CONSULTING EARTH SCIENTISTS

PRELIMINARY SITE INVESTIGATION

INDUSTRIAL SUBDIVISION AND GENERAL INDUSTRY DEVELOPMENT

2 & 10 BOWMAN ROAD, MOSS VALE NSW

PREPARED FOR SAAS AUS PTY LTD

C/- JACKSON ENVIRONMENT AND PLANNING PTY LTD

CES DOCUMENT REFERENCE: CES220803-JEP-AC

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EXECUTIVE SUMMARY

Consulting Earth Scientists Pty Ltd (CES) was commissioned by Jackson Environment and Planning Pty Ltd on behalf of SAAS Aus Pty Ltd (the Client, SAAS) to carry out a Preliminary Site Investigation (PSI) at a site being part of 2 and 10 Bowman Road, Moss Vale New South Wales (NSW) (the Site).

SAAS Aus Pty Ltd (SAAS) is seeking to create a subdivision that will include industrial land from the property at 2 Bowman Road, Moss Vale (Lot 2 / DP1070888), and a small portion of the adjacent property at 10 Bowman Road (Lot 51 / DP130176), and the remaining rural land from the properties. Industrial buildings are proposed to be constructed on three of the created lots with industrial land use zoning. The buildings will be used to house SAAS' scaffolding businesses. The Site location is presented in Figure 1.

The areas proposed for industrial subdivision and general industrial development are shown in Appendix A.

CES has not been made aware of any previous Site investigation on the site, but the PSI study was accompanied by a geotechnical investigation by CES, which is reported separately, *Geotechnical Investigation Report 2 Bowman Road, Moss Vale, NSW* (CES Document Reference CES220803-JEP-AB).

To complete the PSI, CES carried out the following scope of works:

- Completion of a desktop study;
- Completion of a Site walkover;
- Preparation of a conceptual site model (CSM); and
- Preparation of this PSI Report.

The desktop review indicated no historical potentially contaminating activities have occurred on-site.

The Site walkover was undertaken on 25 October 2022. The Site description at the time of the Site walkover included:

- The Site comprised predominantly open space; there is one brick residence in the south as well as a milking shed, a farm shed and adjacent livestock pens in the centre of the site; there is also a high-pressure underground gas pipeline which passes through the central part of the Site with a north-east to south-west orientation
- No distressed vegetation was observed;
- No evidence of historical or current above ground or below ground fuel storage tanks on the site were observed; and
- The Site has a southerly slope, towards Whites Creek;
- No Asbestos Containing Materials (ACM) were observed but may be present within the house or sheds.

Based on the investigation results of the PSI, there is no evidence that the Site has been contaminated from the current or historic land use.

The Site is therefore considered suitable for the proposed industrial subdivision and general industry development.

PRELIMINARY SITE INVESTIGATION

INDUSTRIAL SUBDIVISION AND GENERAL INDUSTRY DEVELOPMENT

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LIST OF ABBREVIATIONS

ACM	Asbestos Containing Material
AHD	Australian Height Datum
ALS	Australian Laboratory Services
ANZG	Australian and New Zealand Guidelines
ASS	Acid Sulfate Soil
BTEX	Benzene, Toluene, Ethylbenzene and Total Xylenes
CES	Consulting Earth Scientists Pty Ltd
COC	Chain of Custody
CSM	Conceptual Site Model
DAC	Data Acceptance Criteria
DP	Deposited Plan
DQI	Data Quality Indicators
DQO	Data Quality Objectives

DSI	Detailed Site Investigation
EPA	Environment Protection Authority
GIL	Groundwater Investigation Levels
GPR	Ground Penetrating Radar
Ha	Hectare
HSL	Health Screening Level
km	Kilometre
m	Metre
mbgl	metres Below Ground Level
NATA	National Association of Testing Authorities
NEPM	National Environment Protection Measure
NSW	New South Wales
PAH	Polycyclic Aromatic Hydrocarbon
PID	Photoionisation Detector
PSI	Preliminary Site Investigation
QA/QC	Quality Assurance and Quality Control
QC	Quality Control
RPD	Relative Percentage Difference
SWL	Standing water levels
TRH	Total Recoverable Hydrocarbons

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1 INTRODUCTION

Consulting Earth Scientists Pty Ltd (CES) was commissioned by Jackson Environment and Planning Pty Ltd on behalf of SAAS Aus Pty Ltd (the Client, SAAS) to carry out a Preliminary Site Investigation (PSI) at a site being part of 2 Bowman Road, New South Wales (NSW) (the Site).

SAAS Aus Pty Ltd (SAAS) SAAS is seeking to create a subdivision that will include industrial land from the property at 2 Bowman Road, Moss Vale (Lot 2 / DP1070888), and a small portion of the adjacent property at 10 Bowman Road (Lot 51 / DP130176), and the remaining rural land from the properties. Industrial buildings are proposed to be constructed on three of the created lots with industrial land use zoning. The buildings will be used to house SAAS' scaffolding businesses.

Lot 2 covers an area of approximately 14.2ha and is divided into three areas separated by a road and gas pipeline easement. The Lot consists of the following land use zones (Figure 3):

- E4 General Industrial; and
- RU2 Rural Landscape.

The property at 2 Bowman Road also includes Lot 1 / DP103123, a C3 Environmental Management zoned portion of land on the opposite side of Whites Creek. No development is proposed on this portion of land, and it will not be included in the subdivision.

The adjacent property at 10 Bowman Road (Lot 51 / DP130176) is a 48-hectare rural property, adjacent to the western boundary of Lot 2. An area of approximately 12,500m^2 in the north-east portion of the Lot is zoned E4 and is proposed to be incorporated into the industrial subdivision and general industry development. The remainder of the property is zoned RU2.

This PSI has been prepared to support the Development Application to Wingecarribee Shire Council and conforms to the requirements of the relevant EPA Guidelines and the Wingecarribee Shire Council's *Industrial Development Control Plan.*

This PSI has been prepared to identify potential areas of environmental concern arising from the site's historical use, any potential contamination which may have occurred at the site, and to assess the suitability of the site, with respect to contamination, for the proposed development in

order to satisfy the requirements of State Environmental Planning Policy - Resilience and Hazards 2021.

