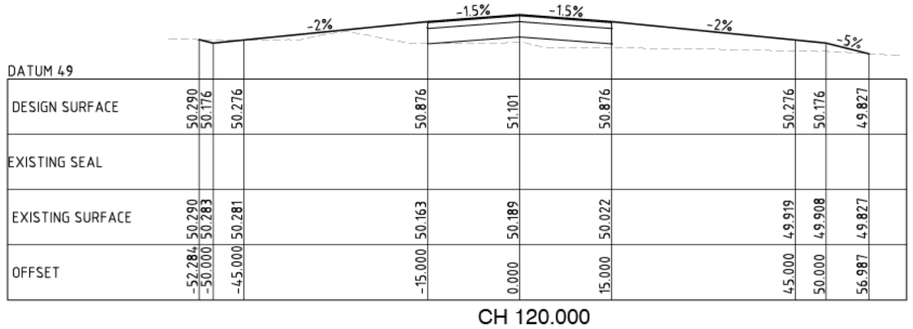
DATUM 49								
DESIGN SURFACE	50.356	50.143	50.243	50.843	51.068	50.843	50.243	50.143	49.846
EXISTING SEAL									
EXISTING SURFACE	50.356	50.530	50.474	50.153	50.109	50.152	49.897	49.862	49.846
OFFSET	-54.257	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	55.931

CH 140.000



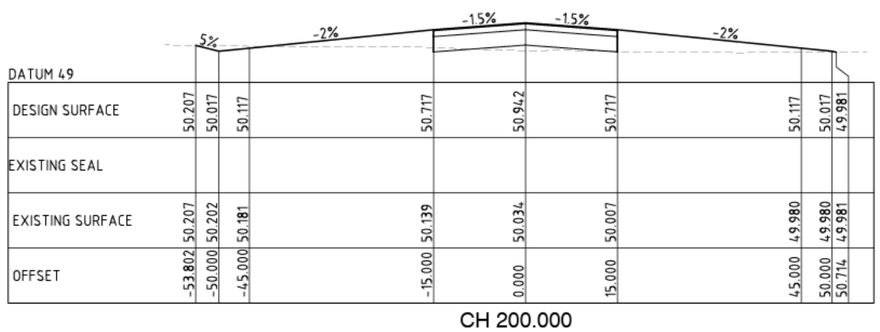
DATUM 49								
DESIGN SURFACE	50.188	49.975	50.075	50.675	50.900	50.675	50.075	49.975	50.000
EXISTING SEAL									
EXISTING SURFACE	50.188	50.182	50.168	50.134	50.038	50.007	50.007	50.001	50.000
OFFSET	-54.268	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	50.511

CH 220.000



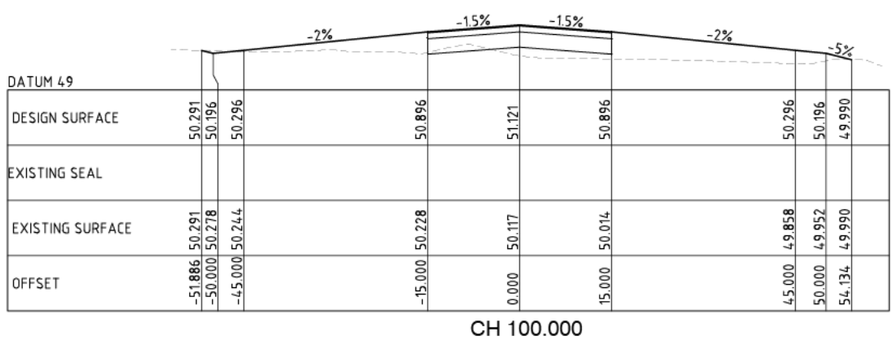
DATUM 49								
DESIGN SURFACE	50.290	50.176	50.276	50.876	51.101	50.876	50.276	50.176	49.827
EXISTING SEAL									
EXISTING SURFACE	50.290	50.283	50.281	50.163	50.189	50.022	49.919	49.908	49.827
OFFSET	-52.284	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	56.987

CH 120.000



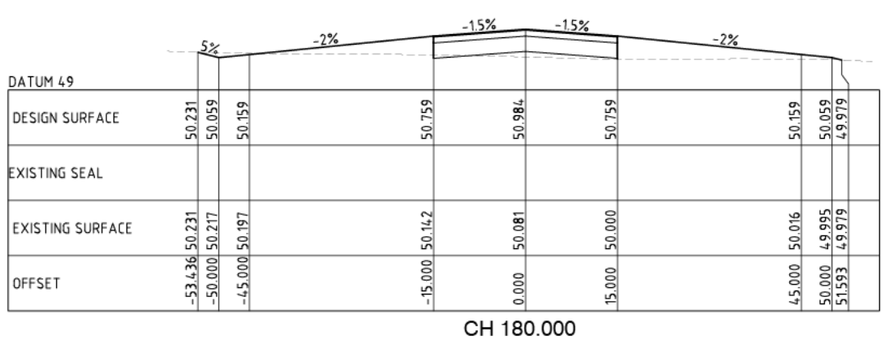
DATUM 49								
DESIGN SURFACE	50.207	50.017	50.117	50.717	50.942	50.717	50.117	50.017	49.981
EXISTING SEAL									
EXISTING SURFACE	50.207	50.202	50.181	50.139	50.034	50.007	49.980	49.980	49.981
OFFSET	-53.802	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	50.714

CH 200.000



DATUM 49								
DESIGN SURFACE	50.291	50.196	50.296	50.896	51.121	50.896	50.296	50.196	49.990
EXISTING SEAL									
EXISTING SURFACE	50.291	50.278	50.244	50.228	50.117	50.014	49.858	49.952	49.990
OFFSET	-51.886	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	54.134

CH 100.000



DATUM 49								
DESIGN SURFACE	50.231	50.059	50.159	50.759	50.984	50.759	50.159	50.059	49.979
EXISTING SEAL									
EXISTING SURFACE	50.231	50.217	50.197	50.142	50.081	50.000	50.016	49.995	49.979
OFFSET	-53.436	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.593

CH 180.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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EAST GIPPSLAND SHIRE COUNCIL

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DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM: **HEIGHT: AHD**
HORIZONTAL: ARBITRARY

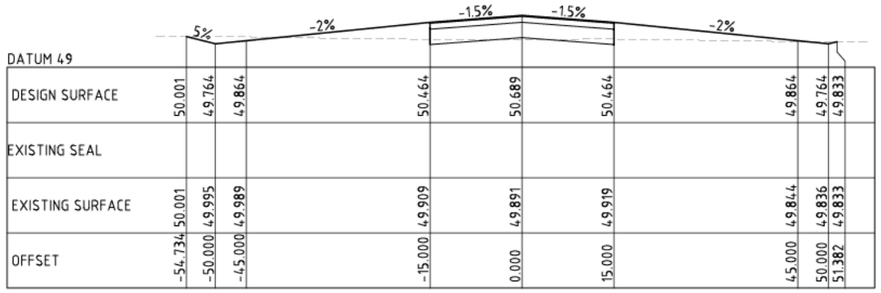
SURVEY REF:
PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1126 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

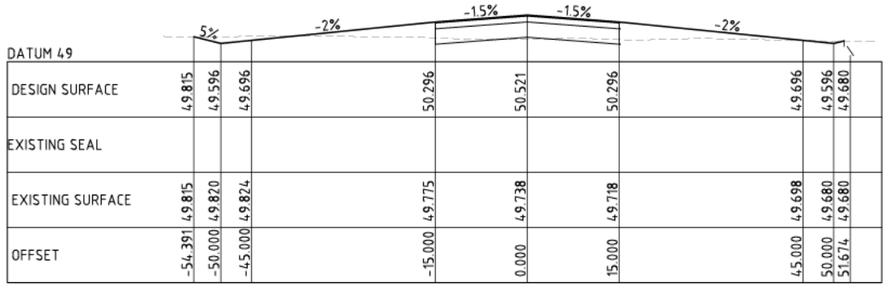
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 3 OF 13

DATE: AUGUST 2021
SHEET 27 OF 51
DRAWING No: 2466/1126
Rv. B



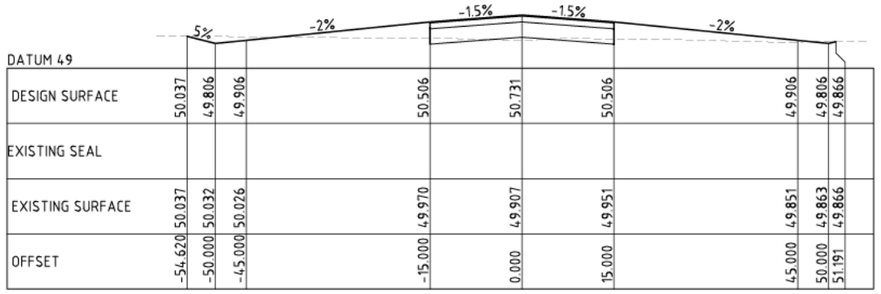
DATUM 49										
DESIGN SURFACE	50.001	49.764	49.864	50.464	50.689	50.464	49.864	49.764	49.833	
EXISTING SEAL										
EXISTING SURFACE	50.001	49.995	49.989	49.909	49.891	49.919	49.844	49.836	49.833	
OFFSET	-54.734	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.382	

CH 320.000



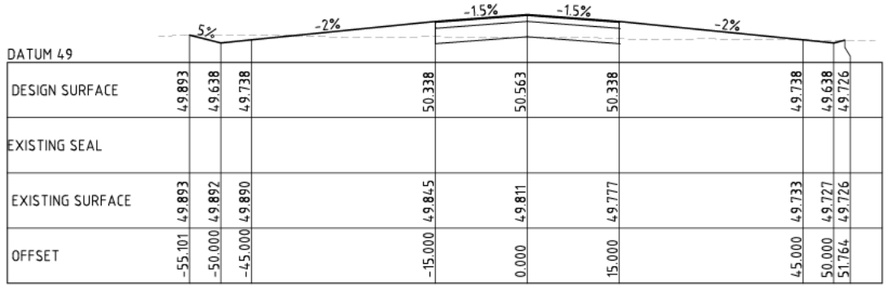
DATUM 49										
DESIGN SURFACE	49.815	49.596	49.696	50.296	50.521	50.296	49.696	49.596	49.680	
EXISTING SEAL										
EXISTING SURFACE	49.815	49.820	49.824	49.775	49.738	49.718	49.698	49.680	49.680	
OFFSET	-54.391	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.674	

CH 400.000



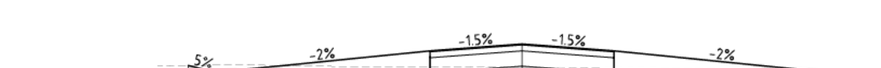
DATUM 49										
DESIGN SURFACE	50.037	49.806	49.906	50.506	50.731	50.506	49.906	49.806	49.866	
EXISTING SEAL										
EXISTING SURFACE	50.037	50.032	50.026	49.970	49.907	49.951	49.851	49.863	49.866	
OFFSET	-54.620	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.191	

CH 300.000



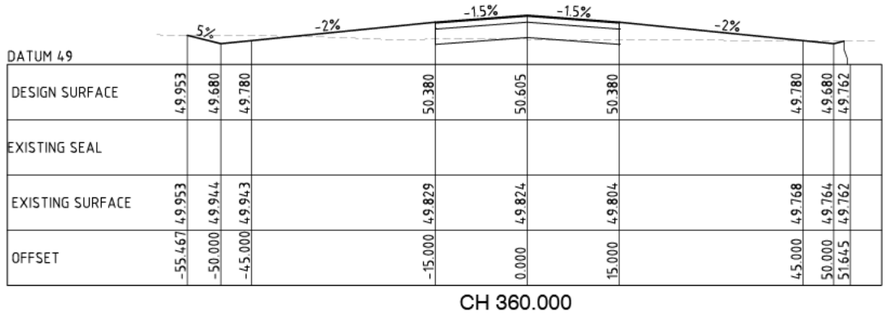
DATUM 49										
DESIGN SURFACE	49.893	49.638	49.738	50.338	50.563	50.338	49.738	49.638	49.726	
EXISTING SEAL										
EXISTING SURFACE	49.893	49.892	49.890	49.845	49.811	49.777	49.733	49.727	49.726	
OFFSET	-55.101	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.764	

CH 380.000



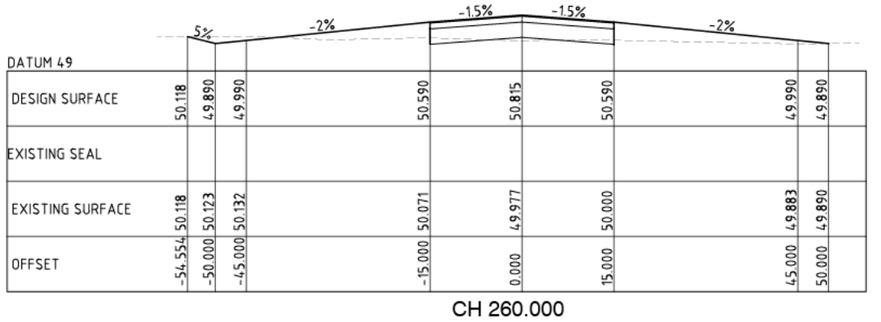
DATUM 49										
DESIGN SURFACE	50.070	49.848	49.948	50.548	50.773	50.548	49.948	49.848	49.865	
EXISTING SEAL										
EXISTING SURFACE	50.070	50.084	50.090	50.036	50.014	49.967	49.887	49.867	49.865	
OFFSET	-54.438	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	50.335	

CH 280.000



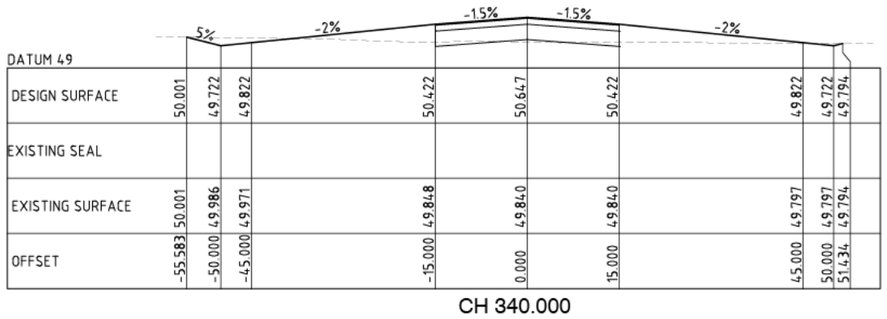
DATUM 49										
DESIGN SURFACE	49.953	49.680	49.780	50.380	50.605	50.380	49.780	49.680	49.762	
EXISTING SEAL										
EXISTING SURFACE	49.953	49.944	49.943	49.829	49.824	49.804	49.768	49.764	49.762	
OFFSET	-55.467	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.645	

CH 360.000



DATUM 49										
DESIGN SURFACE	50.118	49.890	49.990	50.590	50.815	50.590	49.990	49.890		
EXISTING SEAL										
EXISTING SURFACE	50.118	50.123	50.132	50.071	49.977	50.000	49.883	49.890		
OFFSET	-54.554	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000		

CH 260.000



DATUM 49										
DESIGN SURFACE	50.001	49.722	49.822	50.422	50.647	50.422	49.822	49.722	49.794	
EXISTING SEAL										
EXISTING SURFACE	50.001	49.986	49.971	49.848	49.840	49.840	49.797	49.797	49.794	
OFFSET	-55.583	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.434	

CH 340.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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CROSSCo ENGINEERING & ENVIRONMENTAL CONSULTANTS

DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: ARBITRARY

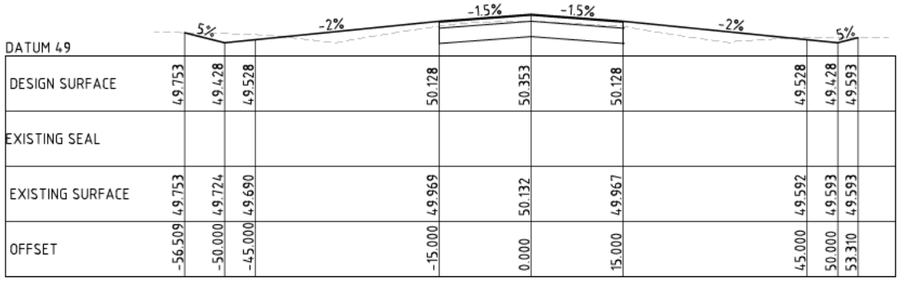
SURVEY REF:
PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
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EAST GIPPSLAND SHIRE COUNCIL

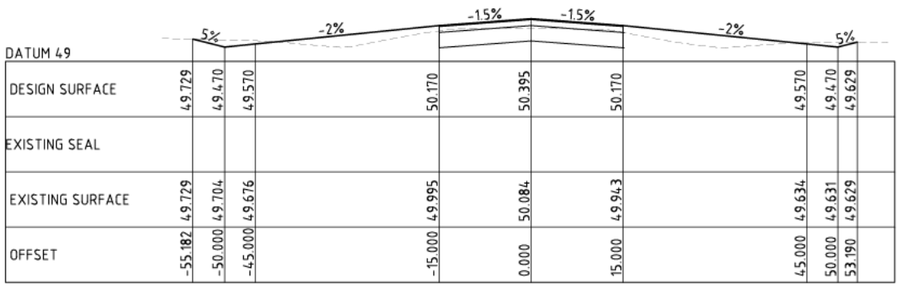
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 4 OF 13

DATE: AUGUST 2021
SHEET 28 OF 51
DRAWING No: 2466/1127
Rv. B



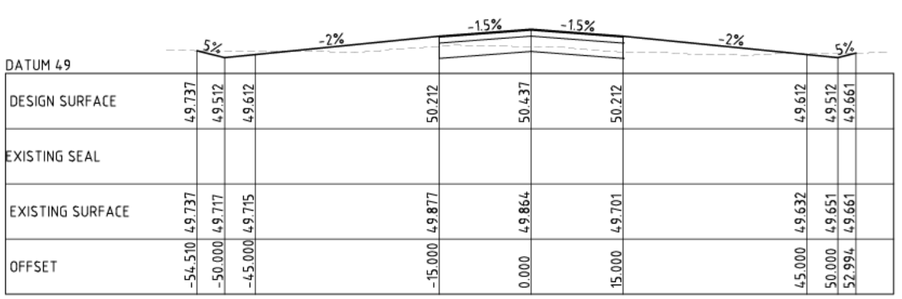
DATUM 49												
DESIGN SURFACE	49.753	49.428	49.528		50.128	50.353	50.128		49.528	49.428	49.593	
EXISTING SEAL												
EXISTING SURFACE	49.753	49.724	49.690		49.969	50.132	49.967		49.592	49.593	49.593	
OFFSET	-56.509	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.310	

CH 480.000



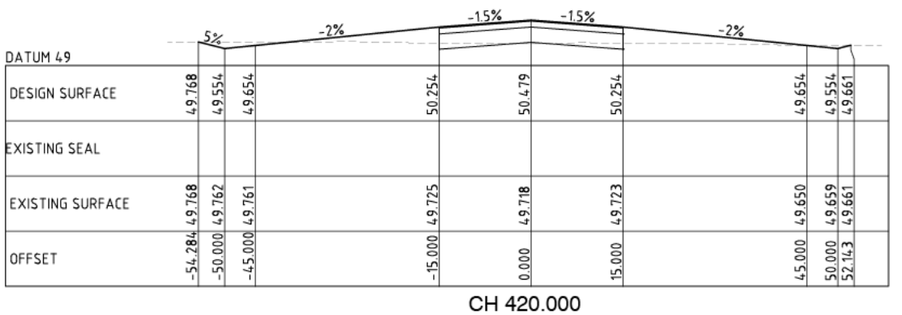
DATUM 49												
DESIGN SURFACE	49.729	49.470	49.570		50.170	50.395	50.170		49.570	49.470	49.629	
EXISTING SEAL												
EXISTING SURFACE	49.729	49.704	49.676		49.995	50.084	49.943		49.634	49.631	49.629	
OFFSET	-55.182	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.190	

CH 460.000



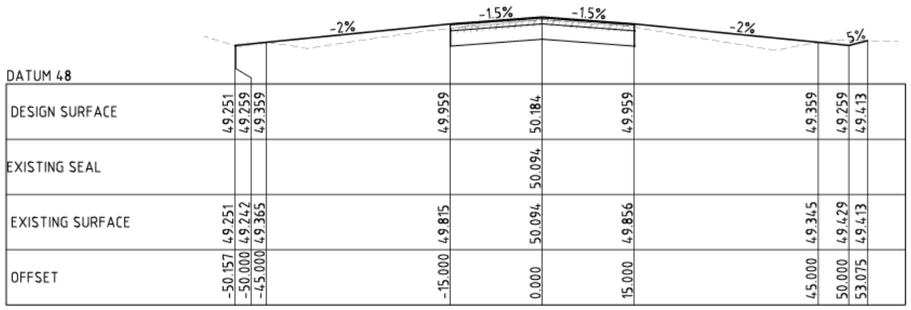
DATUM 49												
DESIGN SURFACE	49.737	49.512	49.612		50.212	50.437	50.212		49.612	49.512	49.661	
EXISTING SEAL												
EXISTING SURFACE	49.737	49.717	49.715		49.877	49.864	49.701		49.632	49.651	49.661	
OFFSET	-54.510	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	52.994	

CH 440.000



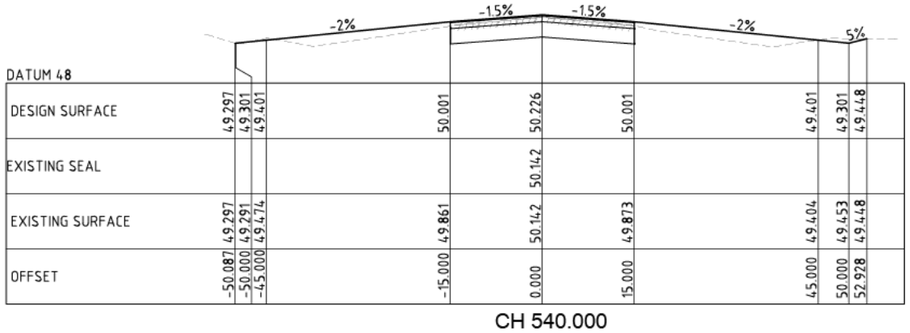
DATUM 49												
DESIGN SURFACE	49.768	49.554	49.654		50.254	50.479	50.254		49.654	49.554	49.661	
EXISTING SEAL												
EXISTING SURFACE	49.768	49.762	49.761		49.725	49.718	49.723		49.650	49.659	49.661	
OFFSET	-54.284	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	52.143	

CH 420.000



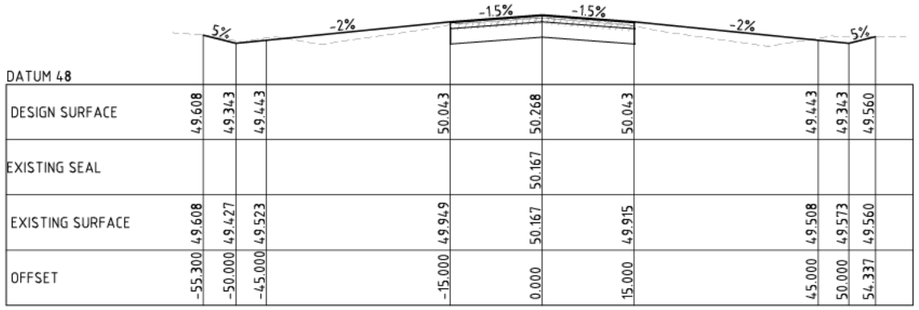
DATUM 48												
DESIGN SURFACE	49.251	49.259	49.359		49.959	50.184	49.959		49.359	49.259	49.413	
EXISTING SEAL						50.094						
EXISTING SURFACE	49.251	49.242	49.365		49.815	50.094	49.856		49.345	49.429	49.413	
OFFSET	-50.157	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.075	

