

Bayview Gardens

Flora and Fauna Assessment

Client : AVEO
Prepared by : Australian Wetlands Consulting Pty Ltd
Project # : 241991
Date : October 2024

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Project control

Project name: **Bayview Gardens**
Flora and Fauna Assessment

Job number: 241991
Client: AVEO
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Key Terms, Definitions and Purpose

Key Term	Acronym	Definition/Purpose
Above Sea Level	ASL	Height above mean sea level is a measure of the vertical distance of a location in reference to a historic mean sea level.
Biodiversity Assessment Methodology	BAM	<p>The BAM is a scientific document that provides:</p> <ul style="list-style-type: none"> • How the proponent proposes to avoid and minimise impacts • Any potential impact that could be characterised as serious and irreversible according to specified principles and • The offset obligation required to offset the likely biodiversity impacts of the proposed development, activity, clearing or biodiversity certification expressed in biodiversity credits. <p>* The BAM must be applied by an accredited assessor.</p>
<i>Biodiversity Conservation Act 2016</i>	BC Act	To maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.
<i>Biodiversity Development Assessment Report</i>	BDAR	An assessment and report that is consistent with the BAM.
Biodiversity Offsets Scheme	BOS	Triggered by developments, projects and activities that meet certain thresholds for significant impacts on biodiversity, significantly impact threatened species or on an opt-in basis.
<i>Biosecurity Act 2015</i>	Bio Act	To provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter, dealing with biosecurity matter, carriers and potential carriers, and other activities that involve biosecurity matter, carriers or potential carriers.
Development Control Plan	DCP	Provides detailed planning and design guidelines to support the planning controls in an environmental planning instrument (LEP or SEPP).
<i>Environmental Planning & Assessment Act 1999</i>	EP&A Act	To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological

Key Term	Acronym	Definition/Purpose
		communities and their habitats.
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	EPBC Act	The EPBC Act refers to the living things (including plants and animals), habitats and places that need protecting as 'matters of national environmental significance'.
Hectares	ha	-
Hollow Bearing Tree	HBT	A hollow bearing tree that provides breeding and sheltering habitat for a range of protected and threatened fauna species.
Habitat Tree	HT	A tree that provides suitable foraging, roosting, sheltering and breeding habitat for protected and threatened fauna species. Features include decorticating bark, cavities, fruiting and flowering parts or dense vegetation suitable for possum dreys.
Local Environmental Plans	LEP	Provides a framework that guides planning decisions for local government areas through zoning and development controls.
Meters squared	m ²	-
Microhabitat	MH	Small scale habitat features such as logs, soaks, and leaf litter.
NSW Environmental Protection Authority	EPA	The NSW Environment Protection Authority (EPA) is the primary environmental regulator for NSW. The EPA partners with business, government and the community to reduce pollution and waste, protect human health, and prevent degradation of the environment.
NSW State Vegetation Mapping	STVM	Maps the distribution of each Plant Community Type, Vegetation Class and Vegetation Formation, across all tenures in NSW.
Plant Community Type	PCT	PCT – The finest level in the NSW vegetation classification hierarchy.
Subject Site	N/A	Subject site means the area directly affected by the proposal. The subject site includes the footprint of the development and any ancillary works, facilities, accesses or hazard reduction zones that support the construction or operation of the development or activity (
State Environmental Planning Policy	SEPP	State and local planning legislation and policies set the rules that control what development can occur on your land.
Study Area	N/A	The Study Area means the subject site and any additional areas which are likely to be affected by the proposal, either directly or indirectly. The study area should extend as far as is necessary to take all potential impacts into account.
Threatened Ecological Community	TEC	TEC – A threatened ecological community is a naturally occurring group of native plants, animals and other organisms living in a unique habitat.

Executive Summary

This Flora and Fauna Assessment (FFA) has been completed to assess the likely impacts regarding the construction of a series of developments located at 36-42 Cabbage Tree Road Bayview, NSW. These include:

- A 'bush lift' ie. an elevator linking residential walkways above and below a rocky vegetated embankment
- Installation of an awning on the western side of the Bayview Gardens reception building
- Alterations to carparking located immediately west of the Bayview Gardens reception building

This assessment supports a Statement of Environmental Effects (SEE) for the project, prepared under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and submitted to Northern Beaches Council.

The proposed development occurs upon a small area of Biodiversity Value (BV) mapped land. Due to the minor extents and low impacts an exemption to the BOS is requested. Clearing thresholds are not exceeded therefore the Biodiversity Offsets Scheme (BOS) would not be triggered and a Biodiversity Development Assessment Report (BDAR) not required should the minor works exemption be approved.

Field assessment results determined:

- One Plant Community Type occurs in degraded condition exists on the bush-lift site
 - PCT 3039 – *Sydney Coastal Lilly Pilly-Palm Gallery Rainforest*
- One Threatened Ecological Communities (TEC) exists on the bush-lift site
 - *Littoral rainforest in the NSW North Coast, Sydney Basin and South East Corner bioregions* (BC Act)
 - *Littoral Rainforest and Coastal Vine Thickets of Eastern Australia* (EPBC Act)
- No threatened flora or fauna species were recorded
- Based on the habitat present and site location there is no real potential for threatened fauna species to occur given the degraded state and small extent of habitat
- No pest animal or priority weed species were identified
- The riparian corridor for a 1st order stream occurs immediately adjacent to the bush-lift site
- The bush-lift site occurs within the proximity area for littoral rainforest

Biodiversity impacts from the proposed development (refer section 6) are likely to include:

- Direct Impacts:
 - Loss of 16m² of PCT 3039 restricted to the ground and shrub layers
 - Reduction in rocky fauna microhabitat suitable for foraging, breeding, sheltering and basking in PCT 3039
- Indirect Impacts:
 - Disturbance (noise & vibrations) to fauna during development and construction.
 - Increases in dust and sedimentation
- Accumulative Impacts:
 - Minor increase in edge effects
 - Negligible reduction in fauna habitat within the study area

The proposal is likely to result in a minor increase in Key Threatening Processes (KTPs) listed under the BC Act and EPBC Act:

- Clearing of native vegetation
- Removal of bushrock

Significance of impacts

Statutory assessment of the proposed development has been completed with regard to:

- Pittwater 21 Development Control Plan (DCP)
- *State Environmental Planning Policy (Resilience and Hazards) 2021* (SEPP (R&H))
- *Biodiversity Conservation Act 2016* (BC Act)
- *Fisheries Management Act 1994* (FM Act)
- *Coastal Management Act 2016* (CM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Statutory assessment determined that:

- Assessment of impacts on Biodiversity Values (BV) mapping conclude impacts are likely to be minor
- Avoidance and minimisation requirements under Chapter B4.6 of the Pittwater 21 DCP have been addressed
- Assessment under Chapter 2, Part 2.2 (Division 1 Coastal wetlands and littoral rainforests area) of SEPP (R&H) determined that littoral rainforest depicted on the Coastal Wetlands and Littoral Rainforests Area Map would not be significantly affected and hence an EIS is not required
- No significant impacts would occur to the Littoral Rainforest TEC listed in the BC Act, therefore, a Biodiversity Development Assessment Report (BDAR) is not required.
- Impacts on Matters of National Environmental Significance (MNES) in the EPBC Act are not likely to be significant and referral to the Minister of the Environment is not required.

To minimise biodiversity impacts of the proposal, a range of recommendations have been prescribed (refer Section 6).

1 Introduction and Background

Australian Wetlands Consulting (AWC) has prepared this Flora and Fauna Assessment (FFA) to assess the likely impacts regarding the construction of a series of developments located at 36-42 Cabbage Tree Road Bayview, NSW. These include:

- A ‘bush lift’ ie. an elevator linking residential walkways above and below a rocky vegetated embankment
- Installation of an awning on the western side of the Bayview Gardens reception building
- Alterations to carparking located immediately west of the Bayview Gardens reception building

This assessment supports a Statement of Environmental Effects (SEE) for the project, prepared under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and submitted to Northern Beaches Council.

This assessment has been prepared to:

- Identify the conservation values of the site inclusive of habitat for threatened species or communities listed in the *Biodiversity Conservation Act 2016* (BC Act) or *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Identify any significant features of biodiversity importance
- Determine potential direct and indirect impacts of the proposal
- Assess the proposal against relevant statutory requirements

1.1 Subject Site

The subject land is located within Bayview Gardens Retirement Village at 36-42 Cabbage Tree Road, Bayview within the Northern Beaches LGA. The land currently consists of a low-density retirement village with paved roads, recreational spaces including walking paths and gardens of predominantly exotic species and scattered remnant native tree species. Within the subject land the proposal focuses on three small subject sites where development will occur (hereafter referred to as the ‘sites’). The three sites are known as:

- Bush-lift site
- Entrance carpark sites
 - Carpark site
 - Reception awning

A steep sandstone gully and 1st order stream runs through the subject land which overlays Biodiversity Values (BV) mapping and is within the proximity area to littoral rainforest as per *SEPP (Resilience & Hazards) 2021* in the location of the proposed bush lift. Planning details for the site as determined by NSW Planning Portal Spatial Viewer (DCS 2020) are detailed in Table 1.1 and displayed in Figure 1.1.

Table 1.1 NSW planning portal details

Site Detail	NSW Planning Portal Detail
Lot and DP	Lot 121 DP789400
Property size (ha)	8ha
Zoning	R2 – Low density residential (Lot 121)
LGA	Northern Beaches
Bushfire Vegetation Category	Not mapped as bushfire risk

1.2 Proposed Development

The proposed development consists of the following works:

- Bush-lift site
 - Construction of a lift connecting walking path at street level to the gully boardwalk
 - Construction of walkways at street level
 - Removal of garden vegetation
 - Removal of sandstone boulder wall
 - Stockpiling and site compound located in paved carpark adjacent to site
- Entrance carpark sites
 - Exterior building alterations with no vegetation losses
 - Installation of a building awning
 - Alterations to entrance carpark

The proposed development and associated development activities will be hereafter referred to as 'the proposal'. The current proposal designs and extents are outlined in Appendix A.

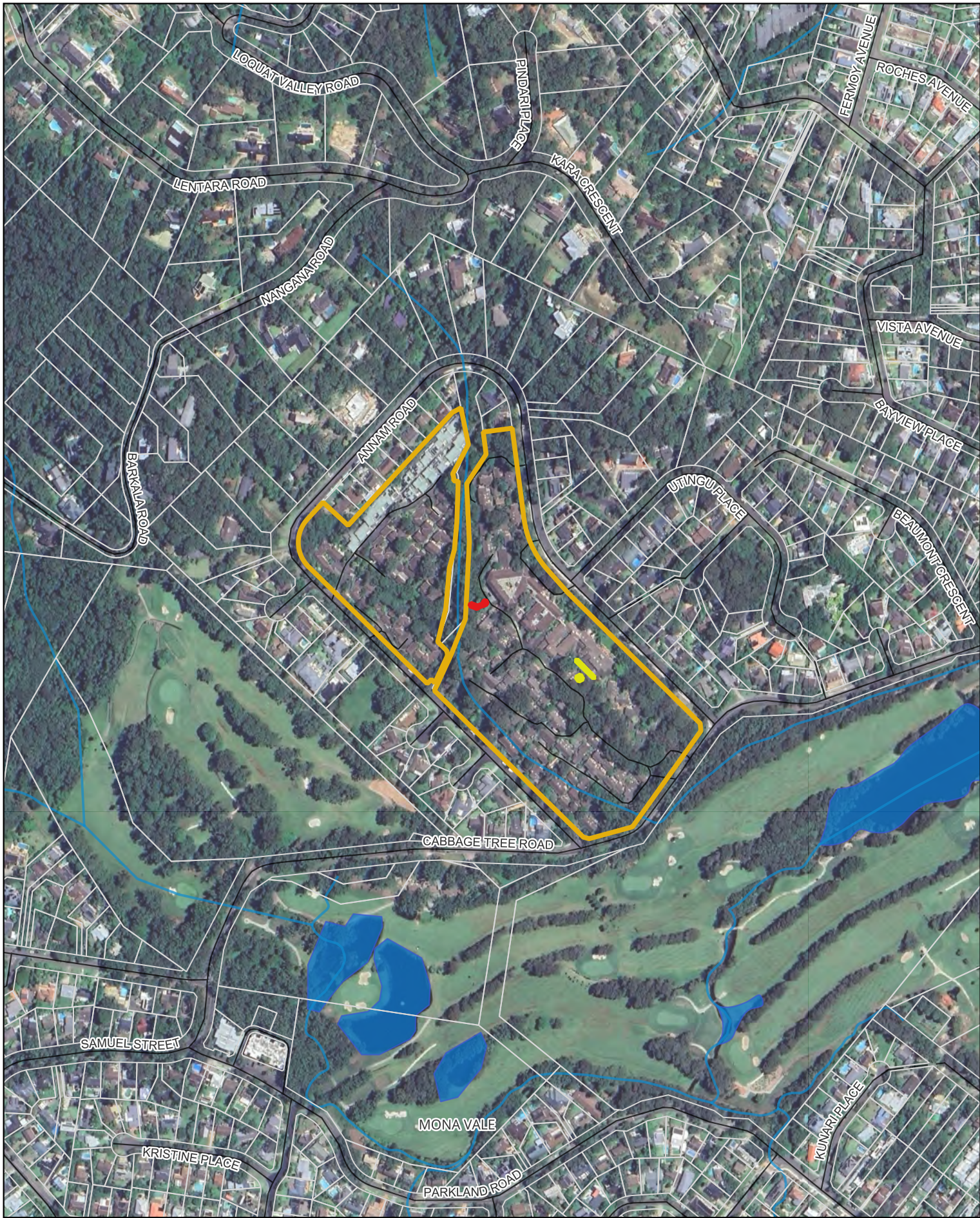
1.3 Biodiversity Offsets Scheme

The *Biodiversity Conservation Regulation 2017* details area clearing thresholds associated with a minimum lot size, to which the Biodiversity Offsets Scheme (BOS) applies. The area clearing thresholds are outlined in Table 1.2. If the proposed development exceeds the clearing thresholds for the identified lot size of 700m², the BOS will be triggered, and a Biodiversity Development Assessment Report (BDAR) required.

While Biodiversity Values (BV) mapping occurs across the bush-lift site, a pre-lodgment meeting with Council has highlighted the potential exemption from entrance into the BOS, as is normally required for impacts to BV mapping. Notes from the meeting raise this minor or low value works exemption due to the expected "minor work component and small location" (refer Appendix H). This FFA will provide advice as to the extent and severity of likely impacts associated with the proposal.

Table 1.2 Area clearing thresholds

Minimum lot size associated with the property	Threshold for clearing, above which the Biodiversity Assessment Method (BAM) and offsets scheme apply
Less than 1 ha	0.25 ha or more
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1,000 ha or more	2 ha or more



	Legend Subject land Lot Site Hydroline Bush-lift Hydroarea Entrance carpark		Figure: 1.1 Subject site	Project: Bayview Gardens - AVEO
	Scale: 1:5,000 @ A4 GDA2020 MGA56 <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> 0 50 100 150 m </div> <div style="text-align: center;"> N  </div> </div>		Data sources Spatial data: © NSW Govt 2024 Imagery: © Google 2024 Drawn: GD Date: 10/10/2024 Checked: DM Job ref: 241991	

2 Statutory Context

2.1 Commonwealth Legislation

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) protects/ regulates matters of national environmental significance (MNES), including:

- World heritage properties
- National heritage places
- Wetlands of international importance
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development.

Under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) a referral is required to the Minister for the Environment and Water for proposed 'actions that have the potential to significantly impact on matters of national environmental significance [MNES] or the environment of Commonwealth land'. A database search encompassing a 5 km radius search area from the Activity has been completed to identify MNES and other matters. Search results following the site assessment are considered in Table 2.1 and discussed with regard to site conditions.

Assessment of the proposal with regard to MNES and other matters indicates there is unlikely to be a significant impact on relevant MNES. Accordingly, the proposal does not require referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) (refer Table 2.1).

Table 2.1 MNES listed under the EPBC Act

MNES	Impact
<i>Any impact on a World Heritage property?</i>	
No World Heritage properties occur within five kilometers of the site.	Nil
<i>Any impact on National heritage places?</i>	
One National Heritage place, Ku-ring-gai Chase National Park, Lion, Long and Spectacle Island Nature Reserves (ID: 105817) occur within five kilometres of the site.	The listed place does not occur on or immediately downstream from the sites. Given the minor extent and nature of the works if any indirect impacts occur, they would be negligible.
<i>Any impact on wetlands of international importance?</i>	
No wetlands of international importance occur within five kilometres of the site.	Nil
<i>Any impact on nationally threatened species and ecological communities?</i>	
<p>Habitat for 8 threatened ecological communities (TEC), 112 threatened species and 58 migratory species were identified within 5 km of the site. No threatened flora or migratory species were identified during the site assessment.</p> <p>One TEC was identified as occurring on the site as a degraded margin to the <i>Littoral Rainforest and Coastal Vine Thickets of Eastern Australia</i> TEC (Littoral Rainforest TEC).</p>	<p>No threatened or migratory species were identified on any of the sites and no direct impacts are likely to occur. Indirect impacts may occur to the habitat for threatened species using the adjacent Littoral Rainforest TEC.</p> <p>At the bush-lift site negligible direct impacts will occur to the Littoral Rainforest TEC totaling approx. 16m² of ground and shrub layer removals only. Indirect impacts would be limited to the construction period only and return to pre-construction levels during the bush-lift's operational phase. Given the short period of construction, minimal footprint and mitigation measures outlined in this document any indirect impacts would be sufficiently managed to a minor level.</p> <p>No direct impacts are likely for the proposed development in the entrance carpark sites (ie. carpark alteration and reception awning). Any indirect impacts (primarily noise and vibration) would be temporary and of low level to threatened or migratory species using the surrounding habitat opportunistically.</p>

2.2 State Legislation

The NSW legislation relevant to the proposed development is outlined in Table 2.2.

Table 2.2 NSW state legislation sections relative to the proposed development

Legislation	Section/s	Proponent's Obligations
<i>Biosecurity Act 2015</i> <i>Biosecurity Regulation 2017</i>	Part 3 Schedule 3	The Biosecurity Act provides a framework for the prevention, elimination and minimisation of biosecurity risks. No priority weed species were identified on site.
<i>Biodiversity Conservation Act 2016</i>	Part 7 and Schedules 1 & 2	The proposal must avoid significantly impacting any threatened flora and fauna species or ecological communities listed in schedule 1 and 2 of the BC Act. Tests have been completed to determine whether the proposed development will significantly impact threatened species or ecological communities, or their habitats. The adoption of the mitigation measures and recommendations outlined in Table 6.1 of this FFA will result in the protection against significant impacts to threatened species and ecological communities.
<i>Coastal Management Act 2016</i>	Part 2	The bush-lift site occurs within the proximity area for a littoral rainforests mapped area as identified by the <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> (SEPP R&H). See Figure 2.1 and Table 2.3 for discussion of SEPP (R&H).
<i>Environmental Planning & Assessment Act 1979</i>	Part 4	The proposal consists of development that requires consent under section 4.2 of the EP&A Act. The proposal must be carried out in accordance with the requirements of the consent authority and objectives of the planning instrument relevant to the zoning to which the proposal will occur.
<i>Fisheries Management Act 1994</i>	Section 200	The proposal will not occur within Key Fish Habitat (KFH).
<i>Water Management Act 2000</i>	Part 1	The proposal is required to the general water management principles set out in Division 1 of the WM Act. A 1 st order stream was identified downslope of the bush-lift site. A 10m riparian corridor must not be impacted upon. Should impacts occur a VMP must be prepared to guide its maintenance and enhancement on the site.

2.3 State Environmental Planning Policies

The State Environmental Planning Policies (SEPPs) relevant to the proposal are outlined in Table 2.3 and displayed in Figure 2.1.

Table 2.3 State Environmental Planning Policies

State Environmental Planning Policy (SEPP)	Section/s	Proponent's Obligations
<i>Resilience and Hazards 2021</i>	Division 1	<p>Section 2.8</p> <p>(1) Development consent must not be granted to development on land identified as "proximity area for coastal wetlands" or "proximity area for littoral rainforest" on the <i>Coastal Wetlands and Littoral Rainforests Area Map</i> unless the consent authority is satisfied that the proposed development will not significantly impact on—</p> <ul style="list-style-type: none"> (a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or (b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.

2.3.1 Consideration of SEPP (R&H)

The bush-lift site occurs across a minor extent (71m²) of the proximity area for littoral rainforest of which 55m² occurs on existing hardstand or kerb-side gardens and only 16m² within native vegetation.

The location, mostly on hardstand or degraded native vegetation will be highly unlikely to significantly impact the ecological integrity of the mapped littoral rainforest. Best practice erosion/sedimentation measures will be in place to guard against indirect impacts to hydrology. The increase in hard surfaces within the proximity area is not likely to cause significant impacts to surface or ground-water flows due to its minor extent.

The mitigation measures outlined in this FFA would reduce all impacts to a low level ensuring the integrity and resilience of the biophysical, hydrological and ecological environment is not significantly impacted by this proposal.



- Legend**
- Subject land
 - Site
 - Entrance carpark
 - Littoral Rainforest
 - Littoral Rainforest - Proximity area
 - Hydroline

Figure:
2.1 SEPP (Resilience & Hazards)

Project:
Bayview Gardens - AVEO

Scale:
1:900 @ A4
GDA2020 MGA56



Data sources
Spatial data: © NSW Govt 2024
Imagery: © Nearmap 2024



Drawn: GD Date: 10/10/2024
Checked: DM Job ref: 241991

2.4 Pittwater LEP

2.4.1 Section 7.6 Biodiversity Protection

- (1) The objective of this clause is to maintain terrestrial, riparian and aquatic biodiversity by—
 - (a) protecting native fauna and flora, and
 - (b) protecting the ecological processes necessary for their continued existence, and
 - (c) encouraging the conservation and recovery of native fauna and flora and their habitats.
- (3) Before determining a development application for development on land to which this clause applies, the consent authority must consider—
 - (a) whether the development is likely to have—
 - (i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and
 - (ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and
 - (iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and
 - (iv) any adverse impact on the habitat elements providing connectivity on the land, and
 - (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.
- (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—
 - (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
 - (b) if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or
 - (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

2.4.1.1 Consideration of LEP

This FFA addresses key requirements of section 7.6 regarding

- Likely impacts (refer Table 6.1)
- Avoidance, minimisation and mitigation measures (refer Table 6.1)

The minor impacts likely to arise from this proposal have considered, following adoption of measures in Table 6.1, to be of a low level and will avoid significant adverse environmental impacts.

2.5 Pittwater 21 Development Control Plan

Chapter B4.6 outlines the following outcomes and controls considered for proposals located on mapped Wildlife Corridors.

Outcomes

- Retention and enhancement of wildlife corridors ensuring/providing the connection of flora and fauna habitats.

Controls

- Development shall not directly impact on / or significantly reduce / degrade habitat for locally native species, threatened species, endangered populations or endangered ecological communities.
- Development shall retain, and provide an adequate buffer to, wildlife corridors.
- Development shall provide wildlife corridors via creation, restoration, and / or regeneration of habitat.
- Development shall not result in a significant loss of canopy cover or a net loss in native canopy trees.
- Development shall ensure that at least 60% of any new planting incorporates native vegetation (as per species listed in *Native Plants for Your Garden* available on the Pittwater Council website). Landscaping is to be outside areas of existing bushland and not include environmental weeds
- Planting is to maximise linkage within the wildlife corridor
- Caretakers of domestic animals shall prevent them from entering areas of wildlife habitat.
- Fencing, where permitted, shall be passable by native wildlife.

2.5.1 Consideration of DCP Chapter B4.6

The proposal has been located to avoid impacts as far as practicable to native vegetation including wildlife corridors. The design proposed:

- Avoids any loss of canopy with removals restricted to the ground and shrub layers
- Is sited at the edge of native vegetation which occurs in a degraded condition
- Requires minimal native vegetation removals totaling approximately 16m²
- Aims to retain the wildlife corridor. The development footprint is located at the degraded margin of native vegetation and habitat.
- No fauna-proof fencing is proposed

3 Methods

3.1 Desktop Assessment

A desktop study was completed prior to field assessment to gather relevant information and data. The following databases and Geographic Information System (GIS) layers were searched/analysed:

- BioNet Atlas (DPIE 2024a): 10 km x 10 km grid centered on the site and records for the past 10 years (completed 2/10/2024)
- Biodiversity Values Map and Threshold Tool and digital data layer (DPIE 2022)
- eSPADE version 2.2 (DPIE 2024b)
- Fisheries Spatial Data Portal (DPI 2016)
- NSW Planning Portal Spatial Viewer (DCS 2020a) with consideration to the relevant SEPPs
 - Resilience and Hazards 2021
- Protected Matters Search Tool (Department of Climate Change, Energy, the Environment and Water (DCCEE 2024): 5km radius of the site (completed 2/10/2024)
- NSW State Vegetation Mapping (extant) (DPIE 2024c)
- Sharing and Enabling Environmental Data in NSW (SEED Portal) (DPIE 2024d)
- Spatial Collaboration Portal (DCS 2020b)

3.1.1 Existing Environment

The existing environment consists of the physical and biological features of the site and the broader study area. The context of the existing environment has been determined from the results of the desktop assessments outlined above. The results of the site assessment will 'ground truth' these physical and environmental features and must be considered in relation to the impact of the proposal.

3.1.1.1 Soil Landscape

The sites are mapped as occurring upon the Erina soil landscape (refer Figure 3.1). The eSPADE (DPIE 2024b) description of this soil landscape is outlined in Table 3.1

3.1.1.2 Previously Mapped Plant Community Types

The previously mapped Plant Community Types (PCTs) and associated TECs identified by the NSW State Vegetation Mapping (extant) (DPIE 2023c) are described in Table 3.2 and displayed in Figure 3.2.

3.1.1.3 Waterways and Waterbodies

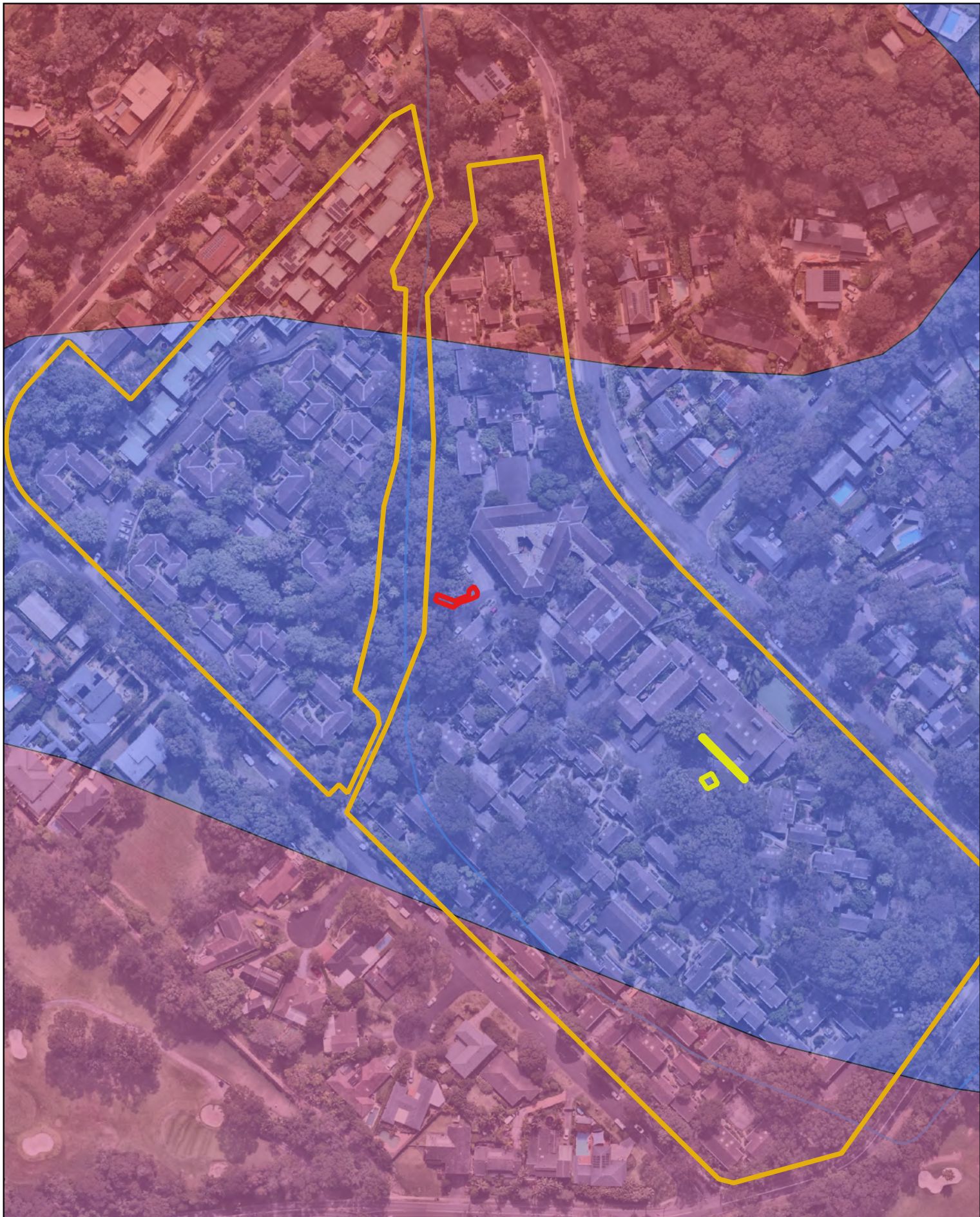
A single unnamed 1st order waterway is mapped immediately downslope from the bush-lift site. Its location is displayed in Figure 3.1.

Table 3.1 Soil landscape characteristics

Name	Soil	Topography	Vegetation
Erina	<p>Moderately deep to deep (100→200cm) Yellow Podzolic Soils on sandstone crests and slopes; moderately deep (100–150cm) Red Podzolic Soils on shale crests and steeper slopes; deep (>200cm) Yellow Podzolic Soils on shale lower slopes; some deep (>200cm) Yellow Earths on colluvial footslopes.</p> <p>Limitations: Very high soil erosion hazard, impermeable plastic low wet-strength subsoil, localised run-on, seasonal waterlogging of footslopes.</p>	<p>Undulating to rolling rises and low hills with local relief to 60m, and slopes <20%. Ridges, crests and valleys are rounded and moderately narrow (300–800m). Slopes are gently to moderately inclined. Rock outcrop is rarely present.</p>	<p>Extensively cleared tall open-forest (wet sclerophyll) with open-heath in exposed coastal locations. Common species of the open-forest include Spotted Gum (<i>Eucalyptus maculata</i>), Grey Ironbark (<i>E. paniculata</i>) and Forest Oak (<i>Allocasuarina torulosa</i>). Associations of Turpentine (<i>Syncarpia glomulifera</i>) and Sydney Blue Gum (<i>E. saligna</i>) are also common. Heathlands occur on exposed coastal headlands. They contain Coastal Banksia (<i>Banksia integrifolia</i>), Black She-oak (<i>Allocasuarina littoralis</i>), Native Rosemary (<i>Westringia fruticose</i>) and Sydney Golden Wattle (<i>Acacia longifolia</i>).</p>

Table 3.2 Previously Mapped PCTs

PCT Name	Description	BC Act TEC	EPBC Act TEC
3039 – Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	<p>Mid-high to very tall, dense rainforest, or occasionally sparse to mid-dense, very tall sclerophyll open forest with rainforest understorey, which occurs mainly in coastal gullies, between Seal Rocks near Forster, and Bundeeena. The tree canopy very frequently includes Lilly-Pilly (<i>Acmena smithii</i>), Sweet Orange (<i>Pittosporum undulatum</i>) and Scentless Rosewood (<i>Synoum glandulosum</i>), the first two species often with a high cover, and commonly Cheese Tree (<i>Glochidion ferdinandi</i>). Very frequently, Cabbage Tree (<i>Livistona australis</i>) and occasionally, Sandpaper Fig (<i>Ficus coronata</i>) may be present and locally abundant at some sites, with the former usually in the sub-canopy or rarely the canopy. Where a sclerophyll canopy or emergents are present, there are rare occurrences of Bangalay (<i>Eucalyptus botryoides</i>), Turpentine (<i>Syncarpia glomulifera</i>), and a wide range of eucalypts inconsistently occurring. The vine Sweet Morinda (<i>Gynochthodes jasminoides</i>) is very frequently present, usually with a low foliage cover. The sparse to dense ground cover very frequently includes Basket Grass (<i>Oplismenus imbecillis</i>) and commonly Rasp Fern (<i>Doodia aspera</i>). This PCT occurs in gullies and occasionally on sheltered slopes, either in coastal locations within 1km of the sea or around the fringes of estuaries, or rarely on slightly more inland alluvial or estuarine flats. It occurs in moderately warm, moderately wet locations receiving 1180-1350mm mean annual rainfall, at low elevations of up to 70m asl.</p>	<p>Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</p>	<p>Littoral Rainforest and Coastal Vine Thickets of Eastern Australia</p>



- Legend**
- Subject land
 - Site
 - Entrance carpark
 - Soil landscapes
 - DEEP CREEK
 - ERINA
 - WATAGAN
 - Hydroline

Figure:
3.1 Soil landscapes and hydrological features

Project:
Bayview Gardens - AVEO

Scale:
1:2,000 @ A4
GDA2020 MGA56

Data sources
Spatial data: © Soil Conservation Service 2009
Imagery: © Nearmap 2024

Drawn: GD Date: 10/10/2024
Checked: DM Job ref: 241991



Legend

- Subject land
- Site
- Entrance carpark
- PCTs
- 3039 - Sydney Coastal Lilly Pilly-Palm Gallery Rainforest
- 3234 - Hunter Coast Lowland Spotted Gum Moist Forest
- Hydroline

Figure:
3.2 Previously mapped PCTs

Project:
Bayview Gardens - AVEO

Scale:
1:1,000 @ A4
GDA2020 MGA56



Data sources
Spatial data: © NSW Govt 2024
Imagery: © Nearmap 2024

Drawn: GD Date: 10/10/2024
Checked: DM Job ref: 241991

3.1.2 BioNet Atlas and Protected Matters Search Tool

BioNet returned confirmed records of 17 threatened flora and 61 threatened fauna species within the 10km x10km search area centred on the subject land and restricted to the last 20 years. This includes several species listed in the EPBC Act (refer Appendix B).