This report has been prepared in general accordance with the applicable legislation and guidelines including but not limited to:

- *National Environmental Protection Measures (Assessment of Site Contamination) Measure 1999 – Schedule B2* (NEPC), 2013); and
- *Contaminated Land Guidelines: Consultants Reporting on Contaminated Land (NSW EPA, April 2020).*

2 SCOPE OF WORKS

To complete the PSI, CES carried out the following scope of works:

- Desktop review, which included a review of the following information:
    - Historical aerial photographs;
    - Topographic maps;
    - Site geology and soil maps;
    - Acid Sulfate Soils Risk Maps;
    - Hydrology;
    - Hydrogeological information;
    - Site zoning;
    - Water NSW groundwater bore database;
    - Site plans, including construction drawings and site layout plans; and
    - Contaminated land records and environment protection licence (EPL) database.
- Completion of a site walkover across the accessible areas of the site by a Principal CES Environmental Scientist to assess and identify present and past recognised environmental conditions (potential contaminating activities or substances), current landforms and site conditions, offsite land uses and to assist with the development of a Conceptual Site Model;
- Preparation of a conceptual site model (CSM) in accordance with the *National Environmental Protection Measures (Assessment of Site Contamination) Measure 1999 – Schedule B2* (NEPC), 2013); and
- Preparation of this PSI Report prepared in general accordance with the *Guidelines for Consultants Reporting on Contaminated Sites* (NSW EPA, 2020) which presents a site

specific CSM, and makes outline recommendations with respect to further investigation, if required.

3 PROPOSED SUBDIVISION

The subdivision will result in the creation of four new lots and leave Lot 1 / DP103123 in its current arrangement. The proposed subdivision will result in the following lots as shown in Appendix A:

- Create Lot 1 – approximately 2.88 ha of land zoned E4 General Industrial. Access to the lot will be directly from Bowman Road at the eastern end of the lot. The road frontage will be approximately 157 m, and the depth of the lot will vary from approximately 148 m on the southern boundary, to approximately 224 m on the northern boundary;
- Create Lot 2 – approximately 2.64 ha of land zoned E4 General Industrial. This lot will be formed by adjusting the boundaries of Lot 51 and Lot 2 to match the land use zone boundaries. This lot has a frontage to Bowman Road at the eastern end of the lot approximately 127 m wide. The lot will be approximately 352 m deep, tapering to a width of approximately 35 m at the western boundary. This lot is affected by the gas pipeline easement at the south-eastern end;
- Create Lot 3 – approximately 2.62 ha of land zoned E4 General Industrial. This is an irregularly shaped lot with a frontage to Bowman Road of approximately 388 m. This lot also has a frontage of approximately 132 m to an unformed paper road (Hutchinson Road) on the southern boundary. The northern portion of this lot is affected by the gas pipeline easement; and
- Create Lot 4 – approximately 54.64 ha of RU2 Rural Landscape zoned land. This is the RU2 portion of Lot 2 / DP1070888 separated from the remainder of the lot by the paper road along its northern boundary. The southern boundary of this lot is defined by Whites Creek and is within Wingecarribee Shire Council's Flood Planning Area. This part of the lot is to be merged with the remainder of the RU2 Rural Landscape lot of 51 / DP130176.

4 PROPOSED DEVELOPMENT

The development proposes the following elements. Plans of the development are presented in Appendix A.

- Building 1 – an irregularly shaped industrial building to be located in Created Lot 1 of the proposed subdivision. The north-east corner of the building will accommodate 956 m^2 office and staff amenities area split over the ground floor, first and second floor, outdoor visitor parking along the eastern side of the building, and a basement carpark under the south-east corner of the building. The outdoor hardstand will provide truck parking along the southern lot boundary, an enclosed loading/unloading area along the entire southern side of the building, and a smaller, covered loading/unloading area on the northern side.

A fire sprinkler system will be installed within the building. A 200,000L underground tank will be installed to capture rainwater for re-use on site;

- Building 2 – an irregularly shaped building to be located on Created Lot 2 of the subdivision. The building will provide 1,392 m^2 of office space and amenities over a ground and first floor. The building will include a covered outdoor loading area at the north-western end of the building. A fire sprinkler system will be installed within the building. A 200,000L underground tank will be installed to capture rainwater for re-use on site;
- Building 3 – this building will be constructed as a split-level warehouse with the upper and lower levels divided and provided with separate amenities and access. It will be located in the southern portion of Created Lot 3, away from the gas pipeline easement. Building 3A will be further split into two sections (North and South) and will include offices and staff amenities over a ground and first floor within the north-west corner of the building. Parking and access will be provided at the northern end for Building 3A. Building 3B (also split into North and South sections) will include offices and staff amenities within the south-west corner of the building over a ground and first floor. Parking and access will be provided at the southern end for Building 3B. Fire sprinklers will be installed in all sections of the buildings. A 120,000L underground tank will be installed to capture rainwater for re-use on site;
- Extension of Bowman Road and formation of the paper Hutchinson Rd to provide access to all created lots and buildings. Hutchinson Road will terminate in an industrial cul-de-sac near the south-eastern corner of Created Lot 3. An easement will be created within the northern portion of Created Lot 4 to accommodate this cul-de-sac;
- Internal haul roads to accommodate up to 26m B-Doubles (Buildings 1 and 2); heavy vehicles to use Building 3 will be limited to 19m semi-trailers;
- Outdoor hardstand areas surrounding each building;
- Individual stormwater capture and treatment systems to be provided to each building will include a HumeCeptor® Gross Pollutant Trap to remove suspended solids and hydrocarbons, and a HumeFilter® Universal Pollutant Trap to capture suspended solids, nitrogen, phosphorous and gross pollutants in stormwater runoff. The treatment systems will discharge to below ground on-site detention basin/s with discharge control to manage stormwater flow volumes;
- Stormwater from the proposed development will discharge to the northern portion of Created Lot 4 via an outlet headwall with scour protection. An easement will be created within the lot to facilitate construction and maintenance;
- Solar collection arrays on all building roofs;
- Landscaping along site boundaries and within parking areas; and
- 1.8m high open black palisade fencing for security.

5 SITE INFORMATION

Information presented in this section is summarised from readily available information sources and the Lotsearch environmental database search site report, which is presented as **Appendix B**.

5.1 *SITE IDENTIFICATION*

The site is located off 2 Bowman Road, Moss Vale NSW, within the LGA of Wingecarribee Shire Council. The total site covers an area of approximately 63 ha and is legally identified as a portion of Lot 1 DP103123, Lot 2 DP1070888 and part Lot 51 DP130176 (**Figure 1**).

As discussed in Sections 3 and 4, the site is proposed to be subdivided, with 3 of the created lots to be developed. The geographical extent of the proposed development site is presented in Figure 2.

5.2 *SITE ZONING*

Lot 2 / DP1070888 consists of the following land use zones:

- E4 General Industrial; and
- RU2 Rural Landscape.

Lot 51 / DP130176 consists of the following land use zones:

- The north-east portion of the Lot is zoned E4 and is proposed to be incorporated into the industrial subdivision and general industry development.
- The remainder of the property is zoned RU2.