CH 560.000



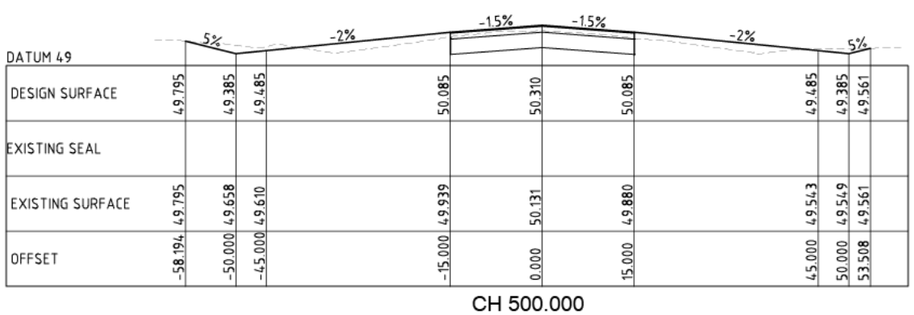
DATUM 48												
DESIGN SURFACE	49.297	49.301	49.401		50.001	50.226	50.001		49.401	49.301	49.448	
EXISTING SEAL						50.142						
EXISTING SURFACE	49.297	49.291	49.474		49.861	50.142	49.873		49.404	49.453	49.448	
OFFSET	-50.087	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	52.928	

CH 540.000



DATUM 48												
DESIGN SURFACE	49.608	49.343	49.443		50.043	50.268	50.043		49.443	49.343	49.560	
EXISTING SEAL						50.167						
EXISTING SURFACE	49.608	49.427	49.523		49.949	50.167	49.915		49.508	49.573	49.560	
OFFSET	-55.300	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	54.337	

CH 520.000



DATUM 49												
DESIGN SURFACE	49.795	49.385	49.485		50.085	50.310	50.085		49.485	49.385	49.561	
EXISTING SEAL												
EXISTING SURFACE	49.795	49.658	49.610		49.939	50.131	49.880		49.543	49.549	49.561	
OFFSET	-58.194	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.508	

CH 500.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: ARBITRARY

SURVEY REF:

PLAN No: -

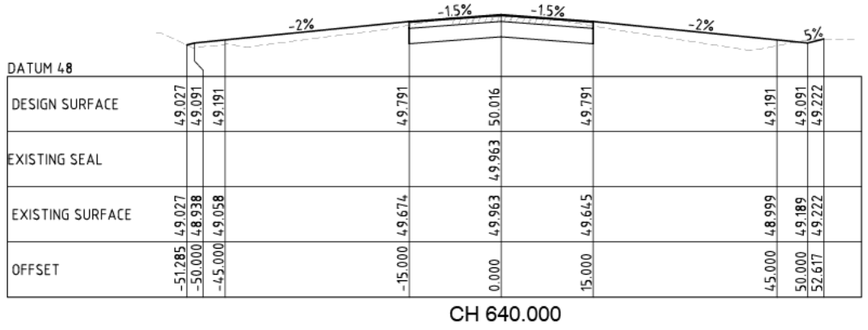
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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1128 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

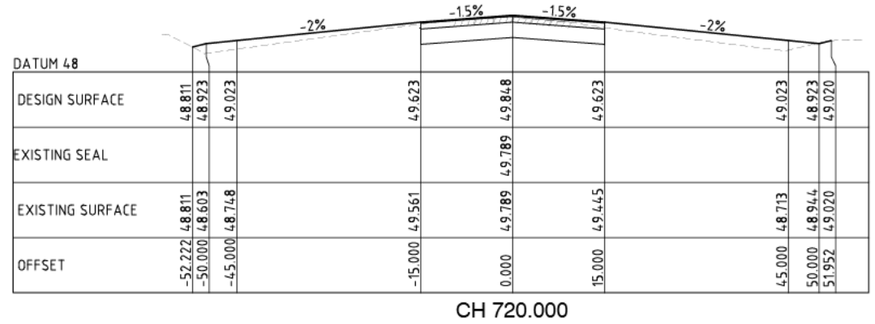
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 5 OF 13

DATE: AUGUST 2021
SHEET 29 OF 51
DRAWING No:
2466/1128
B
Rv.



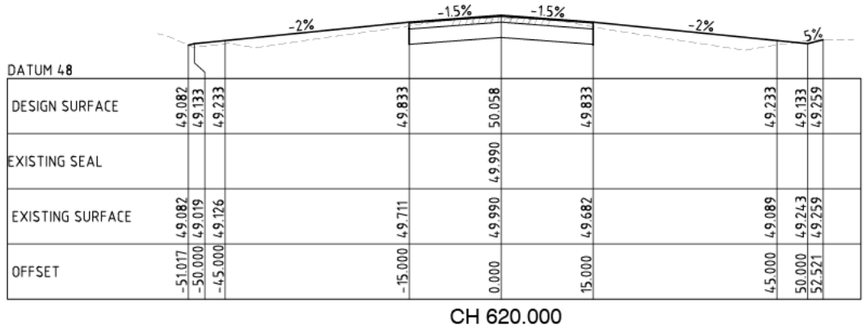
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DESIGN SURFACE	49.027	49.091	49.191		49.791	50.016	49.791		49.191	49.091	49.222	
EXISTING SEAL						49.963						
EXISTING SURFACE	49.027	48.938	49.058		49.674	49.963	49.645		48.999	49.189	49.222	
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CH 640.000



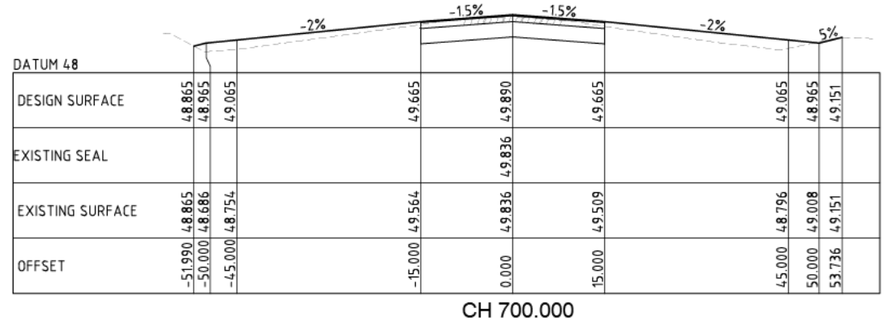
DATUM 48												
DESIGN SURFACE	48.811	48.923	49.023		49.623	49.848	49.623		49.023	48.923	49.020	
EXISTING SEAL						49.789						
EXISTING SURFACE	48.811	48.603	48.748		49.561	49.789	49.445		48.713	48.944	49.020	
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CH 720.000



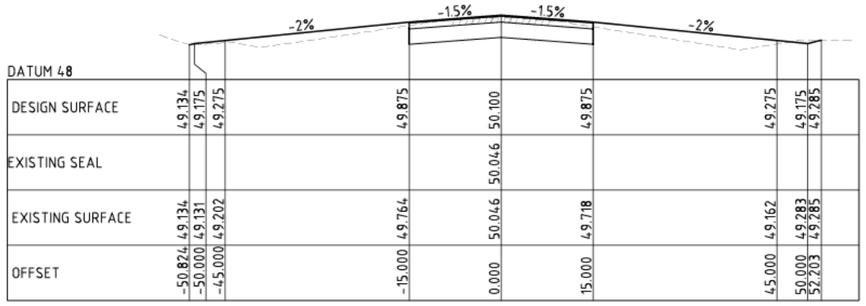
DATUM 48												
DESIGN SURFACE	49.082	49.133	49.233		49.833	50.058	49.833		49.233	49.133	49.259	
EXISTING SEAL						49.990						
EXISTING SURFACE	49.082	49.019	49.126		49.711	49.990	49.682		49.089	49.243	49.259	
OFFSET	-51.017	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	52.521	

CH 620.000



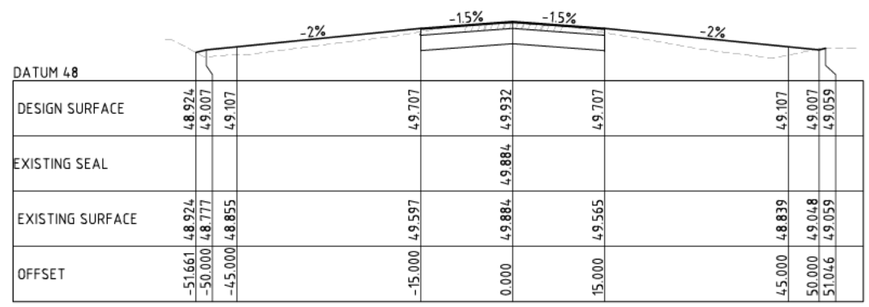
DATUM 48												
DESIGN SURFACE	48.865	48.965	49.065		49.665	49.890	49.665		49.065	48.965	49.151	
EXISTING SEAL						49.836						
EXISTING SURFACE	48.865	48.686	48.754		49.564	49.836	49.509		48.796	49.008	49.151	
OFFSET	-51.990	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.736	

CH 700.000



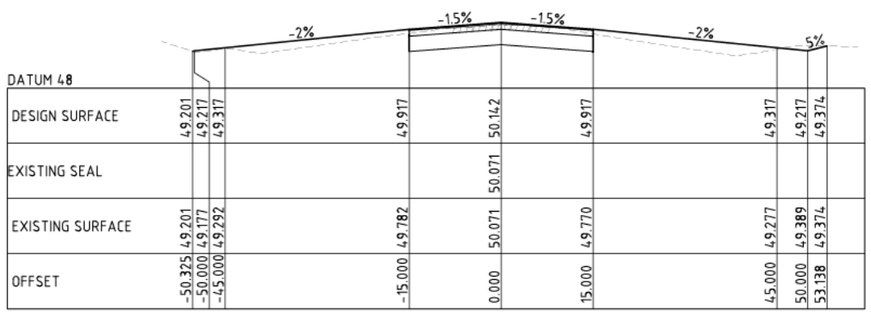
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DESIGN SURFACE	49.134	49.175	49.275		49.875	50.100	49.875		49.275	49.175	49.285	
EXISTING SEAL						50.046						
EXISTING SURFACE	49.134	49.131	49.202		49.764	50.046	49.718		49.162	49.283	49.285	
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CH 600.000



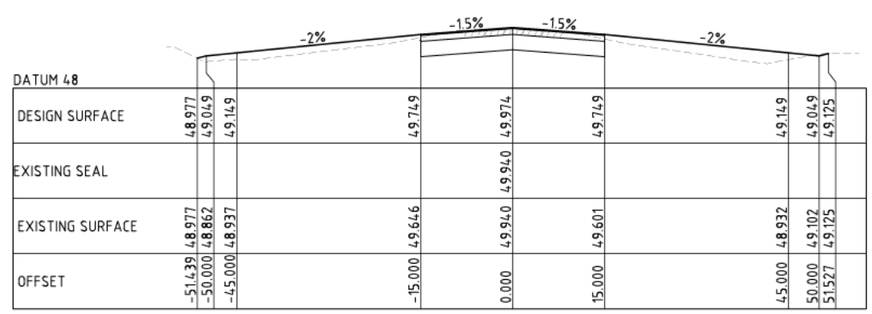
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DESIGN SURFACE	48.924	49.007	49.107		49.707	49.932	49.707		49.107	49.007	49.059	
EXISTING SEAL						49.884						
EXISTING SURFACE	48.924	48.777	48.855		49.597	49.884	49.565		48.839	49.048	49.059	
OFFSET	-51.661	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	51.046	

CH 680.000



DATUM 48												
DESIGN SURFACE	49.201	49.217	49.317		49.917	50.142	49.917		49.317	49.217	49.374	
EXISTING SEAL						50.071						
EXISTING SURFACE	49.201	49.177	49.292		49.782	50.071	49.770		49.277	49.389	49.374	
OFFSET	-50.325	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	53.138	

CH 580.000



DATUM 48												
DESIGN SURFACE	48.977	49.049	49.149		49.749	49.974	49.749		49.149	49.049	49.125	
EXISTING SEAL						49.940						
EXISTING SURFACE	48.977	48.862	48.937		49.646	49.940	49.601		48.932	49.102	49.125	
OFFSET	-51.439	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	51.527	

CH 660.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY

SURVEY REF:

PLAN No: -

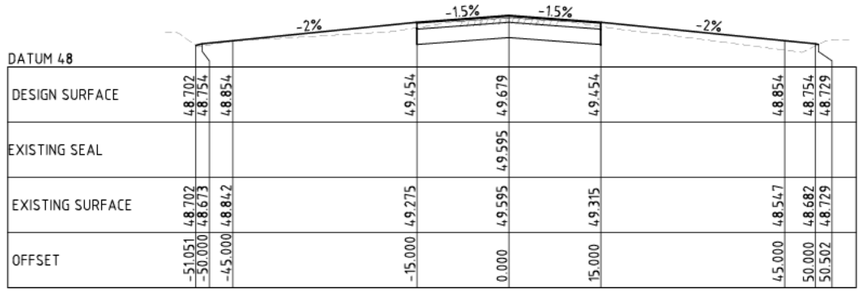
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EAST GIPPSLAND SHIRE COUNCIL

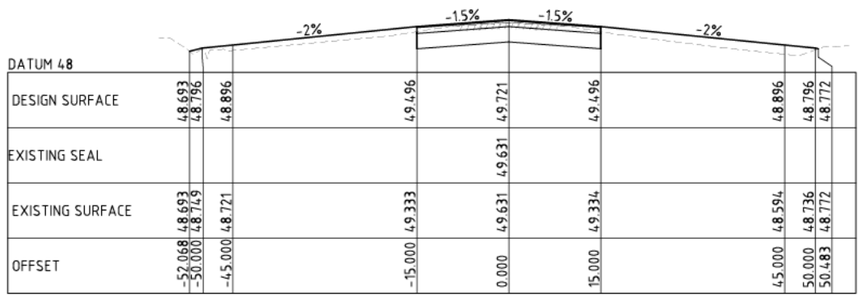
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 6 OF 13

DATE: AUGUST 2021
SHEET 30 OF 51
DRAWING No: 2466/1129
Rv. B



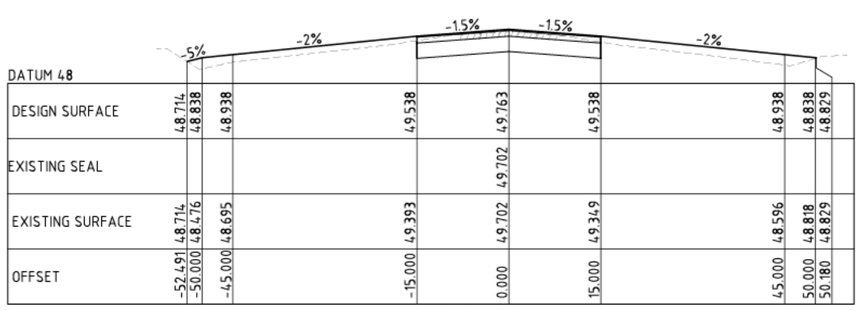
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DESIGN SURFACE	48.702	48.754	48.854		49.454	49.679	49.454		48.854	48.754	48.729	
EXISTING SEAL						49.595						
EXISTING SURFACE	48.702	48.673	48.842		49.275	49.595	49.315		48.547	48.682	48.729	
OFFSET	-51.051	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	50.502	

CH 800.000



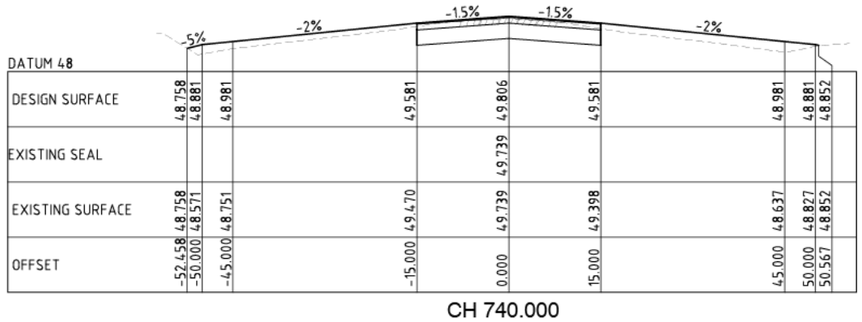
DATUM 48												
DESIGN SURFACE	48.693	48.796	48.896		49.496	49.721	49.496		48.896	48.796	48.772	
EXISTING SEAL						49.631						
EXISTING SURFACE	48.693	48.749	48.721		49.333	49.631	49.334		48.594	48.736	48.772	
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CH 780.000



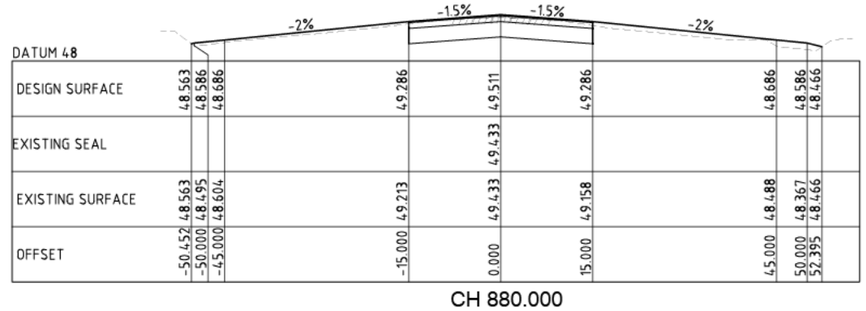
DATUM 48												
DESIGN SURFACE	48.714	48.838	48.938		49.538	49.763	49.538		48.938	48.838	48.829	
EXISTING SEAL						49.702						
EXISTING SURFACE	48.714	48.476	48.695		49.393	49.702	49.349		48.596	48.818	48.829	
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CH 760.000



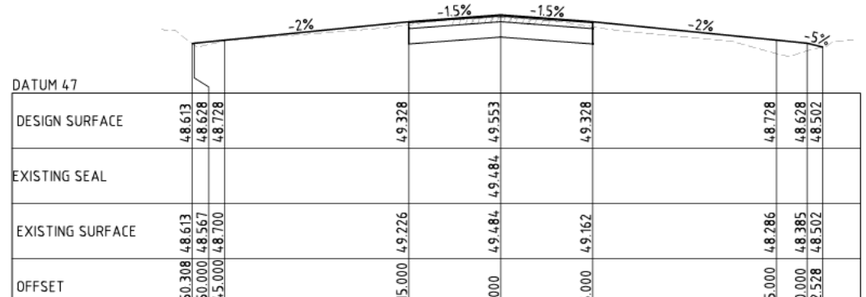
DATUM 48												
DESIGN SURFACE	48.758	48.881	48.981		49.581	49.806	49.581		48.981	48.881	48.852	
EXISTING SEAL						49.739						
EXISTING SURFACE	48.758	48.571	48.751		49.470	49.739	49.398		48.637	48.827	48.852	
OFFSET	-52.458	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	50.567	

CH 740.000



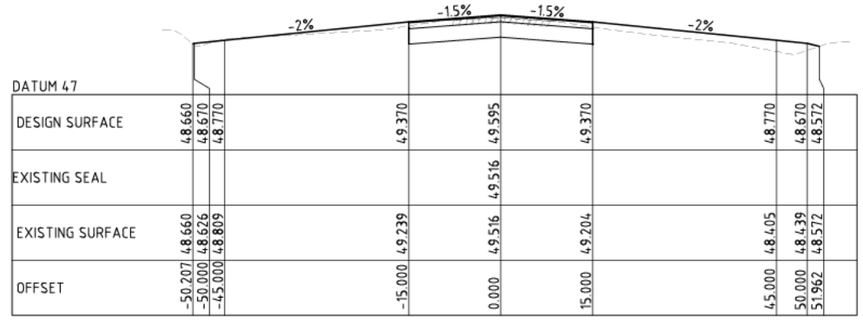
DATUM 48												
DESIGN SURFACE	48.563	48.586	48.686		49.286	49.511	49.286		48.686	48.586	48.466	
EXISTING SEAL						49.433						
EXISTING SURFACE	48.563	48.495	48.604		49.213	49.433	49.158		48.488	48.367	48.466	
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CH 880.000



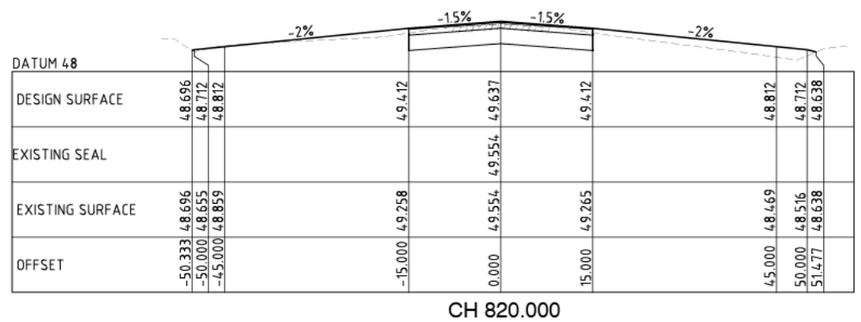
DATUM 47												
DESIGN SURFACE	48.613	48.628	48.728		49.328	49.553	49.328		48.728	48.628	48.502	
EXISTING SEAL						49.484						
EXISTING SURFACE	48.613	48.567	48.700		49.226	49.484	49.162		48.286	48.385	48.502	
OFFSET	-50.308	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	52.528	

CH 860.000



DATUM 47												
DESIGN SURFACE	48.660	48.670	48.770		49.370	49.595	49.370		48.770	48.670	48.572	
EXISTING SEAL						49.516						
EXISTING SURFACE	48.660	48.626	48.809		49.239	49.516	49.204		48.405	48.439	48.572	
OFFSET	-50.207	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	51.962	

CH 840.000



DATUM 48												
DESIGN SURFACE	48.696	48.712	48.812		49.412	49.637	49.412		48.812	48.712	48.638	
EXISTING SEAL						49.554						
EXISTING SURFACE	48.696	48.655	48.859		49.258	49.554	49.265		48.469	48.516	48.638	
OFFSET	-50.333	-50.000	-45.000		-15.000	0.000	15.000		45.000	50.000	51.477	

CH 820.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
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A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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SCALE:	1 : 100

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: ARBITRARY

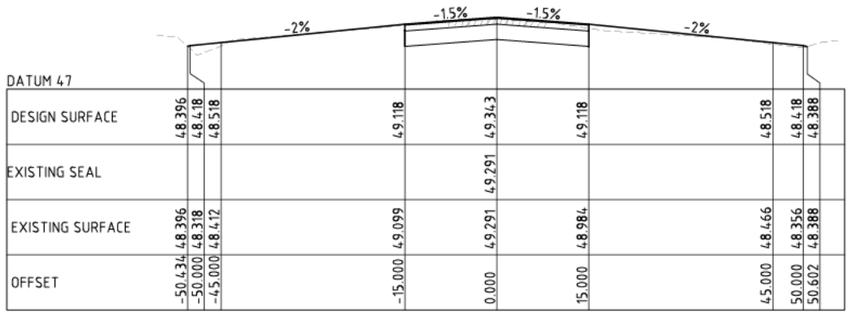
SURVEY REF:
PLAN No: -

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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1130 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

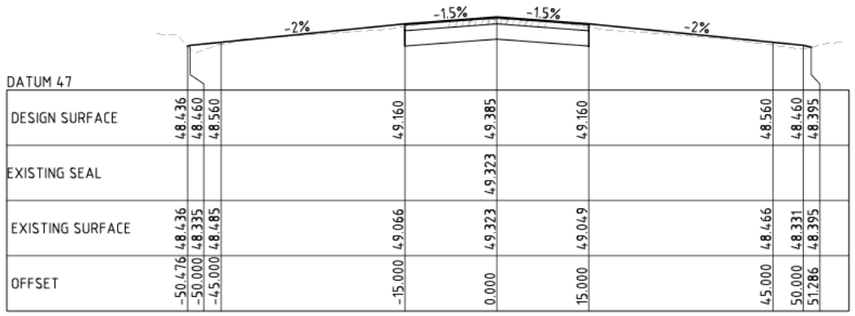
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 7 OF 13

DATE: AUGUST 2021
SHEET 31 OF 51
DRAWING No:
2466/1130
B
Rv.