Protected Matters Search Tool (PMST) identified records of seven threatened flora species, 105 threatened fauna and eight TECs. The results also identified 58 migratory species within the search area (refer Appendix B).

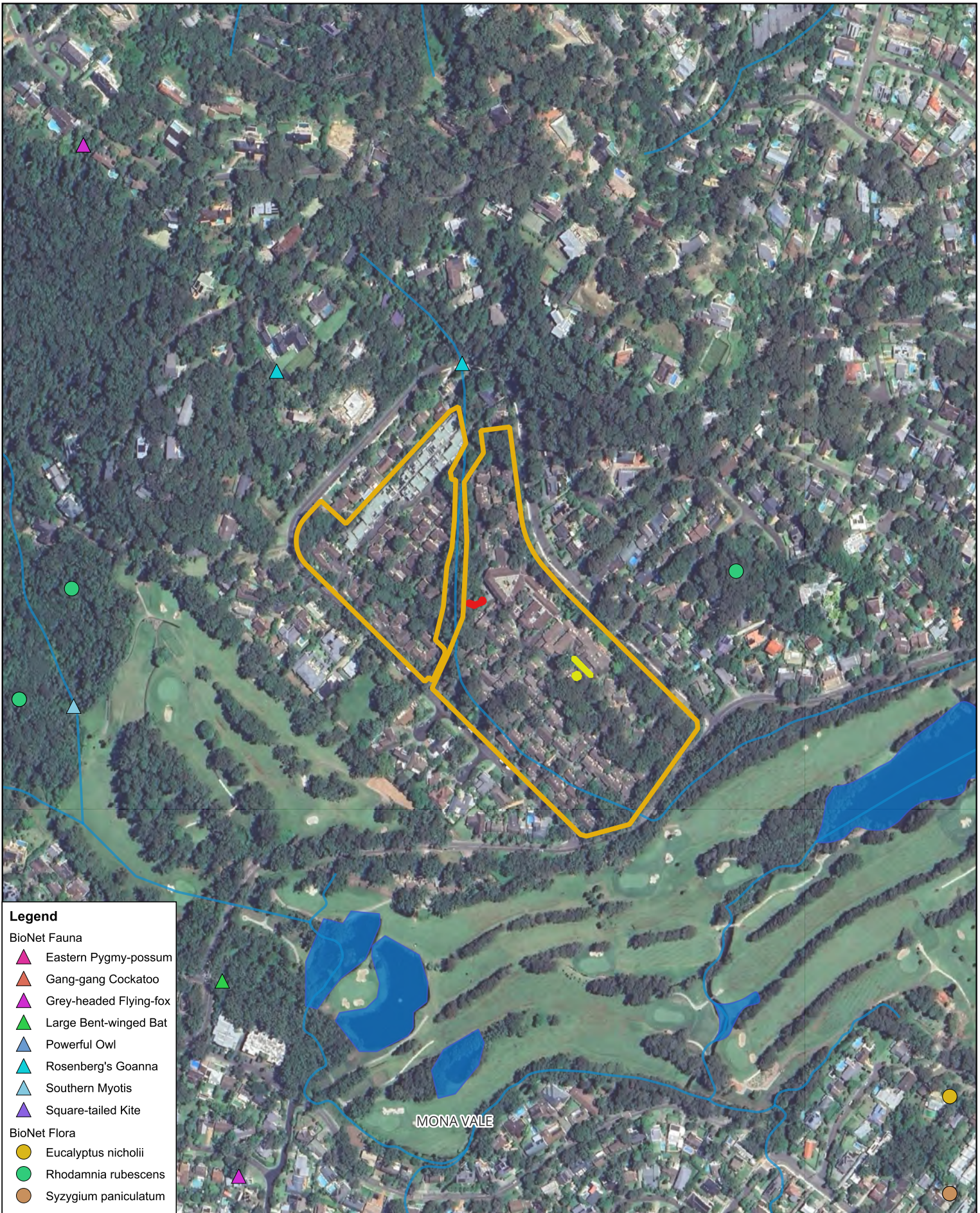
Listings for threatened species under the BC Act and EPBC Act are as follows:

- Vulnerable - V
- Endangered -E
- Critically Endangered -CE

Bilateral agreements for migratory birds are as follows:

- Japan-Australia Migratory Bird Agreement (JAMBA) - J
- China-Australia Migratory Bird Agreement (CAMBA) and - C
- Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA) - K

The locations of threatened species records in the vicinity of the site are displayed in Figure 3.5.



- Legend**
- BioNet Fauna
- ▲ Eastern Pygmy-possum
 - ▲ Gang-gang Cockatoo
 - ▲ Grey-headed Flying-fox
 - ▲ Large Bent-winged Bat
 - ▲ Powerful Owl
 - ▲ Rosenberg's Goanna
 - ▲ Southern Myotis
 - ▲ Square-tailed Kite
- BioNet Flora
- Eucalyptus nicholii
 - Rhodamnia rubescens
 - Syzygium paniculatum



- Legend**
- ▭ Subject land
 - ▭ Site
 - ▭ Bush-lift
 - ▭ Entrance carpark

- Hydroline
- ▭ Hydroarea

Figure:
3.3 BioNet records

Scale:
1:5,000 @ A4
GDA2020 MGA56



Project:
Bayview Gardens - AVEO

Data sources
Spatial data: © NSW Govt 2024
Imagery: © Google 2024

Drawn: GD
Checked: DM
Date: 10/10/2024
Job ref: 241991

4 Field Assessment

Field assessment was completed on the 23rd of September 2024 by ecologist Gareth Davies and consisted of the following:

- Ground truthing PCTs and associated TECs
- Targeted threatened flora survey and assessments of suitable habitat across all sites
- Opportunistic fauna survey based direct observations including visual, aural and indirect observations (i.e., scats and tracks)
- Identification of fauna habitat including but not limited to hollow bearing trees, nests, decorticating bark
- Priority weed mapping
- Identification of likely direct and indirect impacts to biodiversity
- Identification of watercourse banks

Weather conditions during the site assessment as determined by the Bureau of Meteorology (BOM 2024) are outlined in Table 4.1.

Table 4.1 Weather conditions

Temperature	Rain	Wind	Relative humidity
22°C	-	Light northerly (7km/h)	40%

Survey and Assessment Limitations

The survey effort was primarily focused on the proposal footprints and immediately adjacent habitats in order to determine the level of associated impacts. The survey consisted of methods in alignment with random meanders (Cropper 1993; Keith 2000). The flora survey completed is considered appropriate to determine vegetation communities at the site, their condition and conservation significance and determining the occurrence of threatened flora species or habitat.

Survey for threatened and migratory species was limited to a discrete period of time and may not represent species likely to frequent the site throughout the year. The survey method was deemed appropriate for the scale and condition of the site, the level of vegetation cover and fauna habitat features.

5 Site Assessment Results

5.1 Ground Truthed Vegetation

Plant Community Type (PCT) 3039 was identified across the bush-lift site. The PCT was identified based off, vegetative structure, dominant flora species directly adjacent to the site and the BioNet Vegetation Classification. The PCTs description is outlined in Table 5.1, the extents of the PCT across the site are displayed in Figure 5.1.

The site has been assigned as PCT 3039 in a degraded condition. Vegetation across the site is limited including of native vegetation. The site is located between a planted garden bed and remnant Littoral Rainforest. While the site has been highly modified with the emplacement of a sandstone boulder retaining wall and planting of exotic garden species a number of pioneering species indicative of the Littoral Rainforest (PCT 3039) were observed regenerating on the bush-lift site. These include Narrow-leaved Palm Lily and Kangaroo Vine.

Vegetation across the entrance carpark sites consisted of landscape groundlayer plantings and scattered eucalypt canopy above and adjacent to the carpark site. Planted Cabbage Trees exist adjacent to the reception awning site. None of the vegetation is reflective of a PCT.

Table 5.1 Ground Truthed PCT(s)

PCT ID	Ground Truthed Native Vegetation	BC Act listed TEC	EPBC Act listed TEC
3039 – Sydney Coastal Lilly Pilly-Palm Gallery Rainforest	Spotted Gum (<i>Corymbia maculata</i>)* Cheese Tree (<i>Glochidion ferdinandi</i>)* Velvet Wilkea (<i>Wilkea huegeliana</i>)* Rasp Fern (<i>Doodia aspera</i>)* Tuckeroo (<i>Cupaniopsis anacardioides</i>) - seedling Spiny-headed Mat-rush (<i>Lomandra longifolia</i>) Narrow-leaved Palm Lily (<i>Cordyline stricta</i>) Sandpaper Fig (<i>Ficus coronata</i>) Kangaroo Vine (<i>Cissus antarctica</i>)	Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Littoral Rainforest and Coastal Vine Thickets of Eastern Australia

*Occurs immediately adjacent to site

5.1.1 Threatened Ecological Communities

The PCT identified on the bush-lift site is associated with the Littoral Rainforest TEC as outlined in the final determination (DPI 2021). This TEC exists in a degraded condition across the site. Impacts to this TEC must be avoided or mitigated to negligible levels, if higher level impacts are likely to occur the proposal would likely require entrance into the BOS and preparation of a BDAR would be required.

5.1.2 Priority Weeds and Exotic Species

The NSW Biosecurity Act 2015 aims to prevent, eliminate and minimise biosecurity risks associated with weed species. The Biosecurity Act is supported by regionally specific plans which outline the control of priority weed species in the region. The regional plan covering the Northern Beaches LGA is the Greater Sydney Regional Strategic Weed Management Plan 2023-2027 (GSRWMP) (LLS 2021). No priority weeds were identified on any of the sites.

5.2 Fauna Habitat

5.2.1 Habitat Trees

No trees occur on or would be directly impacted across any of the sites and no hollow-bearing trees were identified adjacent to the sites. Immediately adjacent to both bush-lift and entrance carpark sites a number of mature eucalypts (Spotted Gum (*Corymbia maculata*), Tallowwood (*Eucalyptus microcorys*), Grey Gums (*E. punctata*)) and Cabbage Trees (*Livistona australis*) provide nesting potential and foraging resources for nectarivorous birds and arboreal mammal species.

5.2.2 Bush Rock

The bush-lift site is located upon a sandstone boulder retaining wall and as such provides cracks and crevices suitable for reptile and small mammal species to shelter. Additionally, and in conjunction with the provision of shelter the rock and low foliage cover beneath the canopy provides quality basking habitat.

5.2.3 Connectivity

The bush-lift site is located at the degraded edge of an extensive connective feature, the watercourse and Littoral Rainforest gully. However, no connective value is provided by the site.

Stepping-stone habitat is provided by large eucalypts and Cabbage Trees located in the entrance carpark. This type of connectivity forms part of a mosaic across the landscape connecting valuable habitats.

5.3 Aquatic Habitat

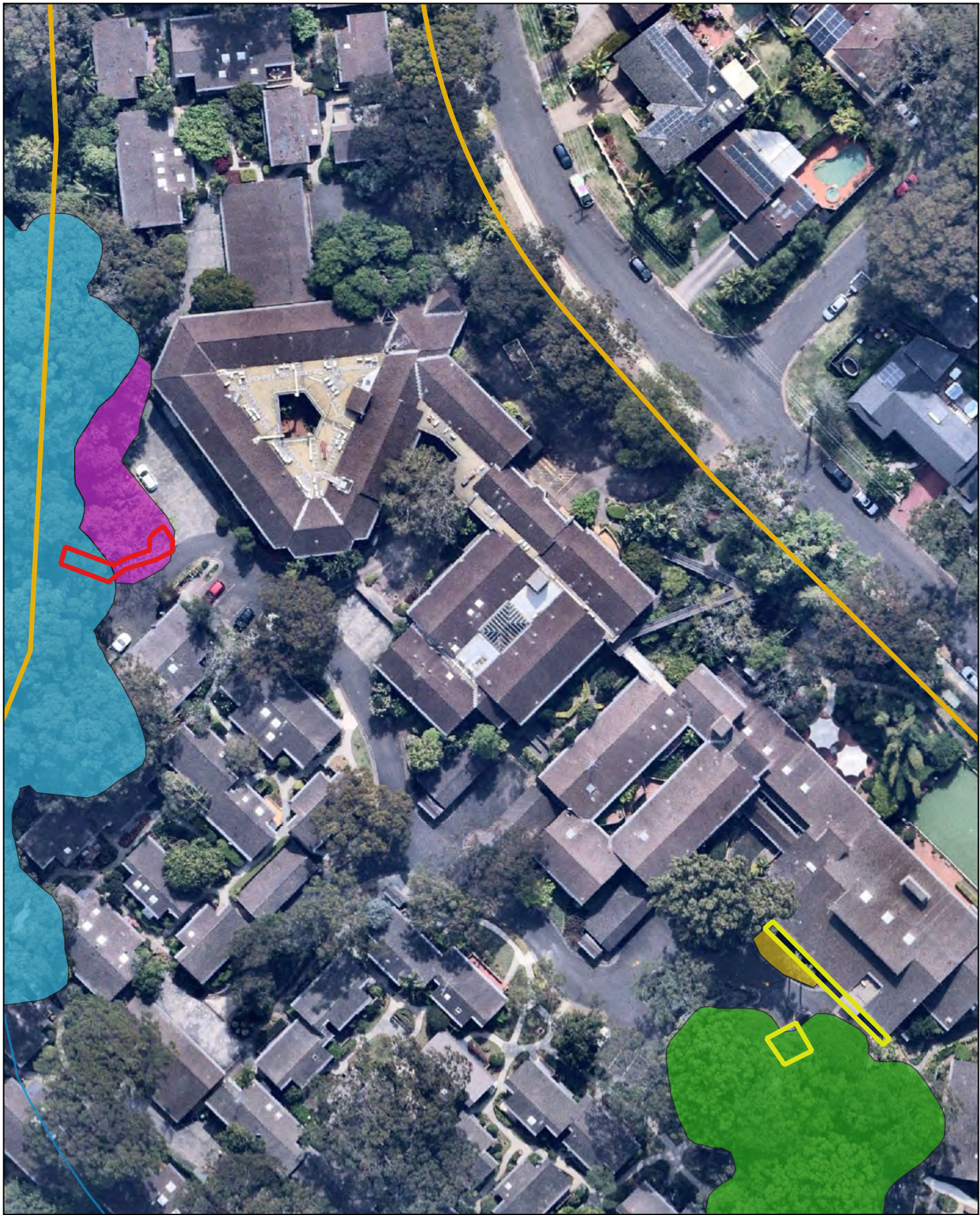
5.3.1 Key Fish Habitat

KFH is defined to include *all marine and estuarine habitats up to highest astronomical tide level (that reached by 'king' tides) and most permanent and semipermanent freshwater habitats including rivers, creeks, lakes, lagoons, billabongs, weir pools and impoundments up to the top of the bank* (DPI 2016).

KFH has not been mapped or identified in the watercourse running through the subject land and adjacent to the bush-lift site as it sits above the king tide level and exists as a narrow (approx. 3m bank-full width) 1st order stream. Based on the top of bank location and 10m riparian zone for 1st order streams the bush-lift site does overlay the riparian corridor (refer Figure 5.2).

5.4 Likelihood of Occurrence

Based on the desktop analysis and habitat identified during the site assessment, no threatened fauna species have potential to occur at any of the sites and their immediate surrounds (refer to potential occurrence table at Appendix E). Tests of significance have been completed for the TEC listed under both BC and EPBC Act's (refer to Appendices F and G).



Legend

Subject land

Site

Bush-lift

Entrance carpark

Hydroline

Ground-truthed vegetation

PCT 3039 - Sydney Coastal Lilly Pilly-Palm Gallery Rainforest

No PCT - Exotic

No PCT - Livistonia australis

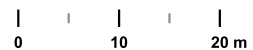
No PCT - Scattered Eucalyptus spp.

Figure:

5.1 Ground-truthed vegetation

Scale:

1:750 @ A4
GDA2020 MGA56



Project:

Bayview Gardens - AVEO

Data sources
Spatial data: © NSW Govt 2024
Imagery: © Nearmap 2024

Drawn: GD Date: 10/10/2024
Checked: DM Job ref: 241991



Legend




-  Subject land
-  Bush-lift site
-  Riparian corridor

Figure:
5.2 Riparian corridor

Project:
Bayview Gardens -
AVEO

Scale:
1:502 @ A4
GDA2020 MGA56



0 | 5 | 10 | 15 m

Data sources
Spatial data: © NSW Govt 2024
Imagery: © Nearmap 2024

Drawn: GD Date: 10/10/2024
Checked: DM Job ref: 241991

6 Impact Assessment and Mitigation Measures

Direct impacts as a result of the proposal consist of those that directly affect the habitat of species and ecological communities and of individuals using the study area. Indirect impacts occur when project-related activities affect species or ecological communities in a manner other than direct losses.

The impact assessment and associated mitigation measures for the activity is outlined in Table 6.1. These mitigation measures should be adhered to in order to minimise any associated impacts to the sites' ecological values.

Table 6.1 Impact assessment and mitigation measures

Impact	Impact (Direct and Indirect)	Severity (Low- High)	Mitigation Measures
Earthworks	<p>Direct:</p> <ul style="list-style-type: none"> Harm to rock sheltering fauna during bush-lift excavations Removal of bush rock <p>Indirect:</p> <ul style="list-style-type: none"> Loss of sandstone breeding, sheltering and basking habitat 	Low	<p>Direct:</p> <ul style="list-style-type: none"> Medium-large sandstone being removed is to be placed in secure piles in surrounding garden and TEC in the gully downslope
Vegetation Clearing	<p>Direct:</p> <ul style="list-style-type: none"> Loss of 16m² of PCT 3039 ground and shrub layers <p>Indirect:</p> <ul style="list-style-type: none"> Increased risk of erosion and sedimentation Increased risk of weed incursion during construction 	Low	<p>Direct:</p> <ul style="list-style-type: none"> Retain and protect all trees with appropriate tree protection as per Arboricultural Impact Appraisal (EziGrow 2024) <p>Indirect:</p> <ul style="list-style-type: none"> Implement erosion and maintain sediment controls in accordance with the best practices guidelines outlined in the 'Blue Book' <i>Managing Urban Stormwater: Soils and construction - Volume 1 4th edition</i> Reduce risk of weed incursion through appropriate Biosecurity practices established in <i>Arrive Clean, Leave Clean Guidelines</i> (DCCEEW 2015) Landscape plantings following construction are to reflect species of the Littoral Rainforest TEC in its entirety
Impacts to Aquatic Habitat	<p>Indirect:</p> <ul style="list-style-type: none"> Increased risk of erosion and sedimentation 	Low	<p>Indirect:</p> <ul style="list-style-type: none"> Implement erosion and maintain sediment controls in accordance with the best practices guidelines outlined in the 'Blue Book'

7 Recommendations

7.1 Avoidance and Minimisation

As per section B4.6 of the Pittwater 21 DCP and the BC Act, avoidance and minimisation measures are required when impacts to native vegetation and fauna habitat is likely. Measures have been adopted throughout the design process to follow the avoid, then minimise hierarchy. These include:

- Avoidance of direct impacts:
 - To native canopy including for the bush-lift which is partially located within the Littoral Rainforest TEC
 - To higher quality habitat by locating the proposal in the lowest quality habitat provided
- Minimisation
 - Implementation of mitigation measures detailed in Table 6.1 to reduce indirect impacts of:
 - Erosion and sedimentation
 - Incidental damage to surrounding canopy trees
 - Incursion of weed propagules and pathogens
 - Managed relocation of medium-large sandstone boulders to the TEC adjacent to the bush-lift site with the purpose of creating micro-habitat
 - Landscape plantings is to reflect flora species native to the Littoral Rainforest TEC and exceed the 60% native requirement of the DCP

7.2 Biodiversity Values mapping impacts

Following site assessment and consideration by qualified ecologist Gareth Davies (B.EnvSc (Hons)) the proposal has been assessed with specific focus on BV mapping and key ecological values. These include:

- BV mapping
- Existence of PCT 3039 across the bush-lift site
- Confirmation the PCT relates to Littoral Rainforest TEC's listed under the BC Act and EPBC Act
- Proximity area to Littoral Rainforests overlaying the bush-lift site

This FFA concludes that due to the following factors any impacts to BV mapping are likely to be very minor:

- Minor extent of direct impacts (16m²)
- Marginal location (at the edge of ground-truthed native vegetation)
- Lack of suitable habitat for threatened species
- Degraded condition of the native vegetation
- Full avoidance of canopy impacts
- Prevalence of extensive high quality habitat within the gully
- Ability to effectively mitigate indirect impacts to a minor level
- Indirect impacts being predominantly confined to the construction period

8 References

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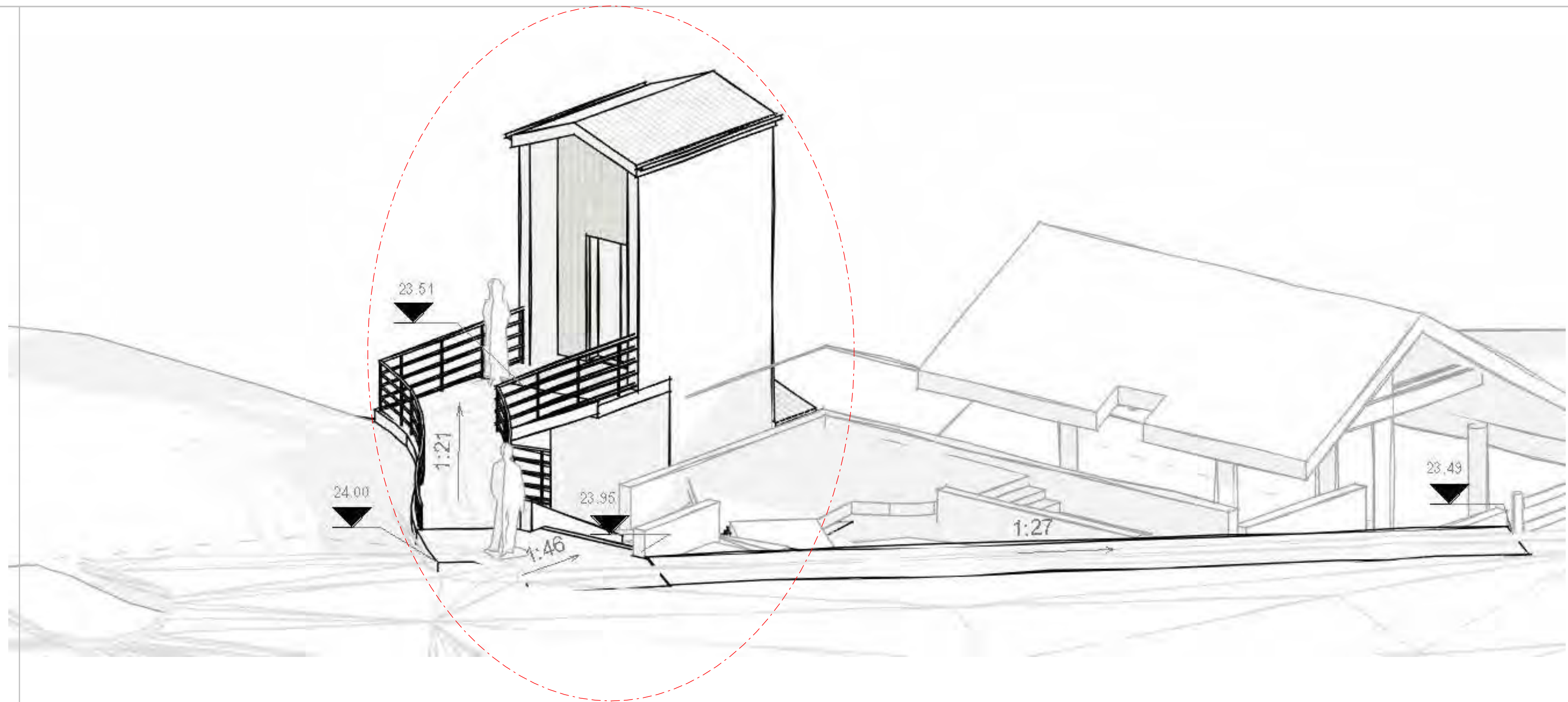
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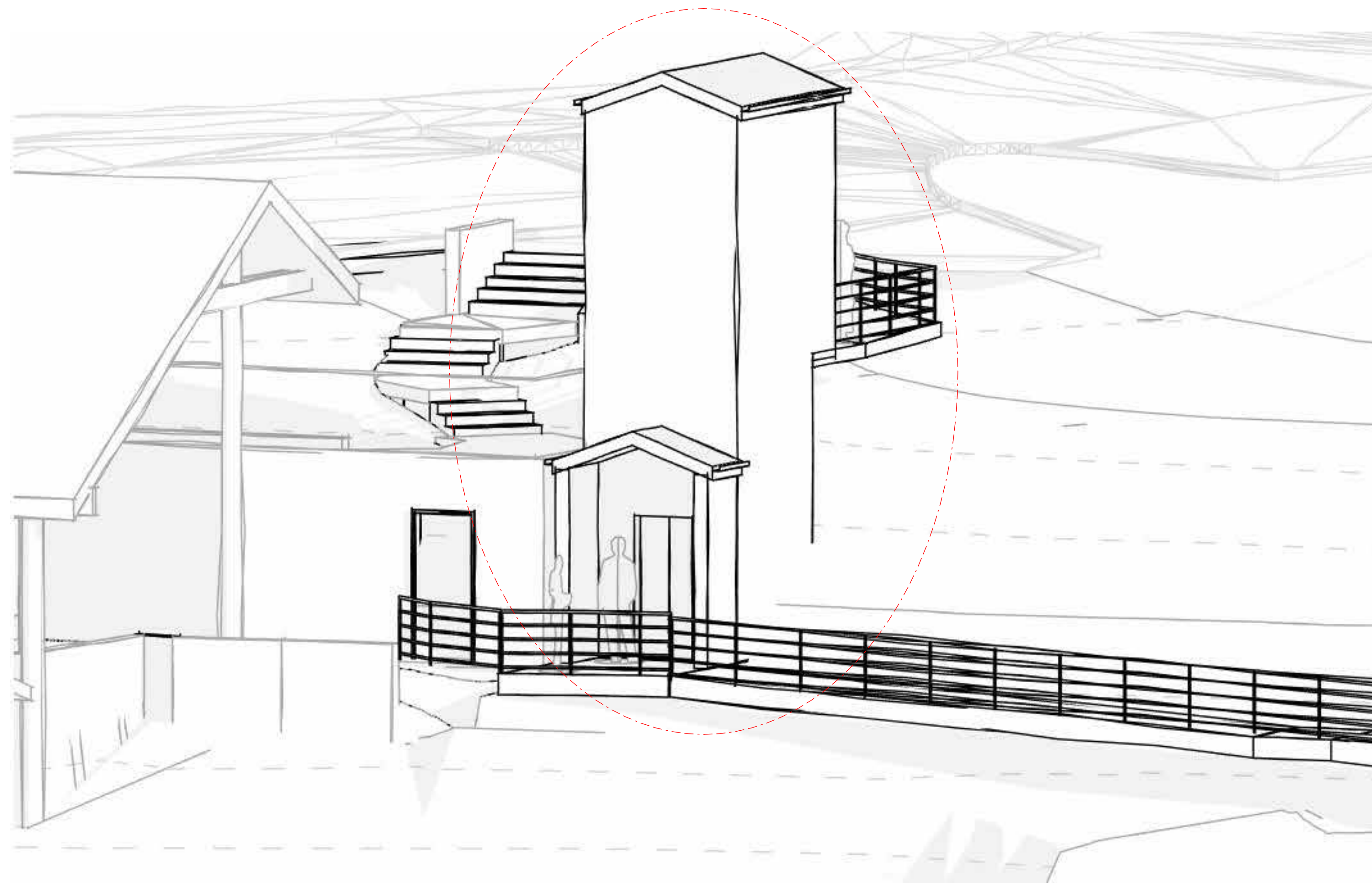
Appendix A – Proposed Development

DA LODGEMENT

BAY VIEW GARDENS RETIREMENT LIVING - BUSH LIFT
36-42 CABBAGE TREE ROAD BAYVIEW, NSW 2104



Sheet No.	Sheet Name	Current Rev	Sheet Issue Date
DA-000	COVER SHEET	3	30/09/30
DA-010	SURVEY PLAN	3	30/09/30
DA-011	SITE & ROOF PLAN - PROPOSED	3	30/09/30
DA-100	OUTDOOR Bush Lift - PLAN, ELEVATIONS & SECTIONS	3	30/09/30



rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
2	24/07/24	PRE-DA	YA
1	05/07/24	PRE-DA	YA

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client
AVEO GROUP

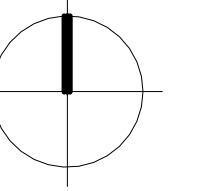
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 36-42 Cabbage Tree Rd, Bayview NSW
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drawing
COVER SHEET

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drawn	checked	scale	project
YA	MB	@ A1	OCT 2022
project no.	drawing no.	issue	
22043	DA-000	3	

