



South Cell at Woy Woy Waste Management Facility



Technical Report 7 – Bushfire Assessment

Central Coast Council

6 December 2023

→ **The Power of Commitment**



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Executive summary

The project

Central Coast Council (Council) is proposing to develop a new 'South Cell' at the existing Woy Woy Waste Management Facility (WMF) ('the project'). The project would optimise the remaining landfill air space at the WMF and ensure that the WMF remains open for as long as possible to accept putrescible waste from the Local Government Area (LGA). The construction of the proposed new South Cell is required to be completed and able to receive waste when the current tipping area reaches capacity in mid to late 2024.

The project is deemed regionally significant development (RSD) and is subject to approval by the Hunter and Central Coast Regional Planning Panel under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report

This Bushfire Assessment report has been prepared on behalf of Council to support the environmental impact statement (EIS) for the project and responds to the Secretary's Environmental Assessment Requirements (SEARs) for bushfire.

This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.5 and the assumptions and qualifications contained throughout the report.

Existing environment

The project site is currently mapped as Bushfire Prone Land by the NSW RFS¹. The project site is surrounded by Vegetation Category 1 on the West, South and Eastern sides and most of the new site works are within this vegetation buffer or on Vegetation Category 1 land.

For bushfire assessment purposes, the primary vegetation formations present throughout the project site and adjoining land are classified as 'Forest'. Where cleared land is present throughout the project site, it is considered a Low Threat Vegetation exclusion under AS3959-2018 section 2.2.3.2.

Impacts from the project during construction

Existing cleared areas should be maintained to a low hazard standard though maintenance to Asset Protection Zone (APZ) standards as summarized in Section 3.6 and be managed by the site operator. The existing fire trail to south of the project should be maintained to the requirements specified in Section 3.5 so that it can be used in an emergency bushfire situation.

Impacts from the project during operation

The existing fire trail to south of the project should continue to be maintained to the requirements specified in Section 3.5 so that it can be used in an emergency bushfire situation in the operation phase. Existing cleared areas should be maintained to a low hazard standard though maintenance to Asset Protection Zone (APZ) standards as summarized in Section 3.6 and be managed by the site operator. Existing emergency management and evacuation plans are to be updated and amended prior to occupancy and operation of the proposed cell including restrictions on access and operations on days of catastrophic fire danger as summarized in Section 3.7.

Mitigation and management measures

The fire protection measures and standards identified in the *Landfill Management Plan* (URS, 2012) should be maintained for the project site:

- **Recommendation 1** – APZ is to be provided in accordance with Table 3.1 as shown in Figure 3.1.
- **Recommendation 2** – APZ landscaping is to comply with PBP 2019 for APZ standards as summarised in Section 3.6 and be managed by the site operator.

¹ <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>

- **Recommendation 3** – access to static water supplies be provided as per recommendations detailed in Section 3.3
- **Recommendation 4** – Access to meet the recommendations detailed in Section 3.5 and Appendix 3 of PBP 2019
- **Recommendation 5** – Existing emergency management and evacuation plans are to be updated and amended prior to occupancy and operation of the proposed cell including restrictions on access and operations on days of catastrophic fire danger as summarized in Section 3.7.

In the author's professional opinion, the project can comply with all PBP requirements if the outlined recommendations are incorporated alongside the existing BMP.

Contents

1. Introduction	1
1.1 Overview	1
1.2 The project	1
1.2.1 Location	1
1.2.2 Key features	2
1.2.3 Construction overview	3
1.3 Secretary's Environmental Assessment Requirements	4
1.4 Purpose of this report	5
1.5 Scope and limitations	5
1.5.1 Scope	5
1.5.2 Limitations	6
1.6 Assumptions	6
2. Bushfire assessment	7
2.1 Bushfire prone land classification	7
2.2 Fire weather	9
2.3 Vegetation	9
2.4 Effective slope	9
2.5 Bushfire attack level assessment	9
3. Bushfire protection measures	13
3.1 Asset protection zones	13
3.2 Construction standard	15
3.3 Water supply	15
3.4 Utilities	16
3.5 Access and Egress	16
3.6 Landscaping and bushfire mitigation plans	17
3.7 Emergency and evacuation planning	18
4. Recommendations and conclusion	19
4.1 Recommendation	19
4.2 Conclusion	19
References	20

Table index

Table 1.1	SEARs relevant to this assessment	5
Table 2.1	Effective slope	9
Table 2.2	Bushfire Attack Level Assessment	10
Table 3.1	Asset Protection Zones	13

Figure index

Figure 1.1	Site locality	2
Figure 1.2	Project layout	4
Figure 2.1	Bushfire Prone Land mapping	8
Figure 2.2	Bushfire hazards	11
Figure 2.3	Bushfire attack level	12
Figure 3.1	Asset protection zone	14
Figure 3.2	Photo showing both the overhead tank and one of the two ponds	16
Figure 3.3	Fire trail through locked gate	17

Appendices

Appendix A	Additional figures
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1. Introduction

1.1 Overview

Central Coast Council (Council) owns and operates the existing Woy Woy Waste Management Facility (WMF) located on Nagari Road, Woy Woy. The WMF is the primary waste disposal facility for the southern Central Coast community and has operated since 1974. The WMF operates in accordance with Environment Protection Licence (EPL) No. 6053. The EPL permits resource recovery, waste disposal (application to land) and waste storage and authorises landfilling of up to 100,000 tonnes per year of putrescible and non-putrescible general solid waste, tyres and asbestos.

Key components of the existing WMF include:

- Weighbridge and office/education centre
- Current active landfill cell and tipping area
- Transfer station
- Garden organics (GO) facility
- Excavation and stockpiling area
- Stormwater and leachate management infrastructure

In 2020 Council commissioned the *Woy Woy Waste Management Facility – Development Strategy* (SMEC, 2020) (the 'Development Strategy') to guide the future use and development of the facility. The Development Strategy identified the existing excavation and stockpile area at the southern end of the WMF site as the location for the next waste cell (known as the new 'South Cell').