5.3 *SITE DESCRIPTION*

The subject site is located within a rural area on the western side of Moss Vale and adjoins an extensive area of industrial development (see Figure 1). The site is irregular in shape and predominantly comprises grassed open space used for cattle grazing and dairy production.

A photographic log is presented in **Appendix C**.

5.4 *SURROUNDING LAND USE*

Based on observations from the site inspection, the surrounding land uses comprised the following:

- **North** – Wingecarribee Shire Council recycling & resource recovery centre
- **East** – Various light industries – Endeavour Energy Field Service Centre, Anderson Waste Services, Self-Storage facility, hardware & landscape supplies centre;
- **South** – Grassed rural land and dam; a sewage treatment plant lies some 400m to the south-east of the southern Site boundary;

- **West** – Grassed and lightly timbered rural land and dam.

5.5 *SENSITIVE RECEPTORS*

Sensitive receptors are presented in Table 1.

Table 1: Sensitive Receptors Onsite and Nearby

Sensitive Receptor	**Receptor Type**	**Orientation and Distance from Site**
Current/Future Site Workers Commercial/Industrial Users	Occupational Risk – Acute Risk only Human Health – Industrial/Commercial	0 m
Mostly cleared rural land	Ecological.	0m
Whites Creek and unnamed creeks	Ecological.	150m – 250m to south and south-east
Moss Vale sewage treatment plant	Industrial + stormwater detention pond	400m south-east

5.6 *CURRENT AND PROPOSED SITE USE*

At the time of the PSI, the Site was predominantly grassed open space with some scattered trees, one house and two farm sheds with associated livestock pens.

The proposed development is described in Section 4 and the concept plan of the proposed subdivision is provided in **Appendix A**.

5.7 *TOPOGRAPHY*

The site was observed during the site inspection to have a southerly slope.

5.8 *SURFACE WATER*

The nearest surface water features are Whites Creek to the south and a small unnamed creek joining it from the north-west. There is also a farm dam on the southern boundary.

5.9 *GEOLOGY*

Reference to the Lotsearch report (**Appendix B**) indicates that the site is underlain by residual and alluvial deposits of Quaternary age, and which in turn are underlain by Bringelly Shale of Triassic age.

5.10 *HYDROGEOLOGY*

No information on groundwater flow direction is currently available, however based on topography shallow groundwater is likely to flow to the south, towards the Whites Creek.

5.11 *GROUNDWATER BORE SEARCH*

A search of the WaterNSW database (as reported and listed in Appendix B) indicates there are no groundwater wells located on the Site, but three monitoring bores are located immediately to the north.

5.12 *SENSITIVE LOCAL ENVIRONMENTS*

The site is not located within an Underground Petroleum Storage System (UPSS) environmentally sensitive zone. UPSS environmentally sensitive zones represent areas that are likely to be vulnerable to the contamination from leaking UPSS due to geology or groundwater properties.

5.13 *SOILS*

A review of the Atlas of Australian Soils Map indicates that soils on-site are predominately sodosols.

5.14 *ACID SULFATE SOILS*

The Atlas of Australian Acids Sulfate Soils indicates the soils on Site (and throughout the surrounding area) are classified as Class B, '*Low probability of ASS occurrence. 6-70% chance of occurrence*'.

5.15 *NSW CONTAMINATED SITE REGISTER*

The Site and 1000m radius dataset buffer contain no sites listed as contaminated sites under the NSW EPA Contaminated Lands Register. Therefore, it is unlikely the Site is impacted by any potential contamination from off-site sources.

There is one EPA record of notice applying to the Moss Vale North Depot immediately to the north of the Site. This notice of 24 September 1990 under the Environmentally Hazardous

Chemicals Act 1985 relates to the approved use of the site for the acceptance and storage of asbestos waste.

5.16 *PFAS*

With respected to potential PFAS contamination at the site it is noted that:

- The site is not, nor is it located near, a site subject to the NSW EPA PFAS investigation Programme;
- The site does not have a history of bulk fuel storage likely to have required the use and retention onsite of PFAS containing Aqueous Film Forming Foams (AFFF); and
- An internet search for historic fires at the Site returned no reported fires.

In the absence of a source of PFAS at the site, PFAS has not been included in this investigation.

5.17 *METEOROLOGY*

Moss Vale climate conditions are summarised below (from the Bureau of Meteorology Moss Vale weather station):

- Mean monthly rainfall was variable throughout the year, with rainfall being highest during June (100 mm) and lowest during September (59 mm). Mean annual rainfall is 958 mm;
- Highest mean temperatures occur during the month of January (26 degrees C); and
- Coolest maximum temperatures occur during the month of July (12 degrees C), which also experiences minimums of 1 degree C.

6 SITE HISTORY

A summary of the site history information is presented below.

6.1 *REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS*

A review of the historical aerial photographs available for site is presented as Table 2. Copies of the aerial photographs are presented in **Appendix B**. The table includes an assessment of the site and the surrounding land for each historical aerial photograph. The aim of the review is to identify potential sources of contamination other than those present at the time of the site walkover.

Table 2: Historical Aerial Photograph Review

Year	Description
1949	The Site comprises largely cleared grazing land with scattered trees and is more heavily timbered on the western section (Area 4, part Lot 51). Berrima Road is present however Bowman Road does not exist; one small building is present, just to the north of the Site.
1963	More cleared land is present in the northern and southern sections of the Site, and a small dam on the southern edge. All surrounding land remains as grazing land.
1969	As previously with little change; the small dam is slightly larger and grazing remains the only land use. Bowman Road is not yet present.
1979	The house in the southern part is now present, with access tracks from Berrima Road. Numerous trees remain in the western section. Some industrial development exists to the north-east. The adjacent site to the north is partly cleared.
1989	The Site and its surrounds appear similar to the 1979 photograph apart from the milking shed and farm shed in the centre of the site which are present and Bowman Road is now formed. Some activity is evident on the site to the north.
1997	The site and its surrounds appear largely unchanged from the 1989 photograph except that more land clearing and industrial development has occurred to the north, between the Site and Berrima Road.
2006	The area adjoining to the north is well developed with industrial activity evident. The Site itself is still exclusively grazing usage.
2013	As previously. The western part now also largely cleared; the land adjoining the eastern boundary is now largely industrial usage.
2018	As previously. More trees are established around the house and the dam in the south.
2021	As previously. Grazing is the only apparent Site land use, with industrial uses well established on adjoining land to the north and east. Land to the west and south remains as mostly cleared open grazing use.