FOR DA



1 Site Survey Plan
SCALE: 1:500 @ A1

3	30/09/2024	FOR DA	YA
2	24/07/24	PRE-DA	YA
1	05/07/24	PRE-DA	YA

rev date issue drawn

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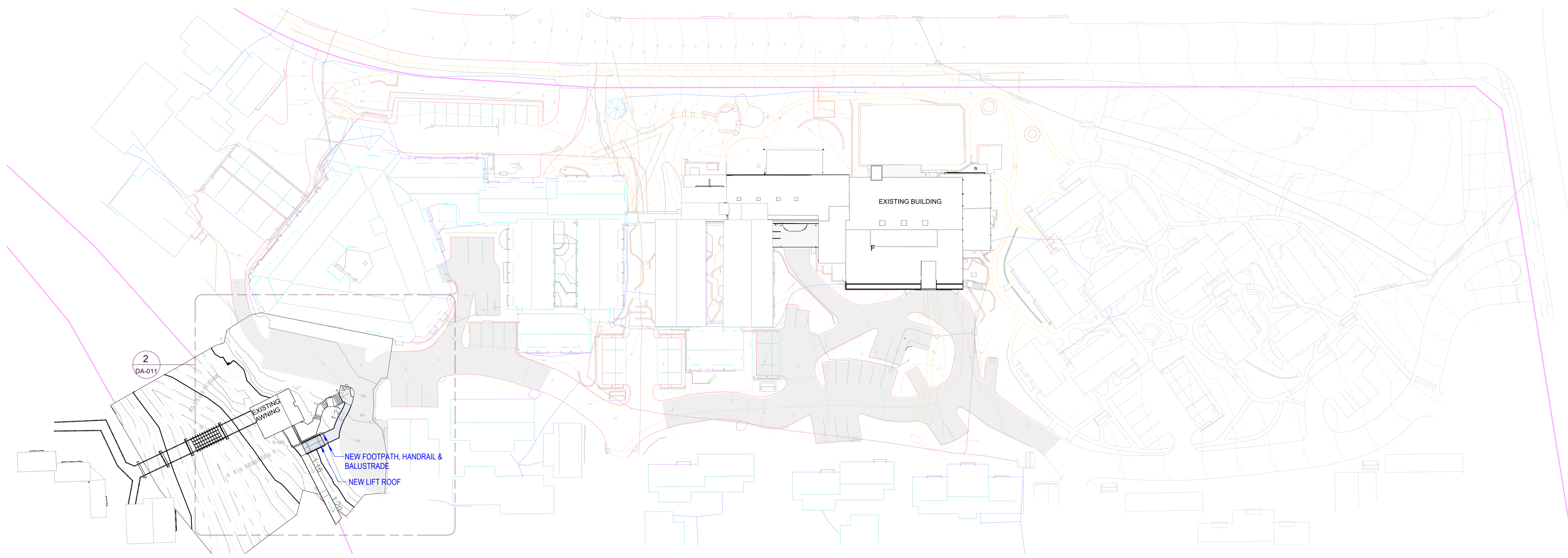
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SURVEY PLAN

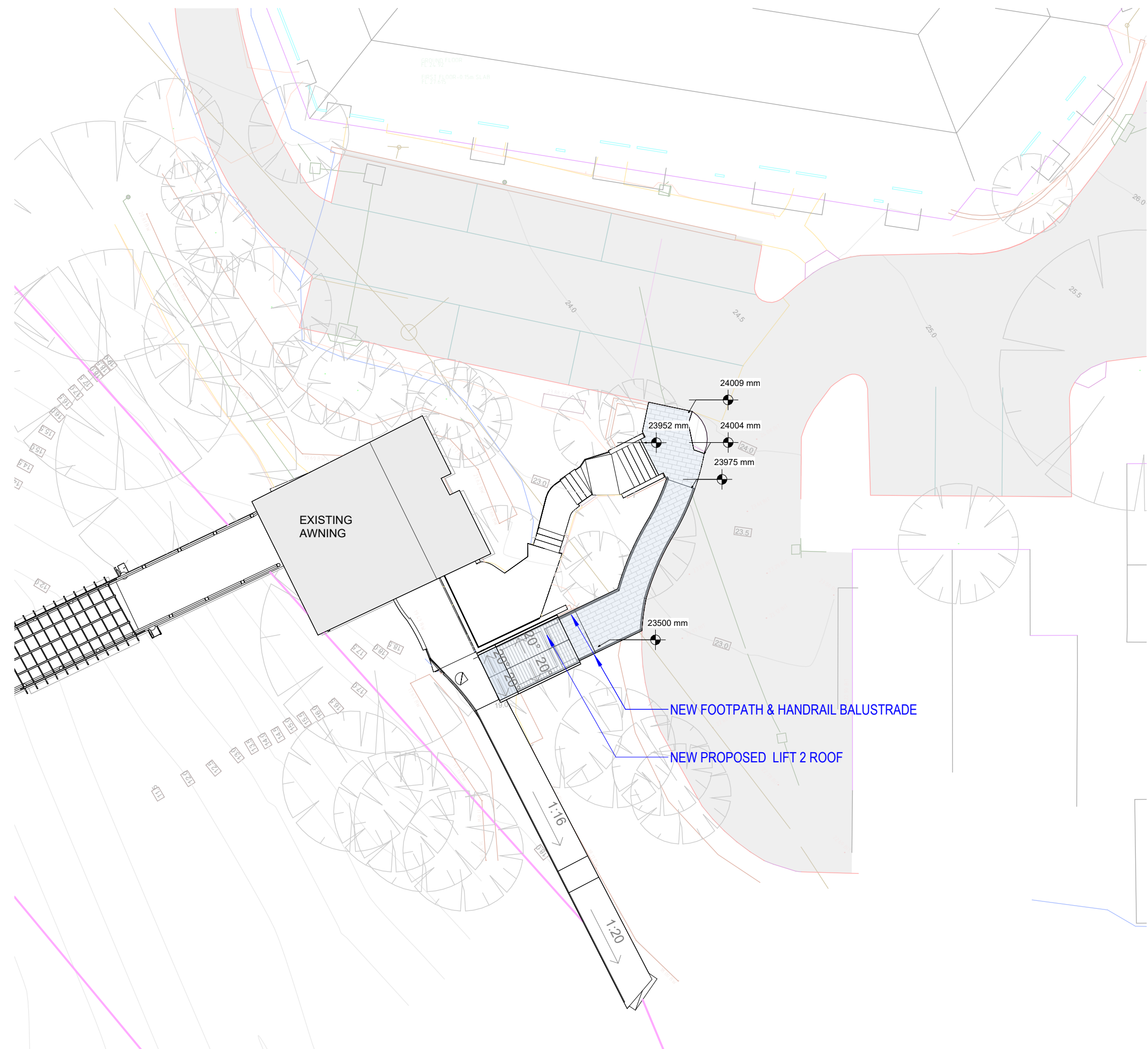
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project no.	drawing no.	issue	
22043	DA-010	3	

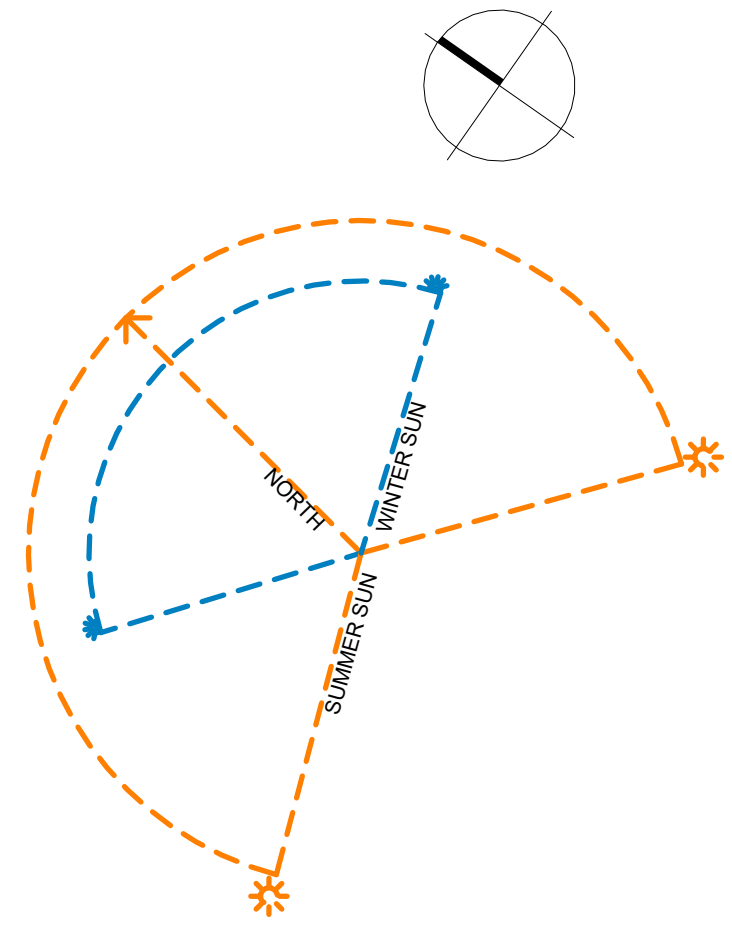
FOR DA



1 Roof Plan - Proposed
SCALE: 1:500 @ A1



2 Roof Plan - Proposed Bush Lift
SCALE: 1:200 @ A1



PARTITION / DEMOLITION LEGEND

	EXISTING WALL TO REMAIN. ALLOW TO MAKE GOOD IN PREPARATION FOR NEW FINISHES.
	NEW WALL REFER TO PARTITION LEGEND FOR SPECIFICATIONS.
	NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
	EXISTING WALL TO BE DEMOLISHED.
	PROPOSED ALTERATION / ADDITION

- NOTES**
- ALL PROPOSED EXTERNAL ITEMS ARE SUBJECT TO DEVELOPMENT APPLICATION APPROVAL.
 - EXTERNAL ITEMS INCLUDING:
 - PROPOSED EXTERNAL LIFTS.
 - PROPOSED EXTERNAL WINDOWS & DOORS.
 - PROPOSED FOOTPATH PAVINGS & AWNING.
 - PROPOSED EXTERNAL BALUSTRADES.
 - PROPOSED EXTERNAL BBQ.
 - PROPOSED BALCONY FINISHES.
 - PROPOSED EXTERNAL STAIRS & BALUSTARDES.

rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
2	24/07/24	PRE-DA	YA
1	05/07/24	PRE-DA	YA

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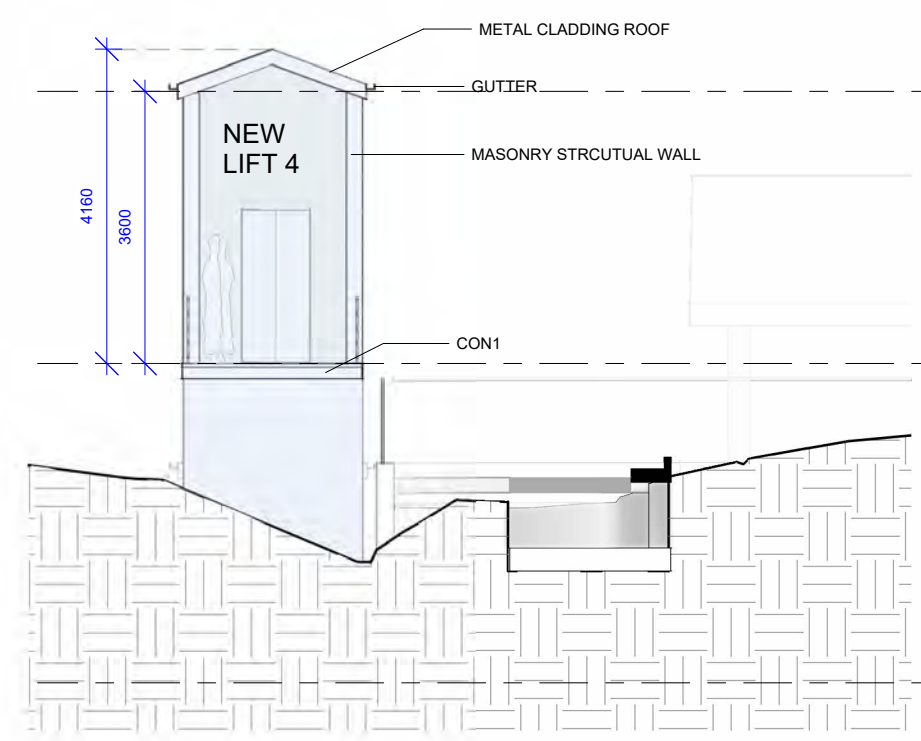
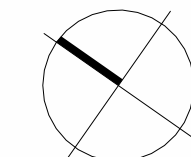
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project
AVEO BAYVIEW GARDENS - BUSH LIFT
36-42 Cabbage Tree Rd, Bayview NSW
2104

SITE & ROOF PLAN - PROPOSED

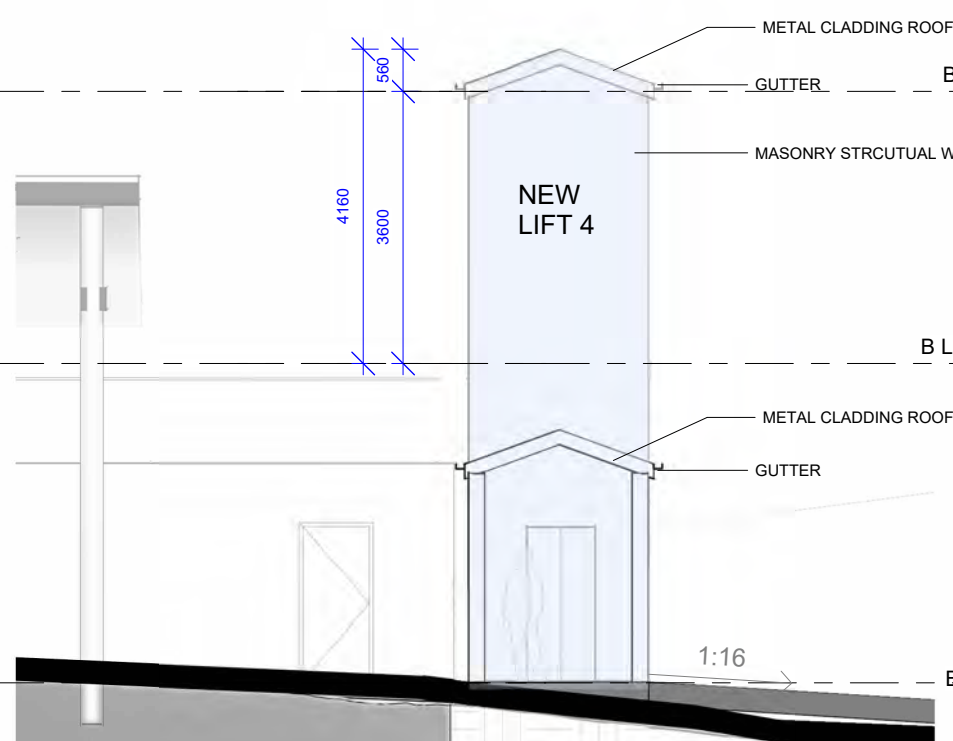
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drawn	checked	scale	project
YA	MB	As Indicated @ A1	OCT 2022
project no.	drawing no.	issue	
22043	DA-011	3	

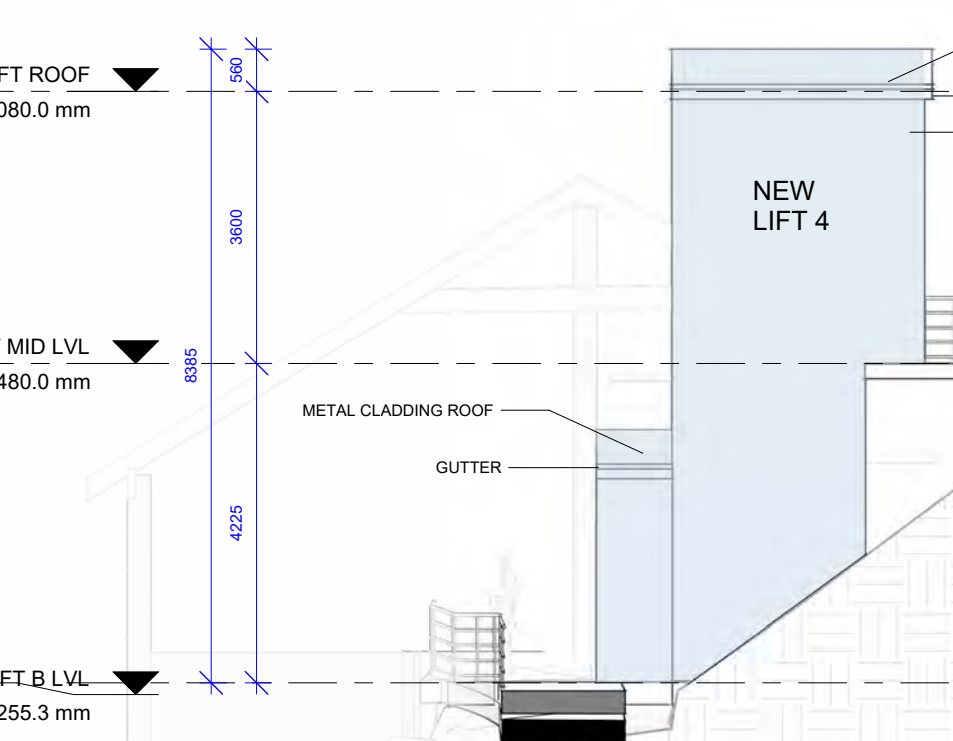
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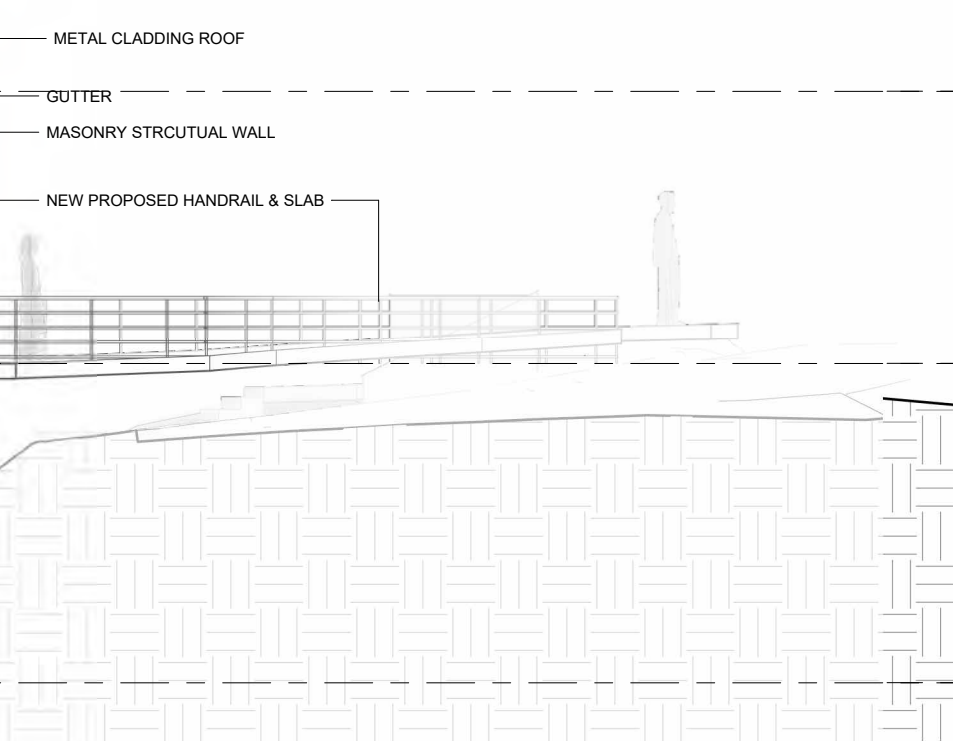
3 Bush Lift - East Elevation
A-110 SCALE: 1:100 @ A1



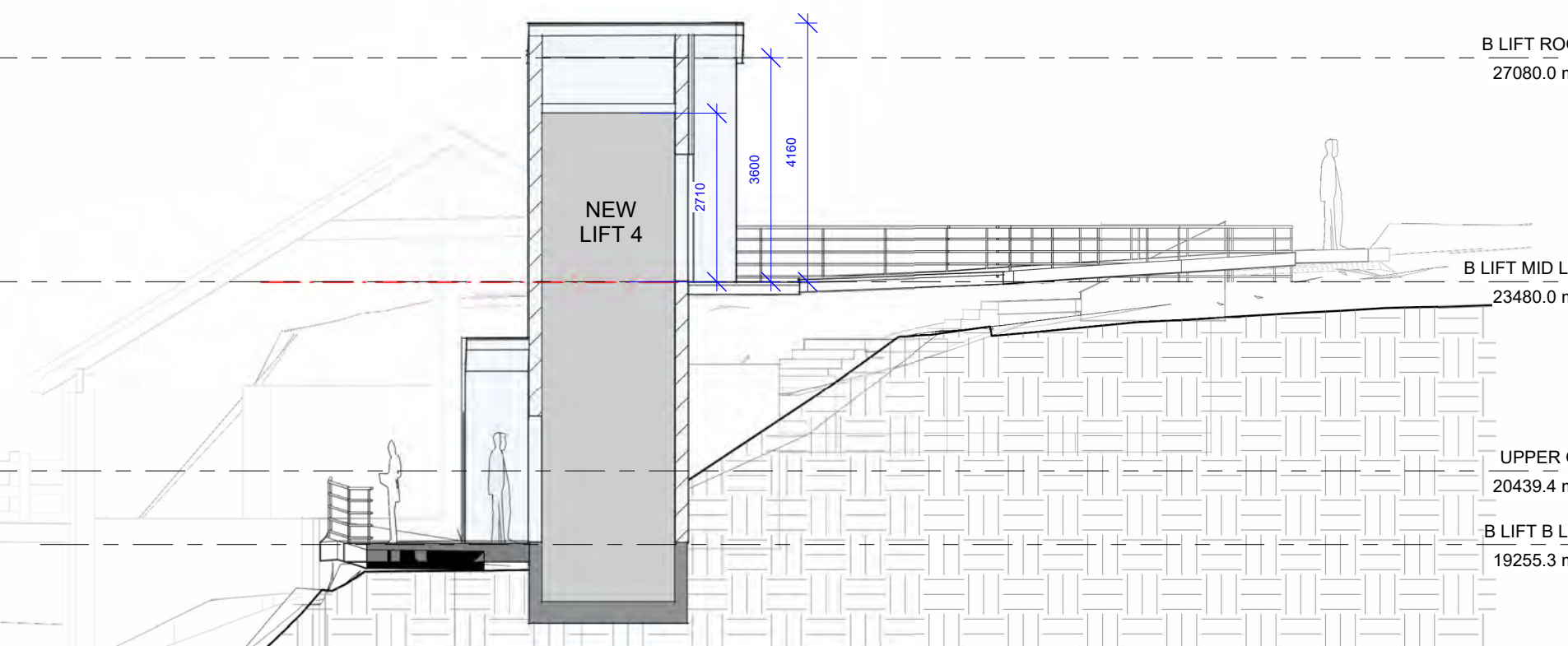
2 Bush Lift - West Elevation
A-110 SCALE: 1:100 @ A1



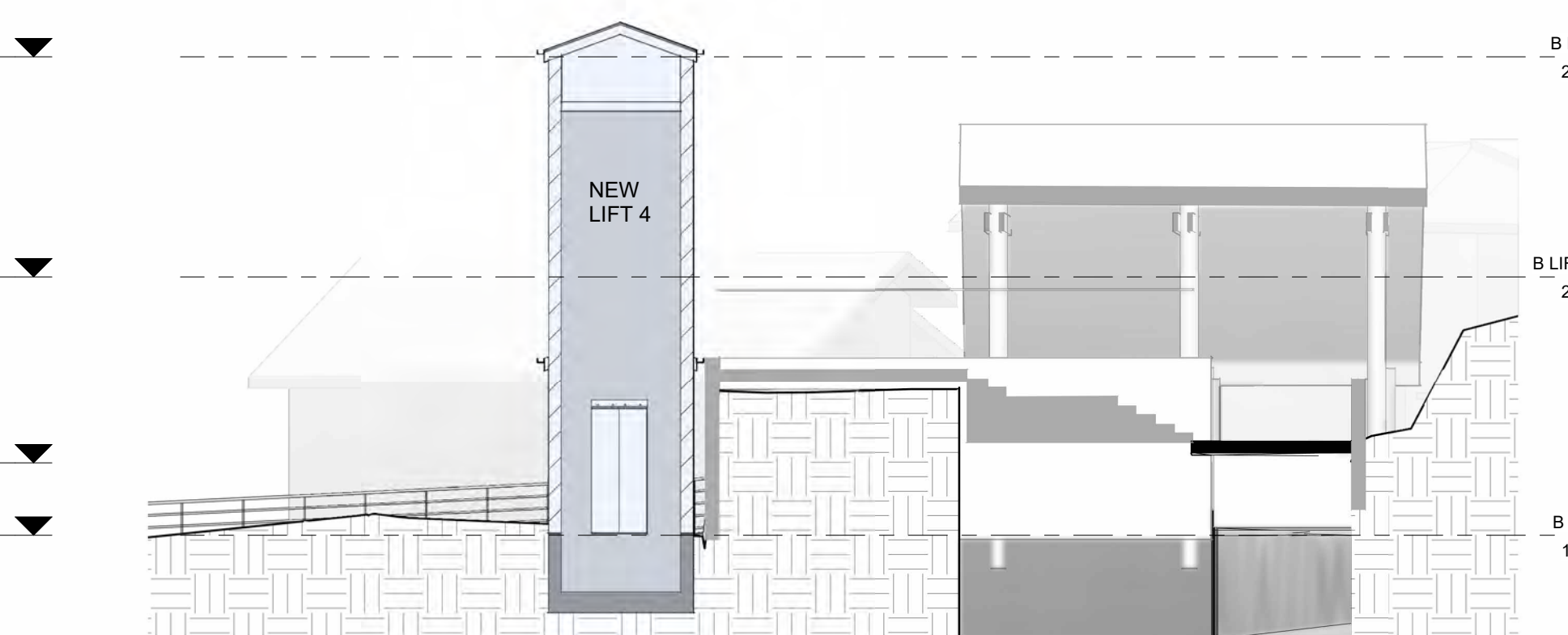
4 Bush Lift - North Elevation
A-110 SCALE: 1:100 @ A1



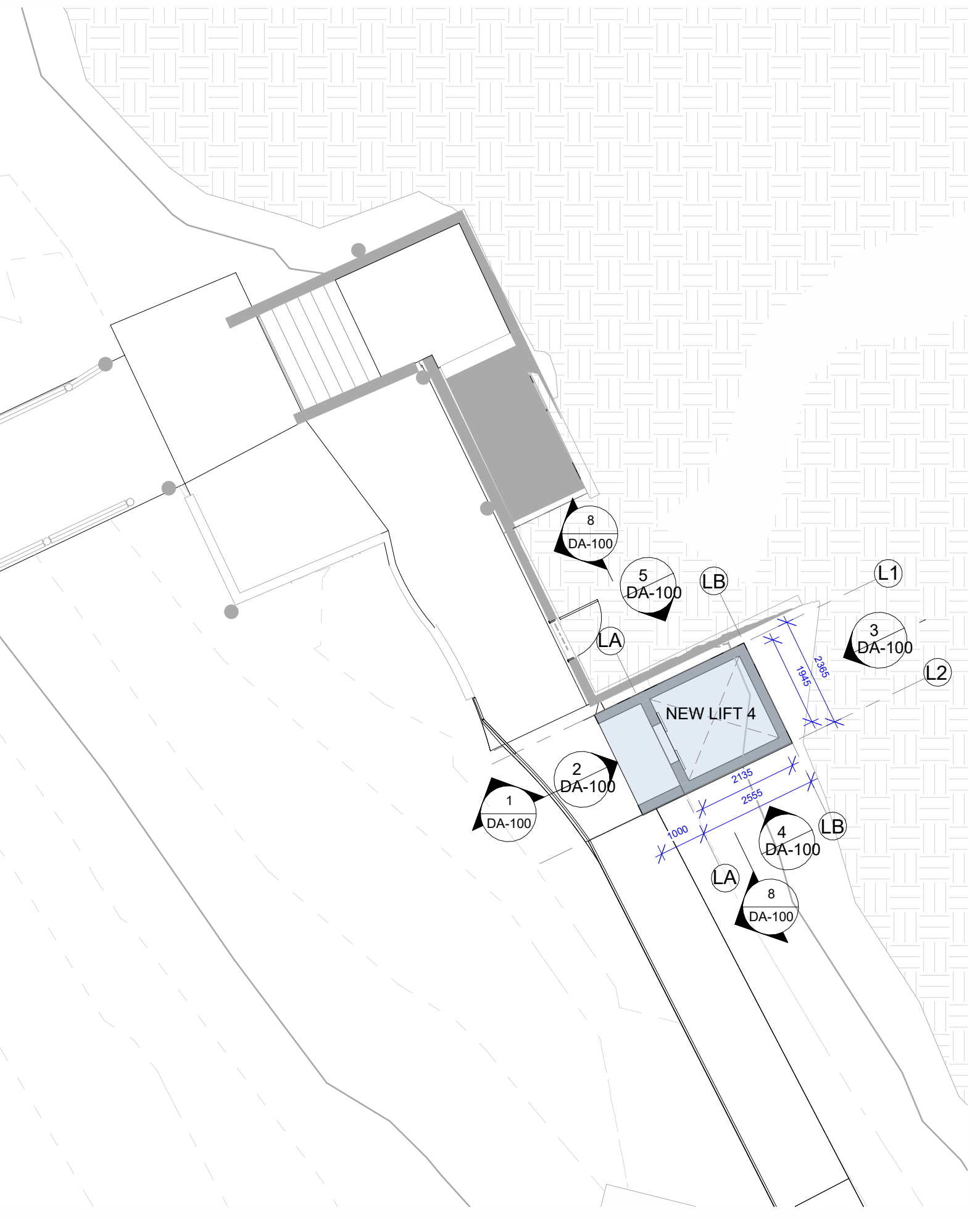
5 Bush Lift - South Elevation
A-110 SCALE: 1:100 @ A1



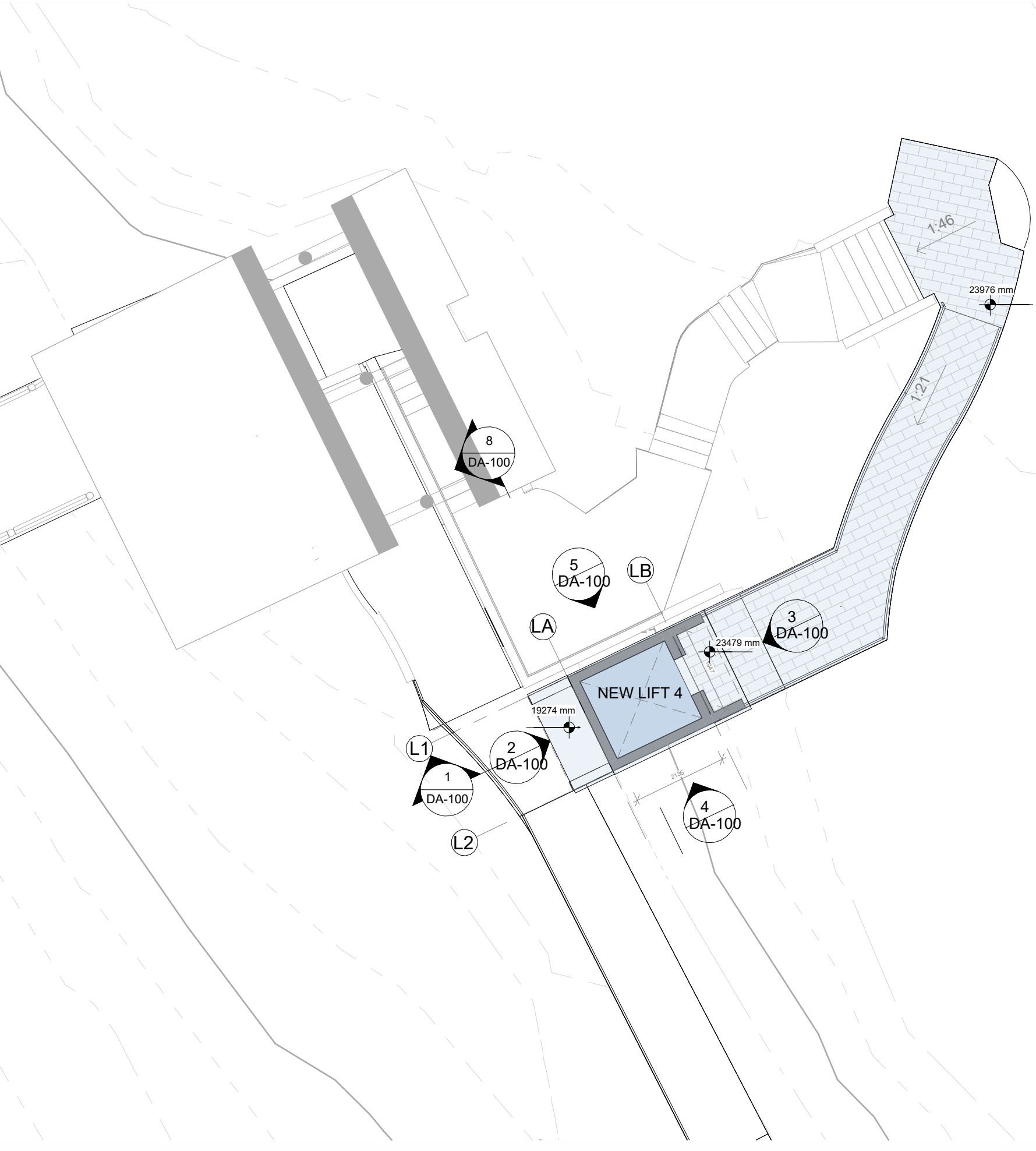
1 Bush Lift - Section 01
A-100 SCALE: 1:100 @ A1