Council is now proposing to develop the new South Cell to optimise the remaining landfill air space at the WMF and ensure that the WMF remains open for as long as possible to accept putrescible waste from the Local Government Area (LGA).

The construction of the proposed new South Cell is required to be completed and able to receive waste when the current tipping area reaches capacity in mid to late 2024. Construction would commence following receipt of planning approval and be completed in two stages. Each stage is expected to take four to six months.

The project is deemed regionally significant development (RSD) and is subject to approval by the Hunter and Central Coast Regional Planning Panel under the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act).

This report has been prepared by GHD Pty Ltd (GHD) as part of the environmental impact statement (EIS) for the project. The EIS has been prepared to support the application for approval of the project and address the environmental assessment requirements of the Secretary of the NSW Department of Planning and Environment (the SEARs) dated 24th August 2023.

1.2 The project

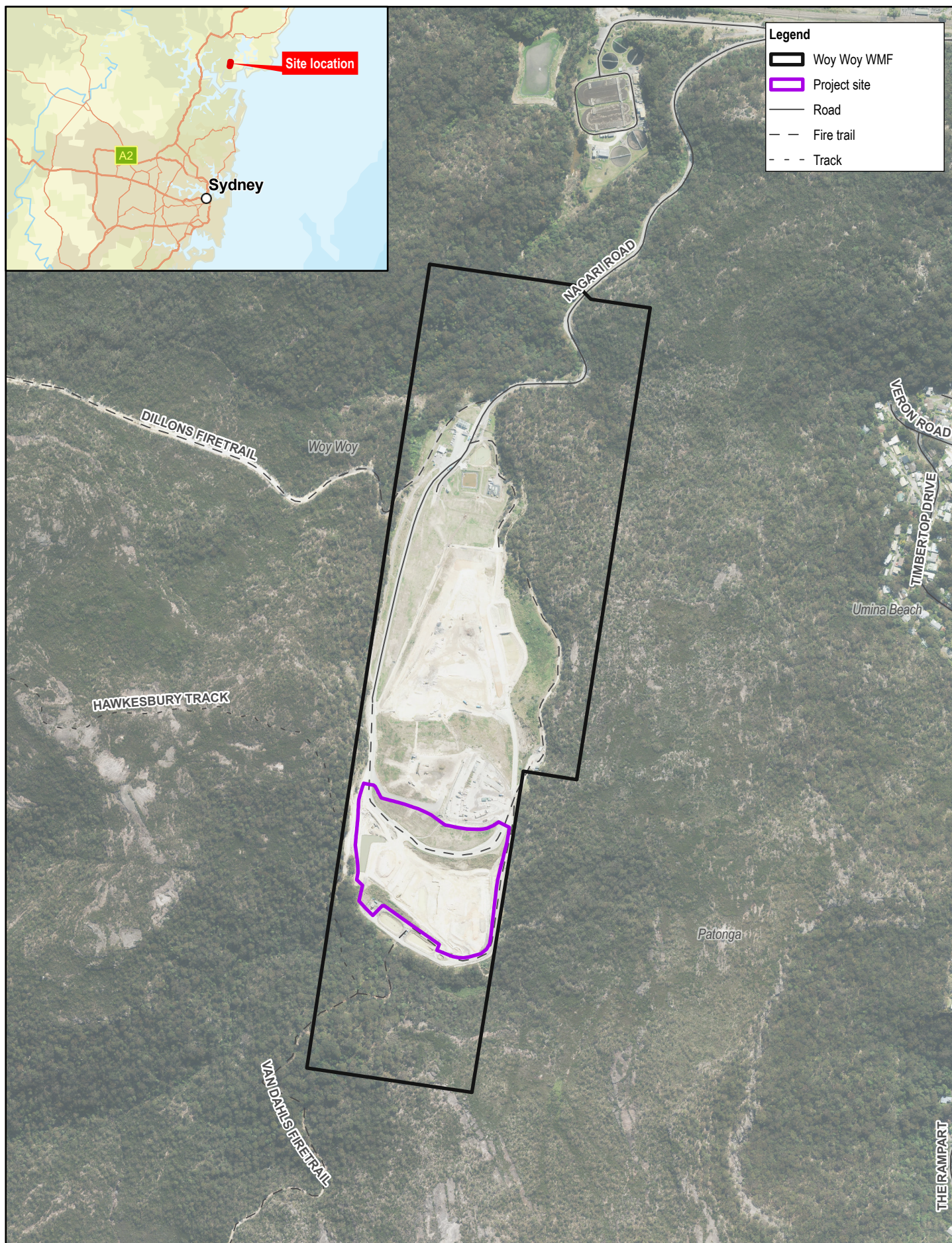
1.2.1 Location

The project would be located within the existing Woy Woy WMF. The WMF is about 10 kilometres south of Gosford across Brisbane Water, within the Central Coast LGA (refer Figure 1.1).

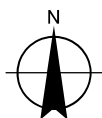
The WMF site consists of:

- Lot 110 DP 755251
- Lot 1 DP 126813
- Lot 1 DP 654885

The project site is about five hectares in area and located on the southern portion of the WMF. It comprises part of Lot 110 DP 755251.



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Central Coast Council
South Cell at Woy Woy WMF
Bushfire Report

Project No. 12595244
Revision No. 0
Date 07/09/2023

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 56

Site Locality

FIGURE 1.1

1.2.2 Key features

Key features of the project include:

- Cell construction including excavation and earthworks to form the base of the cell and lining installation
- Development of associated access, stormwater and leachate management infrastructure
- Continuation of current landfilling operations in the new cell location
- Capping, closure and rehabilitation

The project is expected to provide up to approximately an additional 920,000 cubic metres of airspace or 7.7 years of filling capacity (based on current filling rates). It is also expected to generate additional cell construction and cover materials for the ongoing landfilling operations.

No change is proposed to the existing approved annual disposal capacity or waste types as per EPL 6053.

The other existing operations (weighbridge and office/education centre, transfer station, GO facility etc) at the WMF would continue to be operated in conjunction with the project.

Further information on the project is provided in the EIS.

The project site layout is shown in Figure 1.2.