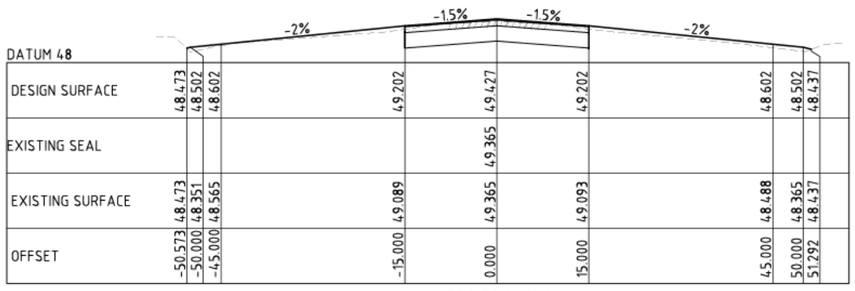
DATUM 47										
DESIGN SURFACE	48.396	48.418	48.518	49.118	49.343	49.118	48.518	48.418	48.388
EXISTING SEAL					49.291				
EXISTING SURFACE	48.396	48.318	48.412	49.099	49.291	48.984	48.466	48.356	48.388
OFFSET	-50.434	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	50.602

CH 960.000



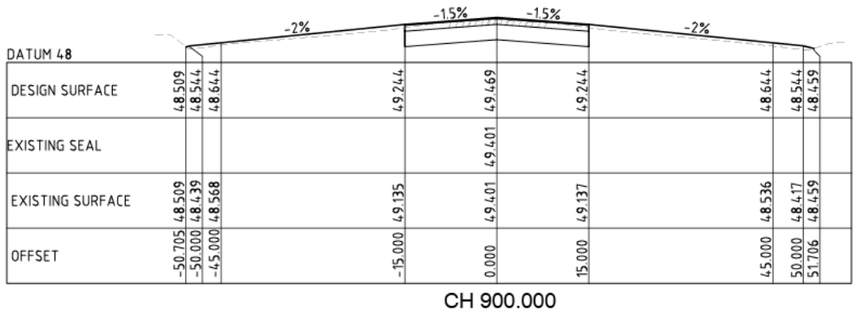
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DESIGN SURFACE	48.436	48.460	48.560	49.160	49.385	49.160	48.560	48.460	48.395
EXISTING SEAL					49.323				
EXISTING SURFACE	48.436	48.335	48.485	49.066	49.323	49.049	48.466	48.331	48.395
OFFSET	-50.476	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.286

CH 940.000



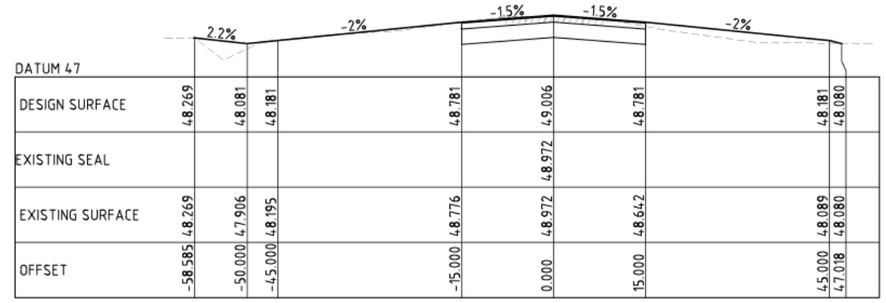
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DESIGN SURFACE	48.473	48.502	48.602	49.202	49.427	49.202	48.602	48.502	48.437
EXISTING SEAL					49.365				
EXISTING SURFACE	48.473	48.351	48.565	49.089	49.365	49.093	48.488	48.365	48.437
OFFSET	-50.573	-50.000	-45.000	-15.000	0.000	15.000	45.000	50.000	51.292

CH 920.000



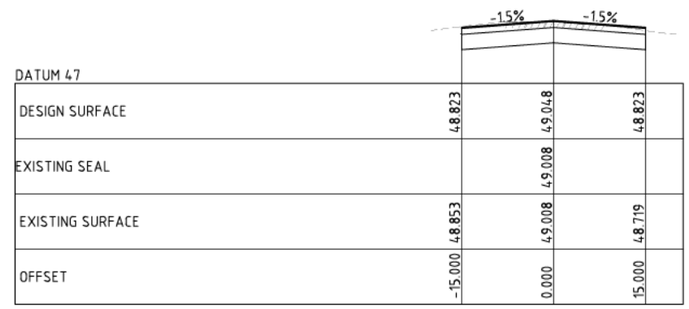
DATUM 48										
DESIGN SURFACE	48.509	48.544	48.644	49.244	49.469	49.244	48.644	48.544	48.459
EXISTING SEAL					49.401				
EXISTING SURFACE	48.509	48.439	48.568	49.135	49.401	49.137	48.536	48.417	48.459
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CH 900.000



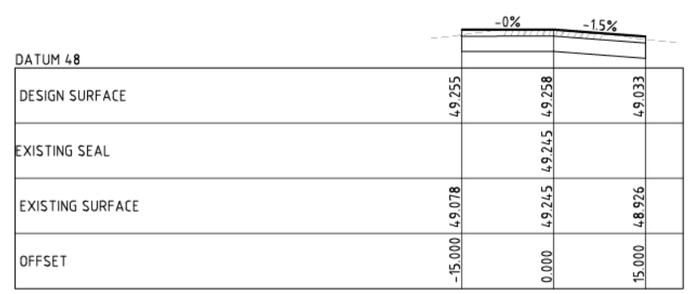
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DESIGN SURFACE	48.269	48.081	48.181	48.781	49.006	48.781	48.181	48.080	
EXISTING SEAL					48.972				
EXISTING SURFACE	48.269	47.906	48.195	48.776	48.972	48.642	48.089	48.080	
OFFSET	-58.585	-50.000	-45.000	-15.000	0.000	15.000	45.000	47.018	

CH 1120.000



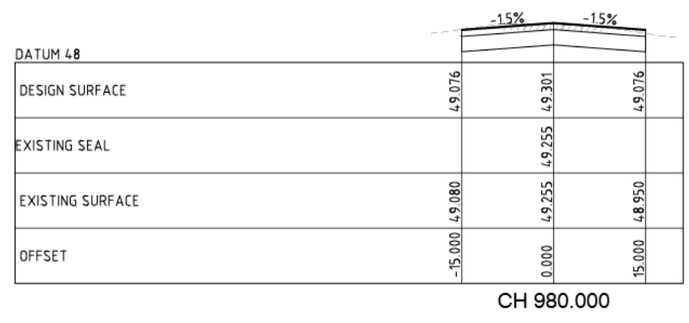
DATUM 47			
DESIGN SURFACE	48.823	49.048	48.823
EXISTING SEAL		49.008	
EXISTING SURFACE	48.853	49.008	48.719
OFFSET	-15.000	0.000	15.000

CH 1100.000



DATUM 48			
DESIGN SURFACE	49.255	49.258	49.033
EXISTING SEAL		49.245	
EXISTING SURFACE	49.078	49.245	48.926
OFFSET	-15.000	0.000	15.000

CH 1000.000



DATUM 48			
DESIGN SURFACE	49.076	49.301	49.076
EXISTING SEAL		49.255	
EXISTING SURFACE	49.080	49.255	48.950
OFFSET	-15.000	0.000	15.000

CH 980.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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dics ASINZS ISO 9001 Certified

DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY

SURVEY REF:

PLAN No: -

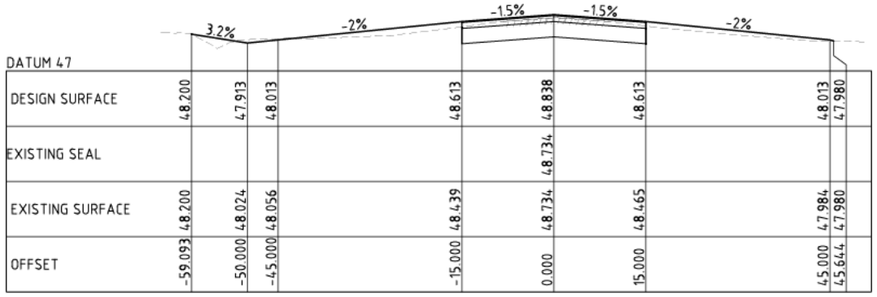
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CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1131 B.dwg

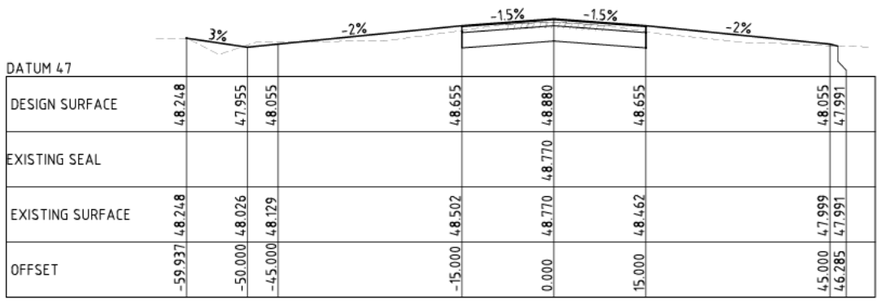
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 8 OF 13

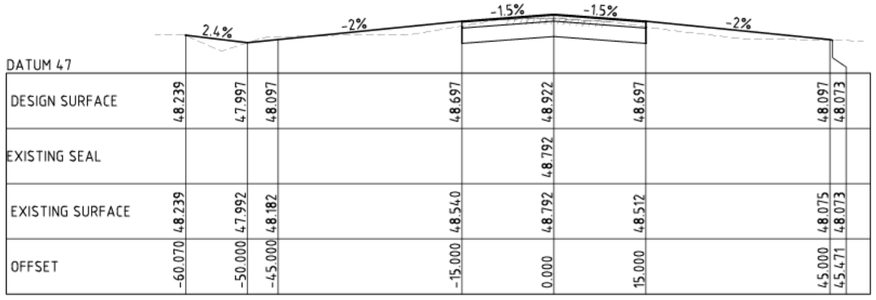
DATE: AUGUST 2021
SHEET 32 OF 51
DRAWING No: 2466/1131 B
Rv.



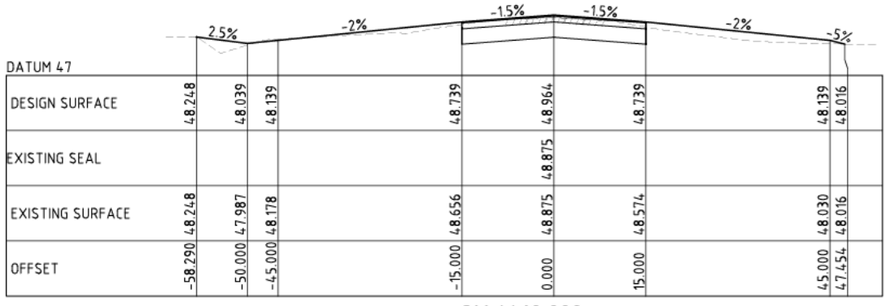
CH 1200.000



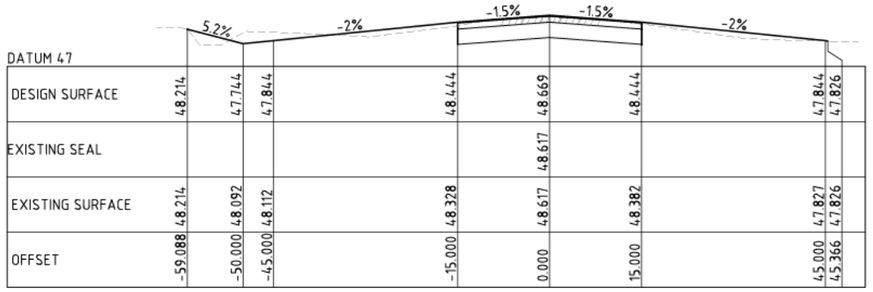
CH 1180.000



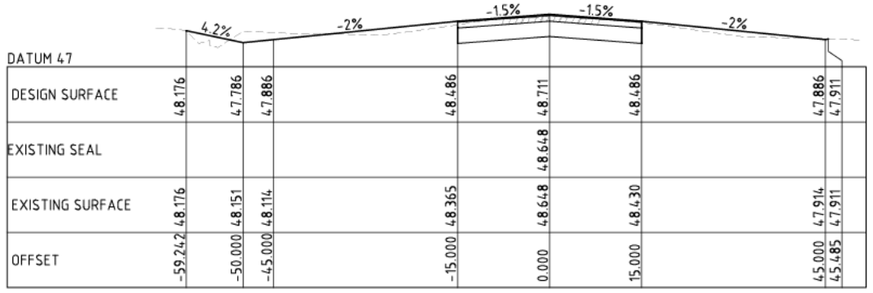
CH 1160.000



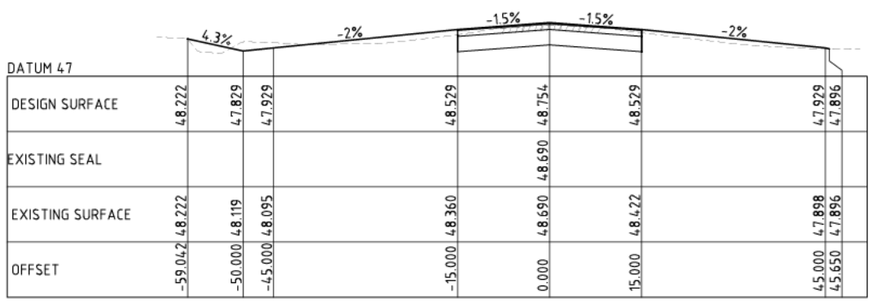
CH 1140.000



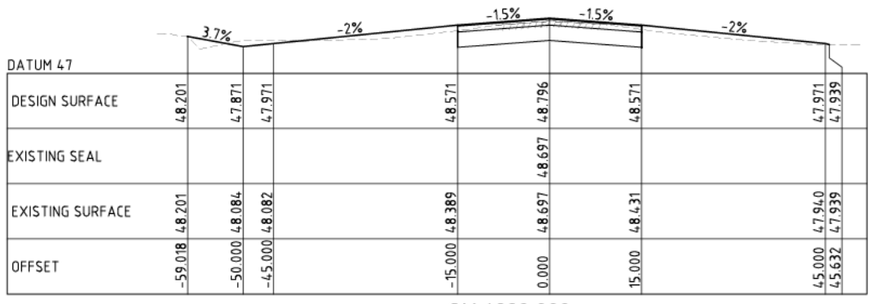
CH 1280.000



CH 1260.000



CH 1240.000



CH 1220.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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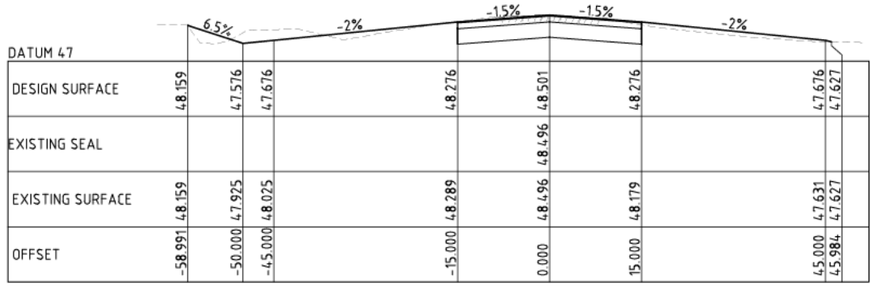
DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 100		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1132 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

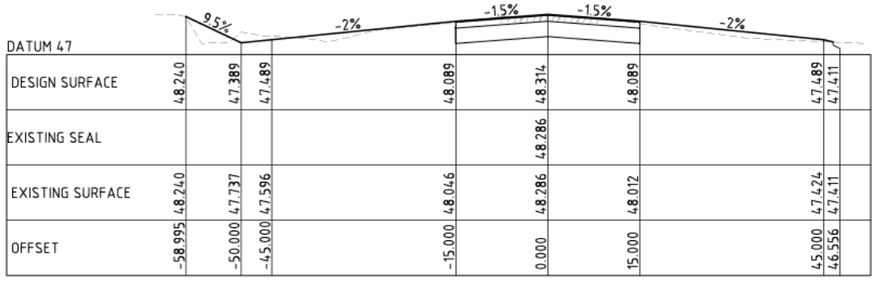
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 9 OF 13

DATE: AUGUST 2021
SHEET 33 OF 51
DRAWING No: 2466/1132 B
Rv.



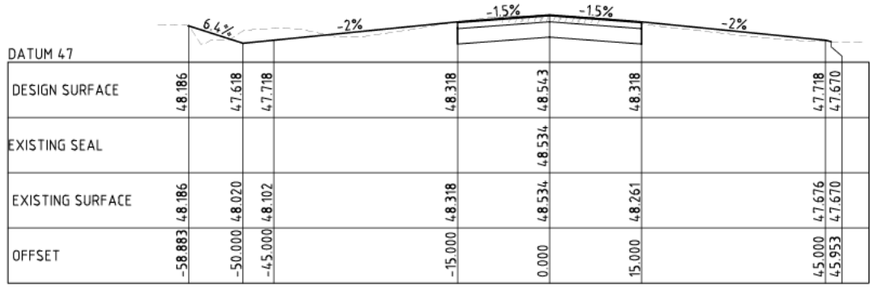
DATUM 47												
DESIGN SURFACE	48.159	47.576	47.676			48.276	48.501	48.276			47.676	47.627
EXISTING SEAL							48.496					
EXISTING SURFACE	48.159	47.925	48.025			48.289	48.496	48.179			47.631	47.627
OFFSET	-58.991	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.984

CH 1360.000



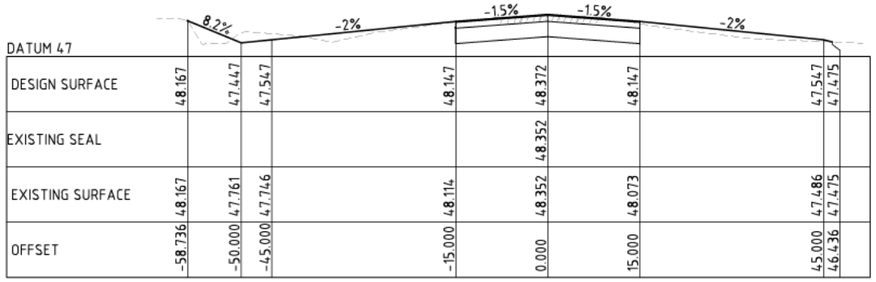
DATUM 47												
DESIGN SURFACE	48.240	47.389	47.489			48.089	48.314	48.089			47.489	47.411
EXISTING SEAL							48.286					
EXISTING SURFACE	48.240	47.737	47.596			48.046	48.286	48.012			47.424	47.411
OFFSET	-58.995	-50.000	-45.000			-15.000	0.000	15.000			45.000	46.556

CH 1440.000



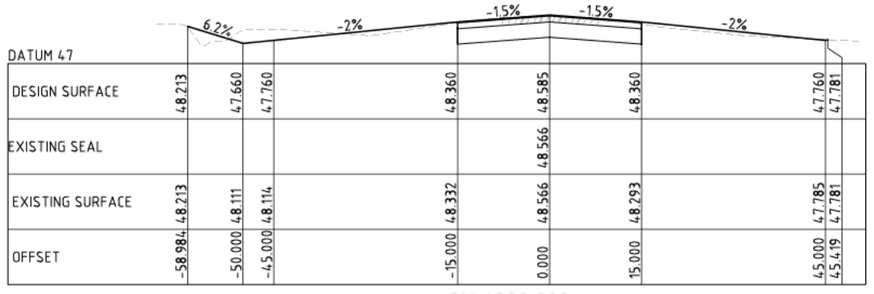
DATUM 47												
DESIGN SURFACE	48.186	47.618	47.718			48.318	48.543	48.318			47.718	47.670
EXISTING SEAL							48.534					
EXISTING SURFACE	48.186	48.020	48.102			48.318	48.534	48.261			47.676	47.670
OFFSET	-58.883	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.953

CH 1340.000



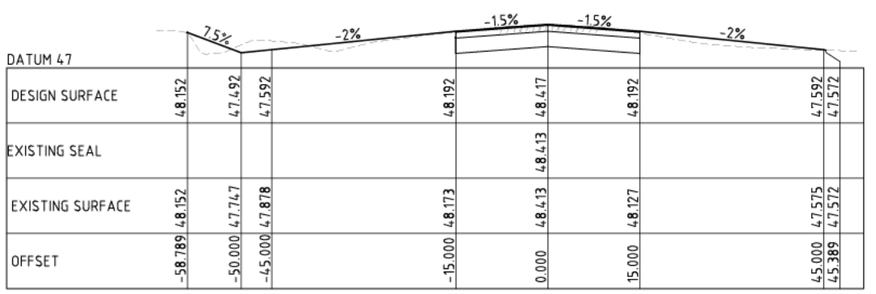
DATUM 47												
DESIGN SURFACE	48.167	47.447	47.547			48.147	48.372	48.147			47.547	47.475
EXISTING SEAL							48.352					
EXISTING SURFACE	48.167	47.761	47.746			48.114	48.352	48.073			47.486	47.475
OFFSET	-58.736	-50.000	-45.000			-15.000	0.000	15.000			45.000	46.436

CH 1420.000



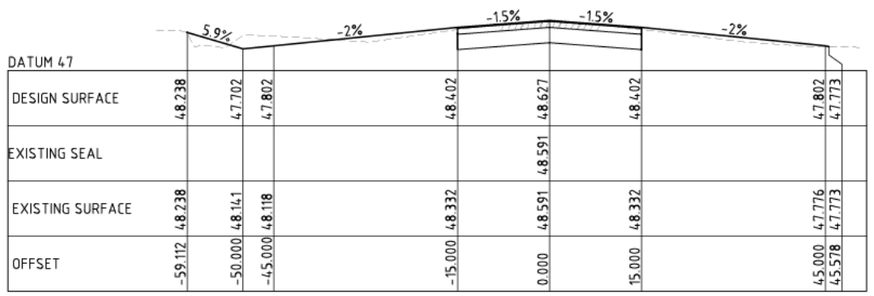
DATUM 47												
DESIGN SURFACE	48.213	47.660	47.760			48.360	48.585	48.360			47.760	47.781
EXISTING SEAL							48.566					
EXISTING SURFACE	48.213	48.111	48.114			48.332	48.566	48.293			47.785	47.781
OFFSET	-58.984	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.419

CH 1320.000



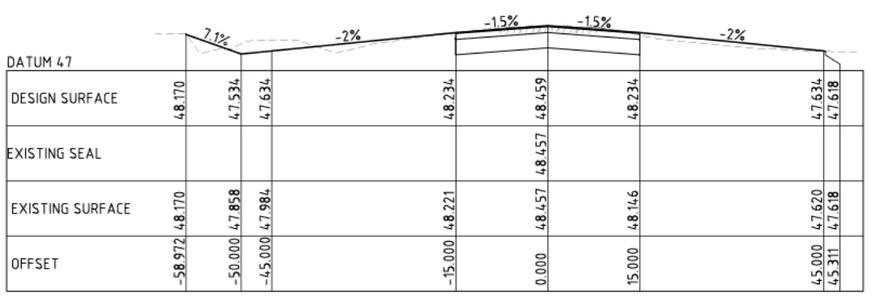
DATUM 47												
DESIGN SURFACE	48.152	47.492	47.592			48.192	48.417	48.192			47.592	47.572
EXISTING SEAL							48.413					
EXISTING SURFACE	48.152	47.747	47.878			48.173	48.413	48.127			47.575	47.572
OFFSET	-58.789	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.389

CH 1400.000



DATUM 47												
DESIGN SURFACE	48.238	47.702	47.802			48.402	48.627	48.402			47.802	47.773
EXISTING SEAL							48.591					
EXISTING SURFACE	48.238	48.141	48.118			48.332	48.591	48.332			47.776	47.773
OFFSET	-59.112	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.578

CH 1300.000



DATUM 47												
DESIGN SURFACE	48.170	47.534	47.634			48.234	48.459	48.234			47.634	47.618
EXISTING SEAL							48.457					
EXISTING SURFACE	48.170	47.858	47.984			48.221	48.457	48.146			47.620	47.618
OFFSET	-58.972	-50.000	-45.000			-15.000	0.000	15.000			45.000	45.311

CH 1380.000

2 1 0 2 4 6 8 1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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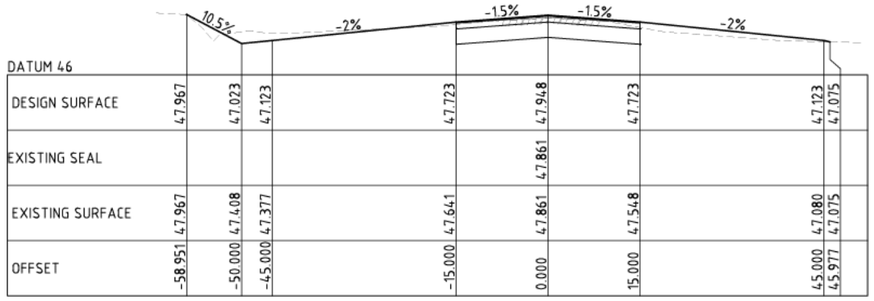
DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 100		PLAN No: -

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
CAD FILE NAME: R:\2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\2466-1133 B.dwg

EAST GIPPSLAND SHIRE COUNCIL

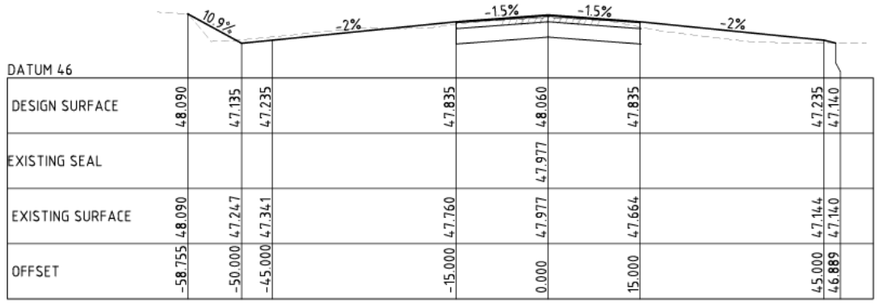
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 10 OF 13

DATE: AUGUST 2021
SHEET 34 OF 51
DRAWING No: 2466/1133 B
Rv.