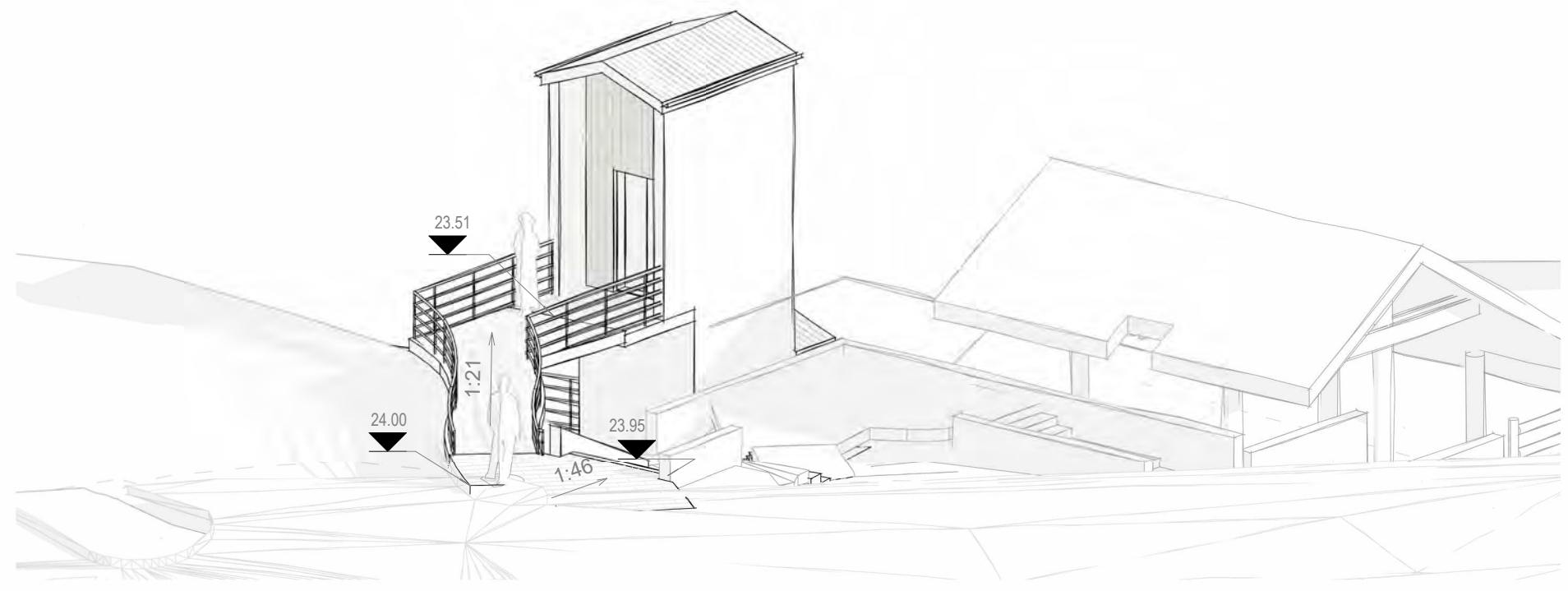
8 Bush Lift - Section 02
A-100 SCALE: 1:100 @ A1



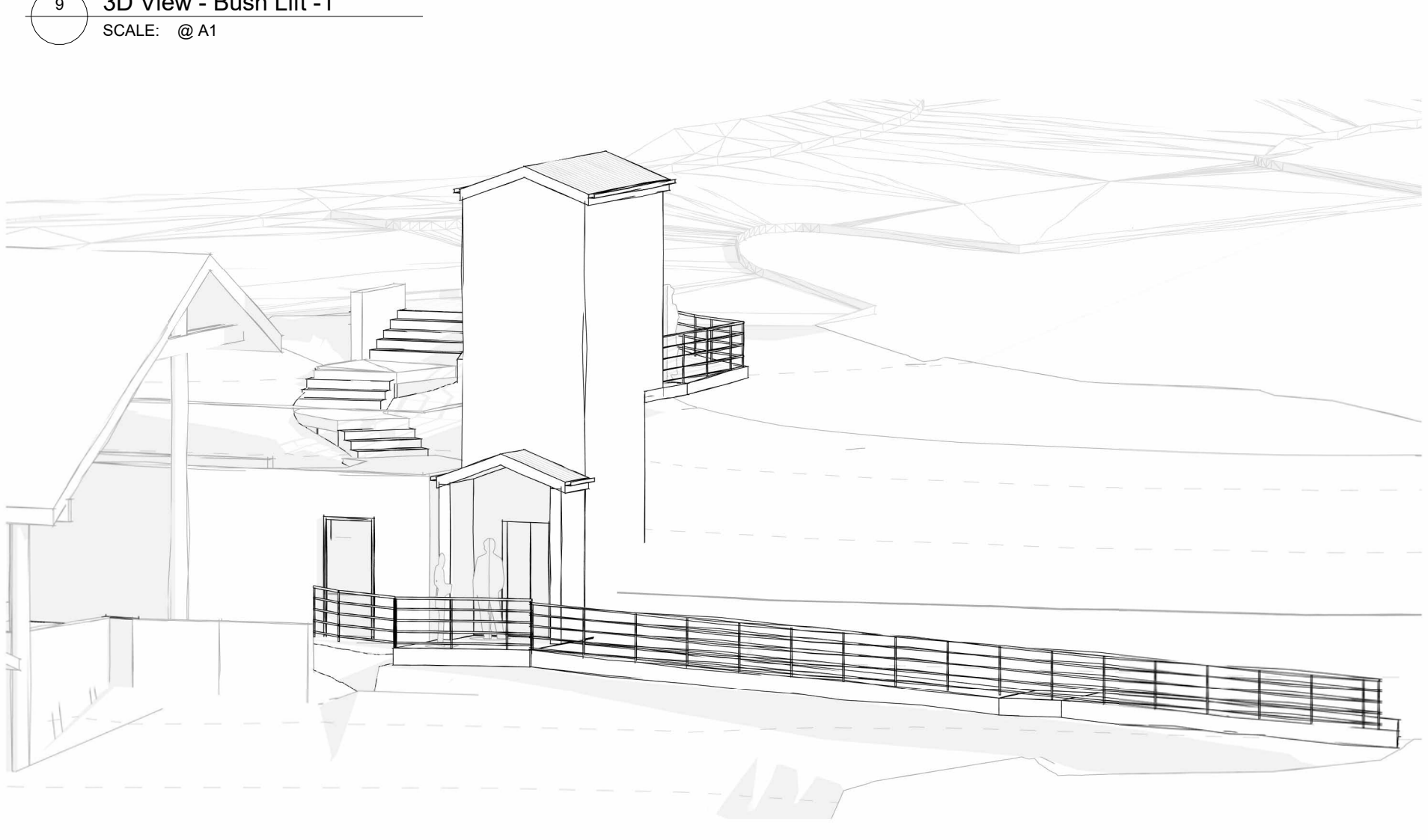
7 Ground Lower Level - Proposed Lift
A-200 SCALE: 1:100 @ A1



6 Ground Upper Level - Proposed Lift
A-200 SCALE: 1:100 @ A1



9 3D View - Bush Lift - 1
SCALE: @ A1



10 3D View - Bush Lift - 2
SCALE: @ A1

PARTITION / DEMOLITION LEGEND

	EXISTING WALL TO REMAIN. ALLOW TO MAKE GOOD IN PREPARATION FOR NEW FINISHES.
	NEW WALL REFER TO PARTITION LEGEND FOR SPECIFICATIONS.
	NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
	EXISTING WALL TO BE DEMOLISHED.
	PROPOSED ALTERATION / ADDITION

- CIVIL & STRUCTURAL NOTES:**
- FOR DETAILS OF CIVIL WORKS REFER TO CIVIL ENGS DRAWINGS
 - FOR DETAILS OF STRUCTURE & CONCRETE WORKS REFER TO STRUCTURAL ENGS DRAWINGS
 - WHERE ANY CONFLICT EXISTS TO SPECIFIED MEMBERS, STRUCTURAL TAKE PRECEDENCE.
 - DIMENSION SETOUT FOR THE CONCRETE LAYOUT WILL BE PROVIDED DURING CONSTRUCTION.

- NOTES**
- ALL PROPOSED EXTERNAL ITEMS ARE SUBJECT TO DEVELOPMENT APPLICATION APPROVAL.
 - EXTERNAL ITEMS INCLUDING:
 - PROPOSED EXTERNAL LIFTS.
 - PROPOSED EXTERNAL WINDOWS & DOORS.
 - PROPOSED FOOTPATH PAVINGS & AWNING.
 - PROPOSED EXTERNAL BALUSTRADES.
 - PROPOSED EXTERNAL BBQ.
 - PROPOSED BALCONY FINISHES.
 - PROPOSED EXTERNAL STAIRS & BALUSTARDES.

rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
2	24/07/24	PRE-DA	YA
1	05/07/24	PRE-DA	YA

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AVEO BAYVIEW GARDENS - BUSH LIFT
36-42 Cabbage Tree Rd, Bayview NSW 2104
drawing
OUTDOOR Bush Lift - PLAN, ELEVATIONS & SECTIONS

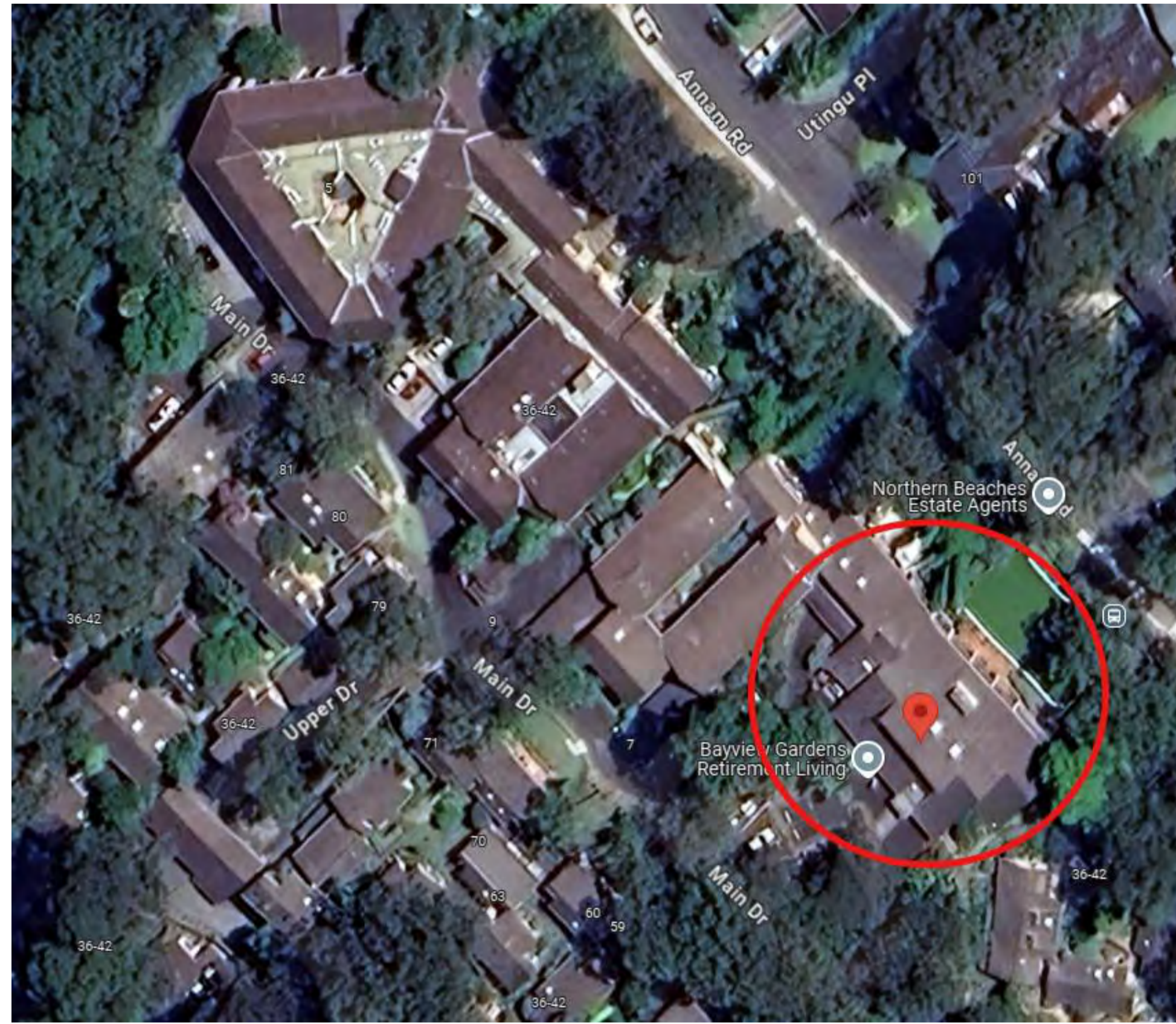
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project no.	drawing no.	issue	
22043	DA-100	3	

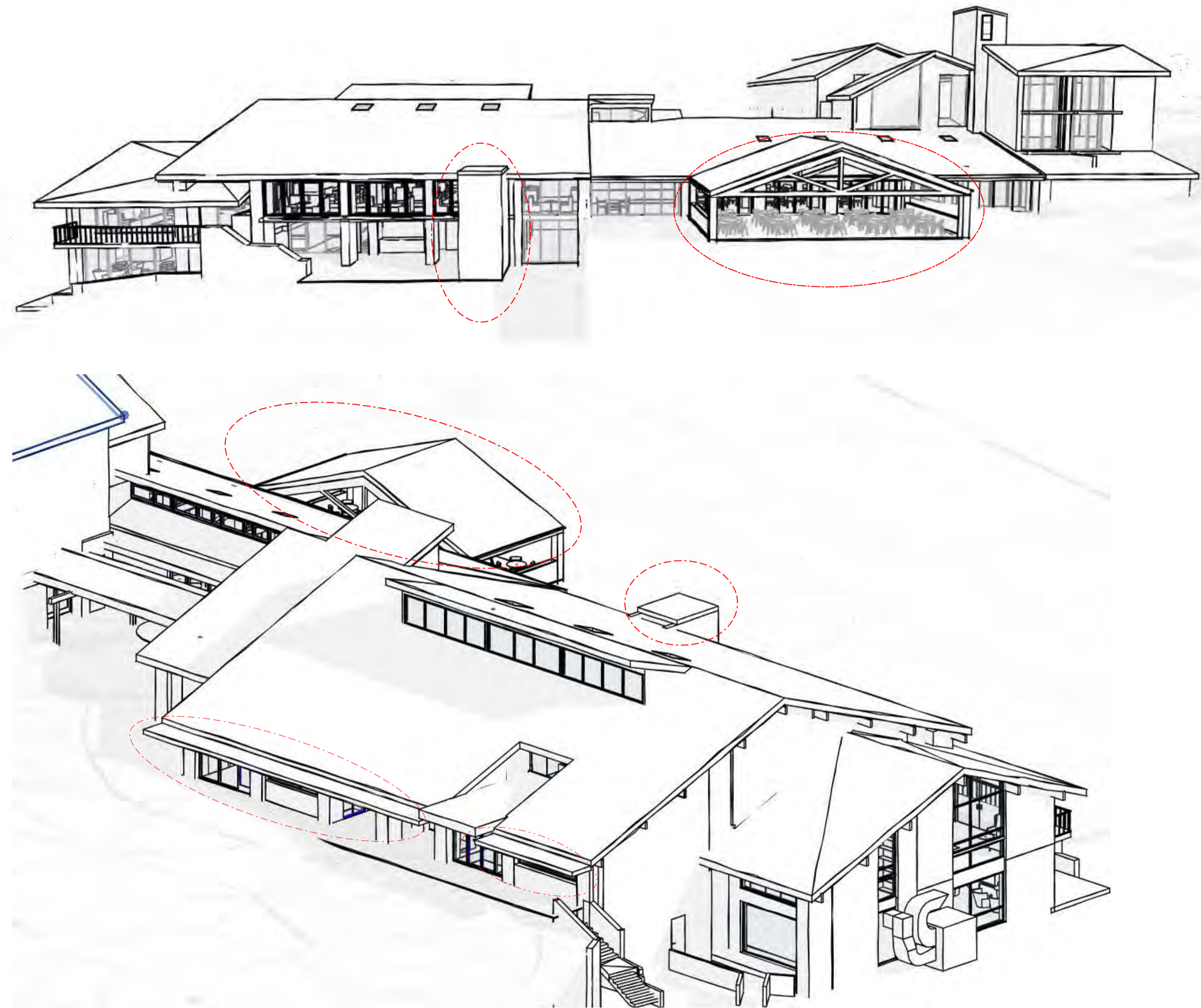
FOR DA

PRE-DA LODGEMENT

BAY VIEW GARDENS RETIREMENT LIVING
36-42 CABBAGE TREE ROAD BAYVIEW, NSW 2104



Sheet No.	Sheet Name	Current Rev	Sheet Issue Date
DA-000	COVER SHEET	3	24/09/30
DA-010	SURVEY PLAN	3	24/09/30
DA-011	SITE & ROOF PLAN - PROPOSED	3	24/09/30
DA-100	GROUND FLOOR - DEMOLITION PLAN	3	24/09/30
DA-101	GROUND FLOOR - PROPOSED PLAN	3	24/09/30
DA-102	LOWER GROUND FLOOR - DEMOLITION PLAN	3	24/09/30
DA-103	LOWER GROUND FLOOR - PROPOSED PLAN	3	24/09/30
DA-200	ELEVATIONS - EXISTING	3	24/09/30
DA-201	ELEVATIONS - PROPOSED	3	24/09/30
DA-400	OUTDOOR DINING AREA - INTERNAL PLANS & ELEVATIONS - 2	3	24/09/30
DA-401	ENTRY AWNING - INTERNAL PLANS & ELEVATIONS	3	24/09/30



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3	30/09/2024	FOR DA	YA
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1	05/07/24	PRE-DA	YA

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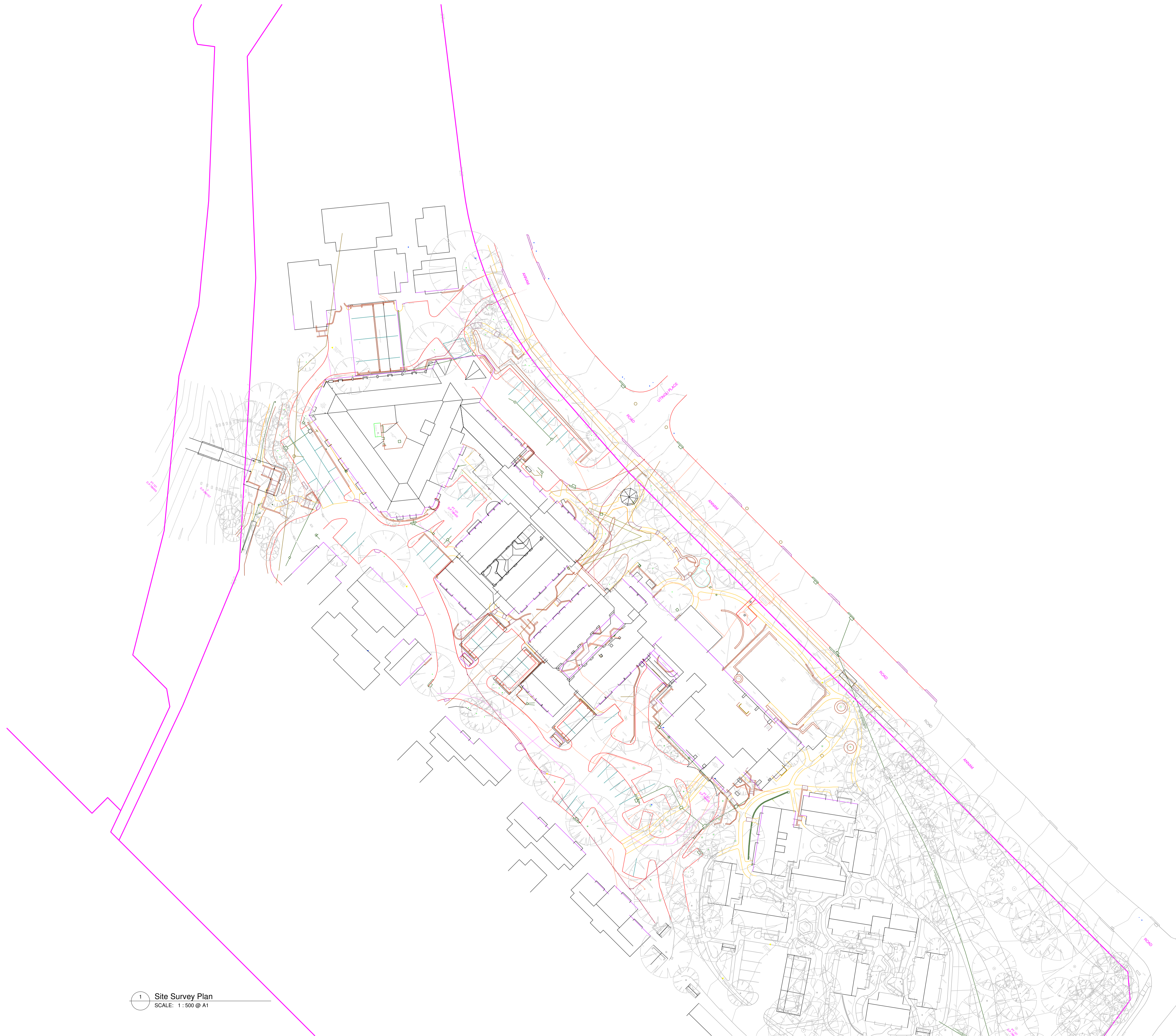
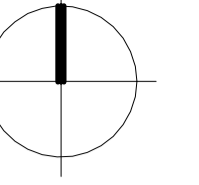
project
AVEO BAYVIEW GARDENS
 36-42 Cabbage Tree Rd, Bayview NSW
 2104

drawing
COVER SHEET

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YA	MB	@ A1	OCT 2022
project no.	drawing no.	issue	
22043	DA-000	3	

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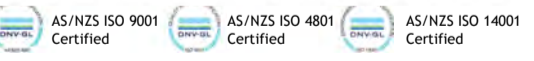
1 Site Survey Plan
SCALE: 1:500 @ A1

3	30/09/2024	FOR DA	YA
2	24/07/24	PRE DA	YA
1	05/07/24	PRE DA	YA

rev	date	issue	drawn
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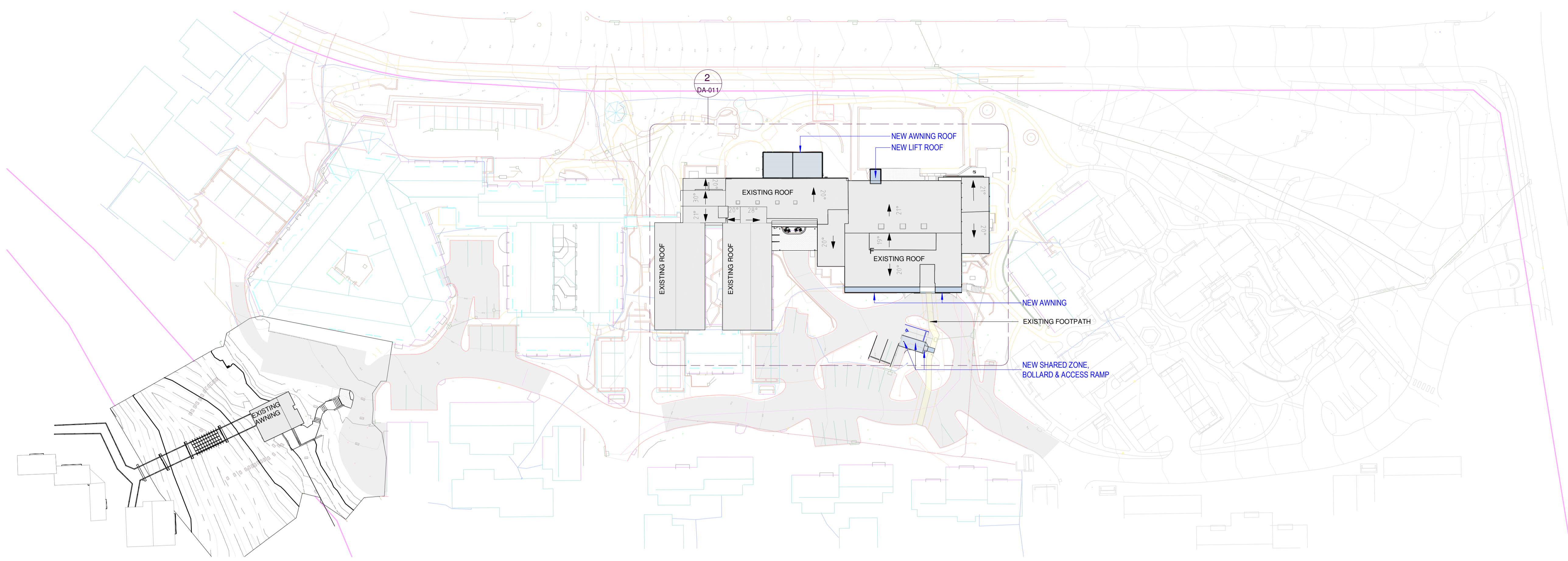
drawing

SURVEY PLAN

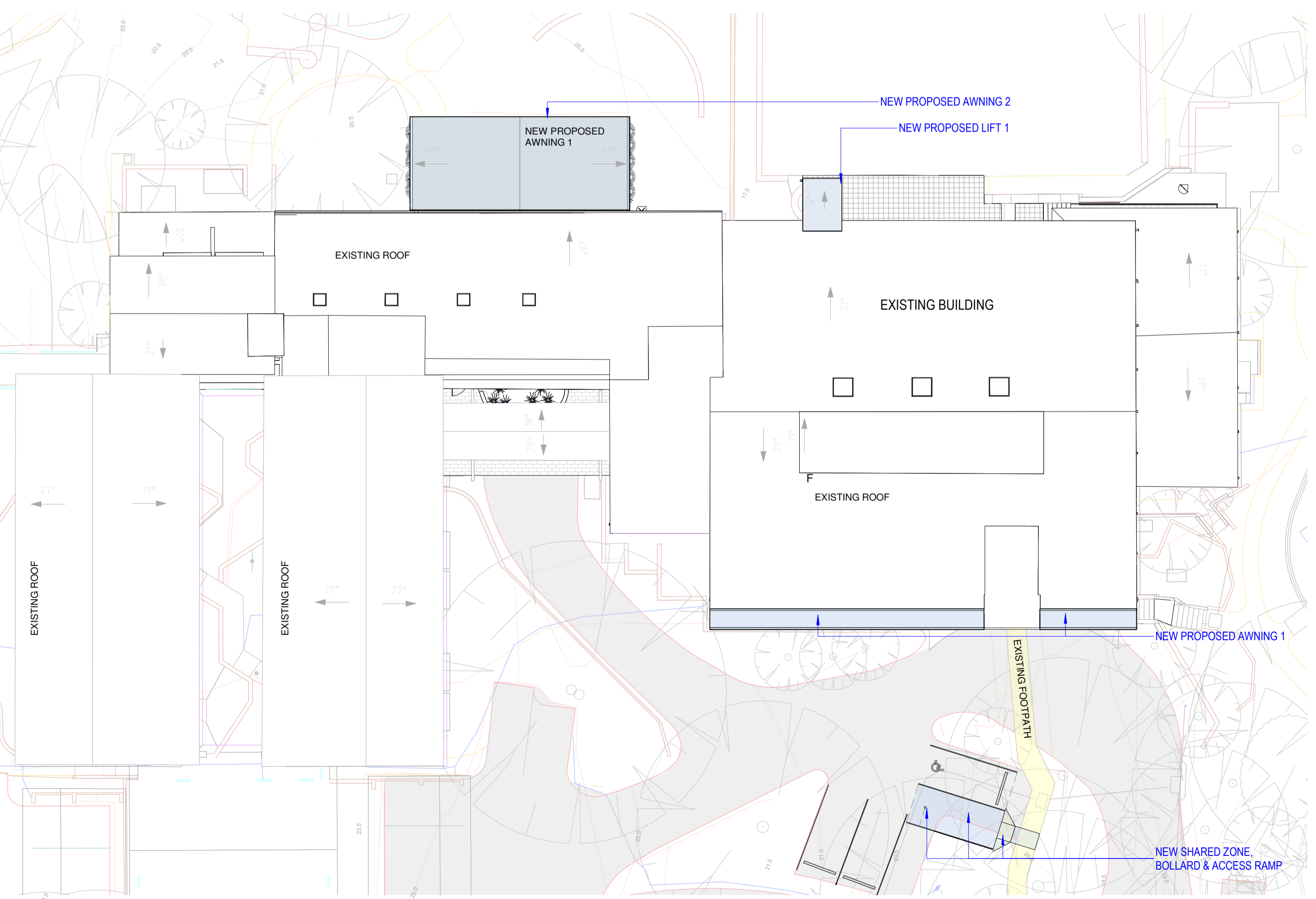
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project no.	drawing no.	issue	
22043	DA-010	3	

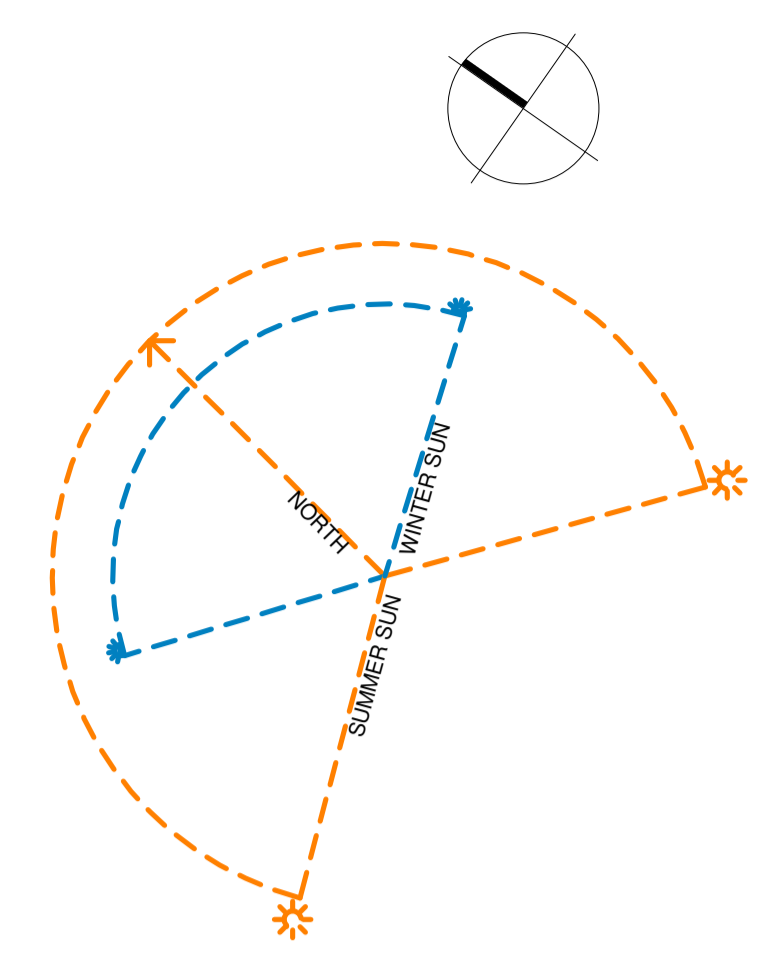
FOR DA



1 Roof Plan - Proposed
SCALE: 1:500 @ A1



2 Roof Plan - Proposed Outdoor Awnings & Lift
DA-011 SCALE: 1:200 @ A1



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- EXISTING WALL TO REMAIN. ALLOW TO MAKE GOOD IN PREPARATION FOR NEW FINISHES.
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- PROPOSED ALTERATION / ADDITION

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 3. PROPOSED FOOTPATH PAVINGS & AWNING.
 4. PROPOSED EXTERNAL BALUSTRADES.
 5. PROPOSED EXTERNAL BBQ.
 6. PROPOSED BALCONY FINISHES.
 7. PROPOSED EXTERNAL STAIRS & BALUSTARDES.