1.2.3 Construction overview

Construction of the project would be subject to the methods proposed by the construction contractor, but is expected to involve the following:

- Site establishment: establishment of site environmental controls including sediment and erosion controls
- Earthworks: excavation and grading along the base of the landfill cell in accordance with the requirements of the *Environmental Guidelines: Solid waste landfills* (NSW EPA, 2016)
- Lining and gravel placement: installation of basal, batter and sidewall liners systems
- Development of ancillary infrastructure including access roads, landfill gas, leachate and water management infrastructure

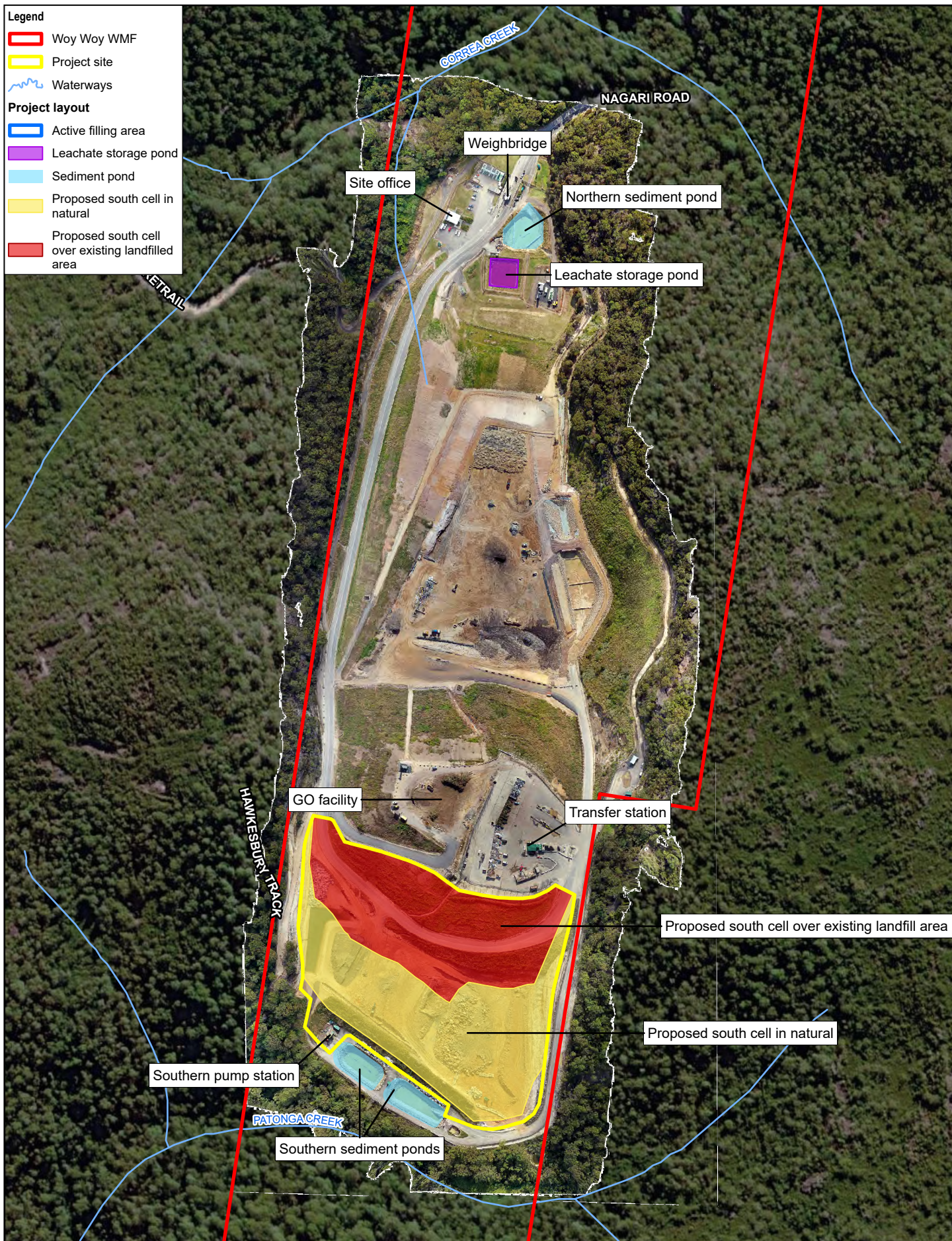
Construction is expected to take about three months to complete.

The construction activities would be carried out during the following hours, consistent with the recommended standard hours of the *Interim Construction Noise Guideline* (NSW DECC, 2009):

- 7 am to 6 pm Monday to Friday
- 8 am to 1 pm Saturdays
- No work on Sundays or Public Holidays

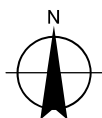
The construction workforce is expected to range between five and ten workers per day.

Further information on the construction of the project is provided in the EIS.



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Map Projection: Transverse Mercator
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Revision No. 0
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Project layout

FIGURE 1.2

1.3 Secretary's Environmental Assessment Requirements

The specific SEARs addressed in this report are summarised in Table 1.1

Table 1.1 SEARs relevant to this assessment

Requirement	Where addressed in this report
An assessment of bushfire risks and asset protection zones (APZ) in accordance with NSW Rural Fire Service guidelines.	Section 3.1: Asset protection zones
Technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment, fire management (including the location of fire hydrants and water flow rates at the hydrants) and containment measures.	Section 3.3: Water supply
Details of the size and volume of stockpiles and their arrangements to minimise fire spread and facilitate emergency vehicle access	Section 3.6 Landscaping and bushfire mitigation plans
The measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the NSW Fire and Rescue guideline <i>Fire Safety in Waste Facilities dated 27 February 2020</i>	Section 4.1 Recommendations

1.4 Purpose of this report

This bushfire assessment has been prepared to assess the appropriateness of the project in the bushfire context considering the bushfire risk and the potential impact of the project in the context of potential bushfires in the area. The bushfire assessment assesses the strategic implications for bushfire mitigation and management.