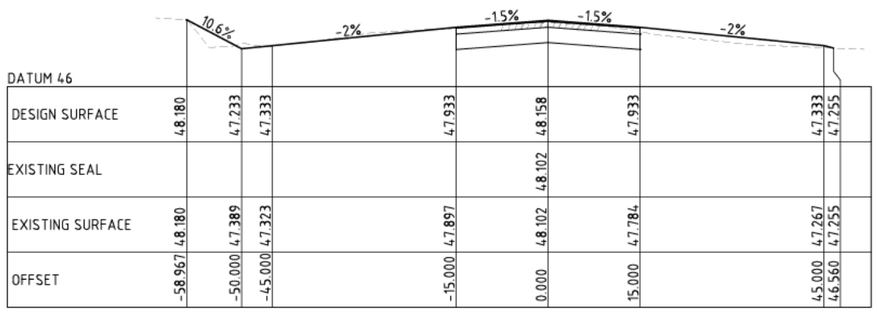
DATUM 46								
DESIGN SURFACE	47.967	47.023	47.123	47.723	47.948	47.723	47.123	47.075
EXISTING SEAL					47.861			
EXISTING SURFACE	47.967	47.408	47.377	47.641	47.861	47.548	47.080	47.075
OFFSET	-58.951	-50.000	-45.000	-15.000	0.000	15.000	45.000	45.977

CH 1520.000



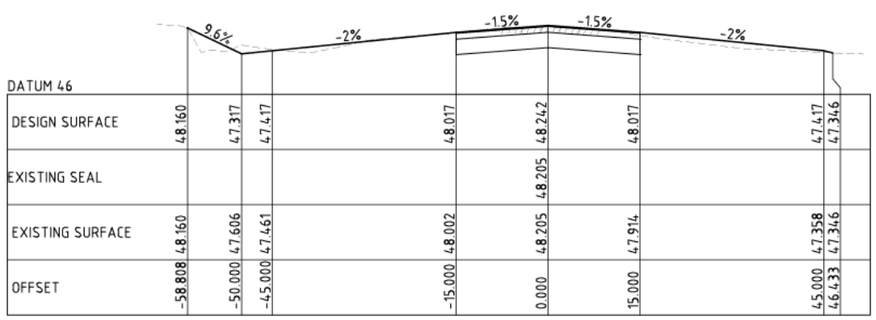
DATUM 46								
DESIGN SURFACE	48.090	47.135	47.235	47.835	48.060	47.835	47.235	47.140
EXISTING SEAL					47.977			
EXISTING SURFACE	48.090	47.247	47.341	47.760	47.977	47.664	47.144	47.140
OFFSET	-58.755	-50.000	-45.000	-15.000	0.000	15.000	45.000	46.889

CH 1500.000



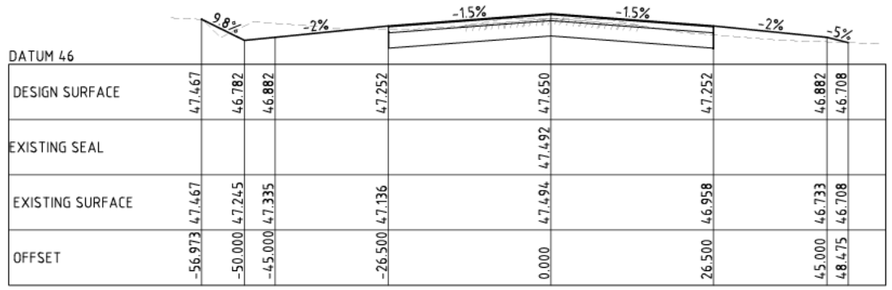
DATUM 46								
DESIGN SURFACE	48.180	47.233	47.333	47.933	48.158	47.933	47.333	47.255
EXISTING SEAL					48.102			
EXISTING SURFACE	48.180	47.389	47.323	47.897	48.102	47.784	47.267	47.255
OFFSET	-58.967	-50.000	-45.000	-15.000	0.000	15.000	45.000	46.560

CH 1480.000



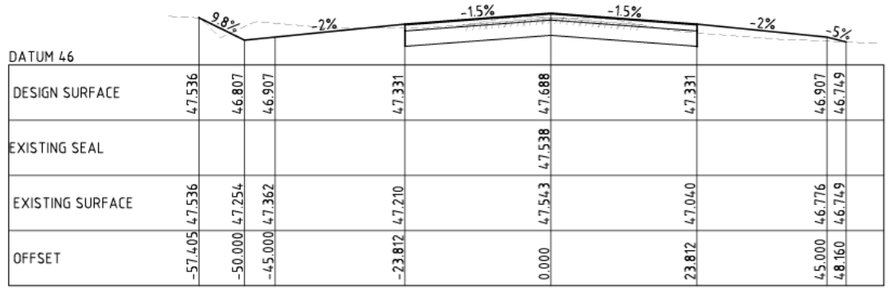
DATUM 46								
DESIGN SURFACE	48.160	47.317	47.417	48.017	48.242	48.017	47.417	47.346
EXISTING SEAL					48.205			
EXISTING SURFACE	48.160	47.606	47.461	48.002	48.205	47.914	47.358	47.346
OFFSET	-58.808	-50.000	-45.000	-15.000	0.000	15.000	45.000	46.433

CH 1460.000



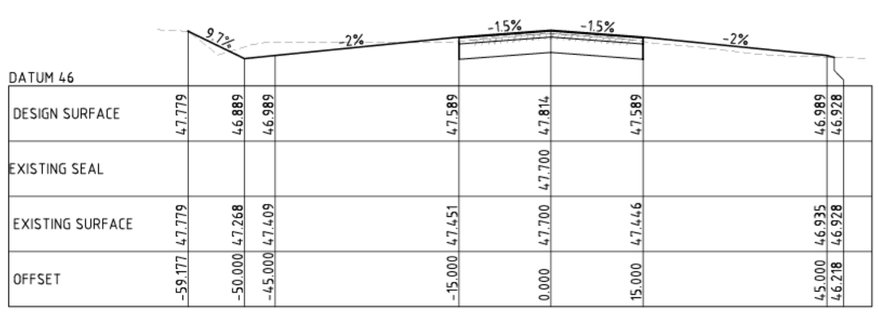
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DESIGN SURFACE	47.467	46.782	46.882	47.252	47.650	47.252	46.882	46.708	
EXISTING SEAL					47.492				
EXISTING SURFACE	47.467	47.245	47.335	47.136	47.494	46.958	46.733	46.708	
OFFSET	-56.973	-50.000	-45.000	-26.500	0.000	26.500	45.000	48.475	46.708

CH 1565.651



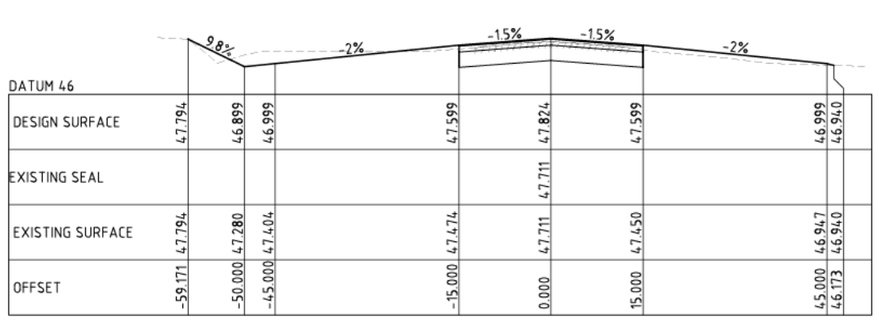
DATUM 46									
DESIGN SURFACE	47.536	46.807	46.907	47.331	47.688	47.331	46.907	46.749	
EXISTING SEAL					47.538				
EXISTING SURFACE	47.536	47.254	47.362	47.210	47.543	47.040	46.776	46.749	
OFFSET	-57.405	-50.000	-45.000	-23.812	0.000	23.812	45.000	48.160	46.749

CH 1560.000



DATUM 46								
DESIGN SURFACE	47.779	46.889	46.989	47.589	47.814	47.589	46.989	46.928
EXISTING SEAL					47.700			
EXISTING SURFACE	47.779	47.268	47.409	47.451	47.700	47.446	46.935	46.928
OFFSET	-59.177	-50.000	-45.000	-15.000	0.000	15.000	45.000	46.218

CH 1541.471



DATUM 46								
DESIGN SURFACE	47.794	46.899	46.999	47.599	47.824	47.599	46.999	46.940
EXISTING SEAL					47.711			
EXISTING SURFACE	47.794	47.280	47.404	47.474	47.711	47.450	46.947	46.940
OFFSET	-59.171	-50.000	-45.000	-15.000	0.000	15.000	45.000	46.173

CH 1540.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

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DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 100

A1

DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY

SURVEY REF:

PLAN No: -

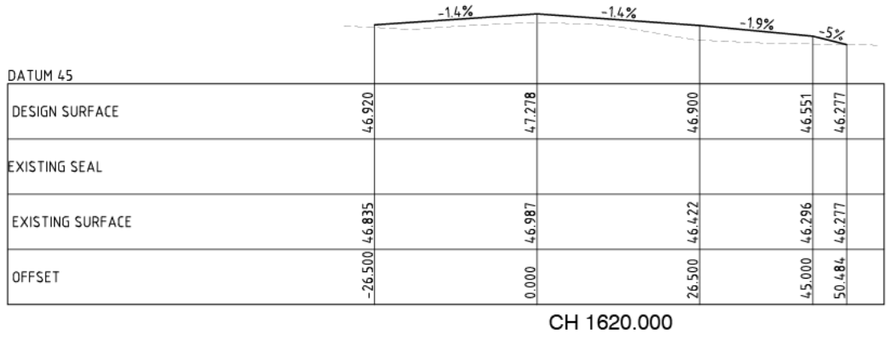
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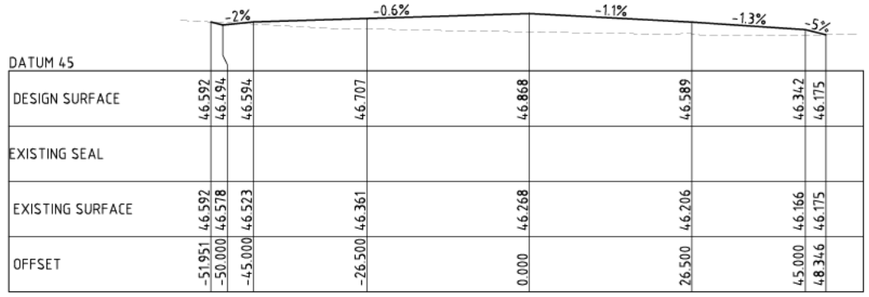
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 11 OF 13

DATE: AUGUST 2021
SHEET 35 OF 51
DRAWING No: 2466/1134
Rv. B

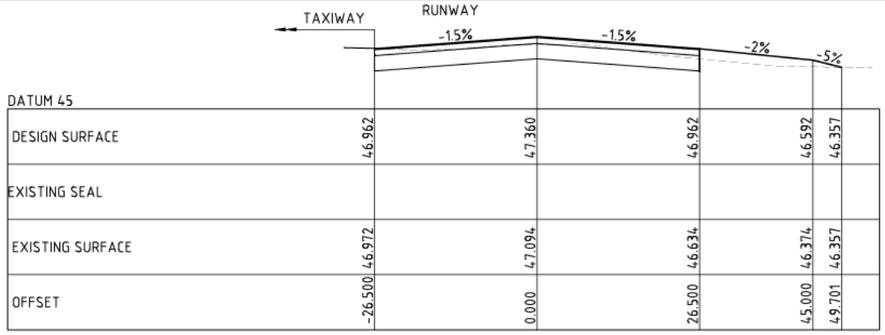


CH 1620.000



CH 1680.000

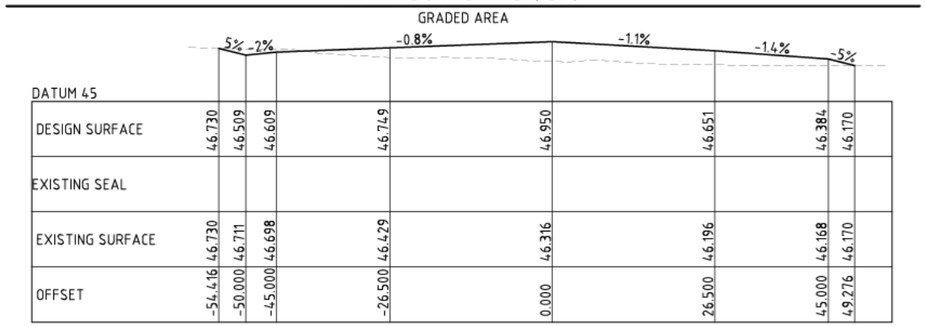
GRADED AREA



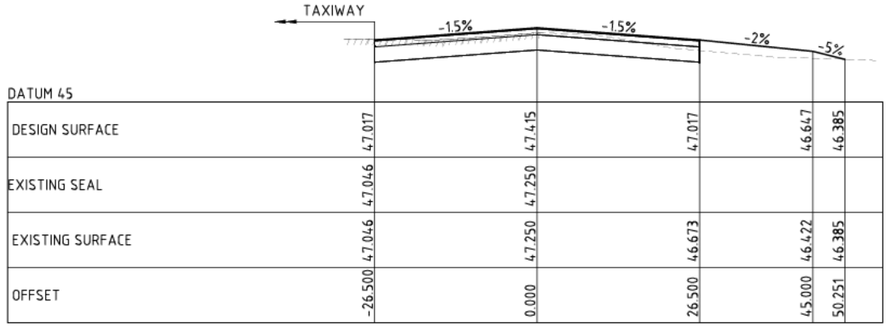
CH 1608.037

RUNWAY END SAFETY AREA (RESA)

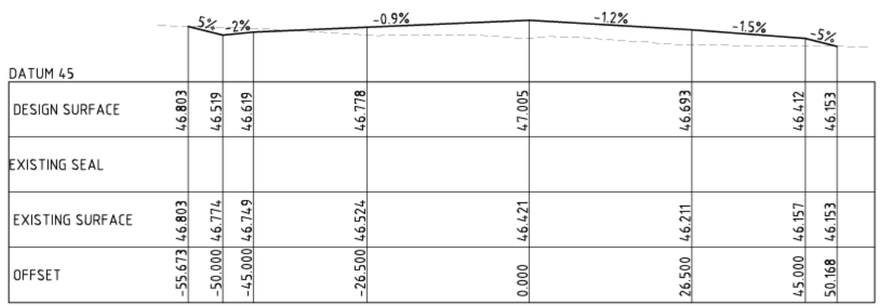
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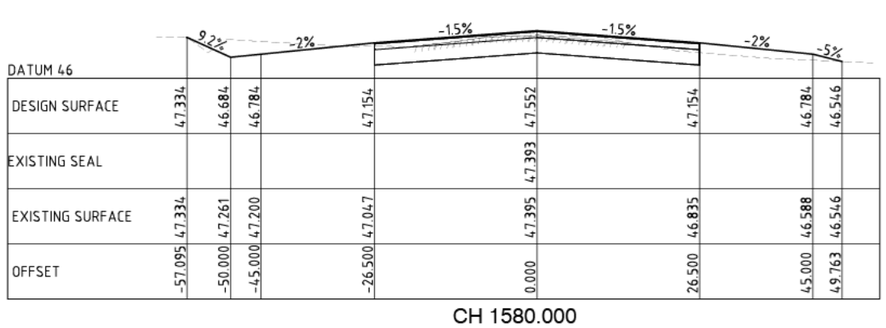
CH 1668.037



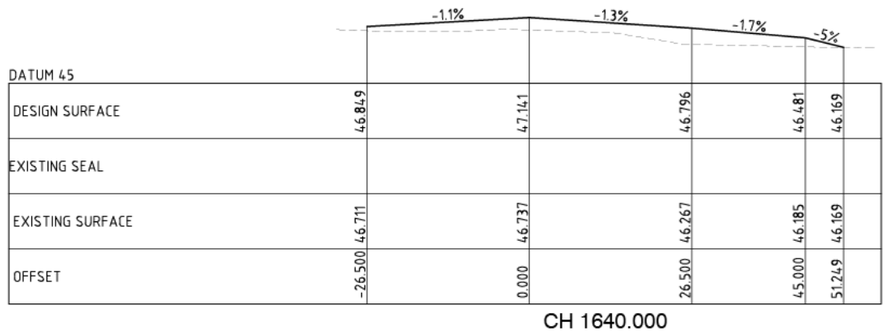
CH 1600.000



CH 1660.000



CH 1580.000



CH 1640.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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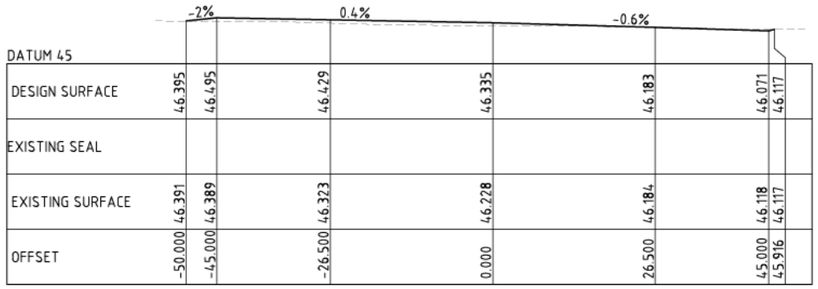
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	1 : 100		PLAN No: -

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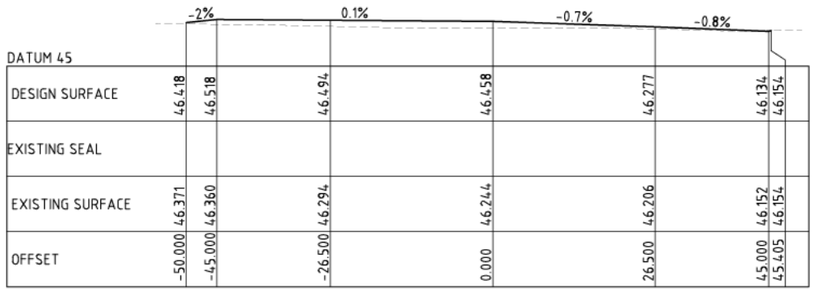
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 12 OF 13

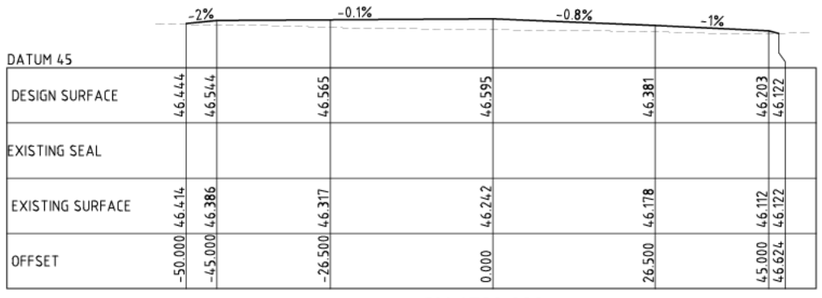
DATE: AUGUST 2021
SHEET 36 OF 51
DRAWING No: 2466/1135
Rv. B



CH 1758.037

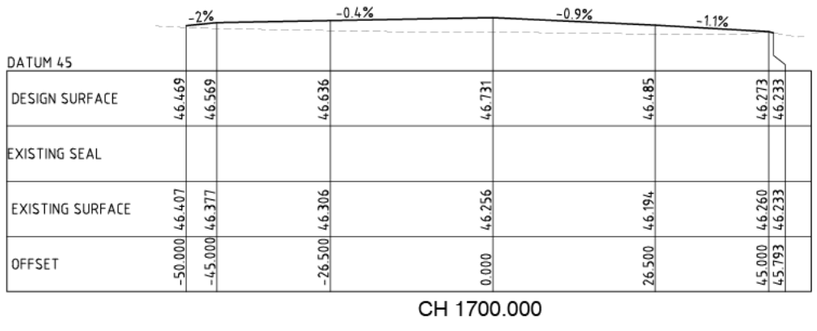


CH 1740.000

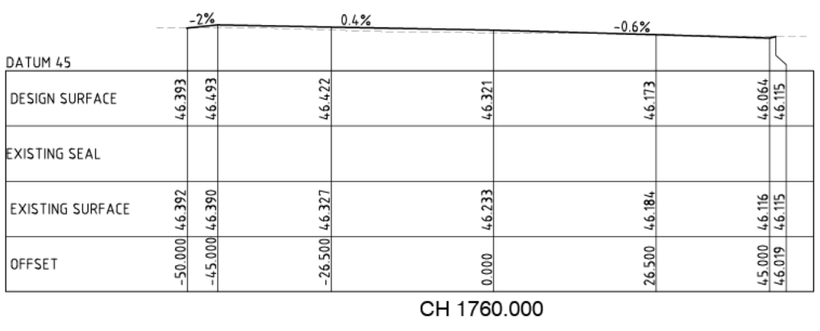


CH 1720.000

CH 1769.591



CH 1700.000



CH 1760.000

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

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Rv.	APPR.	DATE	REVISIONS

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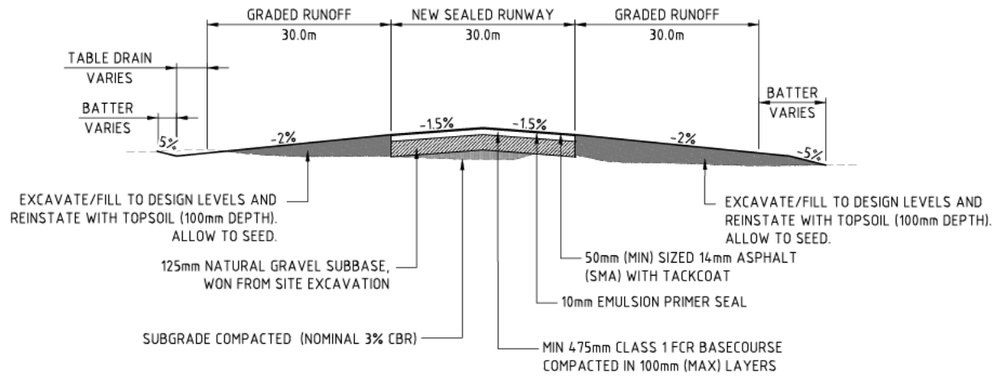
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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	1 : 100	PLAN No:	-

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
PRIMARY RUNWAY
CROSS SECTIONS SHEET 13 OF 13

DATE: AUGUST 2021
SHEET 37 OF 51
DRAWING No: 2466/1136 B
Rv.