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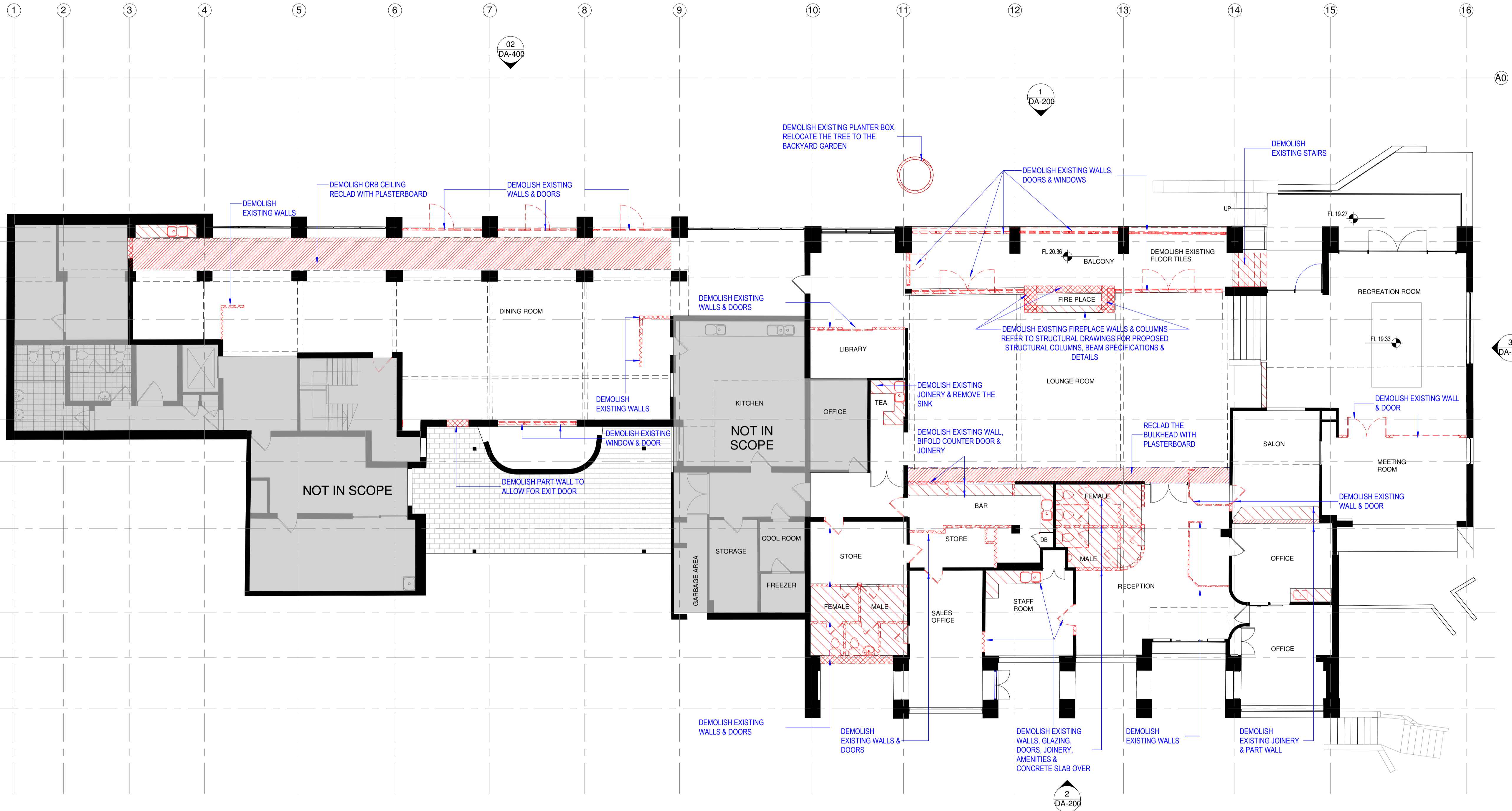
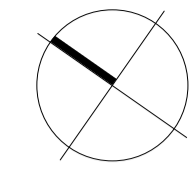
project
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SITE & ROOF PLAN - PROPOSED

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YA	YA	As indicated @ A1	OCT 2022
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rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
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1
A-402
Ground Level - Demolition
SCALE: 1 : 100 @ A1

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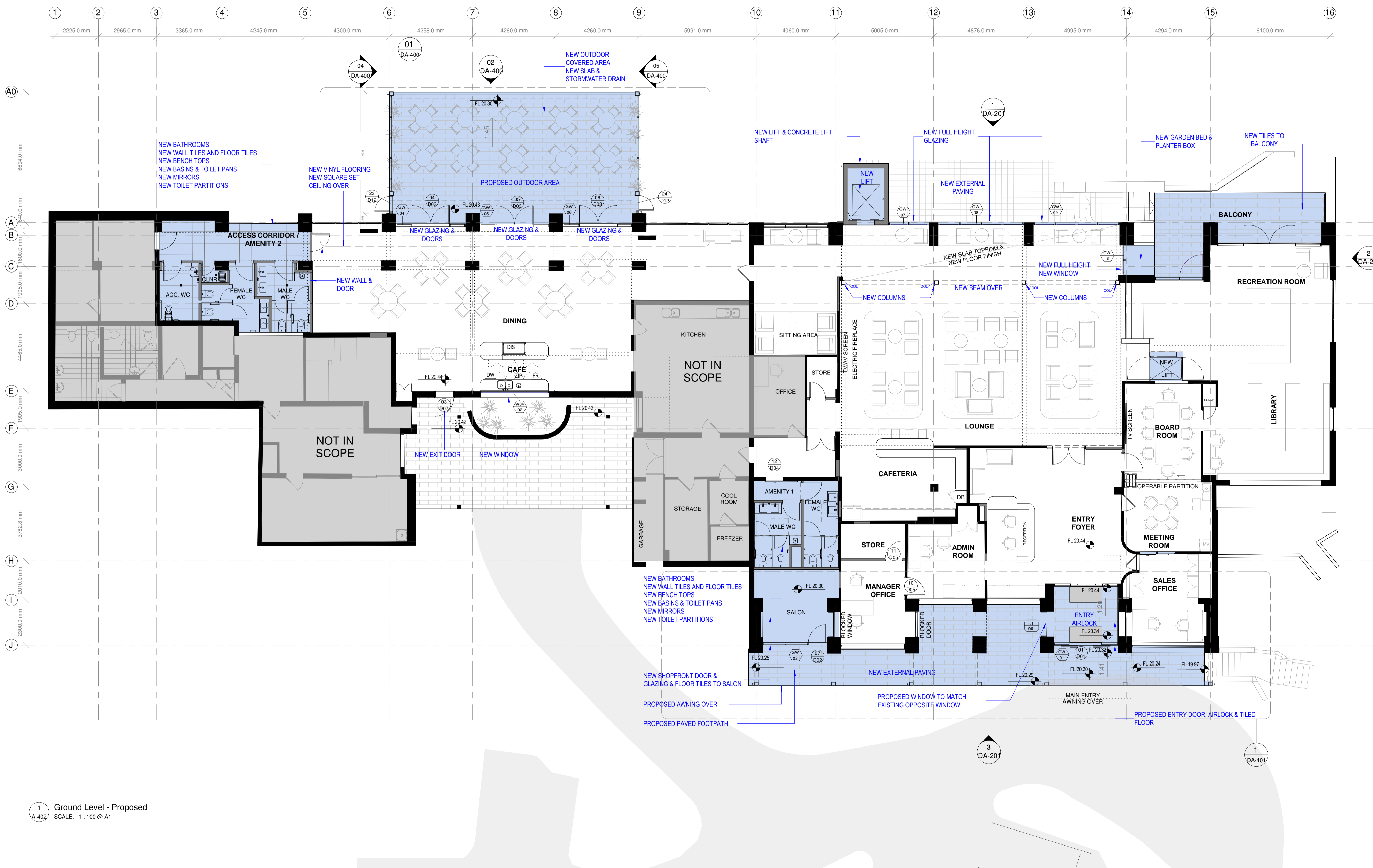
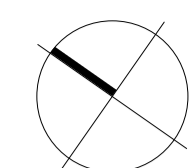
GROUND FLOOR - DEMOLITION PLAN

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project no.	drawing no.	issue
22043	DA-100	3

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PARTITION / DEMOLITION LEGEND

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- NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
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rev	date	issue	drawn
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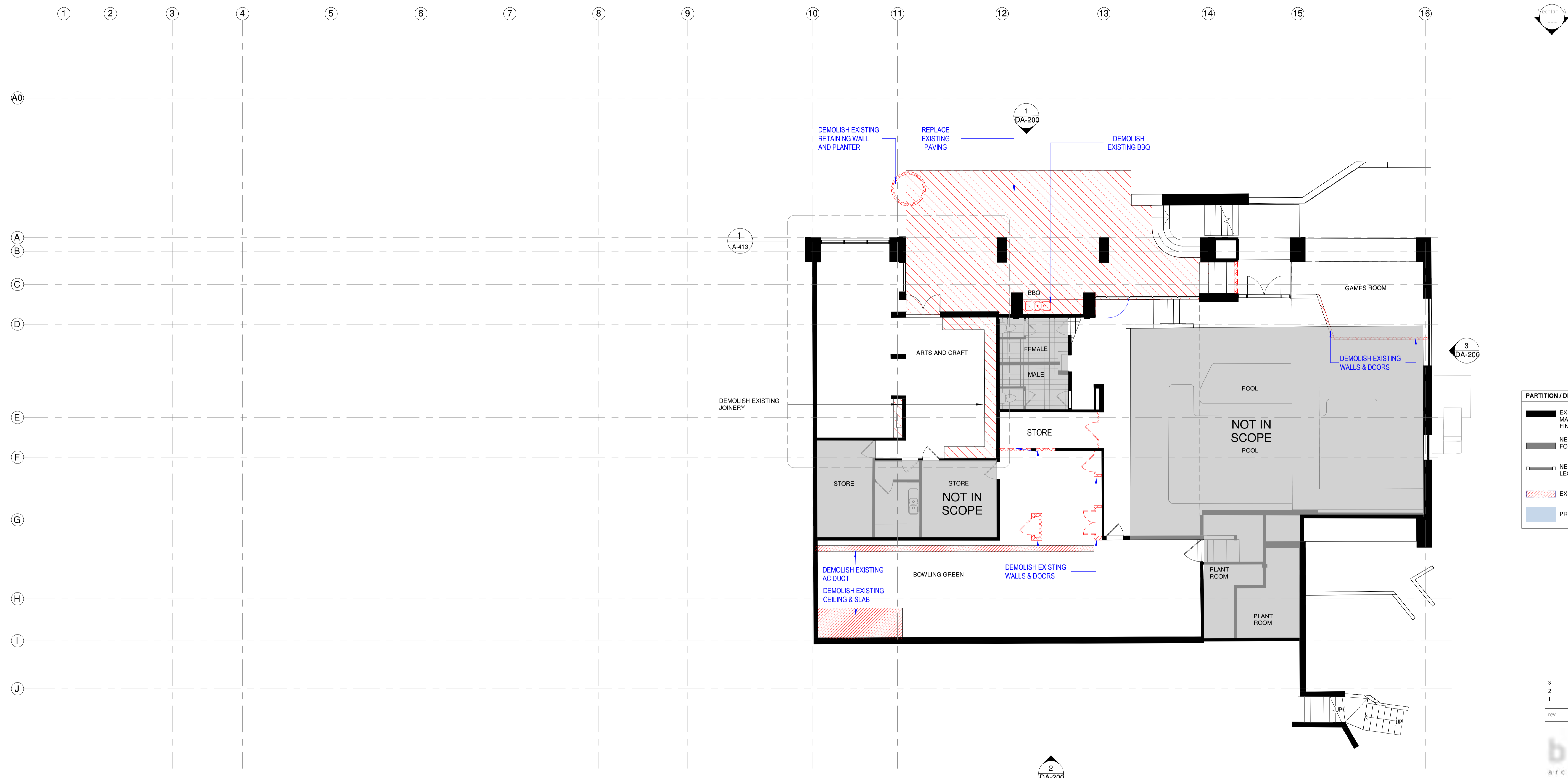
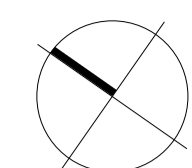
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GROUND FLOOR - PROPOSED PLAN
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1 Ground Level - Proposed
 SCALE: 1:100 @ A1

FOR DA



PARTITION / DEMOLITION LEGEND

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- NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
- EXISTING WALL TO BE DEMOLISHED.
- PROPOSED ALTERATION / ADDITION

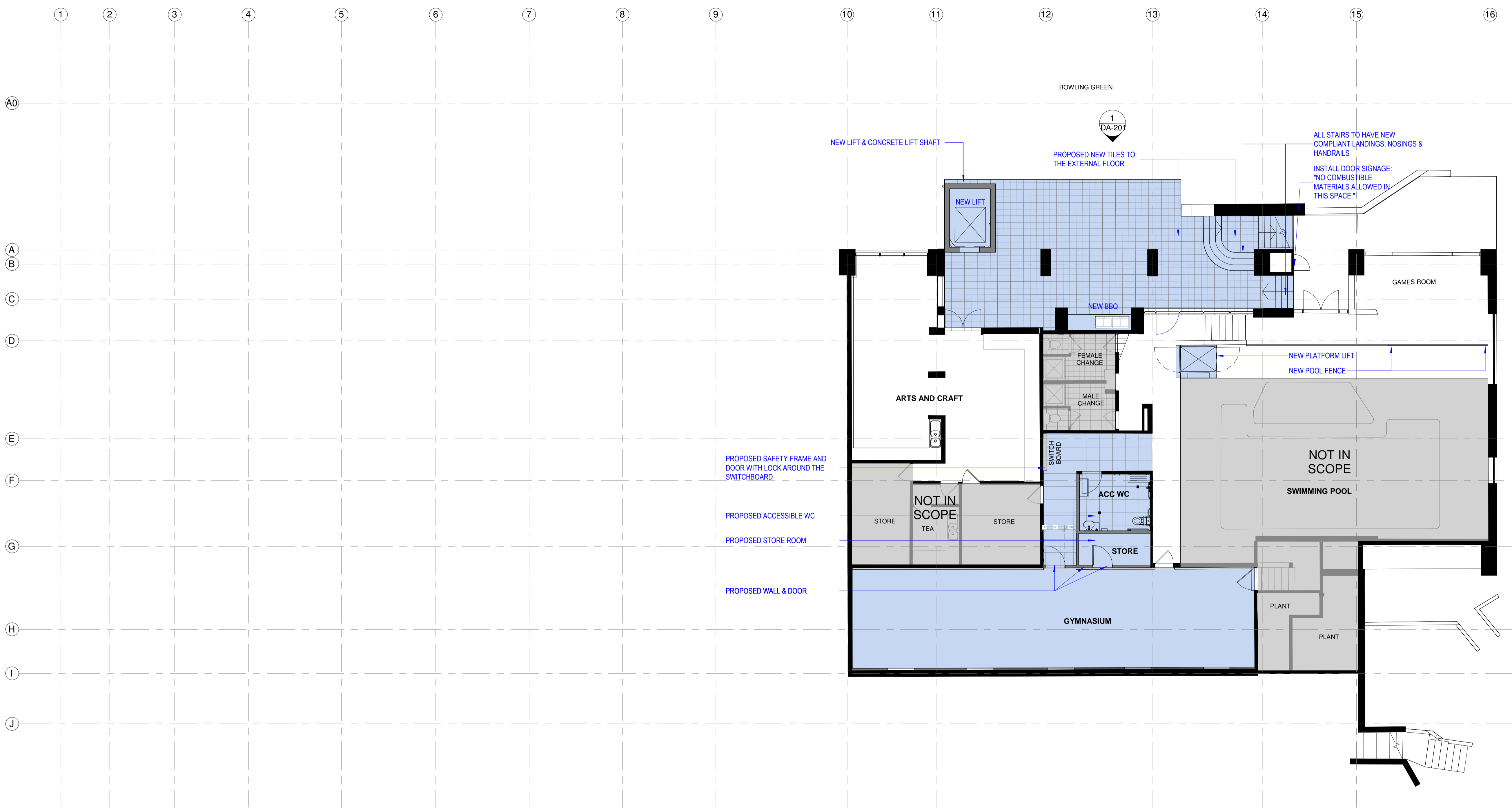
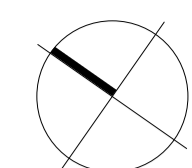
rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
2	24/07/24	PRE DA	YA
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**LOWER GROUND FLOOR -
 DEMOLITION PLAN**
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 drawn checked scale project
 AuthorChecker 1 : 100 @ A1 OCT 2022
 project no. drawing no. issue
 22043 DA-102 3

1 Lower Ground Level - Demolition
 A-409 SCALE: 1 : 100 @ A1

FOR DA



PARTITION / DEMOLITION LEGEND

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- NEW WALL REFER TO PARTITION LEGEND FOR SPECIFICATIONS.
- NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
- EXISTING WALL TO BE DEMOLISHED.
- PROPOSED ALTERATION / ADDITION

3	30/09/2024	FOR DA	YA
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drawing
**LOWER GROUND FLOOR -
 PROPOSED PLAN**

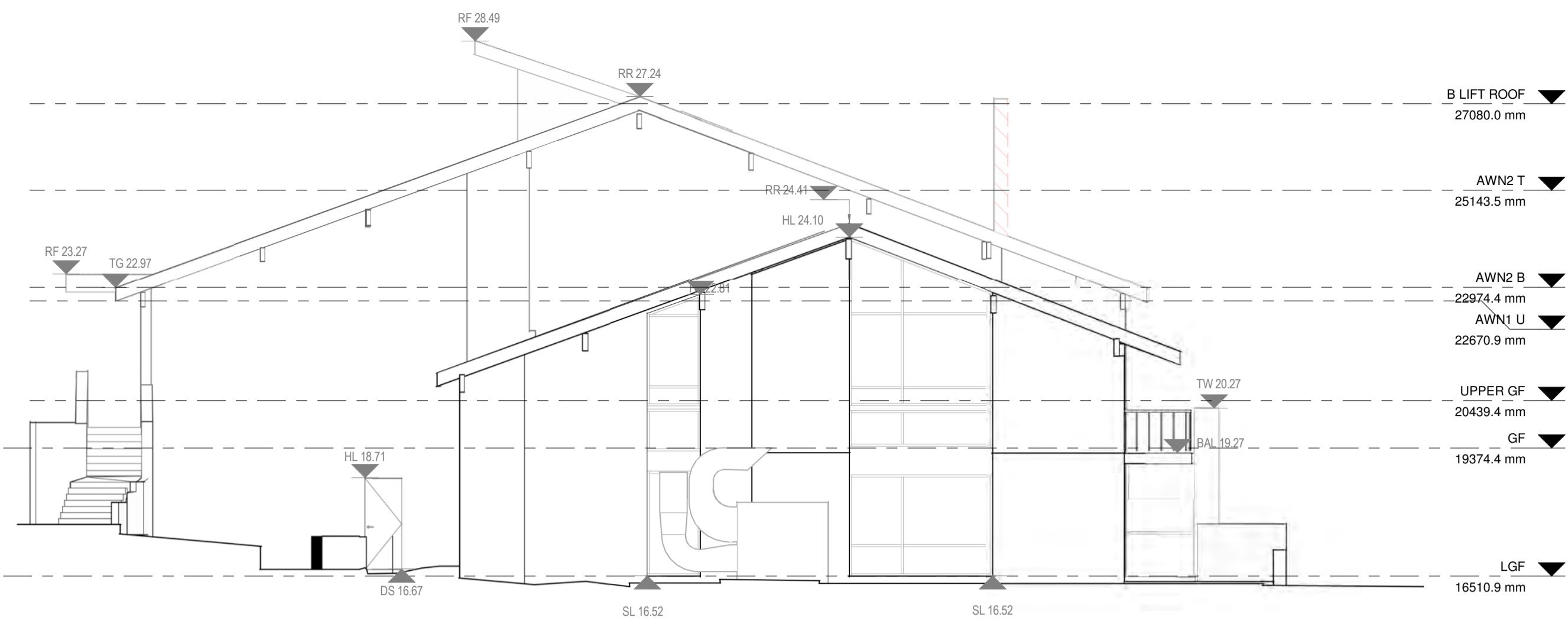
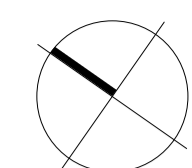
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Author/Checker	1 : 100 @ A1	OCT 2022	
project no.	drawing no.	issue	
22043	DA-103	3	

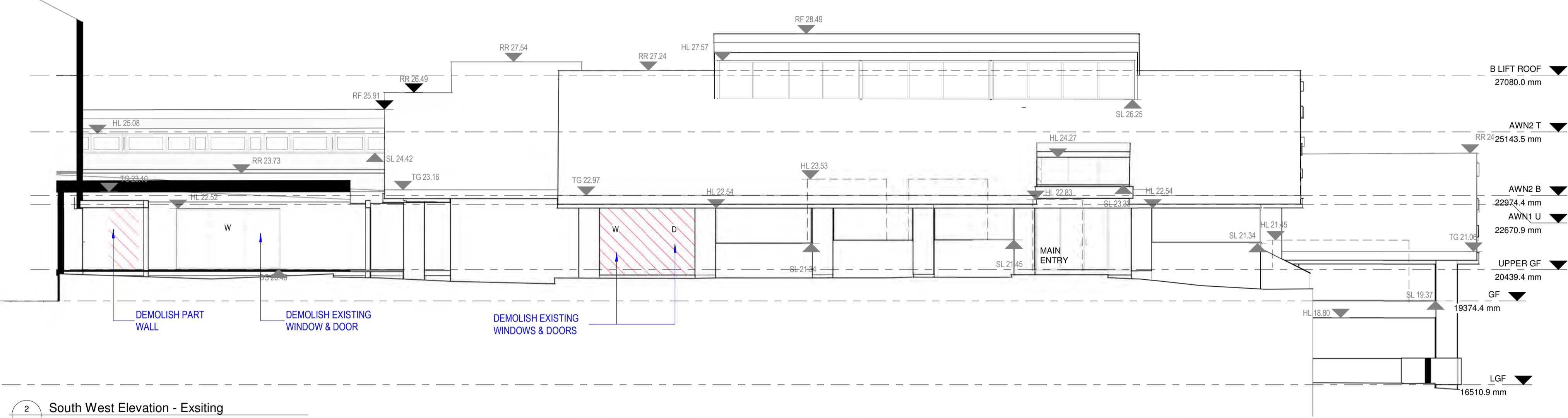
1 Lower Ground Level - Proposed
 A-409 SCALE: 1:100 @ A1

3 DA-201

FOR DA



3 South East Elevation - Existing
A-104 SCALE: 1:100 @ A1

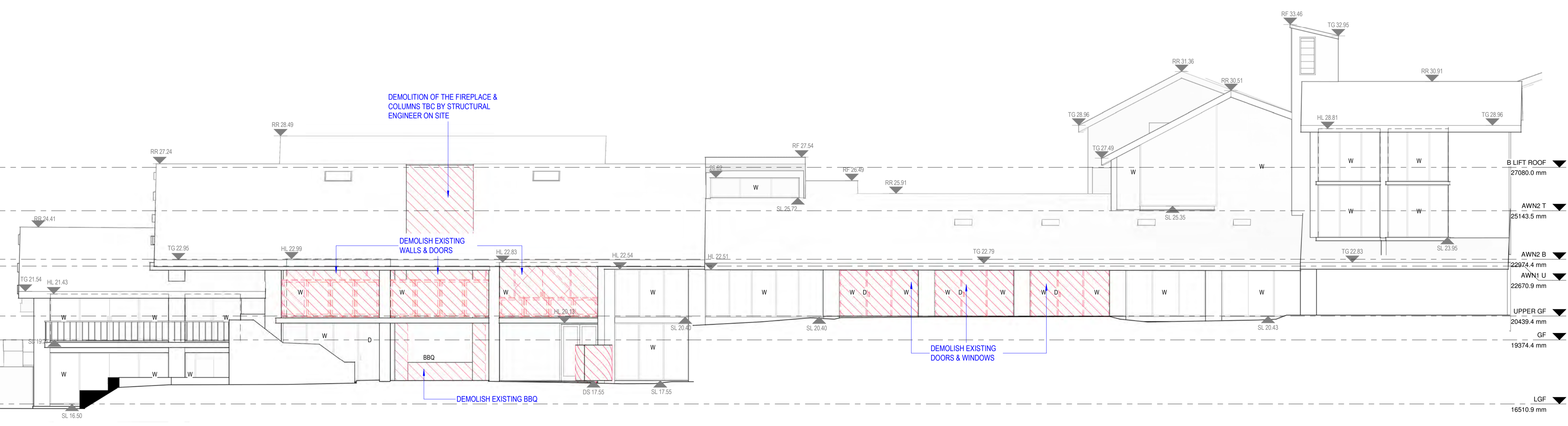


2 South West Elevation - Existing
A-105 SCALE: 1:100 @ A1

Legend

- AWN = AWNING
- BAL = BALCONY
- CHI = CHIMNEY
- CON = CONCRETE
- DK = DECK
- DS = DOOR SILL LEVEL
- EB = EDGE OF BITUMEN
- FCE = FENCE
- FL = FLOOR LEVEL
- GL = GROUND LINE
- NS = NATURAL SURFACE
- PAR = PARAPET
- PAT = PATIO
- RF = TOP OF ROOF
- RR = ROOF RIDGE
- SL = WINDOW SILL LEVEL
- TG = TOP OF GUTTER
- TW = TOP OF WALL
- VER = VERANDAH
- W = WINDOW
- D = DOOR
- O = OPENING

PARTITION / DEMOLITION LEGEND	
	EXISTING WALL TO REMAIN. ALLOW TO MAKE GOOD IN PREPARATION FOR NEW FINISHES.
	NEW WALL REFER TO PARTITION LEGEND FOR SPECIFICATIONS.
	NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
	EXISTING WALL TO BE DEMOLISHED.
	PROPOSED ALTERATION / ADDITION



1 North East Elevation - Existing
A-102 SCALE: 1:100 @ A1

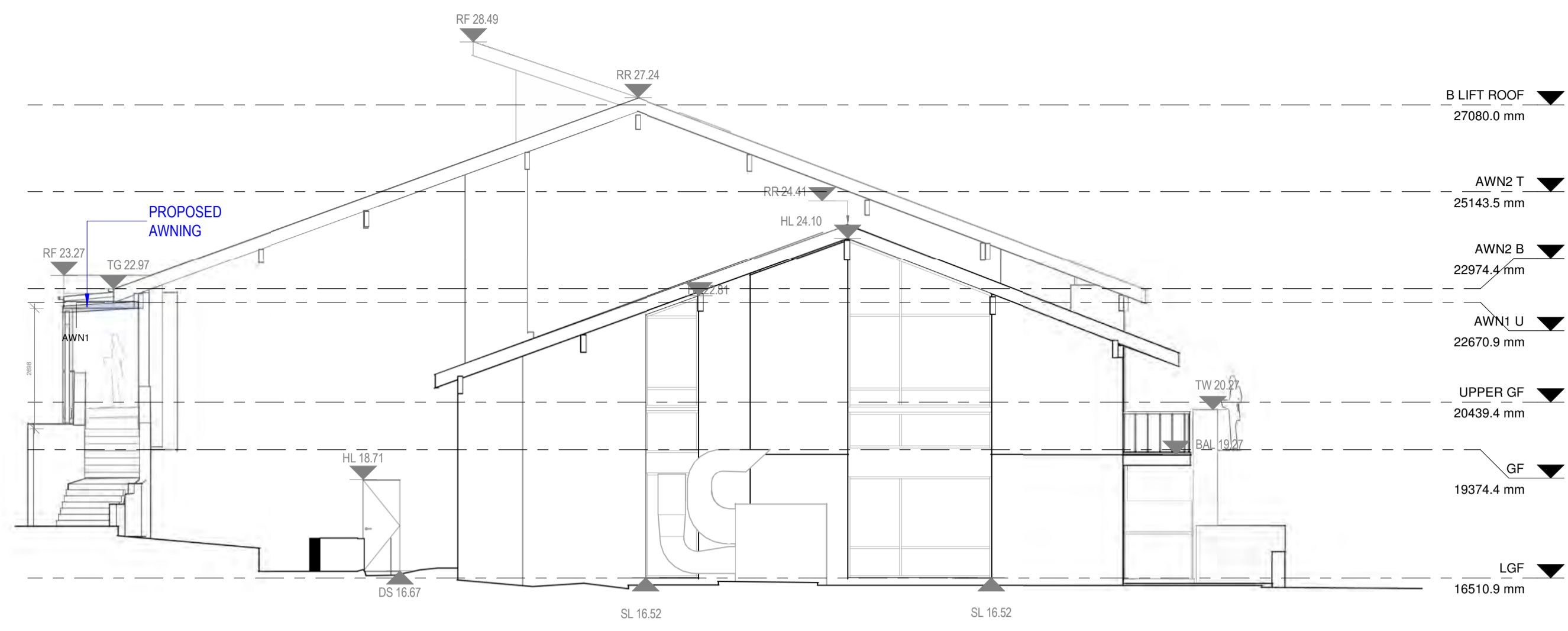
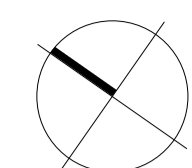
rev	date	issue	drawn
3	30/09/2024	FOR DA	YA
2	24/07/24	PRE DA	YA
1	05/07/24	PRE DA	YA

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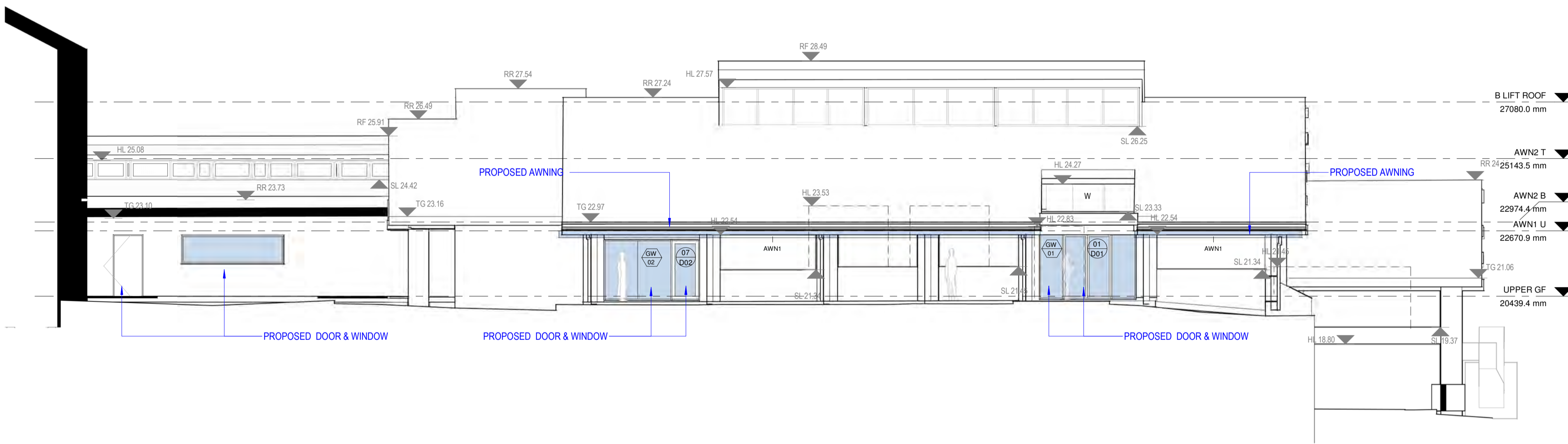
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project
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ELEVATIONS - EXISTING			
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drawn	checked	scale	project
RZ	KK	1:100 @ A1	OCT 2022
project no.	drawing no.	issue	
22043	DA-200	3	