The purpose of this report is to demonstrate that the project meets the requirements of *Planning for Bushfire Protection 2019* (PBP 2019) including:

- Providing site assessment details in relation to bushfire hazard and bushfire attack levels for the project
- Address the relevant requirements of PBP 2019
- Identify if the development complies with the aims and objectives of PBP 2019
- Determine the Asset Protection Zones and Bushfire Attack Level in relation to the project.

The report:

- Addresses the SEARs listed in Table 1.1
- Assesses the impacts from construction and operation of the project
- Recommends measures to mitigate and manage the potential impacts identified

1.5 Scope and limitations

1.5.1 Scope

The report has been prepared in accordance with PBP 2019, Australian Standard 3959-2018 (AS 3959-2018) and National Construction Code (NCC) to address the following:

- Bushfire landscape assessment
- Land use assessment
- Access and egress
- Emergency services
- Infrastructure
- Adjoining land

To identify potential bush fire risks associated with and from the project and adequate fire prevention measures in place and ensure that facility personnel are able to access fire-fighting equipment and manage fire outbreaks at any part of the premises in accordance with Section 9.9 of the LEMP and EPA Licence 6053. This bushfire assessment provides details for the ongoing management and maintenance of bushfire protection measures during the construction and operation phase of the project. It has been prepared in accordance with the specifications detailed in A2.6 of Planning for Bush Fire Protection (PBP) 2019 (NSW RFS).

The proposed South Cell is an extension of current WMF capabilities, required to create further landfill capacity prior to the current limit being reached. Hence, the types of waste would also be an extension of already approved types including:

- General solid waste (putrescible)
- General solid waste (non-putrescible)
- Special waste (asbestos waste and waste tyres)

Based on the materials to be processed in the proposed South Cell, and its location within the existing WMF boundaries, it is not proposed that the extension be treated as hazardous and assessed under Section 8.3.9 of PBP 2019. This assessment therefore considers the proposal in line with Section 8.3.1 and 8.3.10 of PBP 2019.

Relevant documentation

In undertaking this bushfire risk assessment, the following legislation and guidelines have been considered:

- AS 3959-2018
- NSW RFS – PBP 2019
- *Environmental Planning & Assessment Act 1979*
- *Rural Fires Act 1997*

1.5.2 Limitations

This report: has been prepared by GHD for Central Coast Council and may only be used and relied on by Central Coast Council for the purpose agreed between GHD and Central Coast Council as set out in section 1.4 of this report.

GHD otherwise disclaims responsibility to any person other than Central Coast Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 1.5.2 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

1.6 Assumptions

Information on the vegetation formations at the project site and on adjoining land is based on NSW Vegetation mapping by Keith and Simpson on SEED.

It is assumed that the project site already cleared would be maintained in that cleared state and any development would be managed lands and would not revert to a vegetated state unless otherwise specified.

2. Bushfire assessment

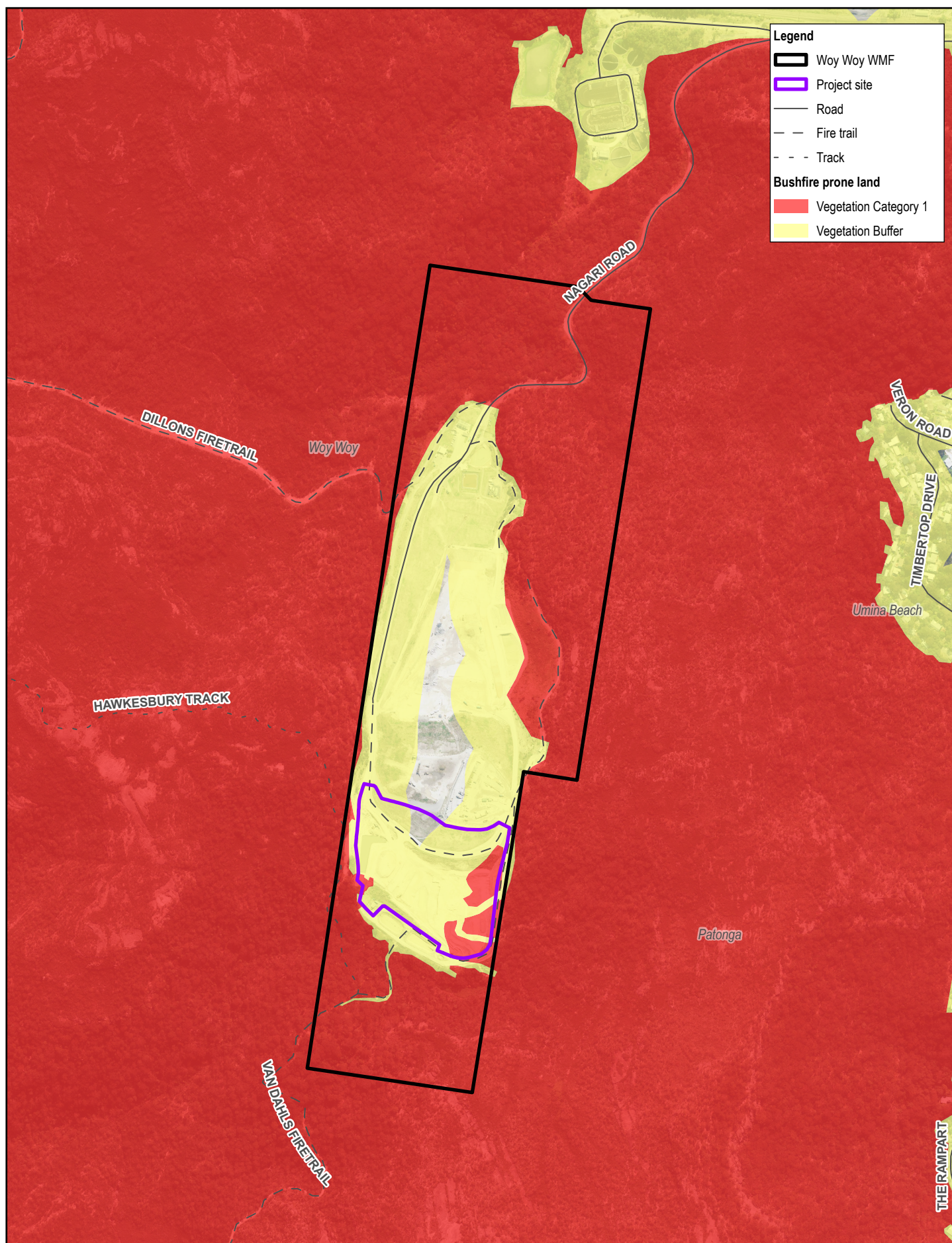
2.1 Bushfire prone land classification

The project site is currently mapped as bushfire prone land by the NSW RFS² and the following assessment is undertaken in accordance with the PBP and Method 1 of AS 3959 – 2018.