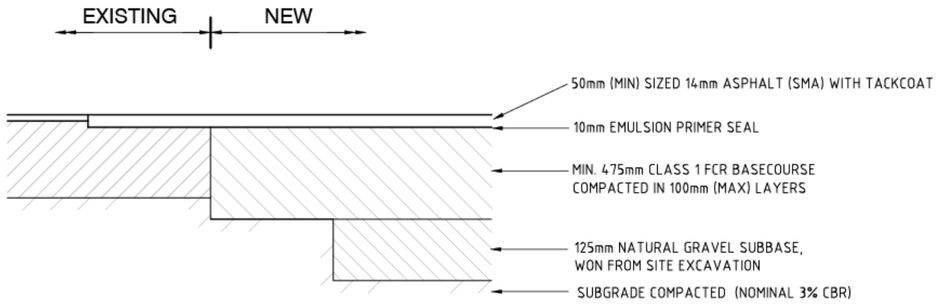


TYPICAL CROSS SECTION

BAIRNESDALE AERODROME

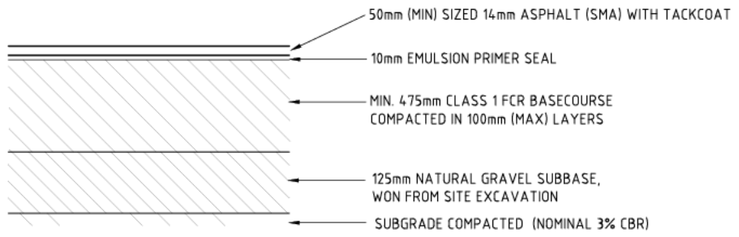
PRIMARY RUNWAY

CH 0.000 - CH 1608.037



PAVEMENT JOINT DETAIL - NEW TO EXISTING PAVEMENT

NOT TO SCALE



FULL DEPTH PAVEMENT DETAIL

NOT TO SCALE

NOTES:

1. REFER TO SPECIFICATION FOR FULL DETAILS OF PAVEMENT CONSTRUCTION

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	1 : 100	PLAN No:	-

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
TYPICAL SECTION & PAVEMENT COMPOSITE DETAILS

DATE: AUGUST 2021
SHEET 38 OF 51
DRAWING No: 2466/1137 B
Rv.

WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

EX. 47.230
FS. 47.230
EX. 47.260
FS. 47.260
EX. 46.100
FS. 46.100
EX. 46.100
FS. 46.100
EX. 46.090
FS. 46.190
EX. 46.100
FS. 46.100
EX. 46.110
FS. 46.220
EX. 47.410
FS. 47.410
EX. 47.400
FS. 47.400
EX. 46.170
FS. 46.280
EX. 46.310
FS. 46.470
EX. 47.520
FS. 47.520
EX. 46.200
FS. 46.280
EX. 47.340
FS. 47.340
EX. 47.140
FS. 47.140
EX. 46.030
FS. 46.030
1
1 IN 8 (TYP)
375 DIA
Ex. 300 DIA
Ex. 450 DIA

CONTRACTOR TO ALLOW TO FORM AND RESHAPE EXISTING DETENTION BASIN AS SHOWN. DETENTION BASIN TO REMAIN IN SERVICE DURING RESHAPING WORKS.

NEW DRAINAGE TO OUTFALL INTO DETENTION BASIN

47.00

TAXI WAY

N

STN 18
STAR PKT
RL 46.717

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/1102.

10 5 0 10 20
1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
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DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	1 : 250

A1
DATUM:
HEIGHT: AHD
HORIZONTAL: ARBITRARY
SURVEY REF:
PLAN No: -

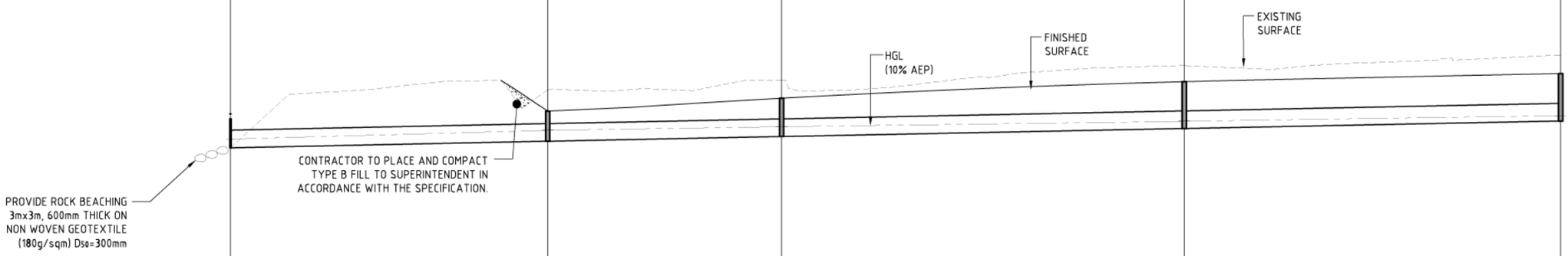
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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DETENTION BASIN IMPROVEMENT
IMPROVEMENT WORKS

DATE: AUGUST 2021
SHEET 39 OF 51
DRAWING No:
2466/1138 B
Rv.

STRUCTURE NUMBER	1	2	3	4	5
STRUCTURE DESCRIPTION	HEADWALL TO SUIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		65	50	34	19
PIPE CAPACITY (L/s)		94	93	92	93
AT GRADE VELOCITY (m/s)		1.01	0.73	0.63	0.53
PIPE SIZE (mm)		375 DIA.	375 DIA.	375 DIA.	375 DIA.
PIPE GRADE		1 in 482 0.21%	1 in 497 0.20%	1 in 503 0.20%	1 in 500 0.20%
DATUM (AHD)	36.00				
DEPTH TO INVERT	0.615	0.641	0.814	0.997	1.010
INVERT LEVEL	46.030	46.170	46.270	46.440	46.600
DESIGN SURFACE	46.645	46.811	47.084	47.437	47.610
EXISTING SURFACE	46.028	47.262	47.471	47.777	48.001
CHAINAGE	0.000	67.417	117.119	202.697	282.697
		67.417	49.702	85.577	80.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)
VERT. 1 0.5 0 1 2 3 4 — 1 : 50 (A1), 1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No:	-

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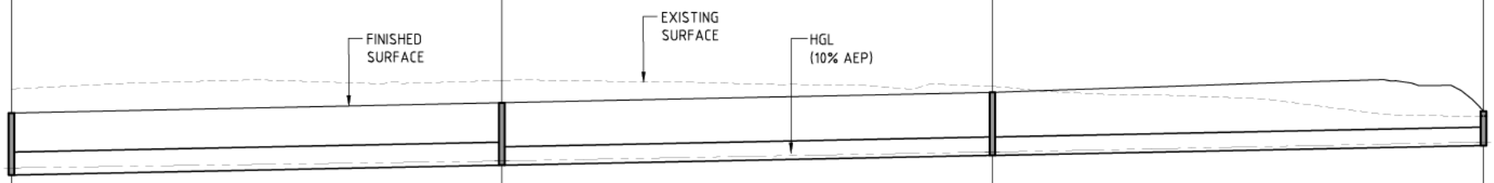
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 8

DATE: AUGUST 2021
SHEET 40 OF 51
DRAWING No: 2466/1139 B
Rv.

STRUCTURE NUMBER	5	6	7	8
STRUCTURE DESCRIPTION	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		7	4	4
PIPE CAPACITY (L/s)		93	51	51
AT GRADE VELOCITY (m/s)		0.4	0.42	0.42
PIPE SIZE (mm)		375 DIA.	300 DIA.	300 DIA.
PIPE GRADE		1 in 500 0.20%	1 in 500 0.20%	1 in 501 0.20%
DATUM (AHD)		37.00		
DEPTH TO INVERT	1.010	1.019	1.027	0.561
INVERT LEVEL	46.600	46.760	46.920	47.080
DESIGN SURFACE	47.610	47.779	47.947	47.641
EXISTING SURFACE	48.001	48.142	48.045	47.552
CHAINAGE	282.697	362.697	442.697	522.810
		80.000	80.000	80.113

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)
VERT. 1 0.5 0 1 2 3 4 — 1 : 50 (A1), 1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
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DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.		SURVEY REF:
SCALE:	AS SHOWN		PLAN No: -

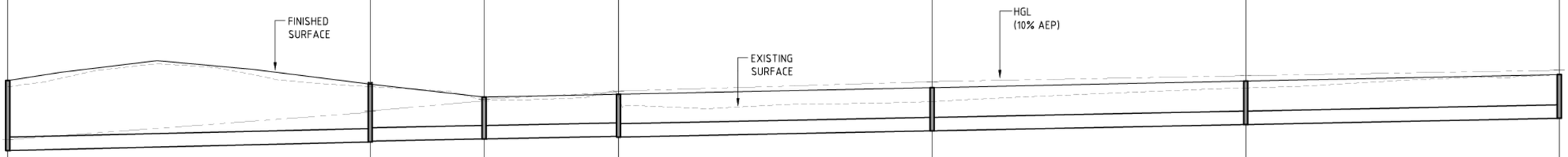
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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 OF 8

DATE: AUGUST 2021
SHEET 41 OF 51
DRAWING No: 2466/1140 B
Rv.

STRUCTURE NUMBER	9A	9	10	11	12	13	14
STRUCTURE DESCRIPTION	BREAK INTO EXISTING PIT AND MAKE GOOD	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		103	103	88	78	85	80
PIPE CAPACITY (L/s)		55	51	50	51	51	51
AT GRADE VELOCITY (m/s)		1.52	1.45	1.25	1.11	1.24	1.18
PIPE SIZE (mm)		300 DIA.	300 DIA.	300 DIA.	300 DIA.	300 DIA.	300 DIA.
PIPE GRADE		1 in 426 0.23%	1 in 509 0.20%	1 in 530 0.19%	1 in 500 0.20%	1 in 500 0.20%	1 in 500 0.20%
DATUM (AHD)	38.00						
DEPTH TO INVERT	1.562	1.292	1.272 / 0.933	0.940	0.956 / 0.956 / 0.964	0.971	0.974
INVERT LEVEL	47.540	47.730	47.750 / 47.800	47.857	47.840 / 47.840 / 47.980	48.120	48.260
DESIGN SURFACE	49.102	49.022	48.733	48.796	48.944	49.091	49.234
EXISTING SURFACE	48.961	48.965	48.657	48.749	48.635	48.938	49.234
CHAINAGE	0.000	80.909	106.347	136.347	206.347	276.347	346.347
		80.909	25.438	30.000	70.000	70.000	70.000

HOR. 10 5 0 10 20 30 40
VERT. 1 0.5 0 1 2 3 4

1 : 500 (A1)
1 : 1000 (A3)
1 : 50 (A1)
1 : 100 (A3)

B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
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Rv.	APPR.	DATE	REVISIONS

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DESIGNED:	A.D.	A1	DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY
DRAWN:	A.M.M		
CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No:	-

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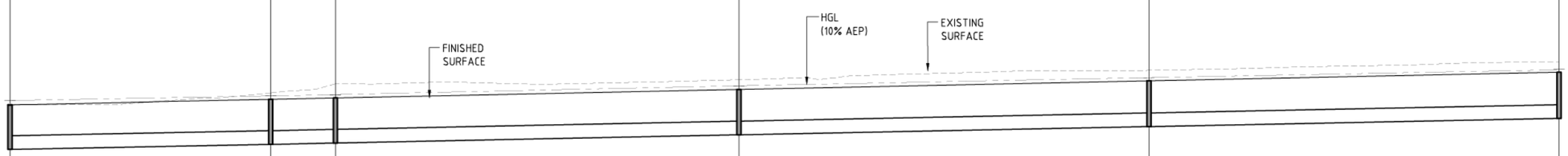
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

DRAINAGE LONGITUDINAL SECTIONS - SHEET 3 OF 8

DATE: AUGUST 2021
SHEET 42 OF 51
DRAWING No: 2466/1141
Rv. B

STRUCTURE NUMBER	14	15	16	17	18	19
STRUCTURE DESCRIPTION	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT OVER EXISTING DRAINAGE	1000X750 DEPRESSED GRATED PIT OVER EXISTING DRAINAGE	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)	79	79	78	78	78	
PIPE CAPACITY (L/s)	50	53	52	51	51	
AT GRADE VELOCITY (m/s)	1.15	1.12	1.14	1.16	1.16	
PIPE SIZE (mm)	300 DIA.	300 DIA.	300 DIA.	300 DIA.	300 DIA.	
PIPE GRADE	1 in 520 0.19%	1 in 473 0.21%	1 in 492 0.20%	1 in 500 0.20%	1 in 500 0.20%	

DATUM (AHD)

DEPTH TO INVERT	0.974	0.989	0.988	0.995	1.004	1.014	
INVERT LEVEL	48.260	48.370	48.400	48.580	48.760	48.940	
DESIGN SURFACE	49.234	49.359	49.388	49.575	49.764	49.954	
EXISTING SURFACE	49.234	49.499	49.698	49.787	49.995	50.181	
CHAINAGE	346.347	403.590	417.779	506.347	596.347	686.347	
		57.244	14.189	88.567	90.000	90.000	

HOR. 10 5 0 10 20 30 40
VERT. 1 0.5 0 1 2 3 4

1 : 500 (A1)
1 : 1000 (A3)
1 : 50 (A1)
1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
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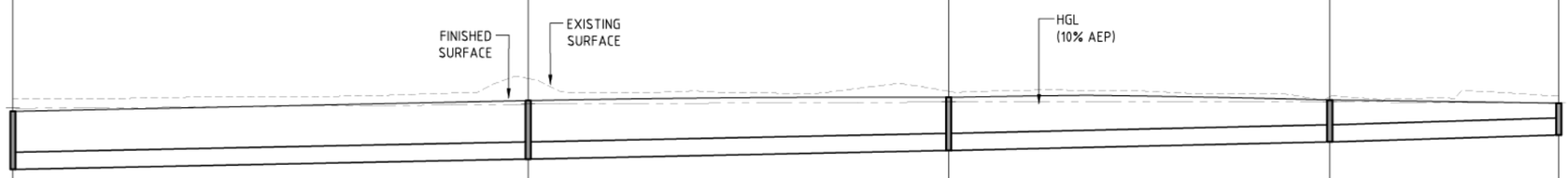
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 4 OF 8

DATE: AUGUST 2021
SHEET 43 OF 51
DRAWING No: 2466/1142 B
Rv.

STRUCTURE NUMBER	19	20	21	22	23
STRUCTURE DESCRIPTION	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		73	70	62	53
PIPE CAPACITY (L/s)		51	52	54	63
AT GRADE VELOCITY (m/s)		1.04	0.99	0.88	0.79
PIPE SIZE (mm)		300 DIA.	300 DIA.	300 DIA.	300 DIA.
PIPE GRADE		1 in 500 0.20%	1 in 490 0.20%	1 in 444 0.23%	1 in 333 0.30%
DATUM (AHD)					
DEPTH TO INVERT	1.014	1.023	0.930	0.734	0.558
INVERT LEVEL	48.940	49.120	49.270	49.420	49.540
DESIGN SURFACE	49.954	50.143	50.200	50.154	50.098
EXISTING SURFACE	50.181	50.530	50.306	50.209	50.222
CHAINAGE	686.347	776.347	849.781	916.347	956.347
		90.000	73.434	66.566	40.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)
VERT. 1 0.5 0 1 2 3 4 — 1 : 50 (A1), 1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
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APPROVED:	M.S.	SURVEY REF:	
SCALE:	1 : 100	PLAN No:	-

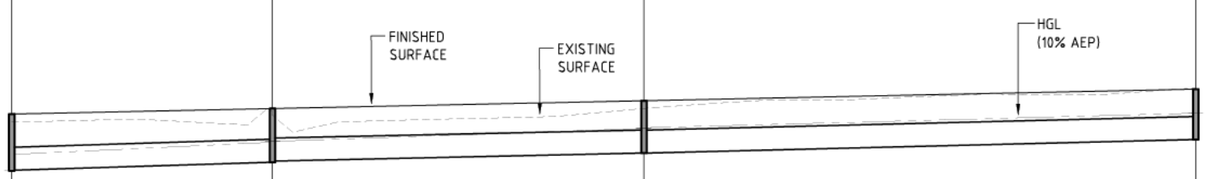
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 5 OF 8

DATE: AUGUST 2021
SHEET 44 OF 51
DRAWING No: 2466/1143 B
Rv.

STRUCTURE NUMBER	24A	24B	25	26
STRUCTURE DESCRIPTION	1000X750 DEPRESSED GRATED PIT OVER EXISTING DRAINAGE	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		125	118	102
PIPE CAPACITY (L/s)		115	96	102
AT GRADE VELOCITY (m/s)		1.31	1.11	1.01
PIPE SIZE (mm)		375 DIA.	375 DIA.	375 DIA.
PIPE GRADE		1 in 327 0.31%	1 in 466 0.21%	1 in 409 0.24%
DATUM (AHD)		38.00		
DEPTH TO INVERT	0.926	0.916 0.876	0.856 0.853	0.823
INVERT LEVEL	47.590	47.600 47.730	47.750 47.880	48.100
DESIGN SURFACE	48.516	48.606	48.733	48.923
EXISTING SURFACE	48.384	48.502	48.608	48.944
CHAINAGE	0.000	42.525	103.117	193.117
		42.525	60.592	90.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)
VERT. 1 0.5 0 1 2 3 4 — 1 : 50 (A1), 1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
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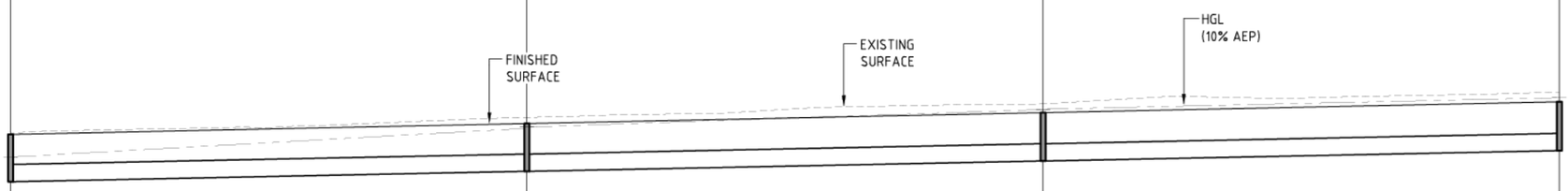
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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 6 OF 8

DATE: AUGUST 2021
SHEET 45 OF 51
DRAWING No: 2466/1144 B
Rv.

STRUCTURE NUMBER	26	27	28	29
STRUCTURE DESCRIPTION	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000X750 DEPRESSED GRATED PIT	1000x750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		86	71	60
PIPE CAPACITY (L/s)		51	51	51
AT GRADE VELOCITY (m/s)		1.22	1.01	0.85
PIPE SIZE (mm)		300 DIA.	300 DIA.	300 DIA.
PIPE GRADE		1 in 500 0.20%	1 in 500 0.20%	1 in 500 0.20%
DATUM (AHD)		38.00		
DEPTH TO INVERT	0.823	0.832	0.841	0.851
INVERT LEVEL	48.100	48.280	48.460	48.640
DESIGN SURFACE	48.923	49.112	49.301	49.491
EXISTING SURFACE	48.944	49.218	49.453	49.661
CHAINAGE	193.117	283.117	373.117	463.117
		90.000	90.000	90.000

1 : 500 (A1)
1 : 1000 (A3)
1 : 50 (A1)
1 : 100 (A3)

HOR. 10 5 0 10 20 30 40
VERT. 1 0.5 0 1 2 3 4

Rv.	APPR.	DATE	REVISIONS
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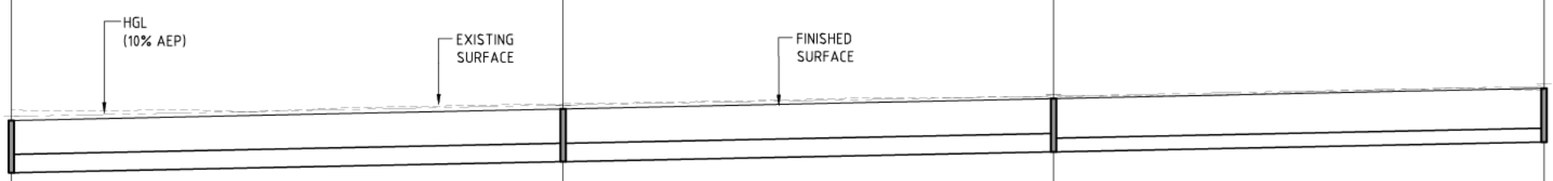
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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 7 OF 8

DATE: AUGUST 2021
SHEET 46 OF 51
DRAWING No: 2466/1145 B
Rv.

STRUCTURE NUMBER	29	30	31	32
STRUCTURE DESCRIPTION	1000x750 DEPRESSED GRATED PIT	1000x750 DEPRESSED GRATED PIT	1000x750 DEPRESSED GRATED PIT	1000x750 DEPRESSED GRATED PIT



10% AEP DESIGN RUNOFF (L/s)		54	48	28
PIPE CAPACITY (L/s)		51	51	24
AT GRADE VELOCITY (m/s)		0.8	0.76	0.68
PIPE SIZE (mm)		300 DIA.	300 DIA.	225 DIA.
PIPE GRADE		1 in 500 0.20%	1 in 500 0.20%	1 in 500 0.20%
DATUM (AHD)		39.00		
DEPTH TO INVERT	0.851	0.860	0.868	0.877
INVERT LEVEL	48.640	48.820	48.980	49.140
DESIGN SURFACE	49.491	49.680	49.848	50.017
EXISTING SURFACE	49.661	49.764	49.867	49.980
CHAINAGE	463.117	553.117	633.117	713.117
		90.000	80.000	80.000

HOR. 10 5 0 10 20 30 40 — 1 : 500 (A1), 1 : 1000 (A3)
VERT. 1 0.5 0 1 2 3 4 — 1 : 50 (A1), 1 : 100 (A3)

Rv.	APPR.	DATE	REVISIONS
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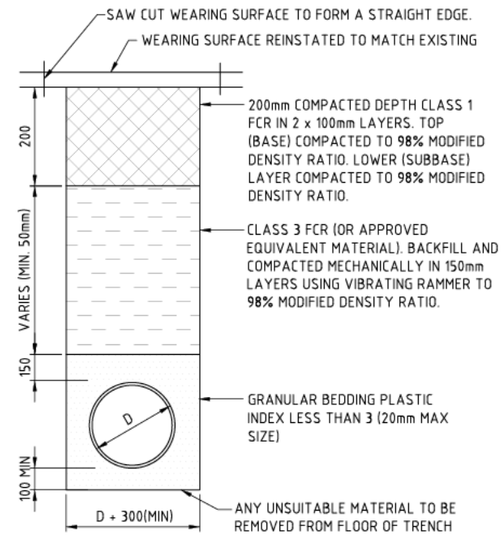
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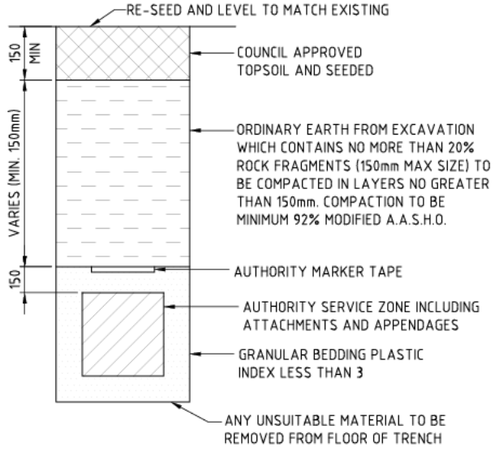
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345 BENGWORDEN ROAD, BAIRNSDALE
DRAINAGE LONGITUDINAL SECTIONS - SHEET 8 OF 8

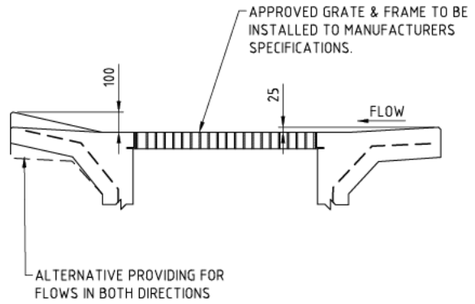
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SHEET 47 OF 51
DRAWING No: 2466/1146 B
Rv.