Based on the review of historic aerial photographs, it is unlikely the Site would have been impacted by previous developments or land uses. It is highly unlikely that the Site has been subjected to significant industrial processes or potentially contaminating land uses, based on the aerial photographs.

6.2 *REVIEW OF HISTORICAL TOPOGRAPHICAL MAPS*

A topographical map review does not indicate that the Site has a risk of historical use for potentially contaminating activities such as heavy commercial/industrial uses. Copies of the historic topographical maps are presented in **Appendix B**.

6.3 *HISTORIC BUSINESS DIRECTORIES*

Historic business directories search results are presented in **Appendix B**.

Review of historic business directories do not indicate that the Site and its immediate surrounds have been used for potentially contaminating activities.

6.4 *NSW EPA LICENSED ACTIVITIES UNDER THE POEO ACT 1997*

The Site is not subject to any Environment Protection Licence (EPL) issued under the Protection of the Environment Operations Act 1997:

Two adjoining sites are subject to an EPL issued under the Protection of the Environment Operations Act 1997:

- EPL No. 3699 – the Wingecarribee Shire Council Regional Livestock Exchange (to the north-west, the adjoining land comprises only open grassed grazing use); and
- EPL No. 10300 – the Wingecarribee Shire Council Resource Recovery Centre (immediately north). This licence is for the use of the centre for composting, recovery, and storage of various waste types.

It was noted on the 2015 topographic map (Refer Appendix B) that the adjoining site to the north (now the Resource Recovery Centre) was indicated as a ‘rubbish tip’, though on the 1998 topographic map it was labelled as a ‘waste transfer station’. Enquiries with the centre suggest that some landfilling of rubbish has taken place in the past, though it is unclear over what period. That property is identified on the National Waste Management Database only as a transfer station, and the EPL (no. 10300) does not refer to former landfilling.

6.5 *TITLE AND LEASE RECORDS*

Historic Title information was not obtained for the Site as the aerial photo information determined that the land has only been used in the past for animal grazing and associated rural activities such as dairy production.

7 PREVIOUS SITE INVESTIGATIONS

CES has not been made aware of any previous Site investigation on the site; the PSI study was accompanied by a geotechnical investigation by CES, which is reported separately, *Geotechnical*

Investigation Report 2 Bowman Road, Moss Vale, NSW (CES Document Referenced CES220803-JEP-AB).

The geotechnical investigation comprised the drilling of eight (8) boreholes across the site. The encountered subsurface profile is presented in Table 3.

Table 3: Inferred Geotechnical Model

Unit	Geotechnical Unit	Approximate Depth Unit Range (m)	Material Description
Unit 1	Topsoil/ Fill	0.00 - 0.15	FILL: Clayey SILT, dark brown, fine to medium grained, low plasticity silt, with organics and rootlets. Soft. Moist.
Unit 2	Clayey SILT/ Silty CLAY	0.15 - 0.50	Clayey SILT/ Silty CLAY:l, grey/brown, medium plasticity, fine grained. Soft to firm, moist. Inferred Residual Soil.
Unit 3a	CLAY	0.50 - 3.50	CLAY, medium to high plasticity, grey to brown. Stiff to very stiff. Moist to dry. Becoming Silty Clay with depth (approx. 2.00m). Inferred Residual Soil.
Unit 3b	Clayey SAND	3.50 – 4.00	Clayey SAND: Inferred Extremely Weathered Rock. Fine grained, medium to high plasticity, dense to hard, dry. Inferred Extremely Weathered Rock.
Unit 4	Shaley CLAY/ SHALE		Shaley CLAY/ SHALE: with interbedded sandstone beds throughout. Highly to slightly weathered and inferred low to medium strength. pale to dark grey, fine grained sand. High plasticity when recovered as clay.

8 SITE WALKOVER OBSERVATIONS

A site walkover was undertaken by an experienced CES Environmental Scientist on 25 October 2022. Selected photographs from the site walkover are presented as **Appendix C**.

The Site description at the time of the Site walkover noted that:

- The Site comprised predominantly grassed open space; there is one brick residence in the south and a milking shed and farm shed in the centre of the Site;
- No signs of distressed vegetation (an indication of potential environmental impacts) in the accessible areas were observed; no surface staining indicative of surface spills that could have impacted underlying soil and groundwater were observed;
- No observable evidence of above-ground or below-ground fuel storage tanks on the site were observed;

- The Site has a southerly slope towards Whites Creek;
- No Asbestos Containing Materials (ACM) were observed, however may be present within the house or sheds.

9 CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) was developed in consideration of the historical information, current site conditions, and analytical results. The CSM takes into account the possible future use of the Site.

9.1 *POTENTIAL SOURCES OF CONTAMINATION*

Historic Agricultural/Commercial Activities

The historical review and site inspection indicates that the Site has been used exclusively as rural grazing land, and for dairy (milk) production. Some of the adjoining land uses include industrial activities (e.g. the Resource Recovery Centre to the north and the waste services and other uses to the east). The use of petroleum products such as fuels, oils, and hydraulic oils may be associated with these industrial land uses, and contaminants of potential concern (COPC) include:

- Petroleum Hydrocarbons;
- Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX); and

Polycyclic Aromatic Hydrocarbons (PAHs).

Based on air-photograph and walkover observations, these risks are considered low.

Uncontrolled Fill

It is possible that some minor cut and fill activities could have occurred during the clearing and building of the house and sheds, however there is no evidence of imported fill being paced on the Site. Filling was not identified in the geotechnical boreholes completed onsite.

9.2 *POTENTIAL OFF-SITE SOURCES OF CONTAMINATION*

The potential off-site sources of contamination identified in the vicinity of the Site, being the above-mentioned industrial uses, are considered unlikely to have included activities which could lead to soil or water contamination on the Site itself. The possible presence of landfilled waste materials on the site to the north, referred to in Section 4.4 could conceivably represent a source of groundwater contamination and a programme of groundwater and surface water monitoring is a requirement of the EPL (and has been conducted for at least the past 10 years). As the subject

Site is proposed for industrial usage, the likelihood of any groundwater contamination representing a constraint to the proposed development is considered low.

9.3 *POTENTIAL PATHWAYS*

The pathways through which contaminants may reach receptors are in part dependent on the nature and behaviour of the contaminant. The following potential pathways have been identified:

- Ingestion / dermal contact during construction and demolition activities (acute risks);
- Indoor and outdoor inhalation, dermal contact and incidental ingestion of contaminants in the particulate form (dust);
- Limited soil ingestion and dermal contact due to the small lawns and landscaping;
- Transfer of contaminants by migration of water (surface or ground) or through air by emissions or wind-blown dust.