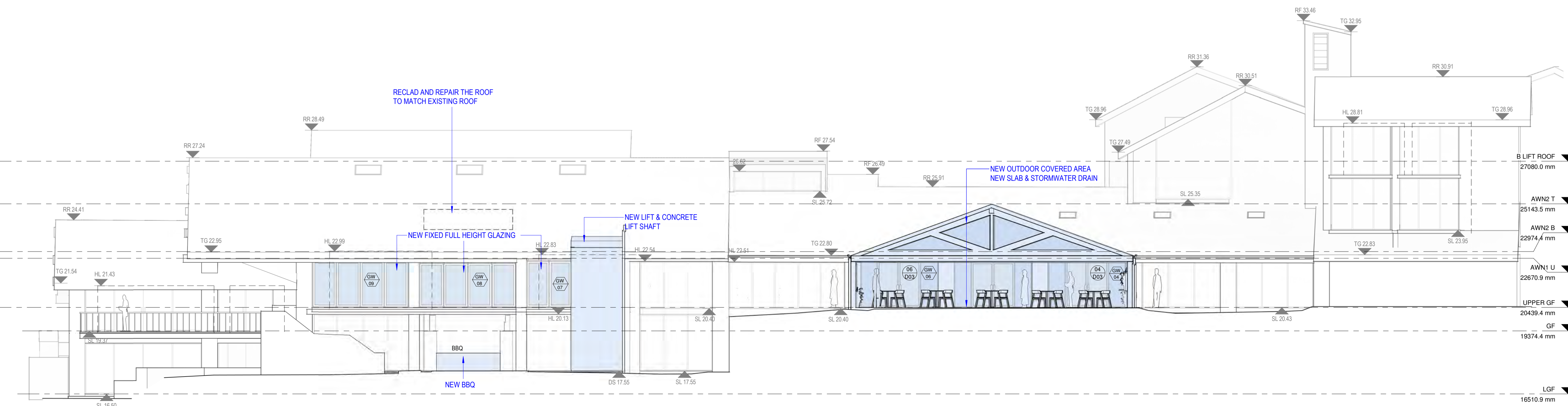
FOR DA



2 South East Elevation - Proposed
A-104 SCALE: 1 : 100 @ A1



3 South West Elevation - Proposed
A-104 SCALE: 1 : 100 @ A1



1 North East Elevation - Proposed
A-104 SCALE: 1 : 100 @ A1

Legend

- AWN = AWNING
- BAL = BALCONY
- CHI = CHIMNEY
- CON = CONCRETE
- DK = DECK
- DS = DOOR SILL LEVEL
- EB = EDGE OF BITUMEN
- FCE = FENCE
- FL = FLOOR LEVEL
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- D = DOOR
- O = OPENING

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- NEW WALL REFER TO PARTITION LEGEND FOR SPECIFICATIONS.
- NEW GLAZING REFER TO PARTITION LEGEND FOR SPECIFICATION.
- EXISTING WALL TO BE DEMOLISHED.
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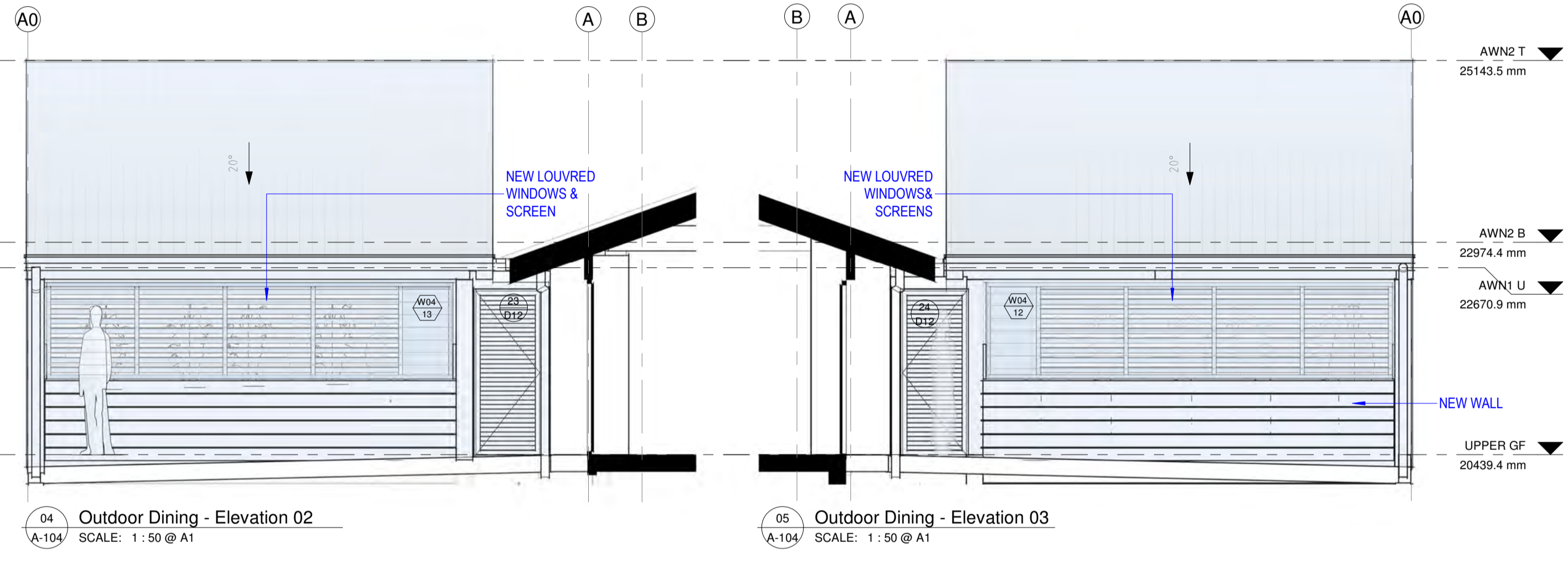
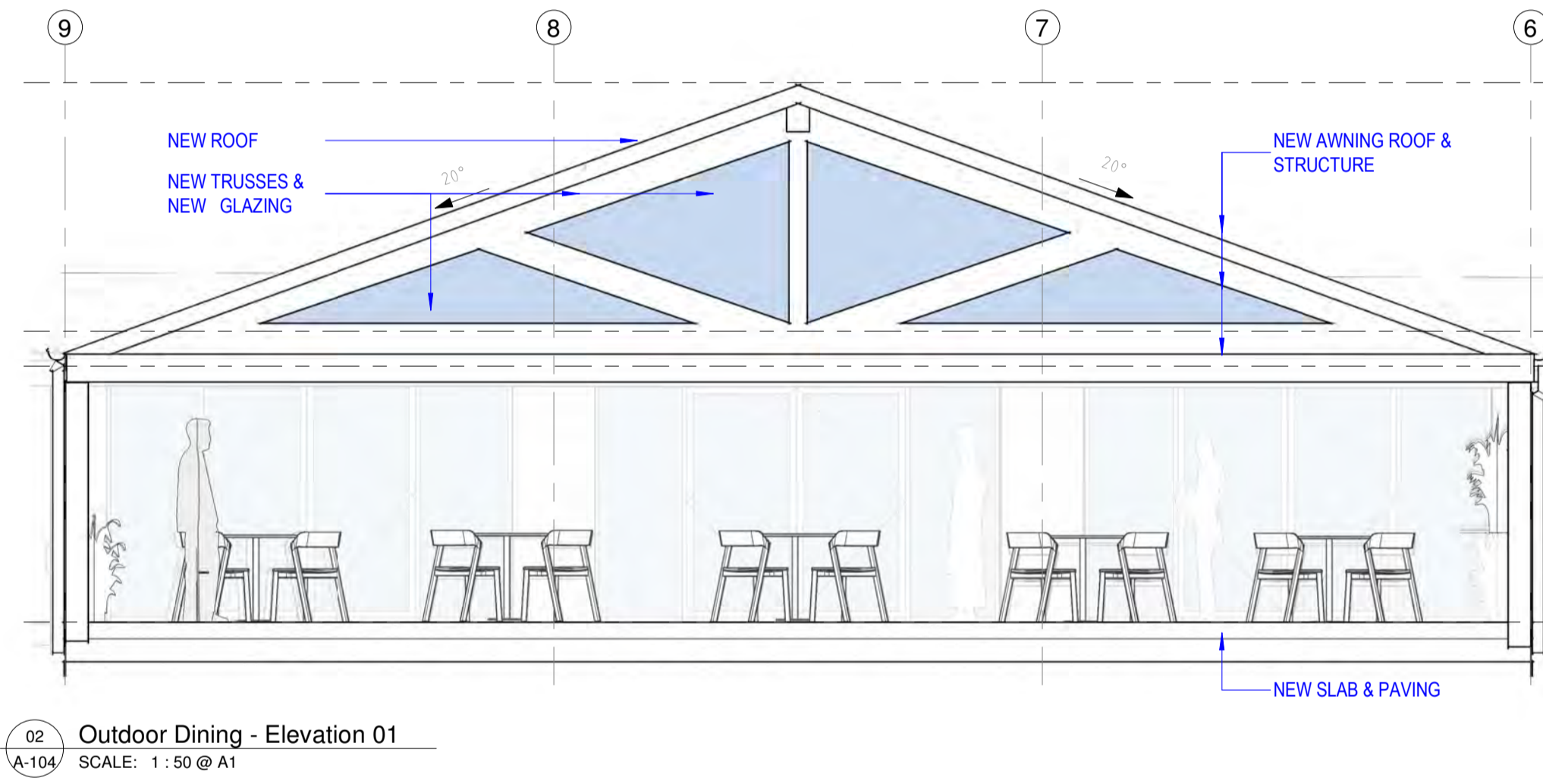
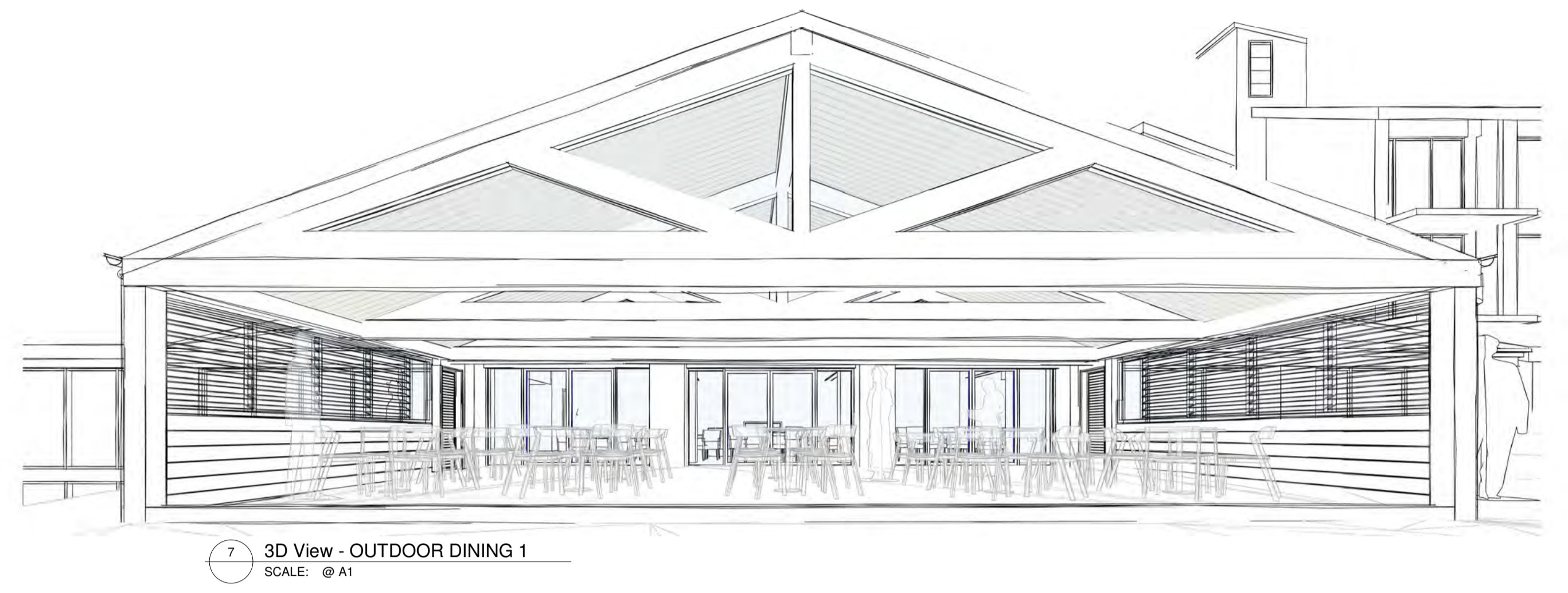
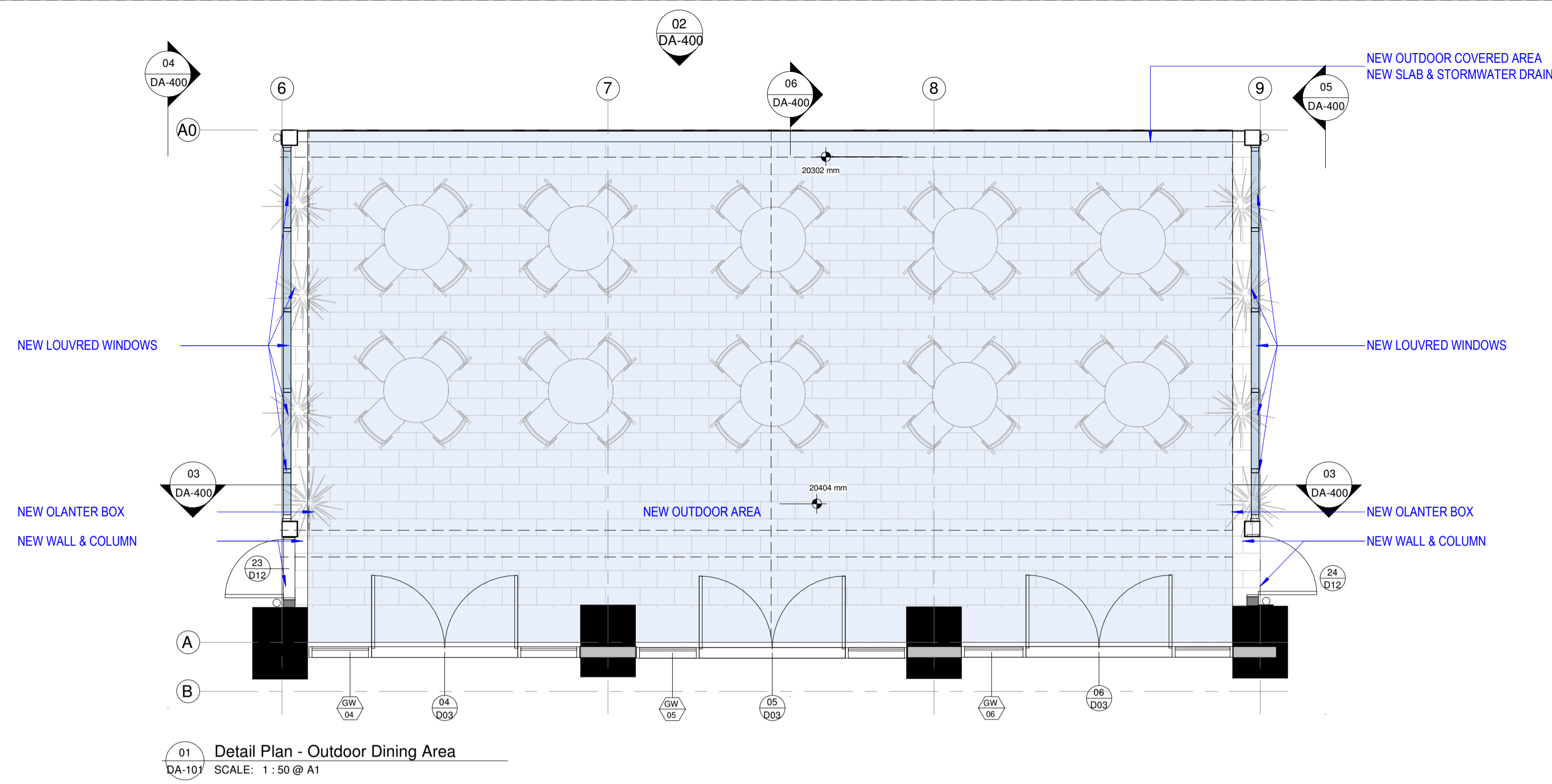
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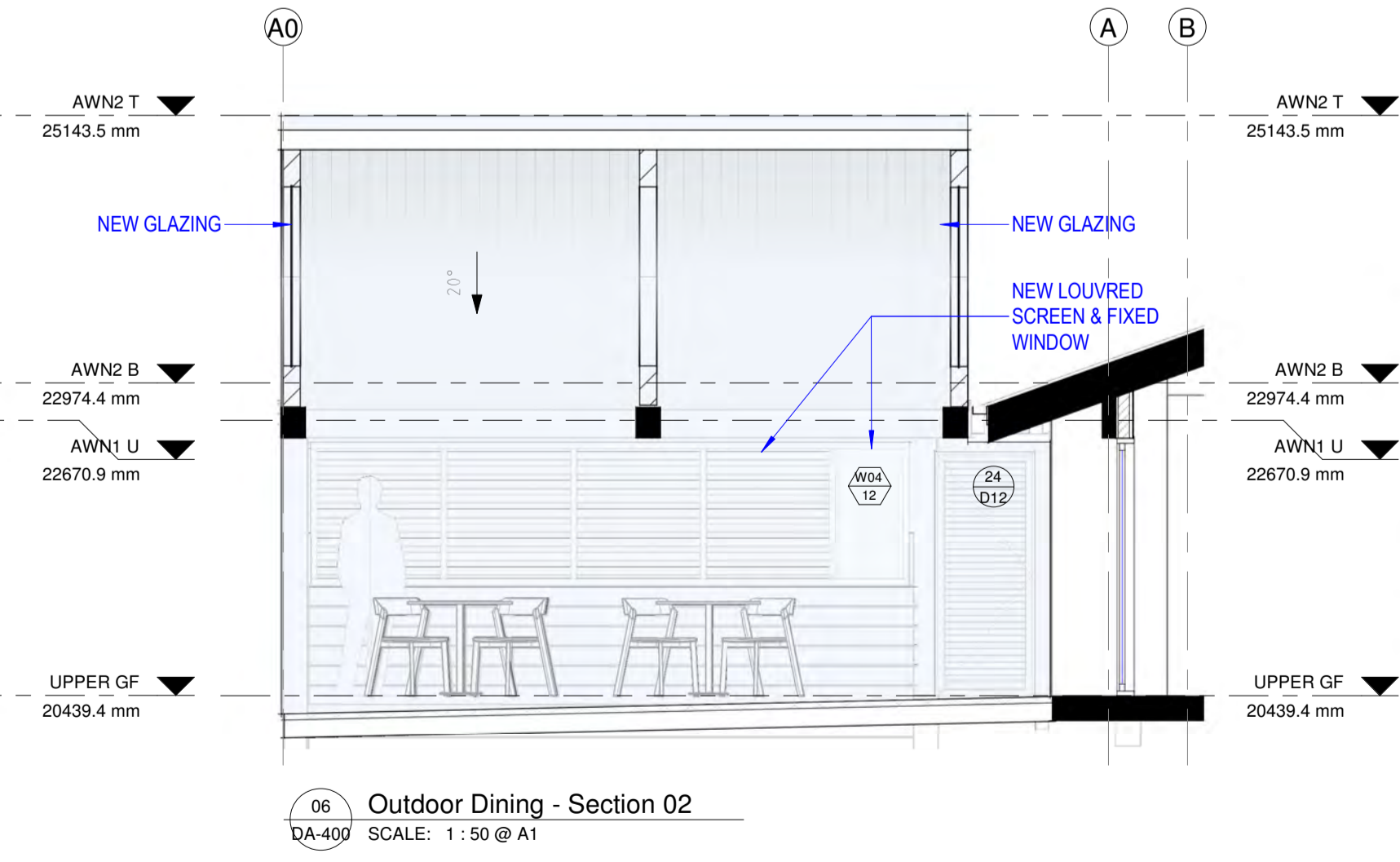
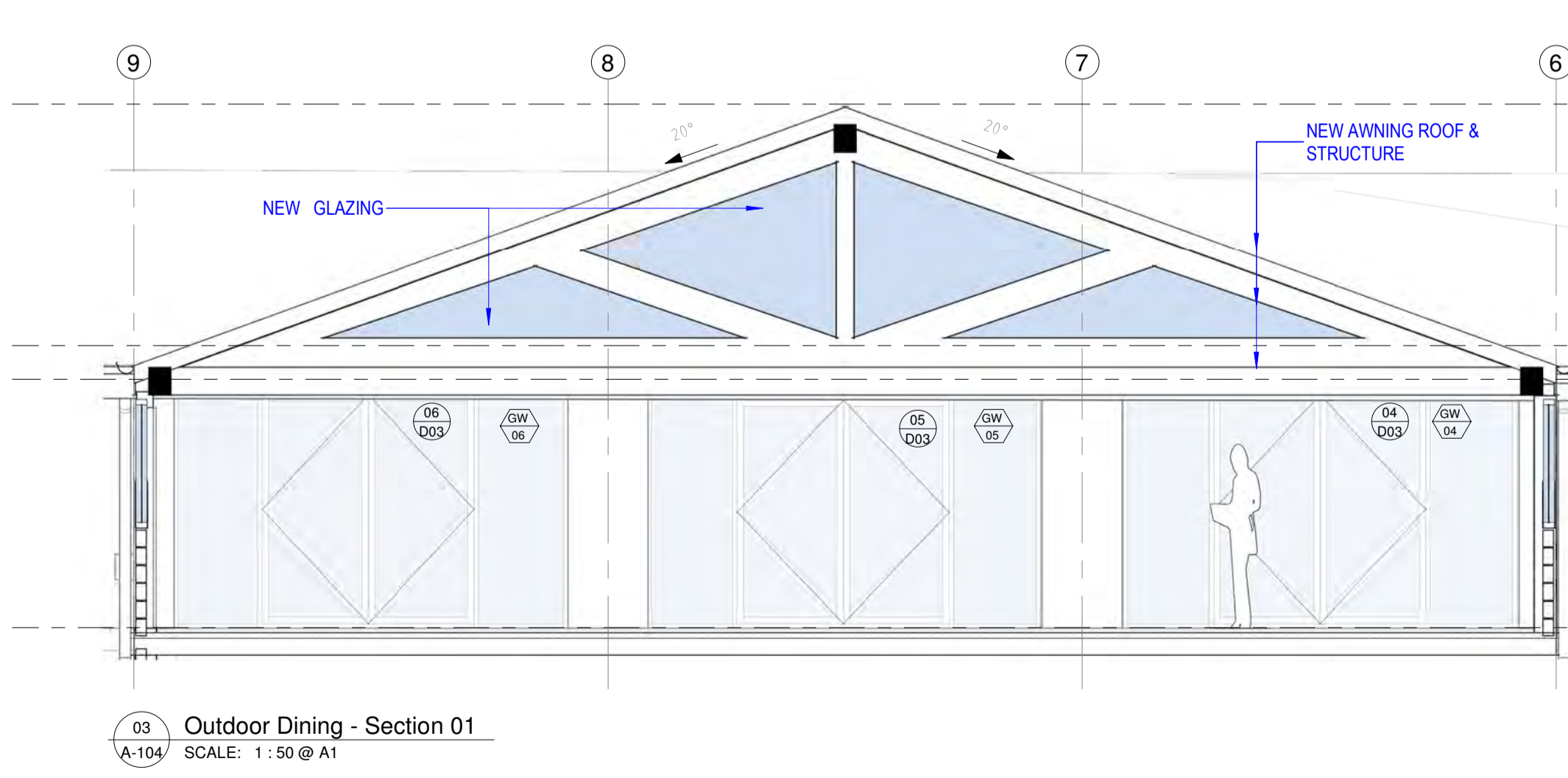
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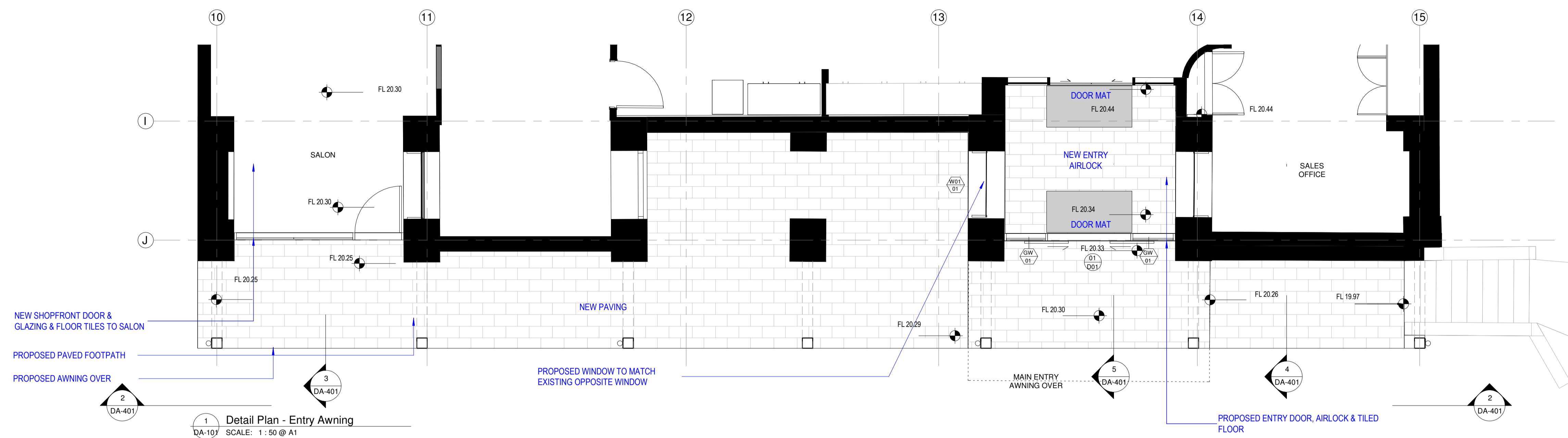
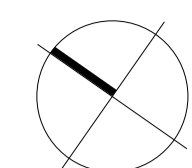


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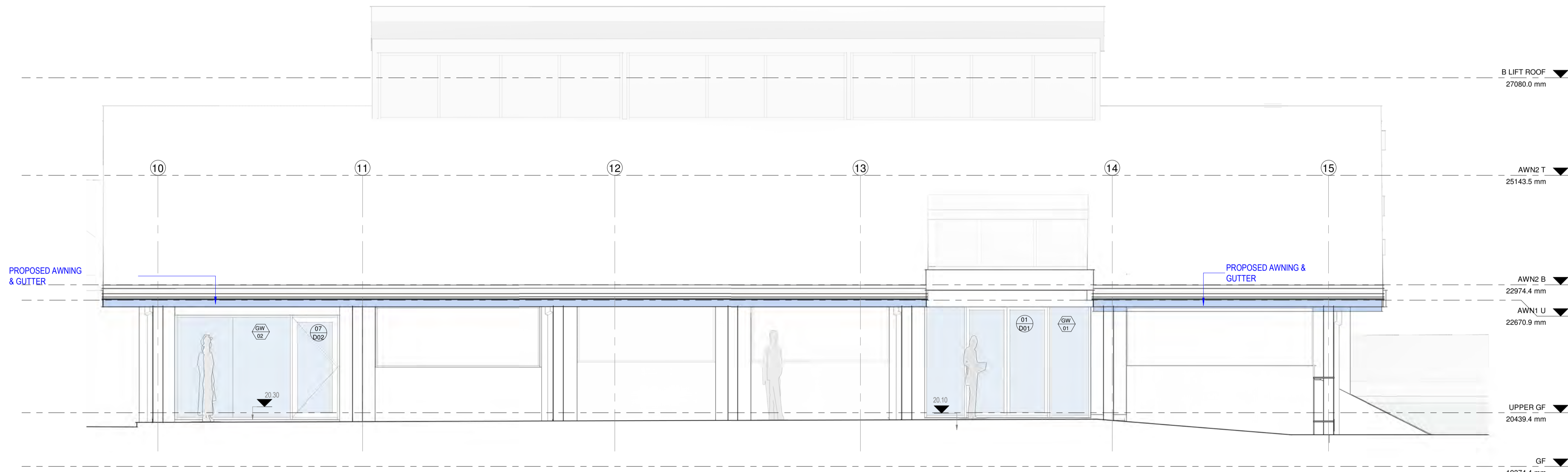
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1 Detail Plan - Entry Awning
DA-107 SCALE: 1:50 @ A1