TRENCHES UNDER SEAL



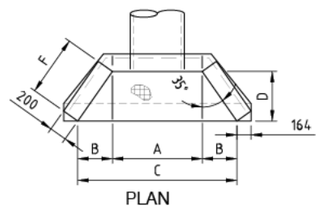
TRENCHES UNDER SWALES



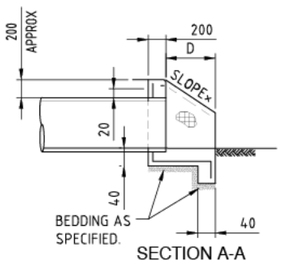
SECTION B-B

TRENCHING BACKFILL - SD 310

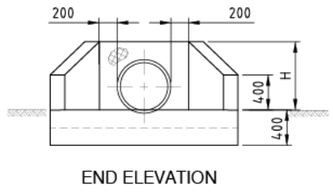
(TRENCHES WITHIN 1m OF COUNCIL ASSETS)
NOT TO SCALE



PLAN



SECTION A-A



END ELEVATION

REINFORCED WINGWALL DIMENISONS

PIPE DIA.	EXTERNAL PIPE DIA	A	E	H	B	C	D	F
					TYPE 1 - SLOPE AT 5 :1			
300	362	762	300	531	138	1037	197	240
375	445	845	300	610	221	1286	315	385
450	534	934	300	692	307	1547	438	535
525	616	1016	300	775	394	1804	563	687
					TYPE 2 - SLOPE AT 2:1			
300	362	762	300	531	138	1129	262	320
375	445	845	300	610	294	1433	420	513
450	534	934	300	692	409	1752	584	713
525	616	1016		775	525	2066	750	916
					TYPE 3 -SLOPE AT 3:1			
300	362	762	300	531	275	1312	393	480
375	445	845	300	610	441	1727	630	769
450	534	934	300	692	613	2161	876	1069
525	616	1016	300	775	788	2591	1125	1373

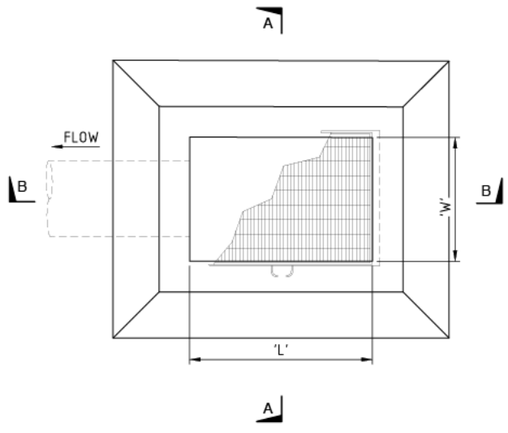
NOTES:

1. REINFORCEMENT, F82 UNLESS OTHERWISE SPECIFIED. SHALL BE CONTINUOUS AROUND CORNERS AND LOCATED AS SHOWN ON SECTIONS A-A AND B-B. CLEAR COVER 50 MIN. LAPS: FABRICS 300 MIN, BARS 25 x BAR DIAMETER MIN.
2. DISTRIBUTION BARS 12 DIA AT 200 CENTRES.
3. CONCRETE SHALL BE NORMAL - CLASS N32 STANDARD STRENGTH GRADE OR HIGHER COMPLYING WITH THE REQUIREMENTS OF AS 1379. EXPOSURE CLASSIFICATION UP TO AND INCLUDING B1.
4. EXPOSED EDGES SHALL HAVE 20x20 CHAMFERS
5. COMPACTION PRESSURE BEHIND WALLS NOT TO EXCEED 15kPa (1.5 TONNE VIBRATORY ROLLER OR 300 kg VIBRATING PLATE WITHIN 0.5m OF WALL).
6. ENDWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF AS 3600.
7. CONCRETE STRENGTH F'C=25MPa (MIN) AT 28 DAYS.

REINFORCED CONCRETE WINGWALL (IN-SITU) - SD 465

NOT TO SCALE

SECTION A-A



PLAN

DEPRESSED GRATED PIT (IDM SD 455) - MODIFIED

NOT TO SCALE

NOTES:

1. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 210kN) OR APPROVED EQUIVALENT.
   MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.
2. CONCRETE STRENGTH F'C=25MPa (MIN) AT 28 DAYS

Rv.	APPR.	DATE	REVISIONS
B	M.S.	19-10-2023	DETAIL DESIGN - ISSUED FOR APPROVAL/TENDER
A	R.S.	06-08-2021	PRELIMINARY DESIGN ISSUE

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DESIGNED:	A.D.
DRAWN:	A.M.M
CHECKED:	R.S.
APPROVED:	M.S.
SCALE:	AS SHOWN

A1 | DATUM: HEIGHT: AHD HORIZONTAL: ARBITRARY | SURVEY REF: | PLAN No: -

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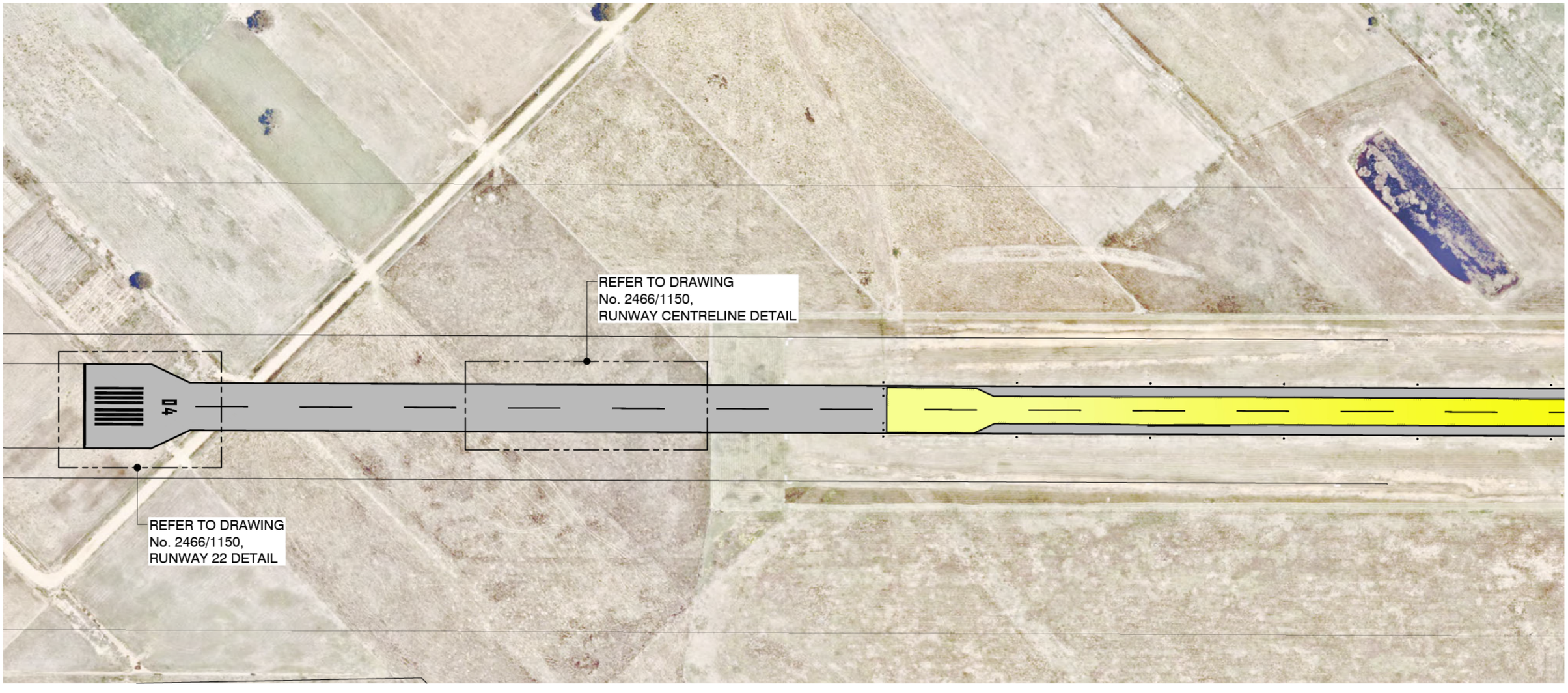
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

STANDARD DETAILS

DATE: AUGUST 2021
SHEET 48 OF 51
DRAWING No: 2466/1147 B
Rv.

WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.



FOR CONTINUATION REFER TO DRAWING No. 2466/1149

50 25 0 50 100
1 : 1250 AT A1
1 : 2500 AT A3

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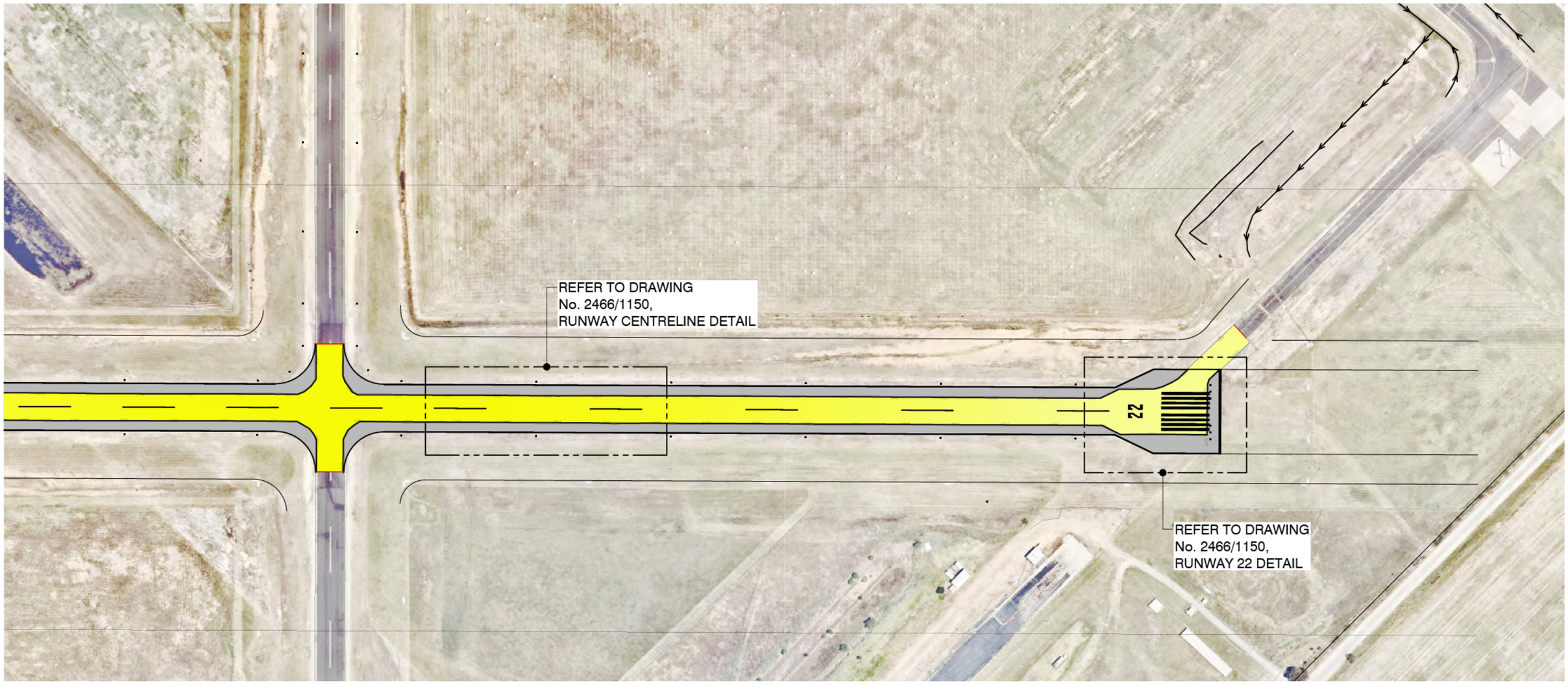
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
LINEMARKING LAYOUT PLAN
SHEET 1 OF 2

DATE: AUGUST 2021
SHEET 49 OF 51
DRAWING No: 2466/1148 B
Rv.

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50 25 0 50 100
1 : 1250 AT A1
1 : 2500 AT A3

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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
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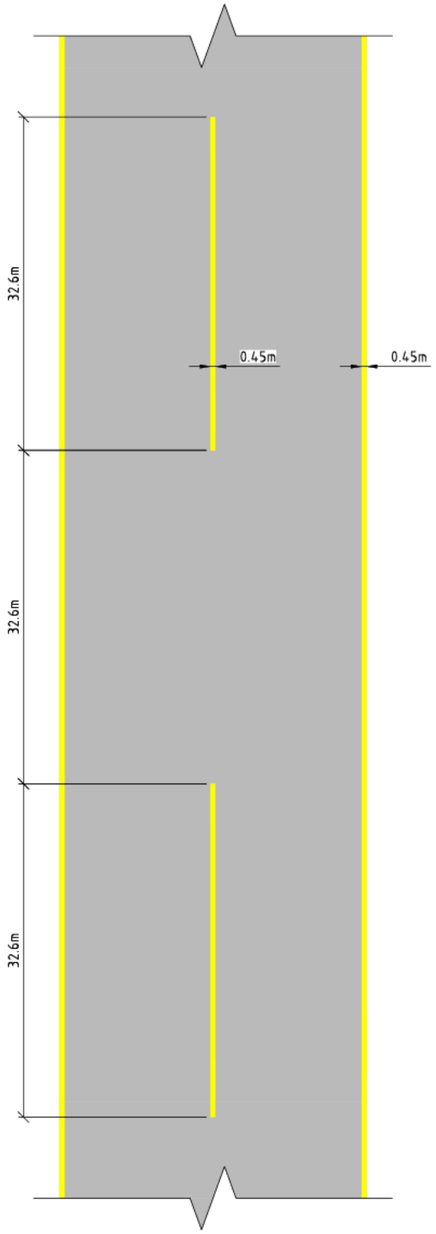
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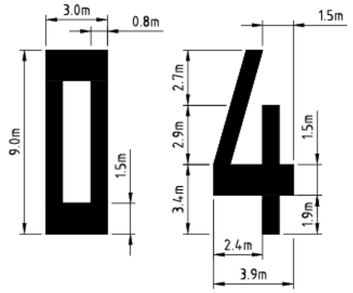
BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
LINEMARKING LAYOUT PLAN
SHEET 2 OF 2

DATE: AUGUST 2021
SHEET 50 OF 51
DRAWING No: 2466/1149 B
Rv.

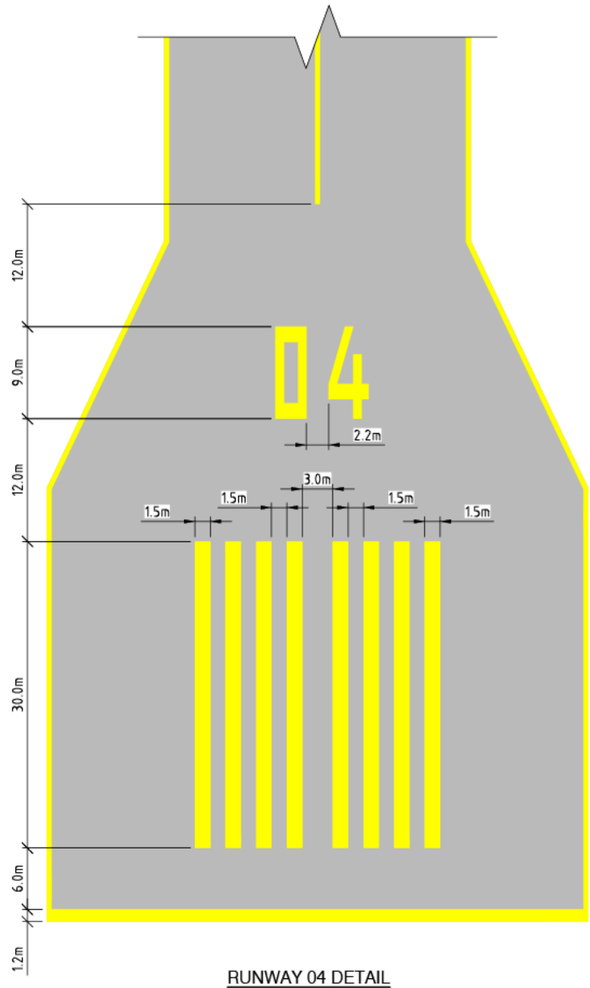
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LINEMARKING SHOWN IN YELLOW
(THIS IS FOR DRAFTING PURPOSES ONLY)
ALL LINE MARKINGS ARE TO BE WHITE UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT



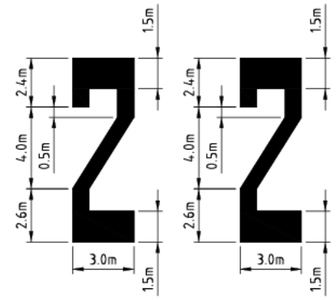
RUNWAY CENTRELINE DETAIL
SCALE: 1:300 AT A1



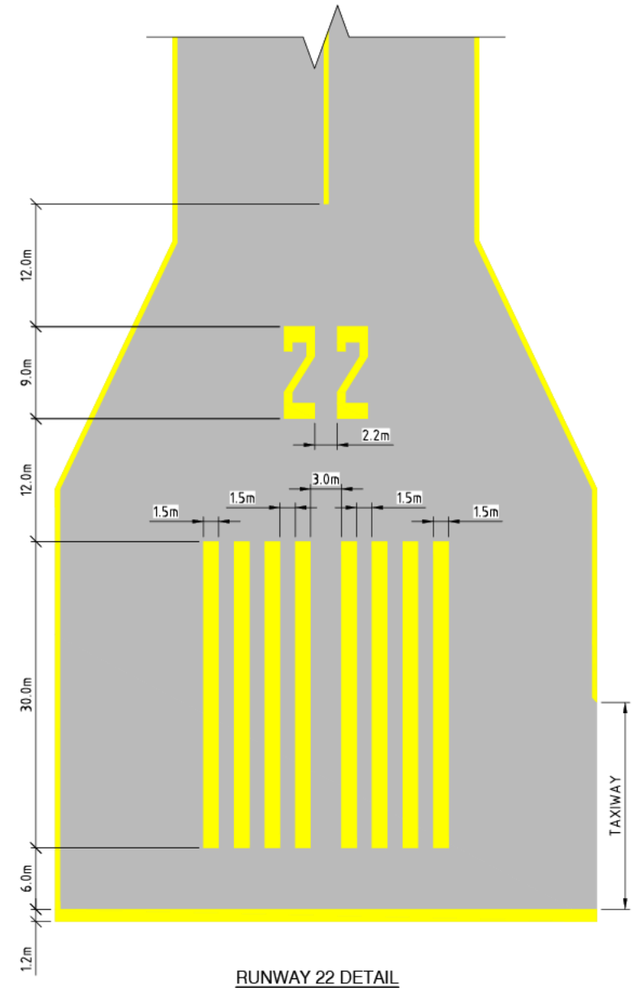
RUNWAY 04 NUMBER DETAIL
SCALE: 1:600 AT A1



RUNWAY 04 DETAIL
SCALE: 1:300 AT A1



RUNWAY 22 NUMBER DETAIL
SCALE: 1:600 AT A1



RUNWAY 22 DETAIL
SCALE: 1:300 AT A1

20 10 0 20 40 60 1 : 600
A1 SCALE BEFORE REDUCTION

10 5 0 10 20 30 1 : 300
A1 SCALE BEFORE REDUCTION

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CHECKED:	R.S.		
APPROVED:	M.S.	SURVEY REF:	
SCALE:	AS SHOWN	PLAN No:	-

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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE

LINEMARKING DETAIL PLAN

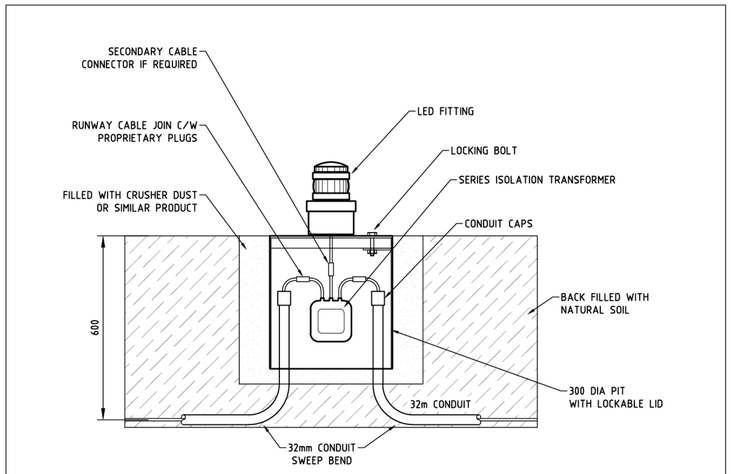
DATE: AUGUST 2021
SHEET 51 OF 51
DRAWING No: 2466/1150 B
Rv.

Appendix 3 Secondary runway lighting design plans

NOTES

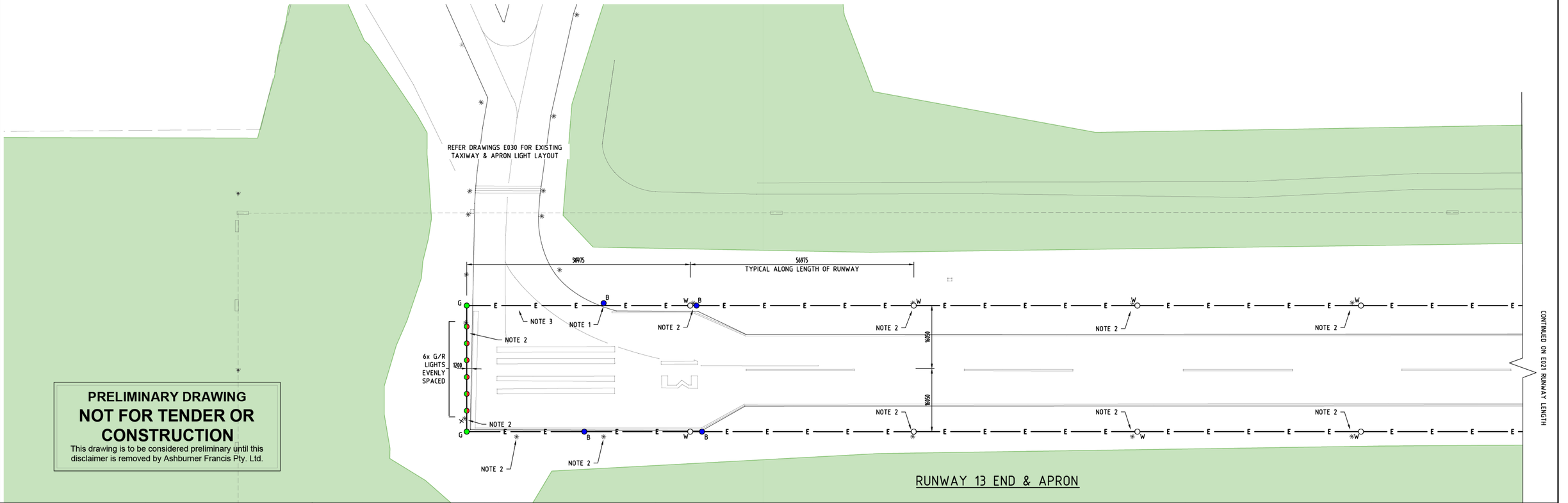
* SURVEYED BLUE LIGHT LOCATION

1. EXISTING BLUE LIGHT AT THIS LOCATION. RE-USE LOCATION FOR NEW LIGHT.
2. EXISTING BLUE LIGHT AT THIS LOCATION - TO BE REMOVED.
3. UNDERBORE EXISTING TAXIWAY. CONDUIT LAYOUT TO BE CONFIRMED ON SITE.
4. RUNWAY 13/31 EDGE & TRHESHOLD LIGHTS MOUNTED ON PITS - REFER INSTALLATION DETAIL 7.