9.4 *RECEPTORS*

Potential sensitive receptors (on and off-site) are listed below:

- Future construction workers during the construction of the proposed redevelopment (including demolition and site preparation works) (acute only);
- Future employees and visitors;
- Groundwater beneath the site;
- Surface Water; and
- Neighbouring residents.

10 SUMMARY AND DISCUSSION

10.1 *SITE HISTORY*

A summary of the site history assessment is presented below:

- The historical aerial photo review confirms that the Site has a history of rural land use – primarily cattle grazing and dairy/milk production;
- The review and site inspection also indicate there is a low potential for the Site to have been impacted by historical land uses and it is unlikely that the Site has been subject to filling or waste disposal;
- Review of historic business directories did not indicate that the Site and its immediate surrounds have been used for potentially contaminating activities;
- The Site is not listed on the NSW EPA Contaminated Sites Register. No sites within a 1,000 m buffer of the Site are listed on the NSW EPA Contaminated Sites Register;

- The site is not listed on the NSW EPA PFAS Investigation Programme. No sites within a 1 km buffer of the site are listed on the NSW EPA PFAS Investigation Programme, Department of Defence PFAS Investigation & Management Program or Airservices Australia National PFAS Management Programme;
- The site is not subject to an Environment Protection Licence (EPL) issued under the Protection of the Environment Operations Act 1997, however the adjoining site to the north (the Wingecarribee Shire Council Resource Recovery Centre) is subject to an EPL for the composting, recovery and storage of various waste materials;

10.2 *SITE WALKOVER*

A summary of the site walkover assessment is presented below:

- The Site comprised predominantly grassed open space; there is one brick residence in the south and a milking shed and farm shed in the centre of the Site;
- No signs of distressed vegetation (an indication of potential environmental impacts) in the accessible areas were observed; no surface staining indicative of surface spills that could have impacted underlying soil and groundwater were observed;
- No observable evidence of above-ground or below-ground fuel storage tanks on the site were observed; however some small volumes of chemical or fuel storage may be present in the farm sheds;
- The Site has a southerly slope towards Whites Creek;
- No Asbestos Containing Materials (ACM) were observed however may be present within the house or sheds on the property.

10.3 *SITE SUITIBILITY*

Based on the CSM and investigation results, it is unlikely the Site has been contaminated based on current or historic land uses, and the likelihood of any significant contamination from off-site sources is considered low. The Site is therefore considered suitable for the proposed industrial subdivision and general industry development.

11 LIMITATIONS OF THIS REPORT

This report has been prepared for use by the client who commissioned the works in accordance with the project brief and based on information provided by the client. The advice contained in this report relates only to the current project and all results, conclusions and recommendations should be reviewed by a competent person with experience in geotechnical and environmental investigations before being used for any other purpose. CES accepts no liability for use or interpretation by any person or body other than the client. This report must not be reproduced except in full and must not be amended in any way without prior approval by the client and CES.

This report does not provide a complete assessment of the environmental status of the site and is limited to the scope defined therein. Should information become available regarding conditions at the site including previously unknown sources of contamination, CES reserves the right to review the report in the context of the additional information.

12 REFERENCES

- NEPC, 2013: National Environment Protection Council (2013*).* National Environment Protection (Assessment of Site Contamination) Measure. *Schedule B(1) Guideline on Investigation Levels For Soil and Groundwater.*
- NEPC, 2013: National Environment Protection Council (2013*).* National Environment Protection (Assessment of Site Contamination) Measure. *Schedule B(2) Guideline on Site Characterisation.*
- NSW EPA (2019) *List of Contaminated Sites Notified to EPA* as at 13 September 2022. NSW Government.
- NSW EPA (2020) *Contaminated Land Guidelines: Consultants Reporting on Contaminated Land*.
- NSW Office of Environment and Heritage (OEH), 2011, *Guidelines for Consultants Reporting on Contaminated Sites*.