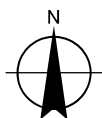
The project site is surrounded by Vegetation Category 1 on the west, south and eastern sides and the majority of the new site works are within this vegetation buffer or on Vegetation Category 1 land.

Bushfire prone land mapping is depicted in Figure 2.1.

² <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>



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Project No. 12595244
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Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 56

Bushfire prone land mapping

FIGURE 2.1

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Data source: GHD: Site Boundary (2023), Survey Data (2023). MetroMap: Imagery (Date Extracted: 28 Feb 2023; Imagery Date: 12 Sept 2022). MetroMap Tile Service: : Vegetation - DPE, 2022; Roads, Suburbs, Contours - NSWSS, 2023; Bushfire Prone Land - NSWRFSS, 2023. Created by: pfmandes

2.2 Fire weather

The project site is located within the Greater Sydney region for which a Fire Danger Index (FDI) of 100 is applicable for bushfire assessment (NSW RFS 2019).

The timing and length of the bushfire danger period is driven by seasonal climate and weather factors. The behavior of fires is also strongly influenced by the weather conditions at the time the fire is burning. The historical weather patterns also provide an understanding of the potential bushfire behavior, and its direction, intensity, and rate of spread. Whilst the declared bushfire season occurs from 1 October to 31 March annually, lower than average rainfall can extend the bushfire season through summer to early autumn. The bushfire season can also be brought forward when a drier than average winter results in the landscape being more susceptible to fires starting and spreading in late spring and early summer.

The Central Coast LGA experiences a generally mild climate compared to western regions with the extent of adverse bushfire weather within a short period due to proximity to the coast. The greatest potential for bushfire events at the site occurs October-March coinciding with fresh to strong north-west winds, high daytime temperature and summer weather condition and low relative humidity.

2.3 Vegetation

The vegetation over the project site and adjacent land is described on SEED³ as a combination of the following Keith (2004) vegetation formations:

- Cleared
- Dry Sclerophyll Forests (Shrubby sub-formation)

For bushfire assessment purposes, the primary vegetation formations present throughout the project site and adjoining land are classified as 'Forest'. Where cleared land is present throughout the project site, it is considered a Low Threat Vegetation exclusion under AS3959-2018 section 2.2.3.2.

2.4 Effective slope

The effective slope at the project site is detailed in Table 2.1 below.

Table 2.1 Effective slope

Aspect	Slope class
North-west	Upslope
South-west	10-15 downslope. Transect length 100 m.
South-east	10-15 downslope. Transect length 79 m.
North-east	Upslope

2.5 Bushfire attack level assessment

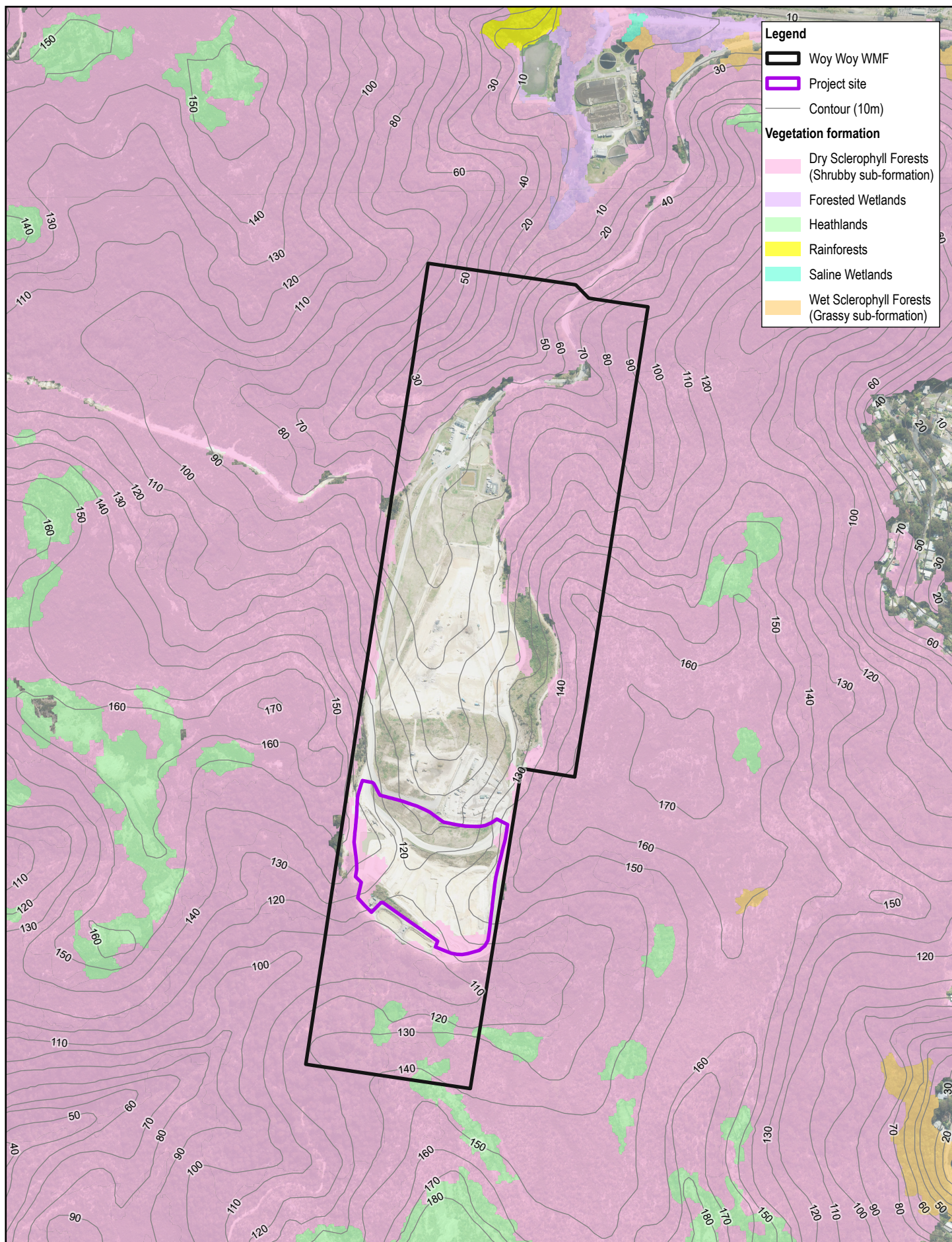
There is no bush fire protection requirements for Class 10a buildings located more than 6 m from a dwelling in bushfire prone areas. However given the importance of maintaining operationality of the facility, it is recommended that bush fire protection measures are put in place for the leachate pumping station. To achieve deemed to satisfy acceptable solutions for Asset Protection Zones (APZ's) and building construction, buildings* within the project are to comply with the construction standards specified in Table 7.4a, Section 7.5.1 and Section 7.5.2 of PBP 2019.