INSTALLATION DETAIL 7 - ELEVATED EDGE LIGHT ON PIT MOUNTING DETAIL

NOT TO SCALE



RUNWAY 13 END & APRON

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www.airportlighting.com.au
Proudly manufacturing in Australia since 1990

architect

Ashburner Francis consulting engineers
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t: (07) 4512 6070
e: toowoomba@ashburnerfrancis.com.au
□ BRISBANE
□ TOWNSVILLE
□ DARWIN

project
BAIRNSDALE AIRPORT RUNWAY LIGHTING UPGRADE
location

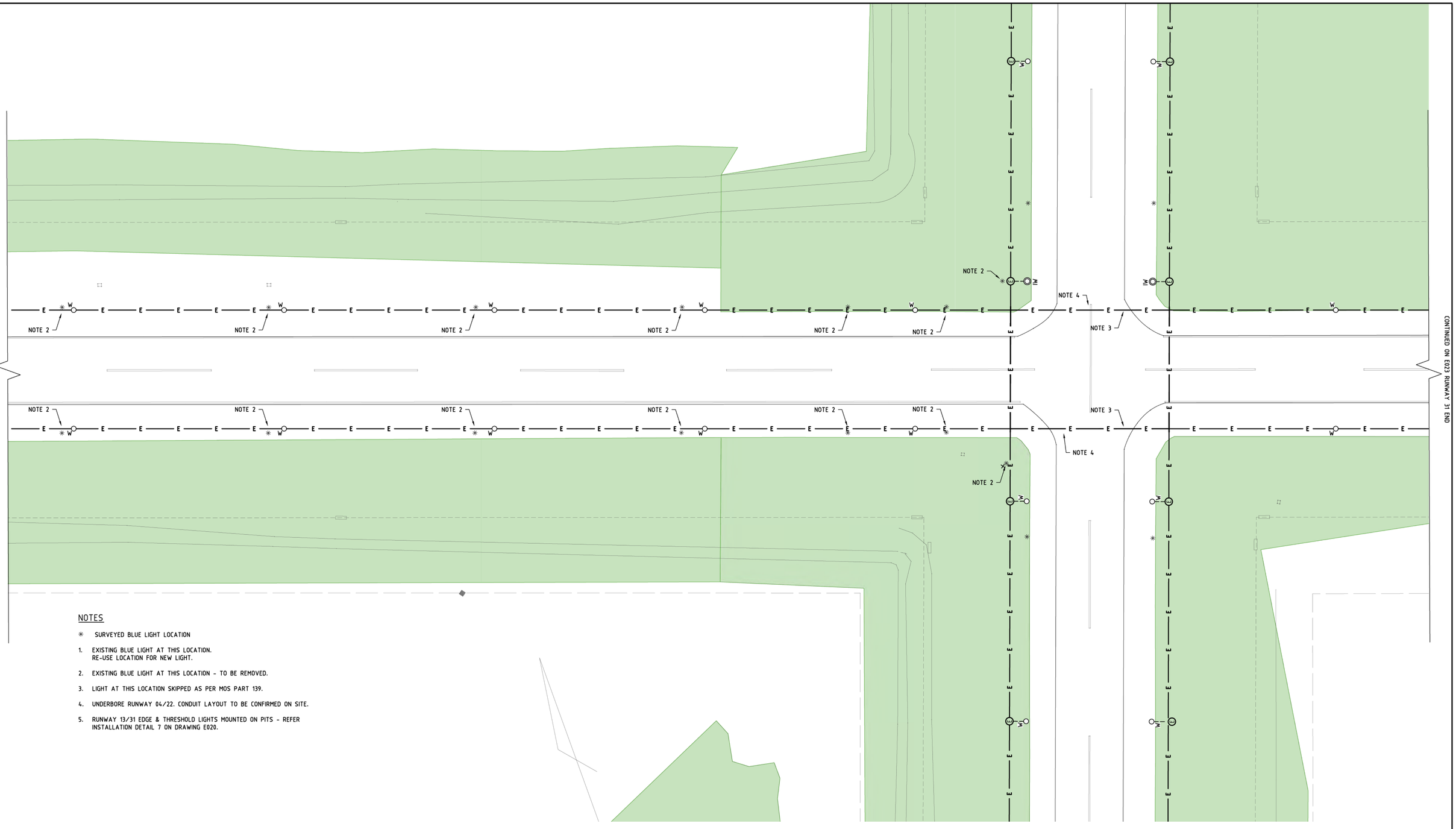
ELECTRICAL SERVICES

title
RUNWAY 13 END & APRON LIGHTING LAYOUT

north

date:	OCT '23
scale:	1:500 @A1
designed:	DTK
drawn:	DTK
checked:	
CAD file name:	
job no.	23-0709
sheet no.	E020
issue	P2

PLOTDATE: 2024-04-29 V:\2023\23-0709 - BAIRNSDALE AIRPORT RUNWAY LIGHTING UPGRADE\DWGS\AF_CURRENT\ELEC\23-0709 ELEC.DWG



NOTES

✳ SURVEYED BLUE LIGHT LOCATION

1. EXISTING BLUE LIGHT AT THIS LOCATION. RE-USE LOCATION FOR NEW LIGHT.
2. EXISTING BLUE LIGHT AT THIS LOCATION - TO BE REMOVED.
3. LIGHT AT THIS LOCATION SKIPPED AS PER MOS PART 139.
4. UNDERBORE RUNWAY 04/22. CONDUIT LAYOUT TO BE CONFIRMED ON SITE.
5. RUNWAY 13/31 EDGE & THRESHOLD LIGHTS MOUNTED ON PITS - REFER INSTALLATION DETAIL 7 ON DRAWING E020.

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RUNWAY 13/31 RUNWAY LENGTH

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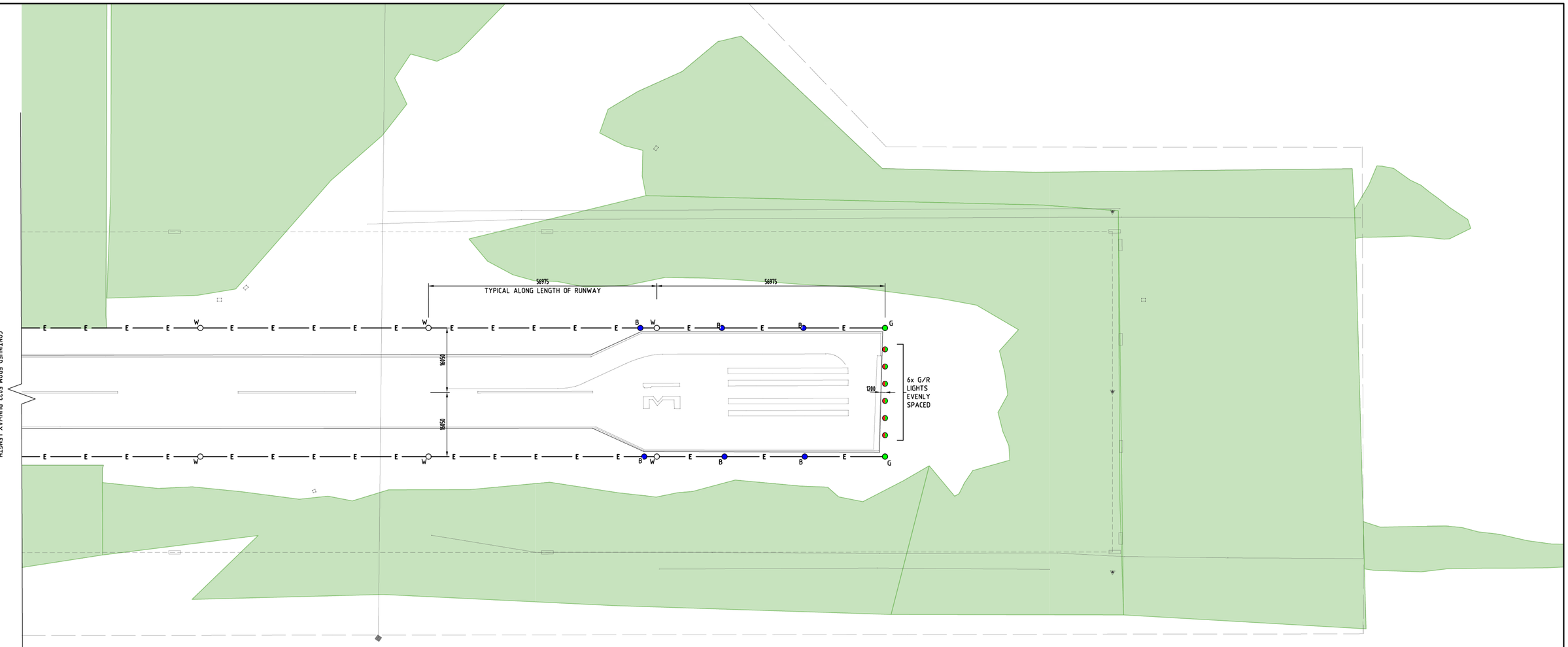
project
BAIRNSDALE AIRPORT RUNWAY LIGHTING UPGRADE
location

ELECTRICAL SERVICES

title
RUNWAY 13-31 LENGTH LIGHTING LAYOUT

date: OCT '23
scale: 1:500 @A1
designed: DTK
drawn: DTK
checked:
north
CAD file name:
job no. 23-0709
sheet no. E021
issue P2

PLOTDATE: 2024-04-29 V:\2023\23-0709 - BAIRNSDALE AIRPORT RUNWAY LIGHTING UPGRADE\DWGS\AF_CURRENT\ELEC\23-0709 ELEC.DWG



RUNWAY 31 END

NOTES.

1. RUNWAY 13/31 EDGE & THRESHOLD LIGHTS MOUNTED ON PITS - REFER INSTALLATION DETAIL 7 ON DRAWING E020.

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□ DARWIN

project
BAIRNSDALE AIRPORT
RUNWAY LIGHTING
UPGRADE
location

ELECTRICAL SERVICES

title
RUNWAY 31 END LIGHTING LAYOUT

date:	OCT '23
scale:	1:500 @A1
designed:	DTK
drawn:	DTK
checked:	
north	
CAD file name:	
job no.	23-0709
sheet no.	E022
issue	P2

PLOTDATE: 2024-04-29 V:\2023\23-0709 - BAIRNSDALE AIRPORT RUNWAY LIGHTING UPGRADE\DWGS\AF_CURRENT\ELEC\23-0709 ELEC.DWG

Appendix 4 Construction Management Plan

BAIRNSDALE AERODROME
RUNWAY UPGRADE

345 BENGWORDEN ROAD, BAIRNSDALE

EAST GIPPSLAND
SHIRE COUNCIL

DRG. No.	DESCRIPTION
2466/6000	LOCALITY PLAN AND DRAWING LIST
2466/6001	CONSTRUCTION MANAGEMENT PLAN OVERALL LAYOUT PLAN
2466/6002	CONSTRUCTION MANAGEMENT PLAN OVERALL ZONE LAYOUT PLAN
2466/6003	CONSTRUCTION MANAGEMENT PLAN OVERALL VEGETATION PLAN
2466/6004	CONSTRUCTION MANAGEMENT PLAN OVERALL DETAIL LAYOUT PLAN
2466/6005	CONSTRUCTION MANAGEMENT PLAN DETAIL LAYOUT PLAN - SHEET 1 OF 3
2466/6006	CONSTRUCTION MANAGEMENT PLAN DETAIL LAYOUT PLAN - SHEET 2 OF 3
2466/6007	CONSTRUCTION MANAGEMENT PLAN DETAIL LAYOUT PLAN - SHEET 3 OF 3
2466/6008	CONSTRUCTION MANAGEMENT PLAN GENERAL NOTES & TYPICAL DETAILS



LOCALITY PLAN
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CHECKED:	R.S.		
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SCALE:	1 : 3000	PLAN No:	-

XREF ATTACHED: R:\ 2466 EGSC Bairnsdale Runway Upgrade\ACAD\Drg\ 2466 BP
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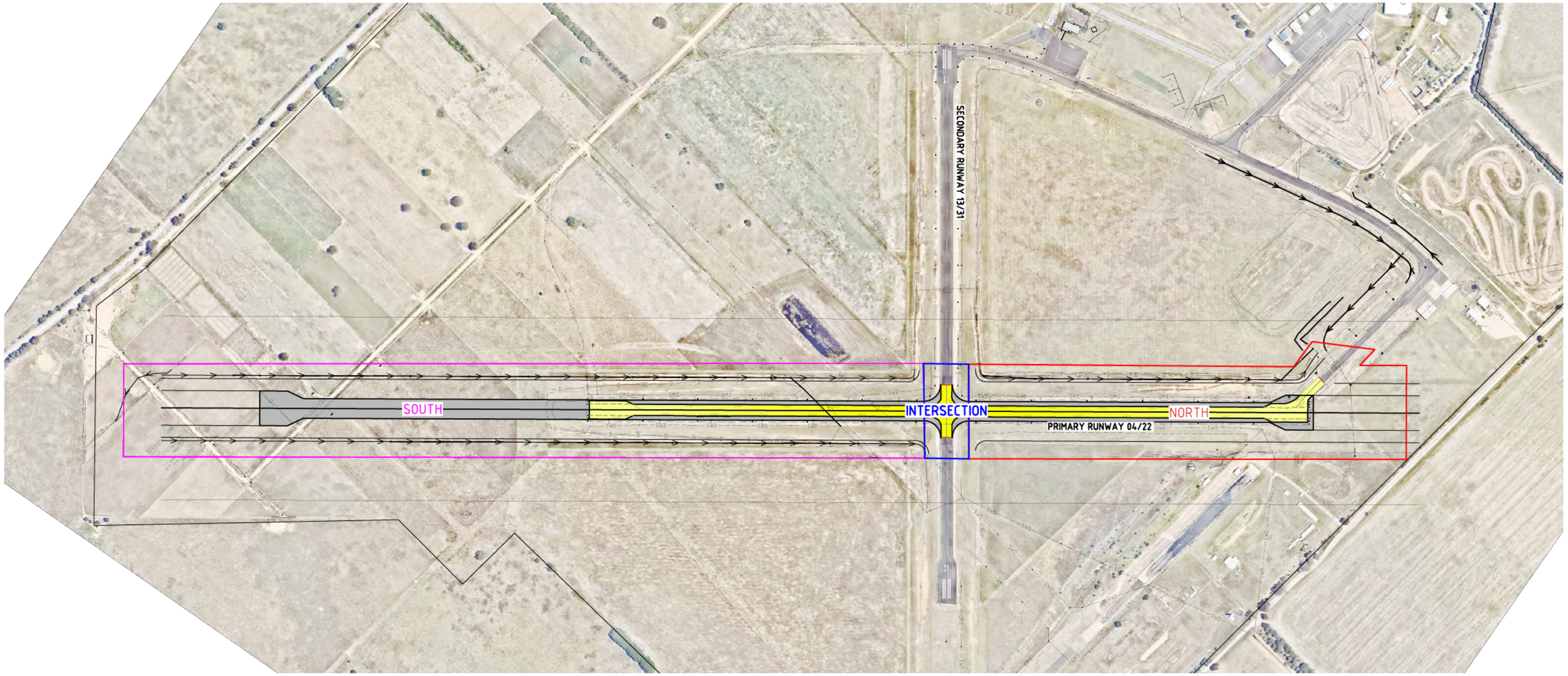
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
LOCALITY PLAN & DRAWING LIST

DATE: OCTOBER 2023
SHEET 1 OF 9
DRAWING No: 2466/6000
A
Rv.

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NOTES:

1. FOR NOTE REFER TO DRAWING No. 2466/6008

100 50 0 100 200 300 1 : 3000 AT A1
1 : 6000 AT A3

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APPROVED:	M.S.		SURVEY REF:
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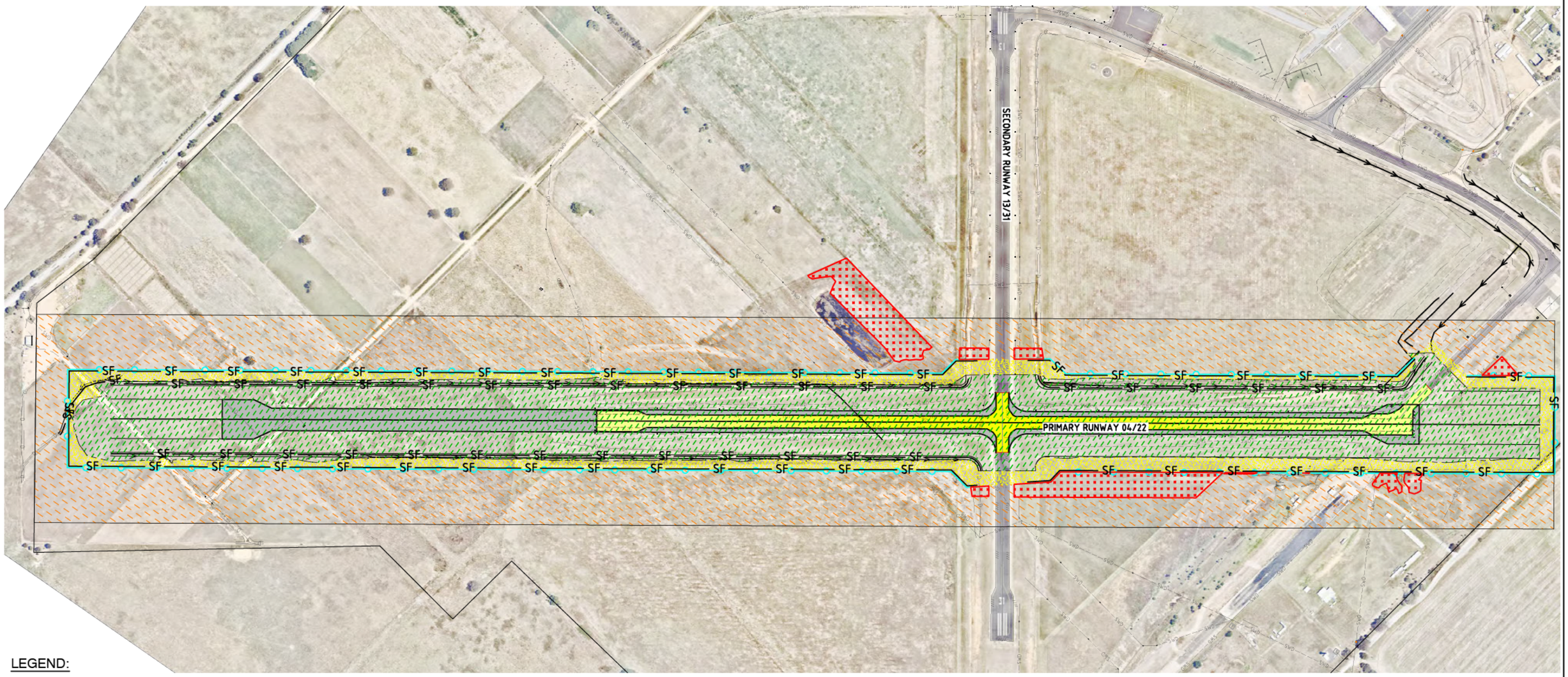
EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
OVERALL LAYOUT PLAN

DATE: OCTOBER 2023
SHEET 2 OF 9
DRAWING No: 2466/6001 A
Rv.

WARNING:
BEWARE OF LIVE ELECTRICITY.

WARNING:
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.
NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.