Figures

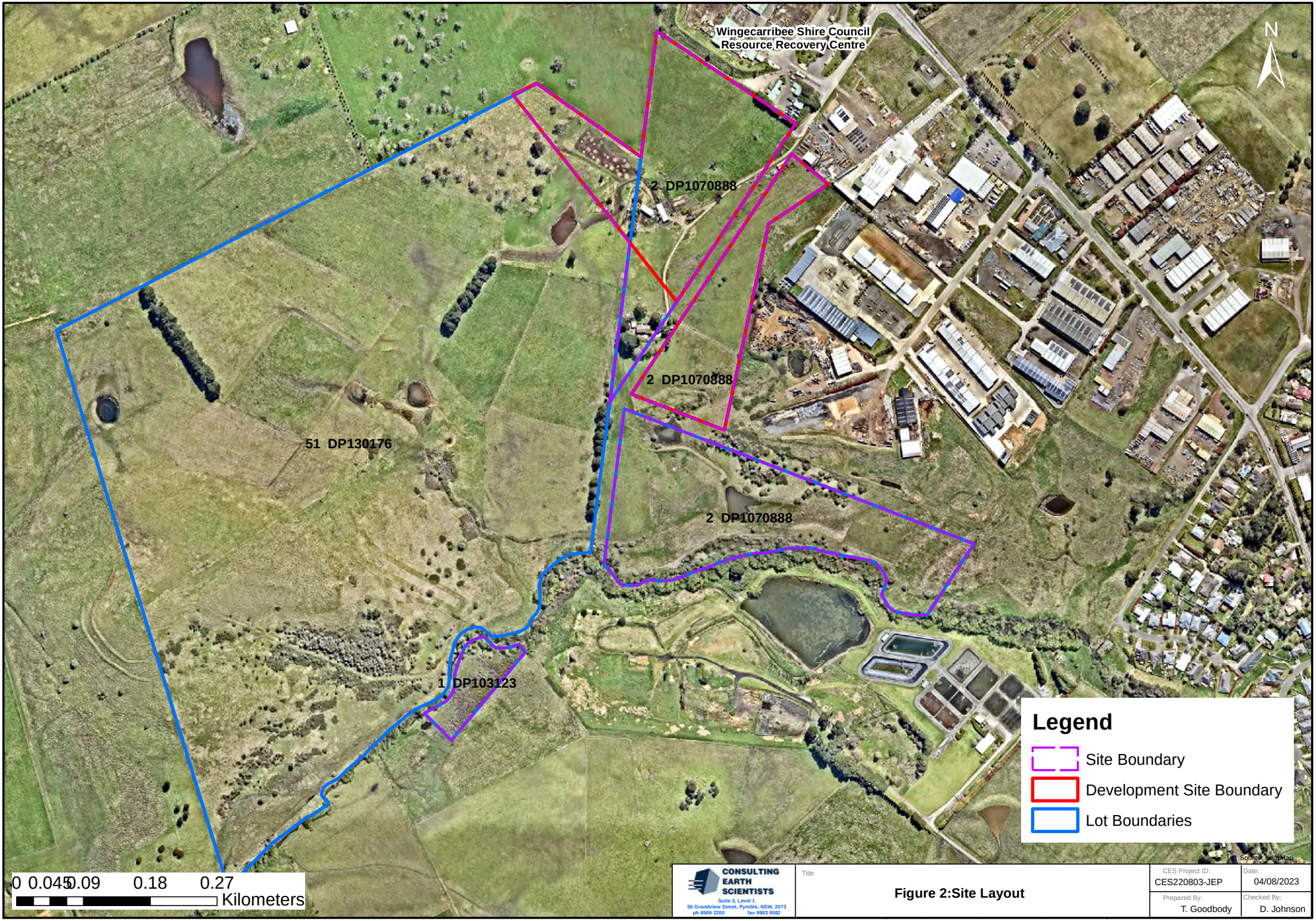


CONSULTING EARTH SCIENTISTS
Suite 3, Level 1
55 Grandview Street, Pymble, NSW, 2073
ph 8569 2200 fax 9983 0582

Title

Figure 1:Site Location

CES Project ID:	Date:
CES220803-JEP	04/08/2023
Prepared By: T. Goodbody	Checked By: D. Johnson



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55 Grandview Street, Pymble, NSW, 2073
ph 8569 2200 fax 9983 0582

Title

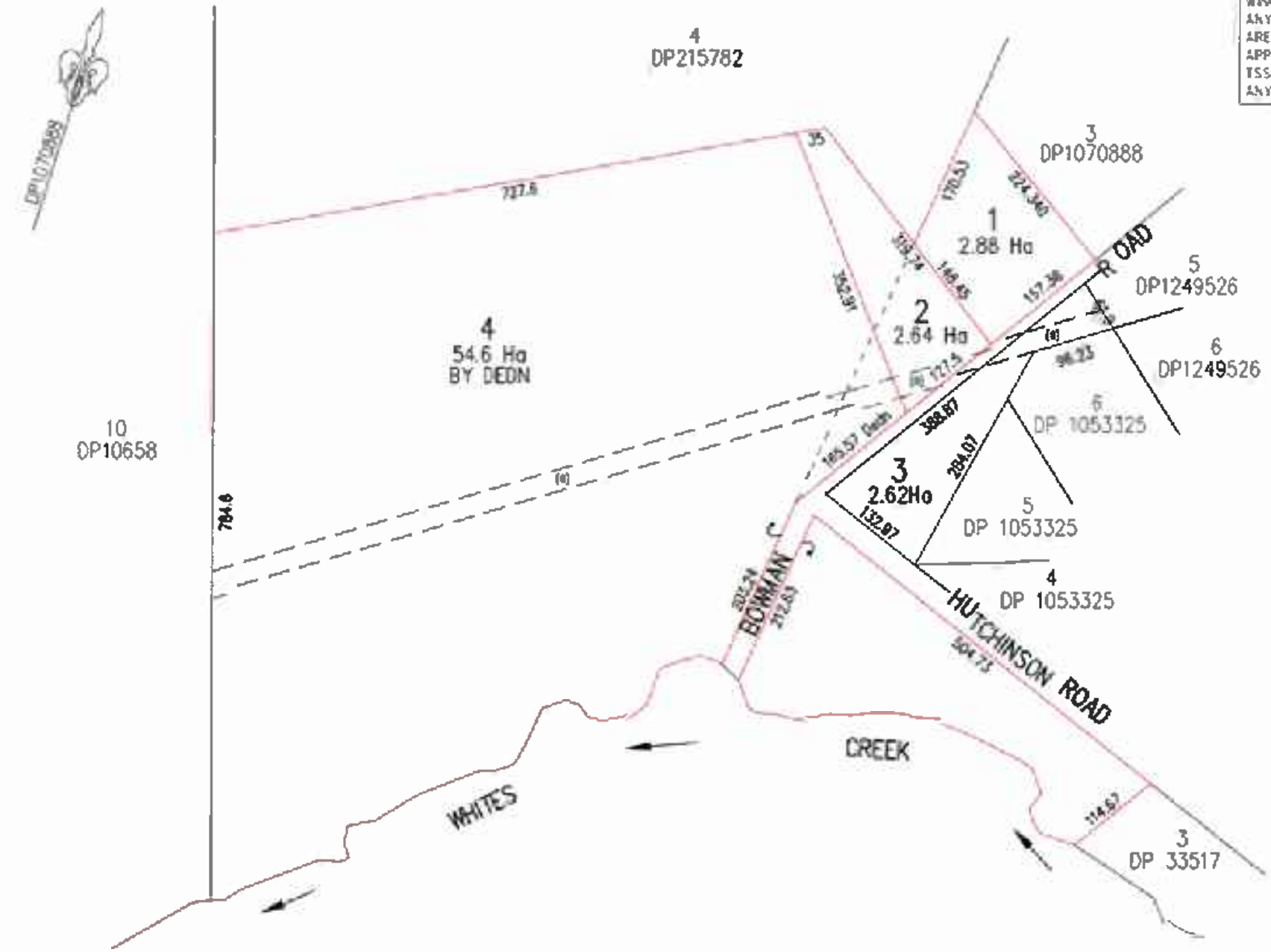
Figure 2:Site Layout

CES Project ID:	Date:
CES220803-JEP	04/08/2023
Prepared By: T. Goodbody	Checked By: D. Johnson

Appendix A

Proposed Subdivision Layout

THIS DOCUMENT HAD BEEN PRODUCED FOR SUBMISSION TO WINGECARIBEE SHIRE COUNCIL ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. ALL LOT DIMENSIONS, AREAS AND SHAPES ARE APPROXIMATE ONLY AND ARE SUBJECT TO VARIOUS AUTHROT APPROVAL, FINAL SURVEY & REGISTRATION WITH NSW LRS
TSS TOTAL SURVEYING SOLUTIONS TAKES NO RESPONSIBILITY FOR ANY ERROR OR OMISSION IN THIS DOCUMENT