2 Entry Awning - Elevation 01
A-104 SCALE: 1:50 @ A1

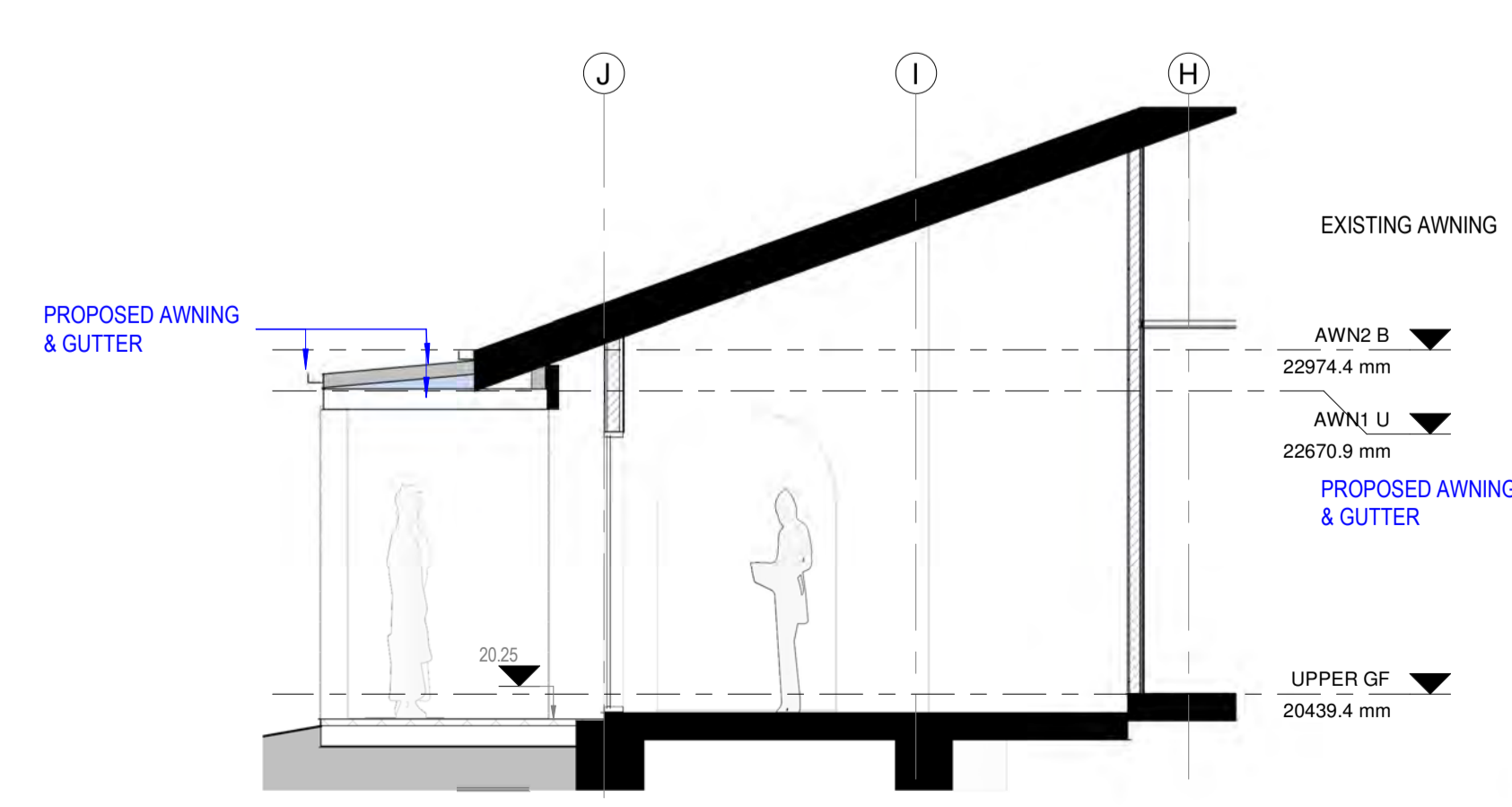
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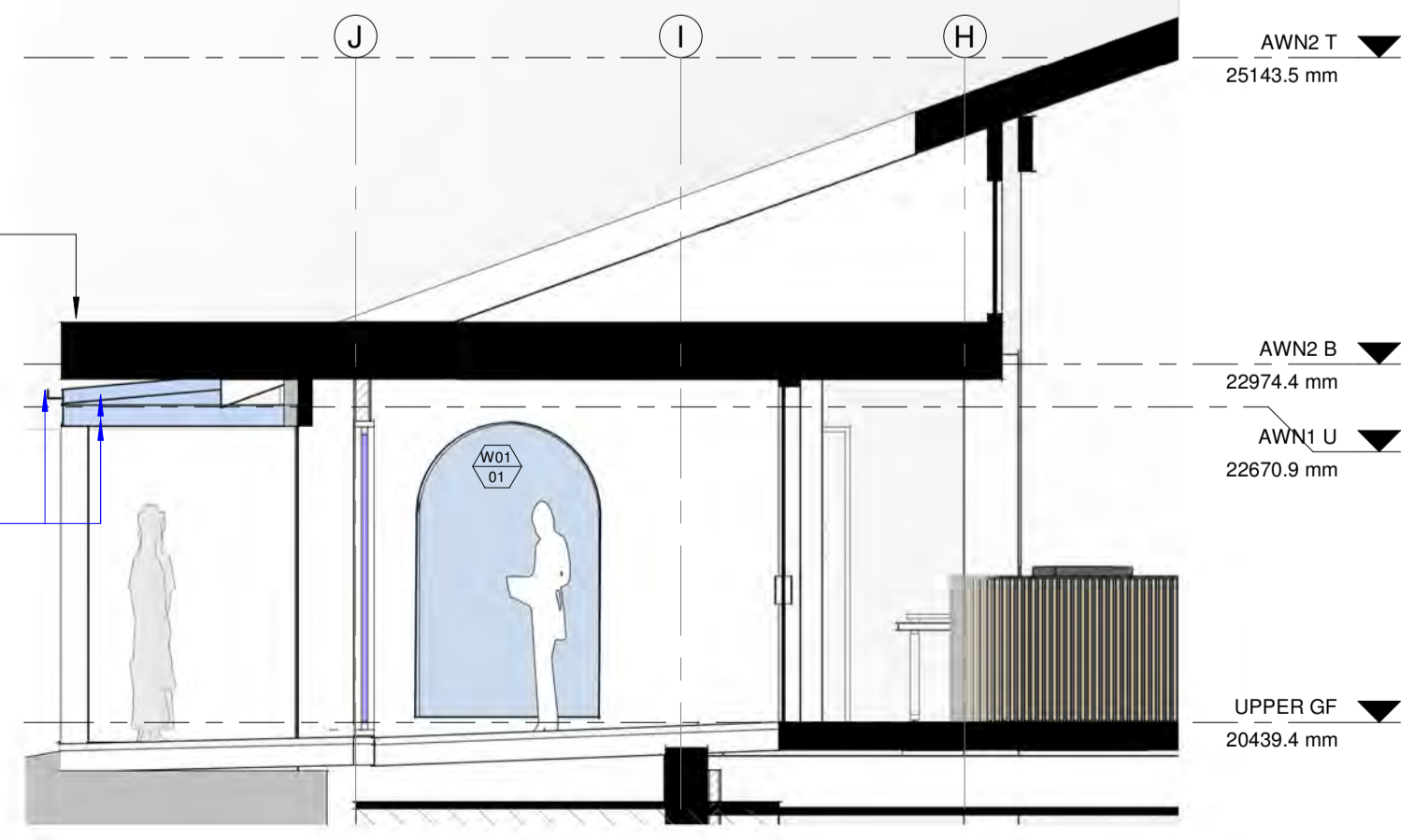
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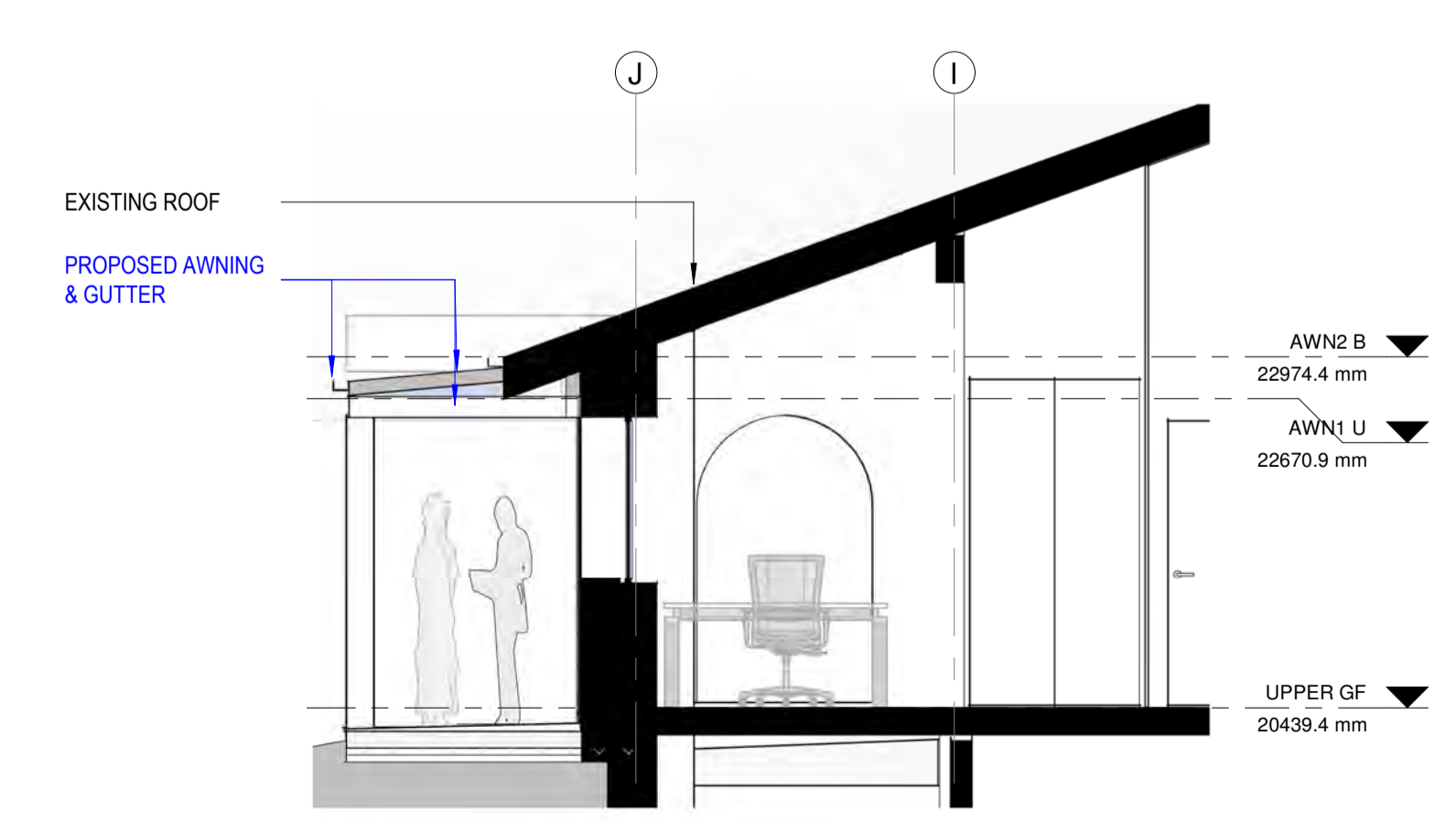
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3 Entry Awning Detail Section - 01
DA-401 SCALE: 1:50 @ A1







5 Entry Awning Detail Section - 02
DA-401 SCALE: 1:50 @ A1



4 Entry Awning Detail Section - 03
DA-401 SCALE: 1:50 @ A1




FOR DA

Appendix B – BioNet and PMST Results

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm status	Records	Info
Plantae	Flora	Elaeocarpaceae	6205	<i>Tetratheca glandulosa</i>			V		8	
Plantae	Flora	Euphorbiaceae	9851	<i>Chamaesyce psammogeton</i>		Sand Spurge	E1		9	
Plantae	Flora	Grammitidaceae	9471	^^ <i>Grammitis stenophylla</i>		Narrow-leaf Finger Fern	E1,3		1	
Plantae	Flora	Lamiaceae	3404	<i>Prostanthera densa</i>		Villous Mint-bush	V	V	1	
Plantae	Flora	Malvaceae	6140	<i>Lasiopetalum joyceae</i>			V	V	2	
Plantae	Flora	Myrtaceae	4007	^^ <i>Callistemon linearifolius</i>		Netted Bottle Brush	V,3		2	
Plantae	Flora	Myrtaceae	4067	<i>Eucalyptus camfieldii</i>		Camfield's Stringybark	V	V	1	
Plantae	Flora	Myrtaceae	4134	<i>Eucalyptus nicholii</i>		Narrow-leaved Black Peppermint	V	V	3	
Plantae	Flora	Myrtaceae	4212	<i>Kunzea rupestris</i>			V	V	1	
Plantae	Flora	Myrtaceae	4248	<i>Melaleuca deanei</i>		Deane's Paperbark	V	V	1	
Plantae	Flora	Myrtaceae	4283	<i>Rhodamnia rubescens</i>		Scrub Turpentine	E4A	CE	28	
Plantae	Flora	Myrtaceae	4293	<i>Syzygium paniculatum</i>		Magenta Lilly Pilly	E1	V	11	
Plantae	Flora	Orchidaceae	4464	^ <i>Genoplesium baueri</i>		Bauer's Midge Orchid	E1,P,2	E	1	
Plantae	Flora	Orchidaceae	9616	^ <i>Microtis angusii</i>		Angus's Onion Orchid	E1,P,2	E	73	
Plantae	Flora	Proteaceae	5365	^^ <i>Grevillea caleyi</i>		Caley's Grevillea	E4A,3	CE	225	
Plantae	Flora	Proteaceae	9680	<i>Macadamia integrifolia</i>		Macadamia Nut		V	5	
Plantae	Flora	Thymelaeaceae	6965	<i>Pimelea curviflora</i> var. <i>curviflora</i>			V	V	1	

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm status	Records	Info
Animalia	Amphibia	Myobatrachidae	3116	<i>Pseudophryne australis</i>		Red-crowned Toadlet	V,P		93	
Animalia	Amphibia	Limnodynastidae	3042	<i>Heleioporus australiacus</i>		Giant Burrowing Frog	V,P	V	28	
Animalia	Reptilia	Cheloniidae	2004	<i>Caretta caretta</i>		Loggerhead Turtle	E1,P	E	10	
Animalia	Reptilia	Cheloniidae	2007	<i>Chelonia mydas</i>		Green Turtle	V,P	V	15	
Animalia	Reptilia	Cheloniidae	2008	<i>Eretmochelys imbricata</i>		Hawksbill Turtle	P	V	1	
Animalia	Reptilia	Dermochelyidae	2013	<i>Dermochelys coriacea</i>		Leatherback Turtle	E1,P	E	6	
Animalia	Reptilia	Varanidae	2287	<i>Varanus rosenbergi</i>		Rosenberg's Goanna	V,P		34	
Animalia	Aves	Anatidae	0214	<i>Stictonetta naevosa</i>		Freckled Duck	V,P		1	
Animalia	Aves	Columbidae	0021	<i>Ptilinopus regina</i>		Rose-crowned Fruit-Dove	V,P		4	
Animalia	Aves	Columbidae	0023	<i>Ptilinopus superbus</i>		Superb Fruit-Dove	V,P		6	
Animalia	Aves	Apodidae	0334	<i>Hirundapus caudacutus</i>		White-throated Needletail	V,P	V,C,J,K	5	
Animalia	Aves	Diomedidae	0091	<i>Thalassarche cauta</i>		Shy Albatross	E1,P	E	1	
Animalia	Aves	Procellariidae	0937	<i>Macronectes halli</i>		Northern Giant-Petrel	V,P	V	1	
Animalia	Aves	Ardeidae	0197	<i>Botaurus poiciloptilus</i>		Australasian Bittern	E1,P	E	2	
Animalia	Aves	Ardeidae	0196	<i>Ixobrychus flavicollis</i>		Black Bittern	V,P		10	
Animalia	Aves	Accipitridae	0226	<i>Haliaeetus leucogaster</i>		White-bellied Sea-Eagle	V,P		47	
Animalia	Aves	Accipitridae	0225	<i>Hieraetus morphnoides</i>		Little Eagle	V,P		6	
Animalia	Aves	Accipitridae	0230	^^ <i>Lophoictinia isura</i>		Square-tailed Kite	V,P,3		6	
Animalia	Aves	Accipitridae	8739	^^ <i>Pandion cristatus</i>		Eastern Osprey	V,P,3		30	
Animalia	Aves	Burhinidae	0174	<i>Burhinus grallarius</i>		Bush Stone-curlew	E1,P		37	
Animalia	Aves	Burhinidae	0175	<i>Esacus magnirostris</i>		Beach Stone-curlew	E4A,P		1	
Animalia	Aves	Haematopodidae	0131	<i>Haematopus fuliginosus</i>		Sooty Oystercatcher	V,P		9	
Animalia	Aves	Rostratulidae	0170	<i>Rostratula australis</i>		Australian Painted Snipe	E1,P	E	3	
Animalia	Aves	Scolopacidae	0168	<i>Gallinago hardwickii</i>		Latham's Snipe	V,P	V,J,K	1	
Animalia	Aves	Scolopacidae	0149	<i>Numenius madagascariensis</i>		Eastern Curlew	P	CE,C,J,K	4	
Animalia	Aves	Scolopacidae	0160	<i>Xenus cinereus</i>		Terek Sandpiper	V,P	V,C,J,K	2	
Animalia	Aves	Laridae	0120	<i>Onychoprion fuscata</i>		Sooty Tern	V,P		1	
Animalia	Aves	Cacatuidae	0268	^^ <i>Callocephalon fimbriatum</i>		Gang-gang Cockatoo	E1,P,3	E	2	

Animalia	Aves	Cacatuidae	8862	<i>^Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	V,P,2	V	61	
Animalia	Aves	Psittacidae	0260	<i>Glossopsitta pusilla</i>	Little Lorikeet	V,P		7	
Animalia	Aves	Psittacidae	0309	<i>Lathamus discolor</i>	Swift Parrot	E1,P	CE	18	
Animalia	Aves	Psittacidae	0302	<i>^^Neophema pulchella</i>	Turquoise Parrot	V,P,3		1	
Animalia	Aves	Strigidae	0246	<i>^^Ninox connivens</i>	Barking Owl	V,P,3		20	
Animalia	Aves	Strigidae	0248	<i>^^Ninox strenua</i>	Powerful Owl	V,P,3		564	
Animalia	Aves	Tytonidae	0250	<i>^^Tyto novaehollandiae</i>	Masked Owl	V,P,3		3	
Animalia	Aves	Tytonidae	9924	<i>^^Tyto tenebricosa</i>	Sooty Owl	V,P,3		2	
Animalia	Aves	Meliphagidae	0603	<i>^Anthochaera phrygia</i>	Regent Honeyeater	E4A,P,2	CE	33	
Animalia	Aves	Meliphagidae	8303	<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater (eastern subspecies)	V,P		1	
Animalia	Aves	Neosittidae	0549	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V,P		3	
Animalia	Aves	Petroicidae	0380	<i>Petroica boodang</i>	Scarlet Robin	V,P		2	
Animalia	Mammalia	Dasyuridae	1008	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	5	
Animalia	Mammalia	Peramelidae	1710	<i>Isoodon obesulus obesulus</i>	Southern Brown Bandicoot (eastern)	E1,P	E	20	
Animalia	Mammalia	Phascolarctidae	1162	<i>Phascolarctos cinereus</i>	Koala	E1,P	E	3	
Animalia	Mammalia	Burramyidae	1150	<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		440	
Animalia	Mammalia	Petauridae	1137	<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		5	
Animalia	Mammalia	Pteropodidae	1280	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	181	
Animalia	Mammalia	Emballonuridae	1321	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V,P		1	
Animalia	Mammalia	Molossidae	1329	<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	V,P		20	
Animalia	Mammalia	Vespertilionidae	1353	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	E1,P	E	18	
Animalia	Mammalia	Vespertilionidae	1372	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P		1	
Animalia	Mammalia	Vespertilionidae	1357	<i>Myotis macropus</i>	Southern Myotis	V,P		38	
Animalia	Mammalia	Vespertilionidae	1361	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		6	
Animalia	Mammalia	Vespertilionidae	1025	<i>Vespadelus troughtoni</i>	Eastern Cave Bat	V,P		3	
Animalia	Mammalia	Miniopteridae	1346	<i>Miniopterus australis</i>	Little Bent-winged Bat	V,P		63	
Animalia	Mammalia	Miniopteridae	3330	<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V,P		88	
Animalia	Mammalia	Muridae	1455	<i>Pseudomys novaehollandiae</i>	New Holland Mouse	P	V	2	
Animalia	Mammalia	Otariidae	1543	<i>Arctocephalus forsteri</i>	New Zealand Fur-seal	V,P		10	
Animalia	Mammalia	Otariidae	1882	<i>Arctocephalus pusillus doriferus</i>	Australian Fur-seal	V,P		2	

Animalia	Mammalia	Balaenidae	1561	<i>Eubalaena australis</i>	Southern Right Whale	E1,P	E	1	
Animalia	Mammalia	Physeteridae	1578	<i>Physeter macrocephalus</i>	Sperm Whale	V,P		3	
Animalia	Insecta	Petaluridae	1007	<i>Petalura gigantea</i>	Giant Dragonfly	E1		2	



Australian Government

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the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 02-Oct-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	1
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	8
Listed Threatened Species:	112
Listed Migratory Species:	58

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	17
Commonwealth Heritage Places:	None
Listed Marine Species:	83
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	10
Key Ecological Features (Marine):	None
Biologically Important Areas:	4
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

National Heritage Places [\[Resource Information \]](#)

Name	State	Legal Status	Buffer Status
Natural			
Ku-ring-gai Chase National Park, Lion, Long and Spectacle Island Nature Reserves	NSW	Listed place	In buffer area only

Listed Threatened Ecological Communities [\[Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Coastal Upland Swamps in the Sydney Basin Bioregion	Endangered	Community likely to occur within area	In feature area
Eastern Suburbs Banksia Scrub of the Sydney Region	Critically Endangered	Community may occur within area	In feature area
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Critically Endangered	Community likely to occur within area	In buffer area only
Posidonia australis seagrass meadows of the Manning-Hawkesbury ecoregion	Endangered	Community likely to occur within area	In buffer area only
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community likely to occur within area	In feature area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only

Listed Threatened Species [\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
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Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Breeding likely to occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Epinephelus daemeli Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat known to occur within area	In feature area
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In feature area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area	In feature area
SeriOLElla brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
FROG			
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat likely to occur within area	In feature area
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Isoodon obesulus obesulus Southern Brown Bandicoot (eastern), Southern Brown Bandicoot (south-eastern) [68050]	Endangered	Species or species habitat known to occur within area	In feature area
Notamacropus parma Parma Wallaby [89289]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</u>			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Potorous tridactylus tridactylus</u>			
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<u>Pseudomys novaehollandiae</u>			
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Pteropus poliocephalus</u>			
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
OTHER			
<u>Dendronephthya australis</u>			
Cauliflower Soft Coral [90325]	Endangered	Species or species habitat may occur within area	In buffer area only
PLANT			
<u>Acacia bynoeana</u>			
Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Acacia terminalis subsp. Eastern Sydney (G.P.Phillips 126) listed as Acacia terminalis subsp. terminalis MS</u>			
Sunshine Wattle (Sydney region) [91564]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Asterolasia elegans</u>			
[56780]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Caladenia tessellata</u>			
Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Cryptostylis hunteriana</u>			
Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Cynanchum elegans</u>			
White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Darwinia biflora [14619]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eucalyptus camfieldii Camfield's Stringybark [15460]	Vulnerable	Species or species habitat known to occur within area	In feature area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat known to occur within area	In feature area
Grevillea caleyi Caley's Grevillea [9683]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Grevillea shiressii [19186]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Haloragodendron lucasii Hal [6480]	Endangered	Species or species habitat may occur within area	In buffer area only
Kunzea rupestris [8798]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lasiopetalum joyceae [20311]	Vulnerable	Species or species habitat known to occur within area	In feature area
Leptospermum deanei Deane's Tea-tree [21777]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Leucopogon exolasius Woronora Beard-heath [14251]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Melaleuca biconvexa Biconvex Paperbark [5583]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Micromyrtus blakelyi [6870]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Microtis angusii Angus's Onion Orchid [64530]	Endangered	Species or species habitat known to occur within area	In buffer area only
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat known to occur within area	In feature area
Pimelea curviflora var. curviflora [4182]	Vulnerable	Species or species habitat known to occur within area	In feature area
Prostanthera densa Villous Mintbush [12233]	Vulnerable	Species or species habitat known to occur within area	In feature area
Prostanthera junonis Somersby Mintbush [64960]	Endangered	Species or species habitat may occur within area	In feature area
Prostanthera marifolia Seaforth Mintbush [7555]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Hoplocephalus bungaroides Broad-headed Snake [1182]	Endangered	Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharias taurus (east coast population) Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Galeorhinus galeus School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

SNAIL

Meridolum maryae Maroubra Woodland Snail, Maroubra Land Snail [89884]	Endangered	Species or species habitat known to occur within area	In buffer area only
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Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharias taurus Grey Nurse Shark [64469]		Species or species habitat known to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands

[[Resource Information](#)]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Australian Postal Corporation		
Commonwealth Land - Australian Postal Commission [13224]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13228]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13239]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [16525]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation Limited		
Commonwealth Land - Australian Telecommunications Commission [13225]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13226]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13221]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13222]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13223]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13241]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13240]	NSW	In buffer area only
Defence		
Commonwealth Land - Defence Service Homes Corporation [13220]	NSW	In buffer area only
Defence - PITTWATER DIVING ANNEX (forms part of "RAN Torpedo Range") [10028]	NSW	In buffer area only
Defence - PITTWATER DIVING ANNEX (forms part of "RAN Torpedo Range") [10027]	NSW	In buffer area only
Defence - PITTWATER DIVING ANNEX (forms part of "RAN Torpedo Range") [10026]	NSW	In buffer area only
Defence - Defence Housing Authority		
Commonwealth Land - Defence Housing Authority [13238]	NSW	In buffer area only
Unknown		
Commonwealth Land - [13227]	NSW	In buffer area only

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardena carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea antipodensis gibsoni as Diomedea gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sterna striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat may occur within area overfly marine area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche bulleri platei as Thalassarche sp. nov. Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Fish			
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In buffer area only
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In buffer area only
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur- seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hydrophis platura as Pelamis platurus Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Garigal	National Park	NSW	In buffer area only
Ku-ring-gai Chase	National Park	NSW	In buffer area only
Narrabeen	Aquatic Reserve	NSW	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Construction of a high-capacity fibre optic submarine cable	2006/2914	Not Controlled Action	Completed	In feature area
Demolition of Ablutions Block, Snapper Island, NSW	2018/8303	Not Controlled Action	Completed	In feature area
Dog swimming area	2002/870	Not Controlled Action	Completed	In buffer area only
Fuel Reduction Proposal Redfield Road, East Killara	2003/1238	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV,	2015/7522	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
sthrn two thirds of Australia				
Japan-Guam-Australia Sunshine Coast Branch Marine Cable Route Survey (JGA) QLD	2018/8373	Not Controlled Action	Completed	In buffer area only
Residential subdivision of 62 Hillside Road, Newport, NSW	2017/8044	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Japan-Guam-Australia (JGA) Fibre Optic Cable project	2016/7795	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Tasman Global Access submarine cable marine route survey, Narrabeen, NSW	2015/7442	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In buffer area only

Biologically Important Areas [[Resource Information](#)]

Scientific Name	Behaviour	Presence	Buffer Status
Dolphins			
Tursiops aduncus			
Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Likely to occur	In buffer area only
Seabirds			
Ardenna tenuirostris			
Short-tailed Shearwater [82652]	Foraging	Likely to occur	In buffer area only
Sharks			
Carcharias taurus			
Grey Nurse Shark [64469]	Foraging	Known to occur	In buffer area only
Whales			
Megaptera novaeangliae			
Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Bioregional Assessments [[Resource Information](#)]

SubRegion	BioRegion	Website	Buffer Status
Sydney	Sydney Basin	BA website	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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Appendix C – Photographs



Plate 1. Bush lift site
(view east)



Plate 2. Bush lift site
(view south)



Plate 3. Littoral rainforest TEC and 1st order stream in gully



Plate 4. Scattered eucalypts in carpark alteration site

Plate 5. Cabbage
Trees adjacent to
reception awning
site



Appendix D – Flora and Fauna Inventory

Table D. 0.1 Flora Records

Scientific Name	Common Name	BC Act	EPBC Act
<i>Aloe spp.*</i>	Aloe	-	-
<i>Alpinia spp.</i>	Native Ginger	-	-
<i>Callistemon salicina</i>		-	-
<i>Camelia spp.*</i>	Camelia	-	-
<i>Chamaedorea spp.*</i>		-	-
<i>Cissus antarctica</i>	Water Vine	-	-
<i>Clivia miniata*</i>	Natal Lily	-	-
<i>Cordyline stricta</i>	Narrow-leaved Palm Lily	-	-
<i>Corymbia maculata</i>	Spotted Gum	-	-
<i>Crassula ovata*</i>	Jade Plant	-	-
<i>Cupaniopsis anacardioides</i>	Tuckeroo	-	-
<i>Datura spp.*</i>	Datura	-	-
<i>Eucalyptus microcorys</i>	Tallowwood	-	-
<i>Eucalyptus punctata</i>	Grey Gum	-	-
<i>Ficus coronata</i>	Sandpaper Fig	-	-
<i>Howea forsteriana*</i>	Kentia Palm	-	-
<i>Iris spp*</i>		-	-
<i>Jacaranda mimosifolia*</i>	Jacaranda	-	-
<i>Livistona australis</i>	Cabbage Tree	-	-
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	-	-
<i>Murraya paniculata*</i>	Murraya	-	-
<i>Nandina domestica*</i>	Japanese Sacred Bamboo	-	-
<i>Nephrolepis cordifolia*</i>	Fishbone Fern	-	-
<i>Passiflora suberosa*</i>	Corky Passionfruit	-	-
<i>Pentas lanceolata*</i>	Egyptian Star-cluster	-	-
<i>Strelitzia reginae*</i>	Bird of Paradise	-	-
<i>Syngonium spp.*</i>		-	-
<i>Tradescantia pallida*</i>	Purple Heart	-	-
<i>Viburnum spp.*</i>		-	-
<i>Yucca aloifolia*</i>	Coastal Yucca	-	-

*Priority Weed/Exotic, CE = Critically Endangered; E = Endangered and V = Vulnerable

Table D. 0.2 Fauna Records

Scientific Name	Common Name	Observation Type	BC Act	EPBC Act
<i>Gymnorhina tibicen</i>	Magpie	O	-	-
<i>Manorina melanocephala</i>	Noisy Miner	OW	-	-
<i>Strepera graculina</i>	Pied Currawong	OW	-	-
<i>Trichoglossus moluccanus</i>	Rainbow Lorikeet	OW	-	-

*Introduced species, CE = Critically Endangered; E = Endangered, V = Vulnerable, C=CAMBA, J=JAMBA & K = ROKAMBA

Observation type: W=Heard, O= Observed, S=Scats & T=Tracks.