LEGEND:

- WORK ZONE
- BUFFER ZONE
- RESTRICTED ZONE
- NO GO ZONE
- CONSTRUCTION AREA BOUNDARY
- SF — SILT FENCE

NOTES:

1. FOR NOTE REFER TO DRAWING No. 2466/6008

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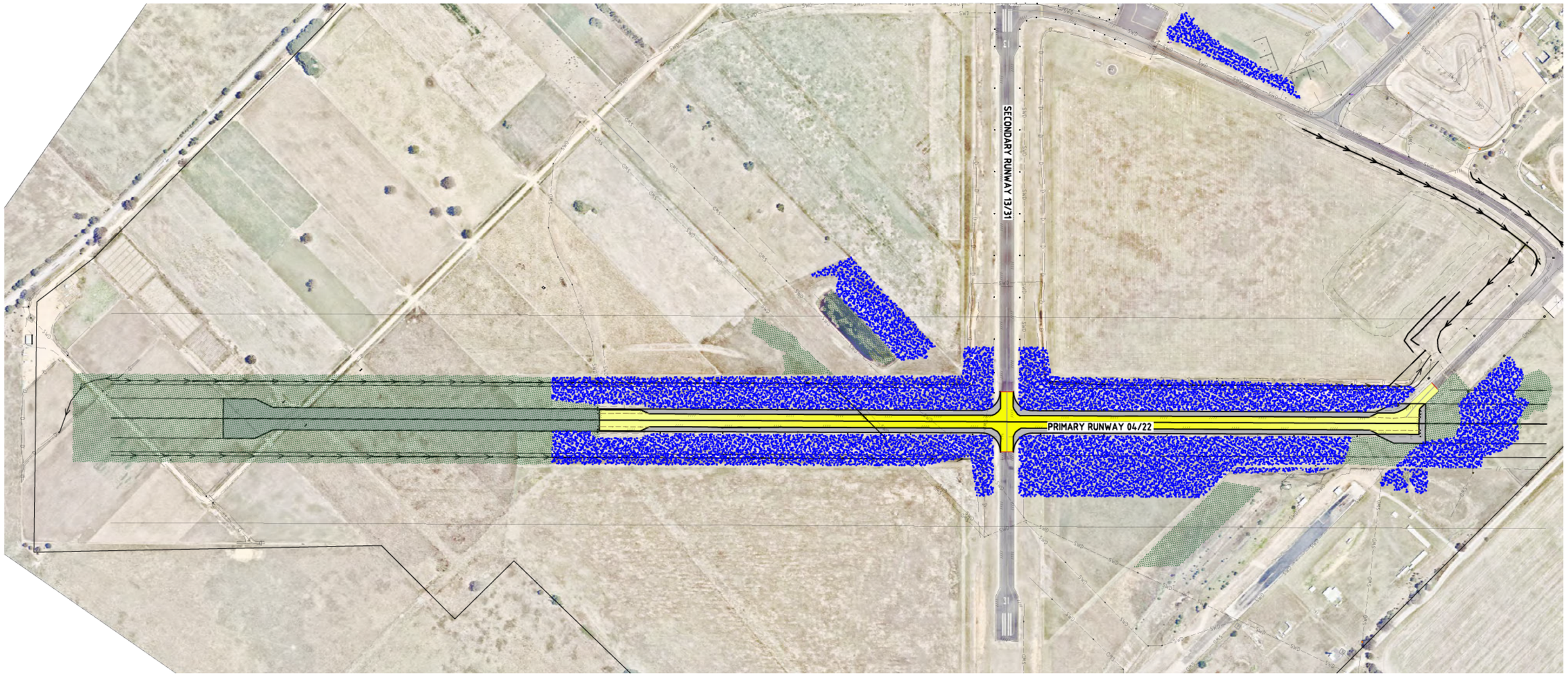
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345 BENGWORDEN ROAD, BAIRNSDALE
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OVERALL ZONE LAYOUT PLAN

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LEGEND:

PROTECTED VEGETATION

NON-PROTECTED VEGETATION

NOTES:

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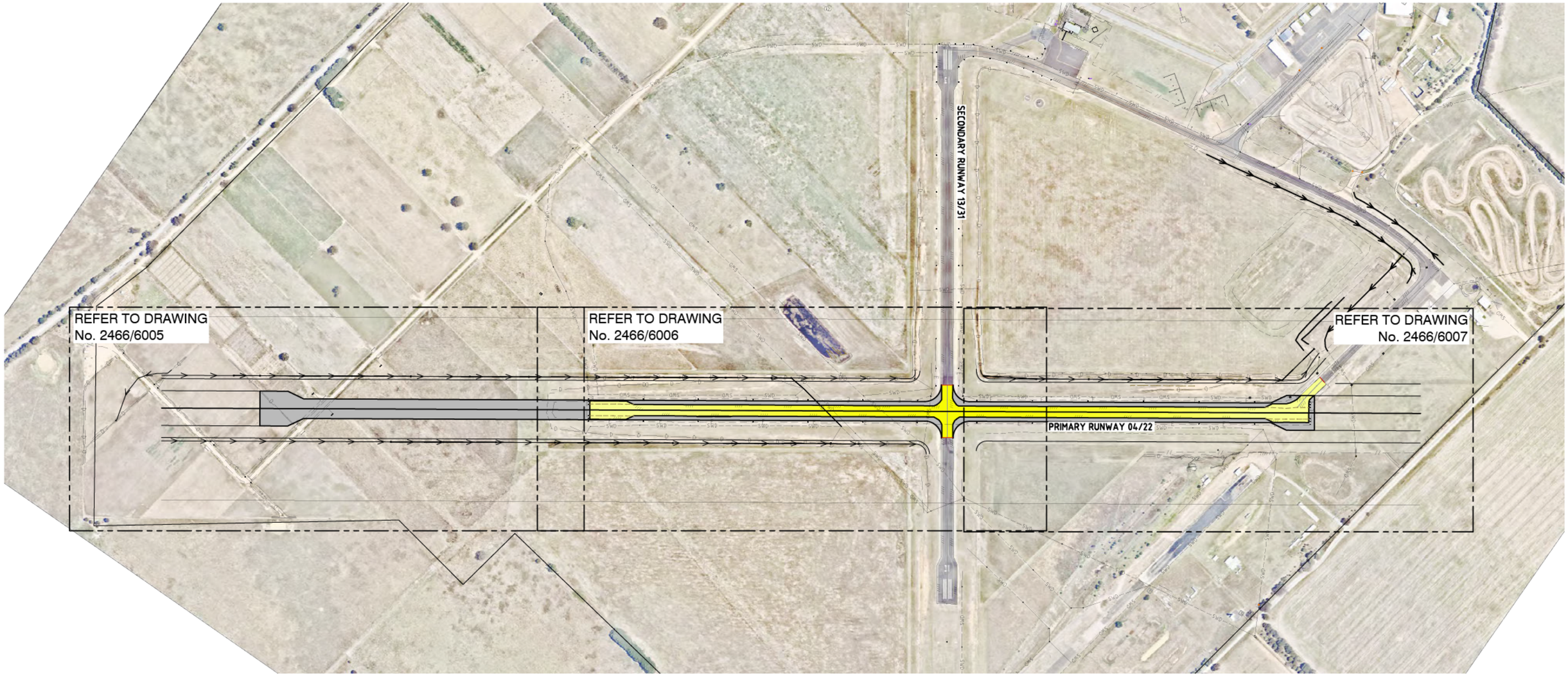
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CONSTRUCTION MANAGEMENT PLAN
OVERALL VEGETATION PLAN

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SHEET 4 OF 9
DRAWING No: 2466/6003
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NOTES:

1. FOR NOTE REFER TO DRAWING No. 2466/6008

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1 : 6000 AT A3

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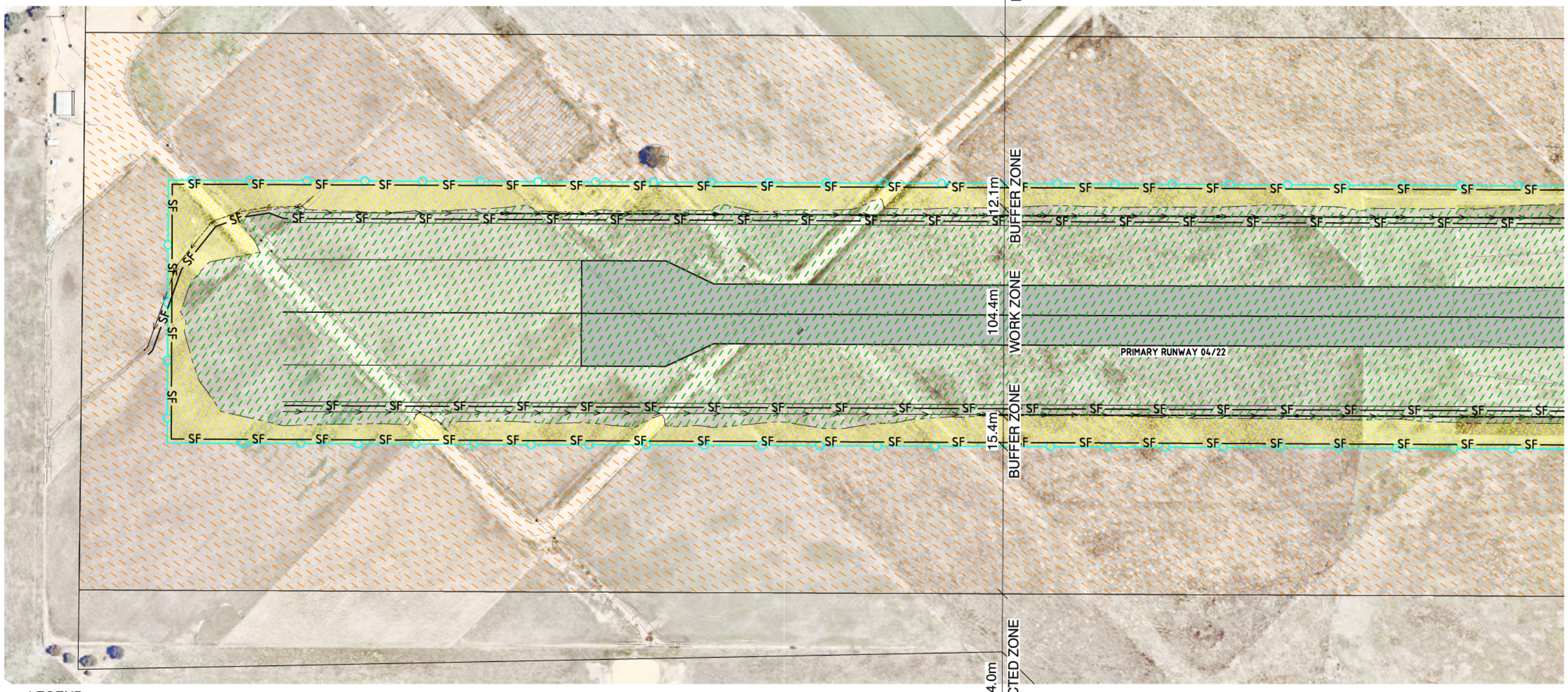
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
OVERALL LAYOUT PLAN

DATE: OCTOBER 2023
SHEET 5 OF 9
DRAWING No: 2466/6004
Rv. A

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LEGEND:

- WORK ZONE
- BUFFER ZONE
- RESTRICTED ZONE
- NO GO ZONE
- CONSTRUCTION AREA BOUNDARY
- SF — SILT FENCE

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/6008

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1 : 2000 AT A3

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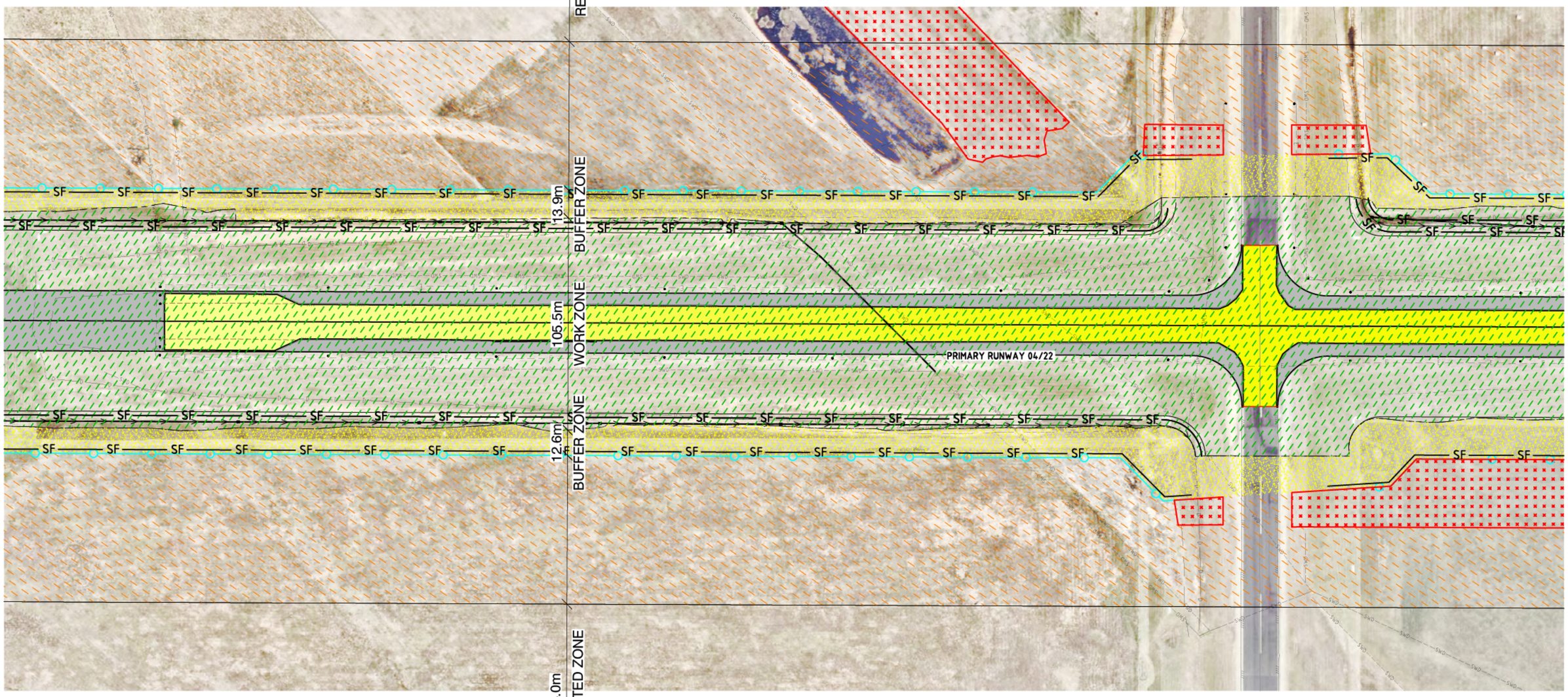
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
DETAIL LAYOUT PLAN - SHEET 1 OF 3

DATE: OCTOBER 2023
SHEET 6 OF 9
DRAWING No: 2466/6005
A
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LEGEND:

- WORK ZONE
- BUFFER ZONE
- RESTRICTED ZONE
- NO GO ZONE
- CONSTRUCTION AREA BOUNDARY
- SF — SILT FENCE

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/6008

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1 : 1000 AT A1
1 : 2000 AT A3

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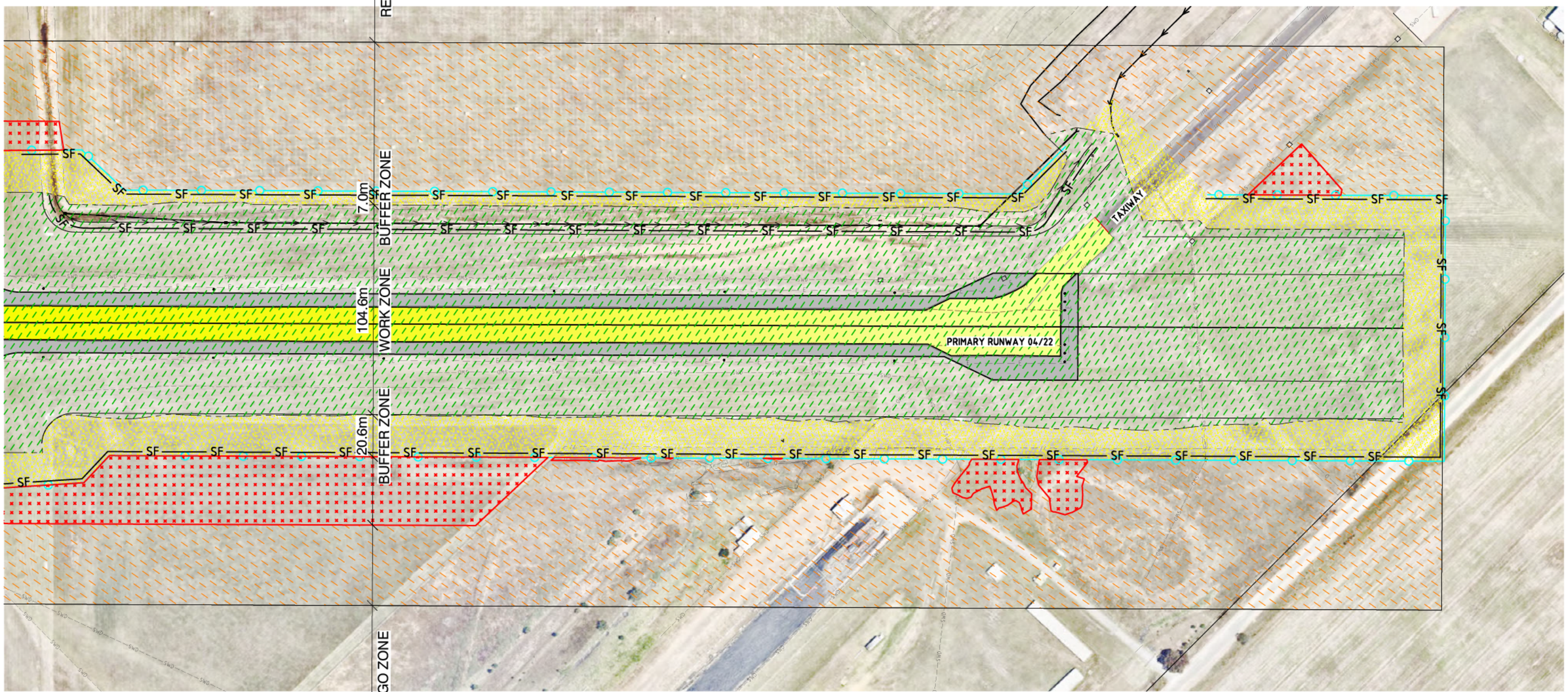
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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
DETAIL LAYOUT PLAN - SHEET 2 OF 3

DATE: OCTOBER 2023
SHEET 7 OF 9
DRAWING No: 2466/6006
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WARNING:
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WARNING:
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LEGEND:

- WORK ZONE
- BUFFER ZONE
- RESTRICTED ZONE
- NO GO ZONE
- CONSTRUCTION AREA BOUNDARY
- SF — SILT FENCE

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2466/6008

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1 : 2000 AT A3

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BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
DETAIL LAYOUT PLAN - SHEET 3 OF 3

DATE: OCTOBER 2023
SHEET 4 OF 9
DRAWING No: 2466/6007
Rv. A

NOTES:

GENERAL

G1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATION.

G2. NO VEGETATION IS TO BE REMOVED (OTHER THAN VEGETATION APPROVED IN ACCORDANCE WITH THE PLAN) WITHOUT THE WRITTEN CONSENT OF COUNCIL.

G3. STRIP ANY TOPSOIL PRESENT ON AREAS TO BE DISTURBED AND STOCKPILE AS DIRECTED BY THE SUPERINTENDENT FOR RE-USE.

G4. THE CONTRACTOR IS TO UNDERTAKE DUST SUPPRESSION OF DISTURBED AREAS A MINIMUM OF FOUR TIMES A DAY - THIS MAY BE VARIED SUBJECT TO PREVAILING WEATHER CONDITIONS.

G5. STORAGE OF CHEMICALS AND FUELS ON THE SITE MUST BE MINIMISED. ANY CHEMICALS OR FUELS STORED ON SITE MUST BE IN DESIGNATED BUNDED AREAS AND SHALL HAVE A CONTINGENCY PLAN TO HANDLE SPILLS TO PREVENT ENVIRONMENTAL DAMAGE.

G6. ALL SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. ANY STRUCTURAL DAMAGE SHALL BE REPORTED TO THE SUPERINTENDENT AND RECTIFIED IMMEDIATELY. ALL TRAPPED SEDIMENT SHALL BE REMOVED.

G7. THE NUMBER OF STOCKPILES MUST BE MINIMISED AND LOCATED WITHIN DESIGNATED STOCKPILE AREAS AS SHOWN ON THIS PLAN. STOCKPILING IN AREAS NOT SHOWN ON THIS PLAN SHALL BE TO THE APPROVAL OF THE SUPERINTENDENT. SEDIMENT CONTROLS SUCH AS SILT FENCES AND COVERING OF STOCKPILES MUST BE CONSTRUCTED AROUND UNSTABLE STOCKPILES. A GRASSED BUFFER ZONE OF A MINIMUM 10M IN WIDTH MUST SEPARATE STOCKPILES FROM DIVERSION BANKS, CHANNELS AND DRAINAGE FLOW PATHS.

G8. ALL DISTURBED AREAS MUST BE PROGRESSIVELY STABILISED WITH STABILISING OR VEGETATIVE COVER WITHIN 14 DAYS OF COMPLETION OF THE EARTHWORKS.

G9. THE PROJECT MANAGER AND/OR SITE FOREMAN SHALL BE RESPONSIBLE FOR ADHERENCE TO THE CONSTRUCTION MANAGEMENT PLAN.

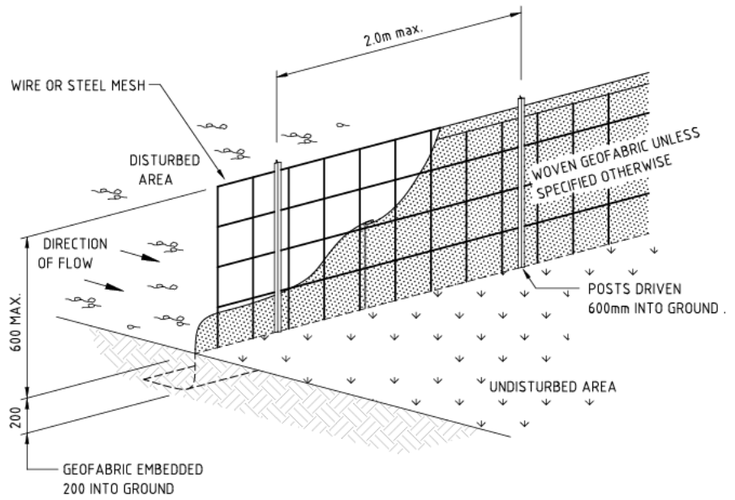
G10. NO WORKS TO BE CARRIED OUT OUTSIDE OF THE NORMAL WORKING HOURS OF 7AM TO SUNSET OR 6PM (WHICHEVER IS EARLIER) MONDAYS TO FRIDAYS, OR ANY PUBLIC HOLIDAY. SATURDAY WORK MAY OCCUR WITH WRITTEN APPROVAL FROM THE SUPERINTENDENT AND ONLY UNDERTAKEN IN ACCORDANCE WITH THE EPA GUIDELINES.

G11. ALL CONTRACTORS AND VISITORS TO THE SITE MUST ATTEND A SITE INDUCTION AT THE SITE OFFICE.

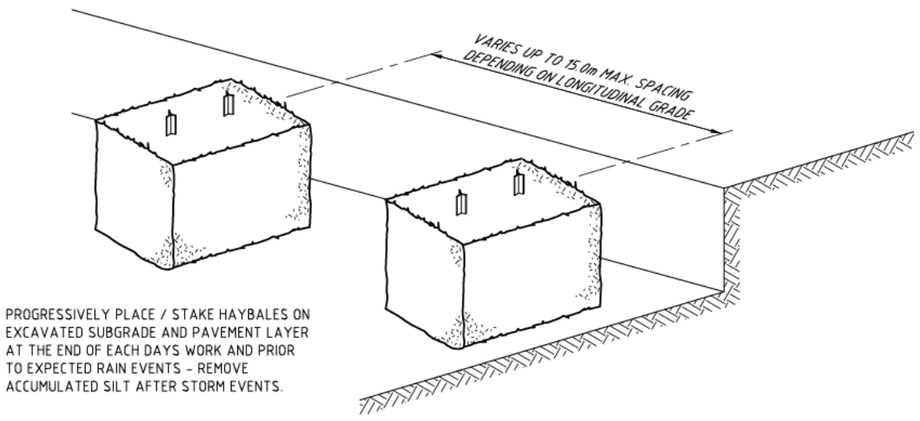
G12. CONTRACTOR TO ENSURE WEED CONTROL MEASURES BY HEAVY VEHICLES WASH DOWNED PRIOR TO TRANSPORTING TO SITE AND UPON LEAVING SITE.

G13. CONTRACTOR TO ALLOW FOR A "WHEEL WASH" SYSTEM AND SHALL ENSURE ALL CONSTRUCTION ROUTE ROADS ARE KEPT CLEAN OF CONSTRUCTION SPOIL, DIRT AND CONTAMINANTS.

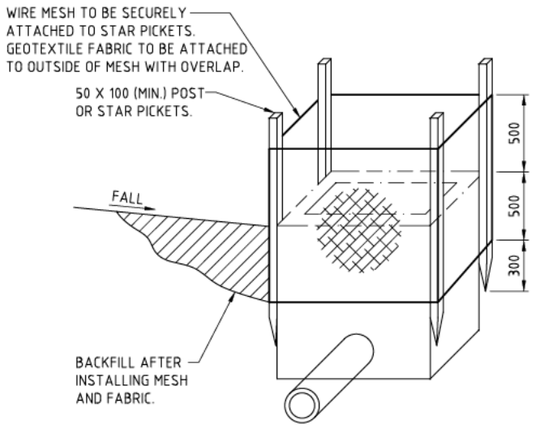
G14. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH THE APPROVED METHOD OF WORKS PLAN. THE CONTRACTOR IS TO ALLOW TO LIAISE WITH THE AERODROME WORKS SAFETY OFFICER FOR THE DURATION OF THE WORKS.



DETAIL A
SILT FENCE
NOT TO SCALE



DETAIL C
HAYBALE BARRIERS
NOT TO SCALE



DETAIL G
FILTER FENCE AROUND FIELD INLET PIT
NOT TO SCALE

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EAST GIPPSLAND SHIRE COUNCIL

BAIRNSDALE AERODROME RUNWAY UPGRADE
345 BENGWORDEN ROAD, BAIRNSDALE
CONSTRUCTION MANAGEMENT PLAN
GENERAL NOTES & TYPICAL DETAILS

DATE: OCTOBER 2023
SHEET 9 OF 9
DRAWING No: 2466/6008
Rv. A

Appendix 5 Offset Management Plan


biosis
APEM Group