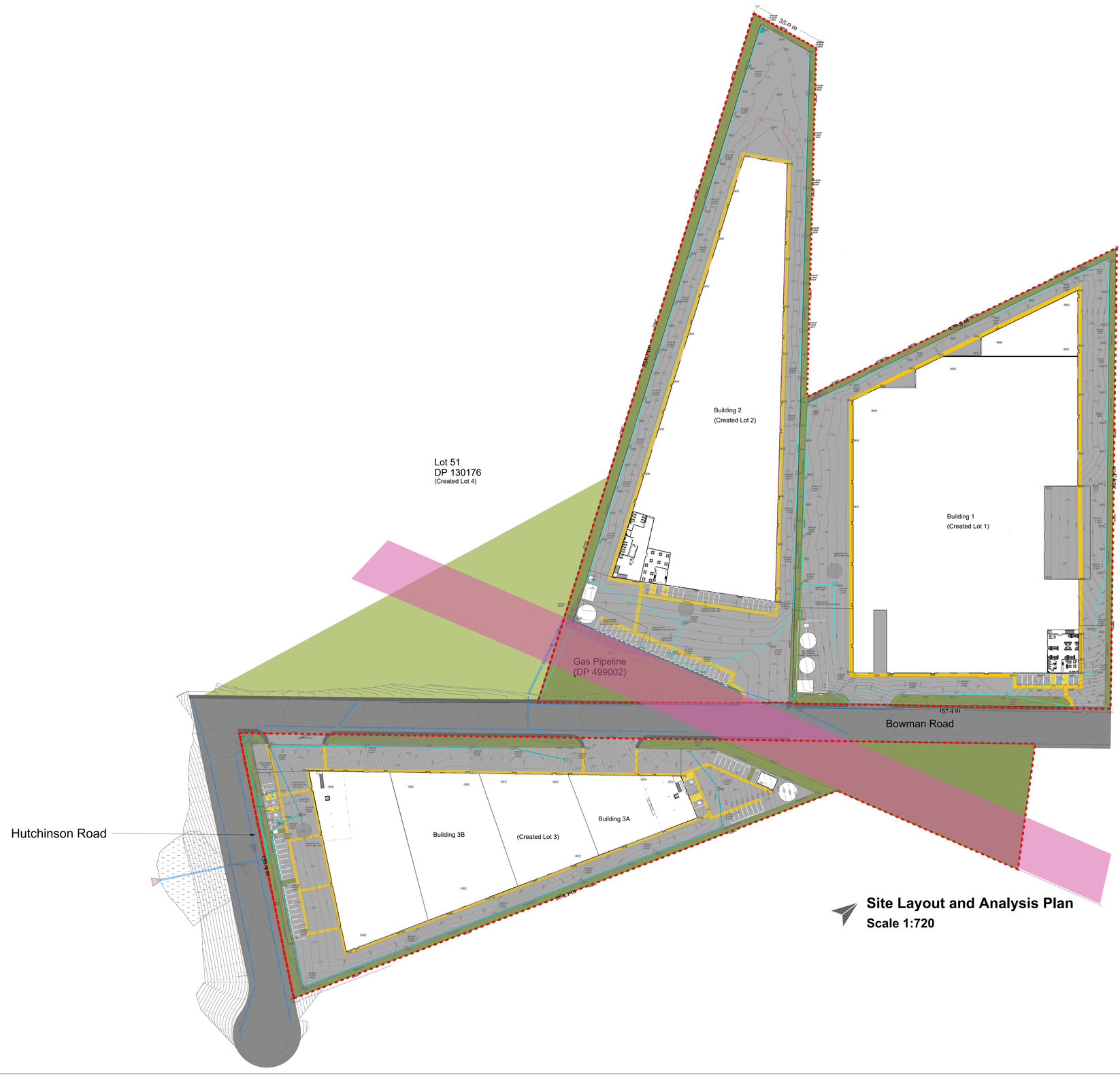
TSS
JAKE COVE | CANBERA | NEWCASTLE | CENTRAL COAST

PLAN OF PROPOSED SUBDIVISION OF LOT 51 IN DP130176 & LOT 2 IN DP1070888

LGA: WINGECARRIBEE
Locality: MOSS VALE
Reduction Ratio: 1: 5000
Lengths are in metres.

REGISTERED

DRAFT
DP PLAN
REV 2 ISSUED: 5/4/2023



Legend

- Roads
- Landscaping
- Internal Pedestrian Footpath
- External Pedestrian Footpath
- Gas Pipeline Easement
- Created Lot boundary

Development Statistics

Created Lot 1	28826.07 m²
Created Lot 2	26,422.12 m²
Created Lot 3	26119.49 m²
Total lot area	81,367.68 m²

Date	Plan Number	Site Layout And Analysis Plan
6-7-2023	1	2 Bowman Road, Moss Vale (Part of lot 51, DP 130176 , Lot 2, DP1070888)

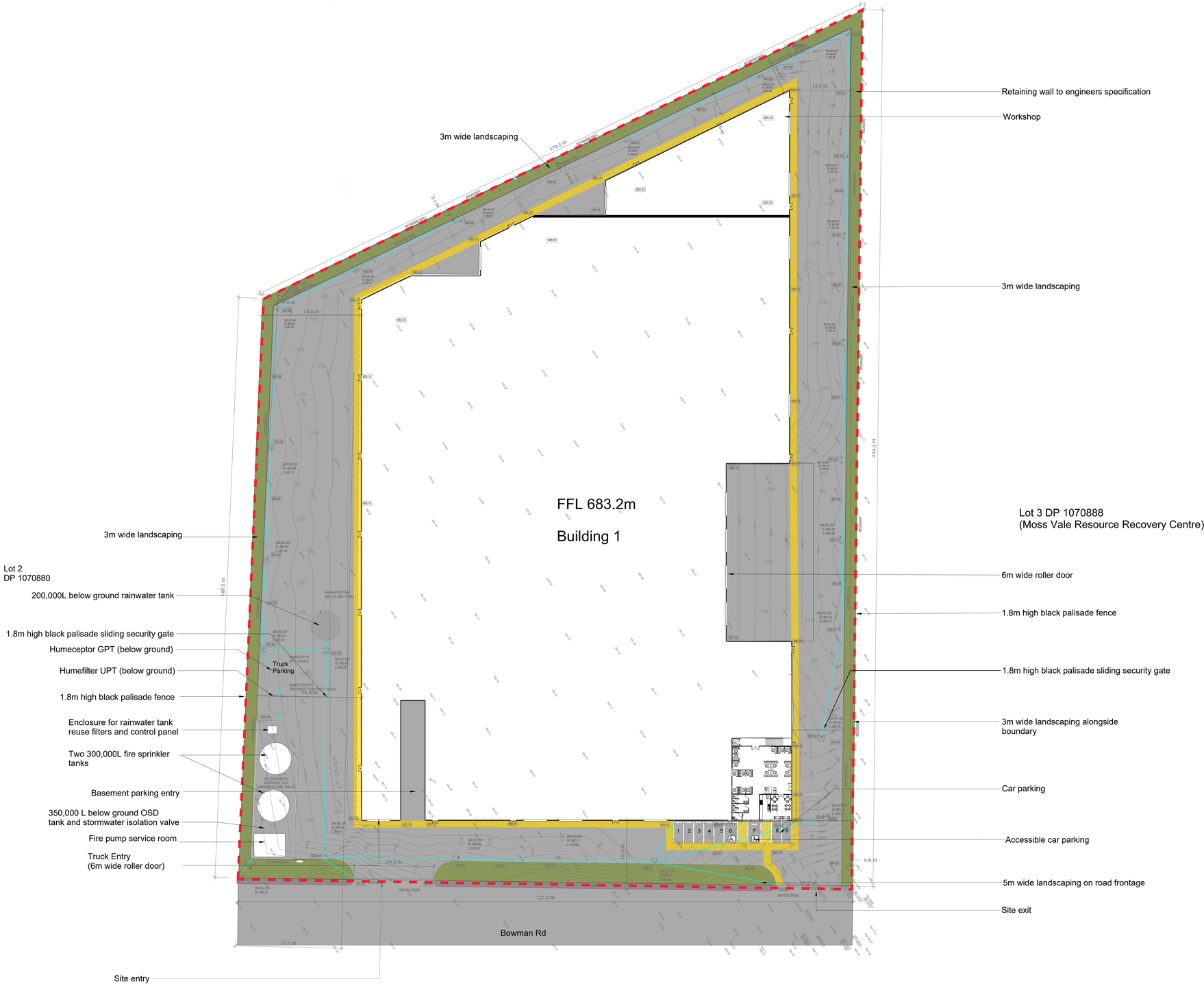
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E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Site Layout and Analysis Plan
Scale	1:720
Source	Jackson Environment and Planning Pty Ltd