³ https://geo.seed.nsw.gov.au/Public_Viewier, layer: "Vegetation Classes of NSW (version 3.03 – 200m Raster) – David A. Keith and Christopher C. Simpson. VIS_ID 3848

Table 2.2 *Bushfire Attack Level Assessment*

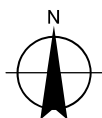
Nearest BF Prone Vegetation	Maximum effective Slope Class	Distance from site to BF prone vegetation	Likely worst-case BAL for all proposed buildings*
Forest	10-15 degrees	NA	Should be located to avoid BAL40 and BAL FZ exposure, so located 45 m from hazard interface

*Leachate pump station to the south of the cell



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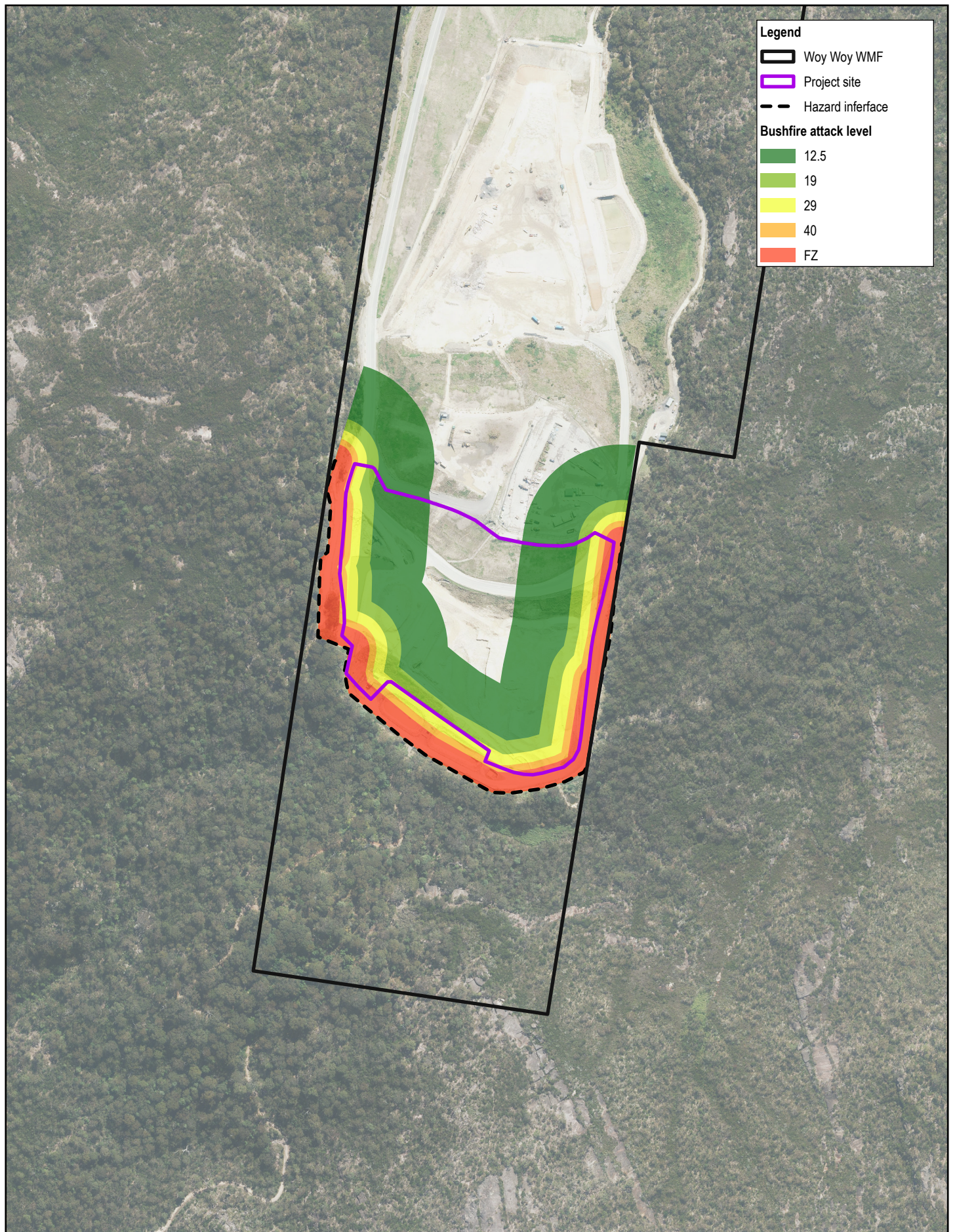


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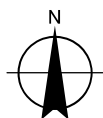
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Bushfire hazards