Appendix E – Likelihood of Occurrence Table

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
Australasian Bittern	<i>Botaurus poiciloptilus</i>	Favours permanent freshwater wetlands with tall, dense vegetation, particularly bullrushes and spikerushes.	E	E	2	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Australian Painted Snipe	<i>Rostratula australis</i>	Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber.	E	E	3	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Barking Owl	<i>Ninox connivens</i>	Inhabits woodland and open forest, including fragmented remnants and partly cleared farmland. It is flexible in its habitat use, and hunting can extend in to closed forest and more open areas.	V	-	20	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Beach Stone-curlew	<i>Esacus magnirostris</i>	Found exclusively along the coast, on a wide range of beaches, islands, reefs and in estuaries	CE	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Black Bittern	<i>Ixobrychus flavicollis</i>	Inhabits both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation.	V	-	10	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Black-chinned Honeyeater (eastern subspecies)	<i>Melithreptus gularis gularis</i>	Occupies mostly upper levels of drier open forests or woodlands dominated by box and ironbark eucalypts, especially Mugga Ironbark, White Box, Inland Grey Box, Yellow Box, Blakely's Red Gum and Forest Red Gum. Also inhabits open forests of smooth-barked gums, stringybarks, ironbarks, river sheoaks (nesting habitat) and tea-trees.	V	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Bush Stone-curlew	<i>Burhinus grallarius</i>	Inhabits open forests and woodlands with a sparse grassy ground layer and fallen timber.	E	-	37	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Eastern Cave Bat	<i>Vespadelus troughtoni</i>	Cave-roosting species usually found in dry open forest and woodland, near cliffs or rocky overhangs; has been recorded roosting in disused mine workings, occasionally in colonies of up to 500 individuals.	V	-	3	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
		Occasionally found along cliff-lines in wet eucalypt forest and rainforest.				
Eastern Coastal Free-tailed Bat	<i>Micronomus norfolkensis</i>	Occasionally found along cliff-lines in wet eucalypt forest and rainforest.	V	-	20	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Eastern Curlew	<i>Numenius madagascariensis</i>	Occupies coastal lakes, inlets, bays and estuarine habitats, and in New South Wales is mainly found in intertidal mudflats and sometimes saltmarsh of sheltered coasts.	-	CE C,J,K	4	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	Prefers moist habitats, with trees taller than 20 m. Generally roosts in eucalypt hollows but has also been found under loose bark on trees or in buildings.	V	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Eastern Osprey	<i>Pandion cristatus</i>	<i>Favours coastal areas, especially the mouths of large rivers, lagoons and lakes.</i>	V	-	30	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	Found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest.	V	-	440	No habitat identified on site. Unlikely to occur on site
Freckled Duck	<i>Stictonetta naevosa</i>	Prefer permanent freshwater swamps and creeks with heavy growth of Cumbungi, Lignum or Tea-tree.	V	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	Occurs in rainforest, including dry rainforest, subtropical and warm temperate rainforest, as well as moist eucalypt forests.	E	E	2	No habitat identified on site. Unlikely to occur on site
Giant Burrowing Frog	<i>Heleioporus australiacus</i>	Found along freshwater streams with permanent or semi-permanent water, generally (but not always) at lower elevation.	V	V	28	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Giant Dragonfly	<i>Petalura gigantea</i>	Moist riparian habitats such as rainforest or wet sclerophyll forest are favoured for the deep leaf litter	E	-	2	No habitat identified on site. Unlikely to occur on site

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	Utilises a variety of habitats from woodland through to moist and dry eucalypt forest and rainforest, though it is most commonly found in tall wet forest.	V	-	6	No habitat identified on site. Unlikely to occur on site
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	<i>Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops.</i>	V	V	181	No habitat identified on site. Unlikely to occur on site
Koala	<i>Phascolarctos cinereus</i>	Eucalypt woodlands and forests.	E	E	3	No habitat identified on site. Unlikely to occur on site
Large Bent-winged Bat	<i>Miniopterus orianae oceanensis</i>	Primary roosting habitat is caves, but also uses derelict mines, stormwater tunnels, buildings and other man-made structures. Hunt in forested areas catching moths and other flying insects above tree tops.	V	-	88	No habitat identified on site. Unlikely to occur on site
Large-eared Pied Bat	<i>Chalinolobus dwyeri</i>	Roosts in caves (near their entrances), crevices in cliffs, old mine workings and the disused, bottle-shaped mud nests of the Fairy Martin, low to mid-elevation dry open forest and woodland close to these features. Also found in well-timbered areas containing gullies.	E	E	18	No habitat identified on site. Unlikely to occur on site
Latham's Snipe	<i>Gallinago hardwickii</i>	In Australia, Latham's Snipe occurs in a wide variety of permanent and ephemeral wetlands. They usually occur in open, freshwater wetlands that have some form of shelter (usually low and dense vegetation) nearby. They generally occupy flooded meadows, seasonal or semi-permanent swamps, or open waters, but various other freshwater habitats can be used including bogs, waterholes, billabongs, lagoons, lakes, creek or river margins, river pools and floodplains.	V	V J,K	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Little Bent-winged Bat	<i>Miniopterus australis</i>	Cave roosting species found in moist eucalypt forest, rainforest or dense coastal banksia scrub.	V	-	63	No habitat identified on site. Unlikely to occur on site
Little Eagle	<i>Hieraetus morphnoides</i>	Occupies open eucalypt forest, woodland or open woodland.	V	-	6	No habitat identified on site. Unlikely to occur on site
Little Lorikeet	<i>Glossopsitta pusilla</i>	Forages primarily in the canopy of open Eucalyptus forest and woodland. Also finds food in Angophora, Melaleuca and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity.	V	-	7	No habitat identified on site. Unlikely to occur on site

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
Masked Owl	<i>Tyto novaehollandiae</i>	Lives in dry eucalypt forests and woodlands from sea level to 1100 m.	V	-	3	No habitat identified on site. Unlikely to occur on site
New Holland Mouse	<i>Pseudomys novaehollandiae</i>	Known to inhabit open heathlands, woodlands and forests with a heathland understorey and vegetated sand dunes	-	V	2	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Northern Giant-Petrel	<i>Macronectes halli</i>	Breeding in Australian territory is limited to Macquarie Island and occurs during spring and summer.	V	V	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Powerful Owl	<i>Ninox strenua</i>	Found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest	V	-	564	No habitat identified on site. Unlikely to occur on site
Red-crowned Toadlet	<i>Pseudophryne australis</i>	Open forests, wet drainage lines below sandstone ridges, under rocks and dense vegetation	V	-	93	No habitat identified on site. Sites permanently dry. Unlikely to occur on site
Regent Honeyeater	<i>Anthochaera phrygia</i>	inhabits dry open forest and woodland, particularly Box-Ironbark woodland, and riparian forests of River Sheoak. These woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoes.	CE	CE	33	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Rose-crowned Fruit-Dove	<i>Ptilinopus regina</i>	Sub-tropical and dry rainforest and occasionally in moist eucalypt forest and swamp forest, where fruit is plentiful.	V	-	4	No habitat identified on site. Unlikely to occur on site
Rosenberg's Goanna	<i>Varanus rosenbergi</i>	Found in heath, open forest and woodland.	V	-	34	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Scarlet Robin	<i>Petroica boodang</i>	Dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shrubs.	V	-	2	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Shy Albatross	<i>Thalassarche cauta</i>	Marine environments and rocky offshore islands	E	E	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
Sooty Owl	<i>Tyto tenebricosa</i>	Occurs in rainforest, including dry rainforest, subtropical and warm temperate rainforest, as well as moist eucalypt forests.	V	-	2	No habitat identified on site. Unlikely to occur on site
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>	Favours intertidal flats of inlets and bays, open beaches and sandbanks. Forages on exposed sand, mud and rock at low tide.	V	-	9	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Sooty Tern	<i>Onychoprion fuscata</i>	Inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest.	V	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
South-eastern Glossy Black-Cockatoo	<i>Calyptorhynchus lathami lathami</i>	South-eastern glossy black cockatoos feed almost exclusively on the seeds of sheoaks (<i>Allocasuarina</i> spp. and <i>Casuarina</i> spp.), usually relying on one or two species within a region. The birds also show strong preference to individual feed trees and will not feed on many other proximate trees of the same tree species. South-eastern glossy black cockatoos are hollow nesters, utilising large hollows in both living and dead eucalypt trees	V	V	61	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Southern Brown Bandicoot (eastern)	<i>Isodon obesulus obesulus</i>	Found in heath or open forest with heathy understorey on sandy or friable soils. Feed on variety of ground-dwelling invertebrates and the fruit-bodies of hypogeous (underground-fruiting) fungi. Nest during the day in shallow depressions covered by leaf litter, grass or other plant material. Nests may be located under Grass trees <i>Xanthorrhoea</i> spp., blackberry bushes and other shrubs, or in rabbit burrows.	E	E	20	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Southern Myotis	<i>Myotis macropus</i>	Roost close to water in caves, mind shafts, hollow-bearing trees, stormwater channels, buildings, under bridges and in dense foliage. Forage over streams and pools catching insects and small fish by raking their feet across the water surface.	V	-	38	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	Spotted-tailed quolls live in a wide variety of habitats including forests, woodlands, coastal heathlands and rainforests. They are sometimes seen in open country or on grazed areas near larger areas of forested habitats.	V	E	5	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site

Common Name	Scientific Name	Habitat	NSW Status	Comm Status	Records	Potential Occurrence
Square-tailed Kite	<i>Lophoictinia isura</i>	Coastal sheltered environments, harbours, inlets and rivers, nests in low dunes or on sandy beaches near estuary mouths.	V	-	6	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Squirrel Glider	<i>Petaurus norfolcensis</i>	Inhabits mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt-Bloodwood forest with heath understorey in coastal areas.	V	-	5	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Superb Fruit-Dove	<i>Ptilinopus superbus</i>	Inhabits rainforest and similar closed forests with fruit bearing trees.	V	-	6	No habitat identified on site. Unlikely to occur on site
Swift Parrot	<i>Lathamus discolor</i>	On the mainland they occur in areas where eucalypts are flowering profusely or where there is abundant lerp (from sap-sucking bugs) infestations.	E	CE	18	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Terek Sandpiper	<i>Xenus cinereus</i>	Favours mudbanks and sandbanks located near mangroves but may also be observed on rocky pools and reefs, and occasionally up to 10 km inland around brackish pools.	V	V C,J,K	2	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Turquoise Parrot	<i>Neophema pulchella</i>	Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland.	V	-	1	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
Varied Sittella	<i>Daphoenositta chrysoptera</i>	Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland.	V	-	3	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	Occurs at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves; and at, or in the vicinity of freshwater swamps, lakes, reservoirs, billabongs and saltmarsh.	V	-	47	No habitat identified on or in direct proximity to the site. Highly unlikely to occur on site
White-throated Needletail	<i>Hirundapus caudacutus</i>	Migratory and usually seen in eastern Australia from October to April.	V	V C,J,K	5	No habitat identified on site. Unlikely to occur on site
Yellow-bellied Sheathtail-bat	<i>Saccolaimus flaviventris</i>	Roosts singly or in groups of up to six, in tree hollows and buildings; in treeless areas they are known to utilise mammal burrows.	V	-	1	No habitat identified on site. Unlikely to occur on site

Status: V=Vulnerable; E=Endangered; CE=Critically endangered

Migratory treaties: C=CAMBA; J=JAMBA; K=ROKAMBA

Appendix F - BC Act Test of Significance

Based on a number of recent BioNet records (within the past 20 years) the results of site assessments identifying suitable habitat for threatened species and potential occurrence assessment, tests of significance ('five-part tests') under Section 7.3 of the BC Act have been completed for the following threatened entities:

BC Act listed TEC:

- Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions

Littoral Rainforest TEC

Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Listed as Endangered – BC Act
Habitat description/ life cycle components	
<p>The Littoral Rainforest TEC is found on the coast eastern NSW. is generally a closed forest, the structure and composition of which is strongly influenced by proximity to the ocean.</p> <p>Littoral rainforest occurs on both sand dunes and on soils derived from underlying rocks (McKinley <i>et al.</i> 1999). Stands on headlands exposed to strong wind action may take the form of dense wind pruned thickets. In more sheltered sites, and hind dunes, the community is generally taller, although still with wind pruning on the windward margins. Most stands of Littoral Rainforest occur within 2km of the sea, but may occasionally be found further inland within reach of maritime influence (DPIE 2021).</p>	
Threats:	
<ul style="list-style-type: none"> • Invasion of habitat by introduced weed species • Loss of canopy integrity from salt/wind burn as a result of clearing at margins • Clearing of understorey (including for firewood collection) • Grazing and physical disturbance of understorey (including by feral deer) • Inappropriate collection of a flora species • Fire • Visitor disturbance including soil compaction & disturbance, erosion from new & unofficial tracks • Introduction of pathogens • Increased visitation and resulting increased demand pressures on TEC • Illegal dumping • Loss of fauna due to predation by feral animals • Road kill • Disturbance from human visitation (faunal elements are essential to the ecological functioning of TEC) • Fragmentation resulting in loss of connectivity and possibly reduced genetic exchange between populations 	
<p><i>a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,</i></p>	
<p>N/A</p>	
<p><i>b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:</i> <i>(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or</i></p>	

<p><i>(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,</i></p>
<p>The proposal requires the removal of approximately 16m² of the Littoral Rainforest TEC. The removal area is located at the degraded margin of the patch and occurs across ground and shrub layers only. Such direct impact is considered to be of a very low level. Indirect impacts including erosion/sedimentation are subject to management measures in section 6 of this report. The probability of such direct and indirect impacts adversely affecting the extent or composition of the TEC such that its local occurrence is likely to be placed at risk of extinction is negligible.</p>
<p><i>c) in relation to the habitat of a threatened species or ecological community: (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity</i></p>
<p>The proposal requires the removal of approximately 16m² of the Littoral Rainforest TEC. The removal area is located at the degraded margin of the patch and occurs across ground and shrub layers only.</p>
<p><i>(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and</i></p>
<p>The proposal will occur at the already degraded edge of the TEC patch. As such, no fragmentation or isolation would occur to the TEC. Canopy which overhangs the site will not be directly impacted allowing the maintenance of stepping-stone connectivity and dispersal ability for arboreal species associated with the Littoral Rainforest TEC.</p>
<p><i>(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,</i></p>
<p>The proposal will occur in an already degraded margin resulting in the loss of approximately 16m² of ground and shrub layers (including exotic flora species) and sandstone boulders provides only minimal foraging habitat. The sandstone boulder wall provides suitable shelter habitat for small mammals, reptiles and invertebrates. The habitat is not considered to be highly important to the long term survival of the TEC due to its degraded condition on site consisting of a sparse ground and shrub layers, presence of exotic flora species, minimal preferred foraging and shelter habitat. The removal of the small area (16m²) is considered unimportant to the long term survival of the TEC due to these reasons in conjunction with extensive surrounding habitat.</p>
<p><i>d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),</i></p>
<p>The activity is not located within or near any declared area of outstanding biodiversity values.</p>
<p><i>e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.</i></p>
<p>The proposal will result in minor increases in the following BC Act listed key threatening processes:</p> <ul style="list-style-type: none"> • Clearing of native vegetation • Bushrock removal <p>Due to the minor and localised aspects of the proposal, it is unlikely that the proposal will result in significant increase the listed KTPs.</p>
<p>Conclusion</p>
<p>The proposal is not expected to significantly impact the Littoral Rainforest TEC because:</p> <ul style="list-style-type: none"> • The proposal will not fragment habitat for the TEC • The proposal will occur in a very small area of habitat • The habitat is not considered important to the long-term or local survival for the TEC <p>Therefore, a BDAR is not required.</p>

Appendix G – EPBC Act Test of Significance

Littoral Rainforest TEC

Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Listed as Critically Endangered – EPBC Act
Habitat description/ life cycle components	
<p>The Littoral Rainforest TEC is found on the east coast of Australia including offshore islands from the Cape York Peninsula in Queensland to the Gippsland Lakes in Victoria.</p> <p>The TEC represents a complex of rainforest and coastal vine thickets on the east coast of Australia. Typically, it occurs within 2km of the coast or adjacent to a large salt water body (eg. estuaries). It is naturally distributed as a series of disjunct and localised stands occurring on a range of landforms derived from coastal processes that can include dunes and flats, cheniers, berms, cobbles, headlands, scree, sea cliffs, marginal bluffs, spits, deltaic deposits, coral rubble and islands. As a result, the TEC is not associated with a particular soil type or geological substrata. The unifying feature of its habitat is salinity, derived from its marine proximity. Saline influence is delivered via aerosols, saline water-tables or occasional inundation.</p> <p>The TEC provides important stepping stones along the eastern Australian coast for various migratory and marine birds (DCCEEW 2015).</p>	
Threats	
<ul style="list-style-type: none"> • Sand mining • Agriculture • Climate change • Land tenures without adequate protection • Natural disturbances (eg. storms) • Invasion of habitat by transformer weed species • Grazing and physical disturbance of understorey (including by feral deer) • Fire • Increased visitation and resulting increased demand pressures on TEC • Visitor disturbance including soil compaction & disturbance, erosion from new & unofficial tracks • Disturbance from human visitation (faunal elements are essential to the ecological functioning of TEC) • Introduction of pathogens • Illegal dumping • Loss of fauna due to predation by feral animals • Fragmentation resulting in loss of connectivity and possibly reduced genetic exchange between populations 	
a) reduce the extent of the ecological community	
<p>The proposal requires the removal of approximately 16m² of the Littoral Rainforest TEC. The removal area is located at the degraded margin of the patch and occurs across ground and shrub layers only.</p>	
b) fragment or increase fragmentation of the ecological community	
<p>The proposal will occur at the already degraded edge of the TEC patch. As such, no fragmentation or isolation would occur to the TEC. Canopy which overhangs the site will not be directly impacted allowing the maintenance of stepping-stone connectivity and dispersal ability for arboreal species associated with the Littoral Rainforest TEC.</p>	
c) adversely affect habitat critical to the survival of the ecological community	
<p><i>Habitat critical to the survival of an ecological community' refers to areas that are necessary:</i></p> <ul style="list-style-type: none"> • <i>for activities such as foraging, breeding, roosting, or dispersal</i> • <i>for the long-term maintenance of the ecological community (including the maintenance of species essential to the survival of the ecological community, such as pollinators)</i> • <i>to maintain genetic diversity and long term evolutionary development, or</i> 	

<ul style="list-style-type: none"> • <i>for the reintroduction of populations or recovery of the ecological community</i> <p>The proposal requires the removal of approximately 16m² of the Littoral Rainforest TEC. The removal area is located at the degraded margin of the patch and occurs across ground and shrub layers only. Such direct impact is considered to be of a very low level. Indirect impacts including erosion/sedimentation are subject to management measures in section 6 of this report.</p> <p>Given the extent (16m²) and condition (degraded), habitat on site is not considered to be critical to the survival of the TEC.</p>
<p>d) <i>modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for the ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns</i></p>
<p>Direct removal of sandstone boulders within the site will occur. Indirect impacts to soil and water is likely limited to erosion/sedimentation concerns. These are to be managed to a negligible level by implementing best practise management measures provided in section 6 of this report. The minor extent of direct impacts to sandstone features will result in very minor impacts.</p>
<p>e) <i>cause a substantial change in the species composition of an occurrence of the ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting</i></p>
<p>The proposal will occur in an already degraded margin of the TEC and will result in the loss of approximately 16m² of ground and shrub layers (including exotic flora species). There is no likelihood species composition will be altered or a decline in functionally important species. The proposal is not likely to result in increased threat of fire, weeds or other ongoing increases to key threats for the TEC. This includes increases to visitation given access is already provided to the able-bodied community by the adjacent stairway.</p>
<p>f) <i>cause a substantial reduction in the quality or integrity of an occurrence of the ecological community, including, but not limited to:</i></p> <ol style="list-style-type: none"> I. <i>assisting invasive species, that are harmful to the listed ecological community, to become established, or</i> II. <i>causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or</i>
<p>The proposal of construction of a bush-lift to increase accessibility to an existing walking path is not likely to assist the establishment of invasive species within the TEC. Management of weeds and pathogens is required as per the <i>Arrive Clean, Leave Clean Guidelines</i> (DCCEEW 2015). No additional application of fertilisers, herbicides or other chemicals or pollutants are associated with this proposal.</p>
<p>g) <i>interfere with the recovery of the ecological community</i></p>
<p>The proposal although minor in scale is in competition with Strategy 3: Restore and extend Littoral Rainforest of the National Recovery Plan (DEE 2019), specifically the implementation of "Actions to increase connectivity, enhance migration and create natural buffers".</p> <p>Due to the scale of the proposal this interference is considered negligible.</p>
<p>Conclusion</p>
<p>The proposal is not expected to significantly impact the EPBC listed Littoral Rainforest TEC because:</p> <ul style="list-style-type: none"> • The proposal will occur in a very small area (16m²) of habitat • The proposal will not fragment or cause more than minor impacts (direct and indirect) • The habitat is not considered critical to the long-term or local survival for the TEC <p>Therefore, referral to the Federal Minister for Environment is not required.</p>

Appendix H – Pre-lodgment Meeting Notes



Pre-lodgement Meeting Notes

Application No: PLM2024/0078
Meeting Date: 30 July 2024
Property Address: 36 Cabbage Tree Road BAYVIEW
Proposal: Alterations and additions to a Seniors Housing development

Attendees for Council: Alex Keller – Principal Planner
Fatima Shajar – Student Planner
James Brisbois – Team Leader, Catchments
Robert Blackhall – Environment Officer Bushland & Biodiversity
Richard Platt – Environment Officer, Coasts and Catchments

Attendees for applicant: Yeganeh Atri
Erin Crane
Jessica Gleeson

General Comments/Limitations of these Notes

These notes have been prepared by Council's Development Advisory Services Team on the basis of information provided by the applicant and a consultation meeting with Council staff. Council provides this service for guidance purposes only.

These notes are an account of the advice on the specific issues nominated by the Applicant and the discussions and conclusions reached at the meeting.

These notes are not a complete set of planning and related comments for the proposed development. Matters discussed and comments offered by Council will in no way fetter Council's discretion as the Consent Authority.

A determination can only be made following the lodgement and full assessment of the application.

In addition to the comments made within these Notes, it is a requirement of the applicant to address the relevant areas of legislation, including (but not limited to) any State Environmental Planning Policy (SEPP) and any applicable sections of the Pittwater Local Environmental Plan 2014 and Pittwater 21 Development Control Plan, within the supporting documentation including a Statement of Environmental Effects, Modification Report or Review of Determination Report.

You are advised to carefully review these notes and if specific concern have been raised or non-compliances that cannot be supported, you are strongly advised to



review your proposal and consider amendments to the design of your development prior to the lodgement of any development application.

SPECIFIC ISSUES RAISED BY APPLICANT FOR DISCUSSION

Response to Matters Raised by the Applicant:

Owner's consent (Council land)

It appears from the PLM concept plans that the works may not be encroaching over the boundary of Lot 7 DP260157. However, if it is identified that some ancillary or incidental works will (e.g. foundation supports / excavation / creek-bank protection / retaining walls) then owner's consent will be required for lodgement of the DA for works within the council drainage reserve / creek line lot that passes through the centre of the retirement village.

Please note that if there are building works as part of the DA, Council may use an independent external consultant for the assessment process (due to conflict-of-interest management procedures). The DA would still be co-ordinated / administered by Council. To acquire owner's consent (for Lot 7) a letter (requesting owners consent to facilitate DA lodgement) should be sent attention of the CEO, so that the appropriate Manager Property / Bushland Reserves can reply. Include concept outline details of the intended works, such as a site plan.

Bushfire

The site is 'tagged' as part of the bushfire buffer hazard. This is a very small and narrow overlap in the western corner of the site across Annam Road. Since the site is used for *seniors housing* this would trigger integrated development under Section 100B of the *Rural Fires Act 1997* and *Planning for Bushfire Protection* may result in conditions requiring the entire site to be managed as an APZ. This could have significant consequences for APZ management including tree removal, ground cover thinning, garden planting and the like, if the NSW RFS places standard conditions on any referral for the DA works. It is strongly recommended the applicant engage a qualified bushfire consultant to engage with the NSW RFS prior to lodgement to establish if the NSW RFS will require a referral (given the narrow overlap) and what the outcomes of that referral may be required pursuant to *Planning for Bushfire Protection*. The RFS may consider if the automated mapping "snippet" of the site does not warrant referral on advice / consultation with the applicant's fire expert. Given the minor works and that the site is also mapped as having Biodiversity Values (BDAR), including littoral rainforest type (and tree removal may trigger designated development / including Environmental Impact Statement procedures) written advice / prior clearance from the NSW RFS is critical, given the overlaying Biodiversity values mapping within the site.

Biodiversity (forest habitat)

For minor or low value works the *Biodiversity Conservation Act* has a mechanism for 'exemptions' to be issued following consideration by a suitably qualified ecologist. To facilitate this the applicant will need to provide supporting documentation to the



Department prior to lodgement for any particular requirements seeking if an exemption may be appropriate. Given the minor work component and small location, advice from an ecologist will be required to address matters referred to the *Department of Climate Change, Energy, the Environment and Water*, pursuant to section 7.7(2) of the *Biodiversity Conservation Act 2016*. Preliminary advice from the department may assist in establishing if formal DA referrals will be required and the depth of assessment that the Department may need, if there is native tree clearing and the like required. (See referral comments below regarding ‘test of significance’ also).

Riparian Zone (works within 40m of watercourses)
 The proposed works being pathways, lift infrastructure, excavation and retaining structures and the like are within the riparian buffer. Therefore, it is advised that prior referral advice be sought from the *Department of Climate Change, Energy, the Environment and Water* to ascertain if Department does not consider the works nominated integrated due to the domestic nature of the works and minor impact if there is no significant risk / no change intended to the natural watercourse. The Department may advise if they do not consider a referral (at DA stage) to be warranted under the circumstances.

Original Consent
 The original consent is No.87/8 for the ‘erection of 51 hostel suites and village centre.’

There have been numerous other consents following on from No.87/8 for various development on the land since 1987. The applicant / owner should keep a complete record of all development consents on site within the site management office. A “GIPA” search may be requested via Council’s website to recover past files / relevant consents and documents.

PITTWATER LOCAL ENVIRONMENTAL PLAN 2014 (PLEP 2014)

PLEP 2014 can be viewed at
<https://www.legislation.nsw.gov.au/view/html/inforce/current/epi-2014-0320>

Part 2 - Zoning and Permissibility	
Definition of proposed development: (ref. PLEP 2014 Dictionary)	Senior’s housing (alterations and additions to a Senior’s housing development)
Zone:	R2 Low Density Residential (Lot 121) (The drainage reserve creek line lot is zoned RE1 Public Recreation)
Permitted with Consent or Prohibited:	Permitted with consent

Clause 4.6 - Exceptions to Development Standards



Clause 4.6 enables the applicant to request a variation to the applicable Development Standards listed under Part 4 of the LEP pursuant to the objectives of the relevant Standard and zone and in accordance with the principles established by the NSW Land and Environment Court.

A request to vary a development Standard is not a guarantee that the variation would be supported as this needs to be considered by Council in terms of context, impact and public interest and whether the request demonstrates sufficient environmental planning grounds for the variation.

Part 4 - Principal Development Standards			
Standard	Permitted	Proposed	Compliance
Building height Pittwater LEP	8.5m	8.4m (To be confirmed in section details)	Yes. To be confirmed.
SEPP (Housing) 2021 height controls for Seniors Housing prevail over the LEP height controls. (The proposal complies with those also)			

PITTWATER 21 DEVELOPMENT CONTROL PLAN (P21DCP)

P21DCP can be viewed at

<https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Pages/Plan/Book.aspx?exhibit=PDCP>

The Pittwater DCP has a desired future character statement for the suburbs. The SEE should address the DFC in brief.

Part		
Control	Permitted	Proposed
Setbacks		Satisfactory, subject to details to be provided.
Setback to the boundary of the property where the creek line is and for the principal building works fronting Annam Road is to be shown on the site plan.		
Colours and materials		Satisfactory, subject to details to be provided.
Pittwater DCP has a colour schedule for building works. It is expected that for the additional works they will generally match or blend in with the existing building material colours.		
Landscaping		Satisfactory, subject to details to be provided.



Part

Removal of landscaping is minimal for the pathway connections and relative to the site as a whole. The landscape buffer to residents opposite the site in Annam Road should be retained to provide protective screening of the alfresco terrace.

Other relevant parts of the DCP to be addressed:

A4.4 Bayview Locality,

Part B3 Landslip (H1), Bushfire and Flood prone land,

Part B5 Water management,

Part B8 Site work management

Part C1 Landscaping, C1.21 Seniors Housing C1.25 Plant, Equipment and Lifts

Part D4 Bayview Locality, D4.1 Character viewed from public place, D4.3 Colours and materials, D4.5 Front building line, D4.6 Side and rear building line, D4.8 Building envelope, D4.9 Landscape area general, D4.13 Construction, walls, terracing.

(Requirements of SEPP (Housing) 2021 prevail over DCP controls in the event of any inconsistency)

Specialist Advice

Parks Reserves and Foreshores

- Any proposed works across the RE1 Public Recreation land will require Council approval for access and undertaking works under a *Working and Access to Reserve Permit*.
- Impacts to natural landscape features (rock outcrops, trees, watercourse etc) shall be identified for consideration.
- Impacts to Council's physical infrastructure shall be identified for consideration.

Subject to preservation of Council's physical infrastructure, access to, and minimisation of impacts to natural landscape features, no initial concerns are raised.

Landscape Assessment

- Proposed works within 5 metres of any tree or native vegetation shall be identified.
- An Arboricultural Impact Assessment in accordance with Council's DA Lodgement requirements is required to provide clarification on which trees are to be retained, including tree protection measures, and which trees are to be removed. The Arboricultural Impact Assessment report shall indicate the impact of development upon the existing trees within the site, and for any existing tree on adjoining properties located 5 metres from the site (building and associated excavation or fill



Specialist Advice

zones). The report shall be prepared by a qualified Arborist AQF Level 5 and shall cover assessment of excavation and construction impacts upon the SRZ and TPZ, tree protection requirements, and recommendations. Recommendations shall include the setback distance from each tree where no construction impact is to occur to ensure the long-term retention of the tree.

- It is noted that works are proposed in the area mapped as Biodiversity Values and this matter shall be deferred to Council's Bushland and Biodiversity Referral. Any removal of native vegetation from within the mapped areas may trigger the *Biodiversity Offset Scheme (BOS)*.

Development Application Documents

- An Arboricultural Impact Assessment.
- Plans indicating tree replacement should any existing trees be proposed for removal.

Biodiversity

Biodiversity Planning Controls

The following biodiversity related legislation and planning controls apply to the subject lot. Compliance with applicable provisions will need to be demonstrated within the submitted *Statement of Environmental Effects (SEE)* and/or supporting documentation.

- *Biodiversity Conservation Act (BC Act) 2016*
- *Biodiversity Conservation Regulation (BC Reg) 2017*
- *SEPP (Resilience and Hazards) 2021 – Part 2.2 Division 1 Coastal Wetlands and Littoral Rainforest Area*
- *Pittwater LEP – Clause 7.6 Biodiversity Protection*
- *Pittwater DCP – Clause B4.6 Wildlife Corridors*

Required Supporting Documentation

On review of the submitted pre-lodgement plans, the following documentation is required to accompany the Development Application (DA):

- An Arboricultural impact assessment will be required as prescribed trees are found within 5 metres of proposed areas of works.
- Landscape Plans
- A Report that considers the proposed development, and whether or not it will significantly impact on—
 - (a) the biophysical, hydrological or ecological integrity of the adjacent littoral rainforest, or
 - (b) the quantity and quality of surface and ground water flows to and from the adjacent littoral rainforest.
 - (c) the requirements of cl 7.6 of Pittwater LEP
 - (d) the requirements listed with P21 DCP Control B4.6 Wildlife Corridors



Specialist Advice

Dependent on impacts to Littoral Rainforest and/or the Biodiversity Values Map area, the following documentation may be required to accompany the Development Application (DA):

- Environmental Impact Statement (if Designated Development)
- Biodiversity Development Assessment Report (impacts to the BV Map area)

As discussed in the meeting portions of the site are identified on the Littoral Rainforest and Littoral Rainforest (Proximity) mapping under the SEPP (cll 2.7 and 2.8), and also the Biodiversity Values Map (BV Map).

Impacts to trees and native vegetation may trigger the need for more detailed assessment such as an EIS and/or BDAR, so the relevant planning pathways and reporting requirements of the *Biodiversity Conservation Act (BC Act) 2016* and the *SEPP (Resilience and Hazards) 2021* must be carefully considered as part of project design.

General Biodiversity Comments

- The proposal has to demonstrate that the hierarchical principles of avoidance and minimisation of impacts to biodiversity have been fully explored and look for alternatives to maximise retention of prescribed vegetation and unique environmental features.
- An Arboricultural Impact Assessment is required to determine whether impacts to trees from the proposed works are acceptable or not.
- If prescribed (protected) trees are to be removed for the purposes of the proposed works, like for like replacement plantings will have to be considered. Trees found outside of the property boundary must always be considered as constraints.
- New landscaping is to incorporate a minimum 60% locally native vegetation species as a proportion of the total number of plants. Development shall ensure that at least 60% of any new planting incorporates native vegetation to be selected from the Pittwater Ward species list available on Council's Website:
<https://www.northernbeaches.nsw.gov.au/environment/native-plants/native-planting-guide/narrabeen-ward>.

Documentation to accompany the Development Application

- Lodge Application via NSW Planning Portal
- Statement of Environmental Effects (proposals that trigger "designated development" requires EIS procedures which are different to an SEE)
- SEE will address SEPPs also (SEPP Housing, SEPP RH & BC Act)
- Owners, including ASIC and Body Corporate consent as applicable.
- Written consent from Council for works within Lot 7 DP260157 (as applicable).
- Scaled and dimensioned plans:
 - Site Plan;



- Floor Plans;
- Elevations; and
- Sections.
- Landscape details / works plan.
- Cost of works estimate/ Quote
- Arborist report
- Ecology report
- Bushfire report as applicable
- BCA / Accessibility / Fire engineering safety (summary)
- Survey Plan (Boundary Identification Survey)
- Site Analysis Plan
- Demolition Plan
- Excavation and fill Plan
- Waste Management Plan (Construction & Demolition)
- Driveway Design Plan (if any change is proposed to the driveway)
- Erosion and Sediment Control Plan / Soil and Water Management Plan
- Stormwater Management Details / Stormwater Plans for any inclusion for re-use, runoff management and connections.

IMPORTANT NOTE FOR DA LODGEMENT

Please refer to the Development Application Lodgement Requirements on Council's website (link details below) for further detail on the above list of plans, reports, survey and certificates.

<https://files.northernbeaches.nsw.gov.au/sites/default/files/documents/pdf-forms/development-application-da-modification-or-review-determination/2060-da-modification-lodgement-requirements-mar21.pdf>

The lodgement requirements will be used by Council in the review of the application after it is lodged through the NSW Planning Portal to verify that all requirements have been met for the type of application/development.

Concluding Comments

These notes are in response to a pre-lodgement meeting held on 30 July 2024 to discuss alterations and additions to a Seniors Housing development at 36 Cabbage Tree Road Bayview. The notes reference the plans prepared by *Boker Architects* dated 24.7.2024.

In summary, the alterations and additions are relatively minor works to the external parts of the community centre building and for the improvement of accessibility access between the northern and southern part of the site which is bisected by a forested creek-line gully. There are various internal renovations to the community centre building and ancillary areas which are general modernisations and improvements to assist the living environment for retirement village residents and the like. The proposal is supported, however the applicant is strongly advised to "sound out" the NSW Departmental referral bodies, in advance of lodging a DA, to ensure the works intended (as low impact) do not inadvertently trigger high-impact and high-cost (dis-



Concluding Comments
proportionate) conditions or adverse environmental requirements under the Water Management Act, Biodiversity Conservation Act or Rural Fires Act.
Question on these Notes? Should you have any questions or wish to seek clarification of any matters raised in these Notes, please contact the member of the Development Advisory Services Team at Council referred to on the front page of these Notes.



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