FIGURE 2.2



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Bushfire attack level

FIGURE 2.3

3. Bushfire protection measures

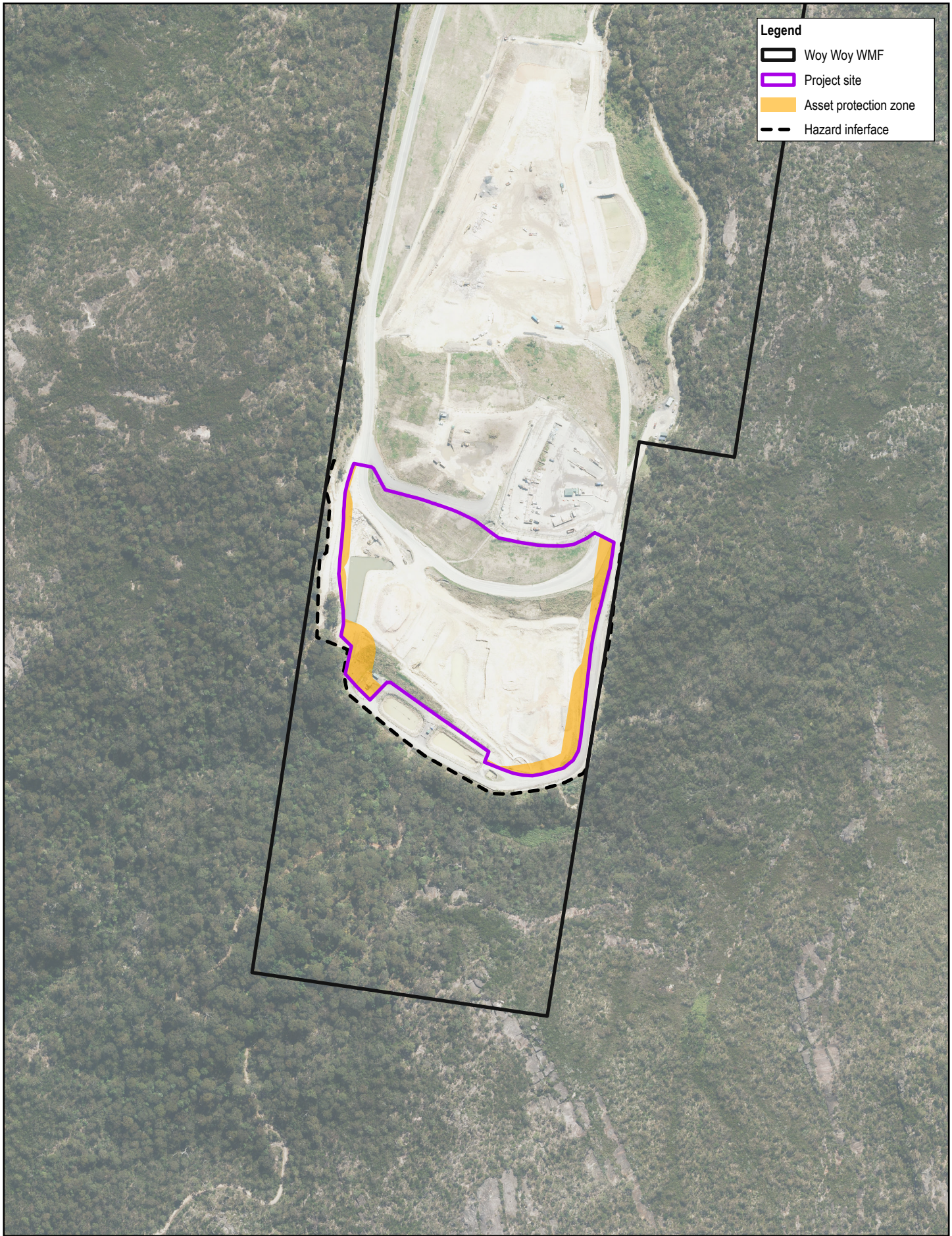
The bushfire assessment identifies that the project can provide bushfire protection measures meeting the objectives of PBP 2019 and meeting all Acceptable Solutions.

3.1 Asset protection zones

Built assets requiring separation from bushfire prone vegetation have APZ requirements. Although no built infrastructure is proposed – an APZ is provided below to illustrate an exclusion zone for any vulnerable infrastructure, such as any components of the southern cell leachate pumping station that may be susceptible to damage from bushfire attack. There is existing clearance in place that provides an APZ that would reduce the risk of bushfire attack on any vulnerable components of the leachate pumping station.

Table 3.1 *Asset Protection Zones*

Aspect	Vegetation type (AS 3959-2018)	Slope	Required APZ (m)	Existing APZ within study boundary (m)	Comment
East and South-east	Dry Sclerophyll Forests (Shrubby sub-formation)	10-15 degrees	45 m	13 – 15 m	Minimum APZ achieved assuming existing cleared areas both on project study area boundary and in adjacent areas are not revegetated. The APZ within the project study are located along the west and south western boundaries and the east and south eastern boundaries. Any vulnerable components (pumps) should be located outside of the identified APZ footprint.
West and South-west	Dry Sclerophyll Forests (Shrubby sub-formation)	10-15 degrees	45 m	8-26 m	



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 Bushfire Report

Project No. 12595244
 Revision No. 0
 Date 07/09/2023

Asset protection zone

FIGURE 3.1

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 Data source: GHD: Site Boundary (2023), Survey Data (2023), MetroMap: Imagery (Date Extracted: 28 Feb 2023; Imagery Date: 12 Sept 2022), MetroMap Tile Service: ; Vegetation - DPE, 2022; Roads, Suburbs, Contours - NSWSS, 2023; Bushfire Prone Land - NSWRF, 2023. Created by: pfremandes

3.2 Construction standard

The National Construction Code (NCC) does not provide any bushfire specific performance requirements for Class 10a structures (non-habitable building being a private garage, carport, shed or the like). The southern leachate pumping station would be considered a Class 10 a structure. However, the following objectives are required to be applied in relation to access, water supply and services, and emergency and evacuation planning:

- To provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation
- To provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development
- To provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building
- Provide for the storage of hazardous materials away from the hazard wherever possible.

3.3 Water supply

There are two ponds, within the southern portion of the project site with water pumped to an overhead tank for water truck refilling as seen in Figure 3.2. This has capacity to be used as an on-site water resource in the event of a fire, with the following requirements to be provided:

- A connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure
- 65 mm Storz outlet with a ball valve is fitted to the outlet
- Ball valve and pipes are adequate for water flow and are metal
- Supply pipes from tank to ball valve have the same bore size to ensure flow volume
- Unobstructed access can be provided at all times
- All exposed water pipes external to the building are metal, including any fittings
- Where pumps are provided, they are a minimum 5 hp or 3 kW petrol or diesel-powered pump, and are shielded against bush fire attack
- Any hose and reel for firefighting connected to the pump shall be 19 mm internal diameter.



Figure 3.2 Photo showing both the overhead tank and one of the two ponds

3.4 Utilities

No changes to existing utilities would be made as part of the project.

3.5 Access and egress

The primary access for the WMF would also provide suitable access to the proposed South Cell. This road enters the WMF from the north along Nagari Road, is regularly used for heavy machinery and is suitable for any emergency services vehicles. There is a suitable road already used for the current landfill to provide access to the southern portion of the WMF. There is a loop road joining this, providing access to the perimeter of the proposed project site.

A fire trail through a locked gate at the southern fence line provides an alternative to the main access/egress shown in Figure 3.3. This trail may be used in an emergency bushfire situation and should be maintained to the following requirements:

- Minimum 4 m carriageway width
- In forest, woodland and heath situations, rural property roads have passing bays every 200 m that are 20 m long by 2 m wide, making a minimum trafficable width of 6 m, at the passing bay
- A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches
- Property access must provide a suitable turning area in accordance with Appendix 3 of PBP 2019
- Curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress
- The minimum distance between inner and outer curves is 6 m
- The crossfall is not more than 10 degrees
- Maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads.



Figure 3.3 *Fire trail through locked gate*

3.6 Landscaping and bushfire mitigation plans

All open space within the project site would undergo management to meet APZ or low hazard standards under AS3959-2018.

The proposed APZ requires maintenance of land between the project site and hazard interface, to support the proposed development due to the predominantly forested nature of the site, the proposed layout, required distance to surrounding vegetation and existing and proposed access. Fuel management practices to be implemented by the site operator within the APZ would be undertaken to maintain the APZ as follows:

- Tree canopy cover less than 15% (at maturity)
- Trees (at maturity) should not touch or overhang the building
- Lower limbs should be removed up to a height of 2 m above the ground
- Preference should be given to smooth and evergreen trees

- Avoid connective pathways across the ground toward the building
- Small, isolated clumps need to be site specific in design
- Avoid creating fuel ladders (shrubs, bark, dropped branches, leaves, etc)
- Select suitable plants (low flammability, avoid dense and elevated fine fuels)
- No plants near vulnerable building components (exposed pipes or fittings (non-metal))
- Leaves and vegetation debris should be removed.

The Fire safety guideline: *Fire safety in waste facilities (FRNSW, 2020)* does not apply to any waste facility or areas of that are being used for landfilling. The guideline however does provide general guidance to manage fire risk, fire prevention, monitoring hazards and implementing policies and procedures that would be considered in the development of bushfire mitigation and operational plans for the project site.

3.7 Emergency and evacuation planning

The current *Landfill Management Plan* (URS, 2012) details the necessary steps for a fire emergency and evacuation plan for WMF fires.

There is a risk to both employees and visitors to the WMF of an external bushfire threat, particularly on days of elevated fire danger. Therefore, it is proposed that an emergency evacuation plan for bush fires is created including constant monitoring for threats on days of elevated fire danger.

An emergency management plan for the project site would be required to be developed prior to the operation of the South Cell. A Bush Fire Emergency Management and Evacuation Plan for the project site is to be prepared by the operator consistent with the NSW RFS publication: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan* prior to the operation of the South Cell. This plan should clearly identify bushfire preparedness actions, bushfire response actions, evacuation plans and procedures (for onsite and offsite evacuation), and on-site refuge locations.

There is a bushfire risk to users of the project, particularly on days of elevated fire danger. Therefore, it is proposed that a usage restriction be placed on the South Cell such that it is not occupied on days where the Fire Danger Rating is forecast to be Catastrophic and potentially at lower levels depending on risk and advice from relevant authorities.

4. Recommendations and conclusion

4.1 Recommendations

The fire protection measures and standards identified in the *Landfill Management Plan* (URS, 2012) should be maintained for the project site:

- **Recommendation 1** – APZ is to be provided in accordance with Table 3.1 as shown in Figure 3.1.
- **Recommendation 2** – APZ landscaping is to comply with PBP 2019 for Inner and Outer APZ standards as summarized in Section 3.6 and be managed by the site operator.
- **Recommendation 3** – access to static water supplies be provided as per recommendations detailed in Section 3.3
- **Recommendation 4** – Access to meet the recommendations detailed in Section 3.5 and Appendix 3 of PBP 2019
- **Recommendation 5** – Existing emergency management and evacuation plans are to be updated and amended prior to occupancy and operation of the proposed cell including restrictions on access and operations on days of catastrophic fire danger as summarized in Section 3.7.

4.2 Conclusion

In the author's professional opinion, the project can comply with all PBP requirements if the above recommendations are incorporated alongside the existing BMP.

References

New South Wales Rural Fire Service. 2019. *Planning for Bushfire Protection – A guide for councils, planners, fire authorities and developers*. NSW Government.

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Appendix A

Additional figures



Figure A.1 *Entrance to loop road and vegetation on the Eastern side*



Figure A.2 *Proposed South Cell area and forest vegetation surrounding East and South perimeter*



Figure A.3 *Incline on Western side to forest vegetation*



Figure A.4 ***Locked gate to alternative access/egress and shown assembly point***



Figure A.5 ***Southern perimeter with two ponds and loop road shown***



Figure A.6 **Western aspect showing bordering vegetation, 2 ponds and water supply**



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