01

A



Site Layout
Scale 1:380

Legend

- Roads
- Landscaping
- Internal Pedestrian Footpath
- External Pedestrian Footpath
- Created Lot boundary

Development Statistics

Building 1	16414.3 m²
Basement Floor Area	2215.25 m²
Office Ground Floor Area	293.22 m²
Office First Floor Area	341.6 m²
Office Second Floor Area	321.61 m²
Hardstand Area	13042.77 m²
Total Lot Area	28826.07 m²
Gross Floor Area	17370.73 m²
Building and office volume	212,475.49 m³
Basement volume	6434.24 m³
Site Coverage	57%

Parking Rate - Building 1

1 Space per 300m² GFA

Required = 58

Provided = 59

Date	Plan Number	Site Layout (Building 1)
6-7-2023	1.1	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

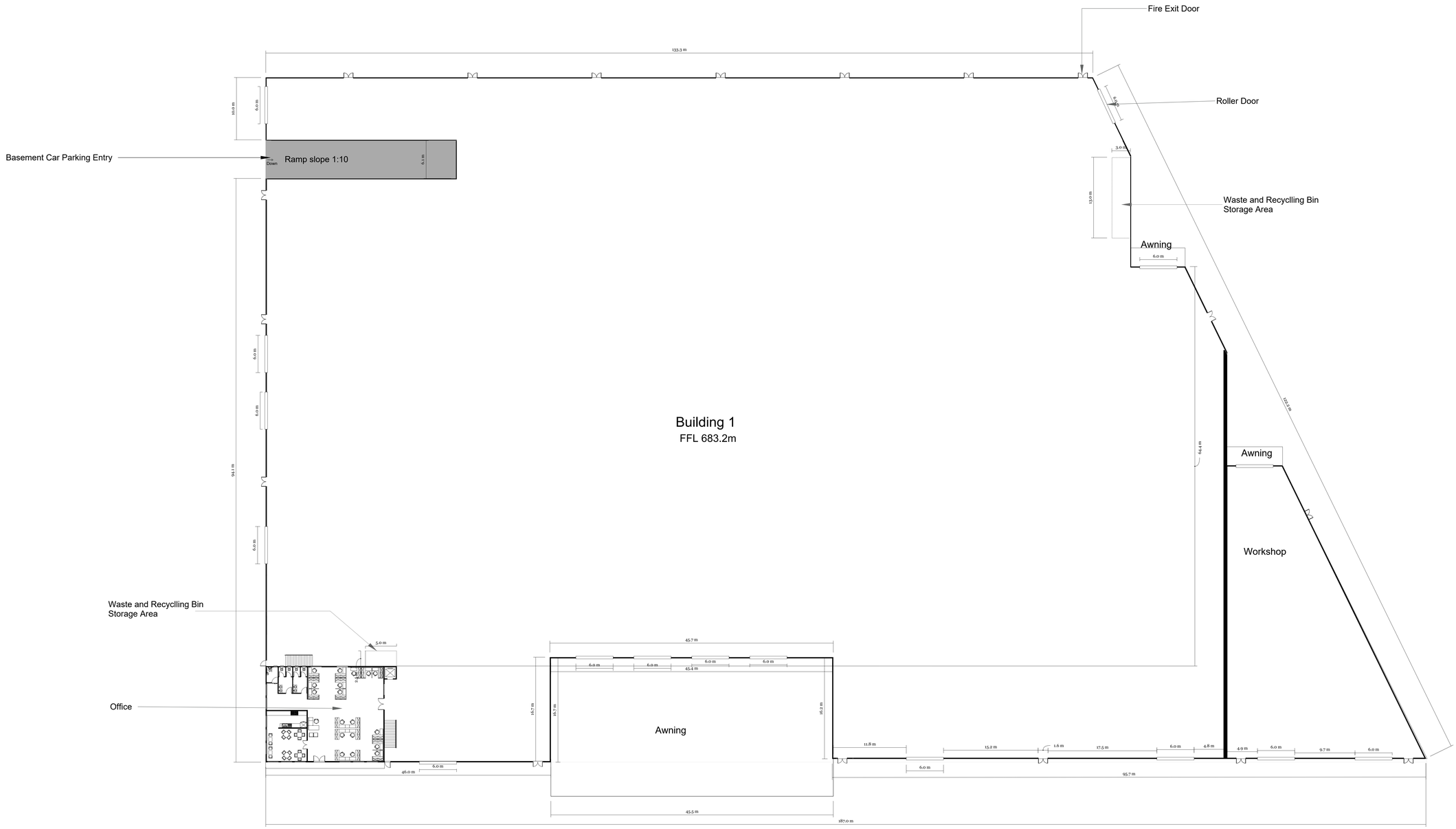
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Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Building 1 Site Layout Plan
Scale	1:380
Source	Jackson Environment and Planning Pty Ltd

01

A



Building Floor Plan
Scale 1:240

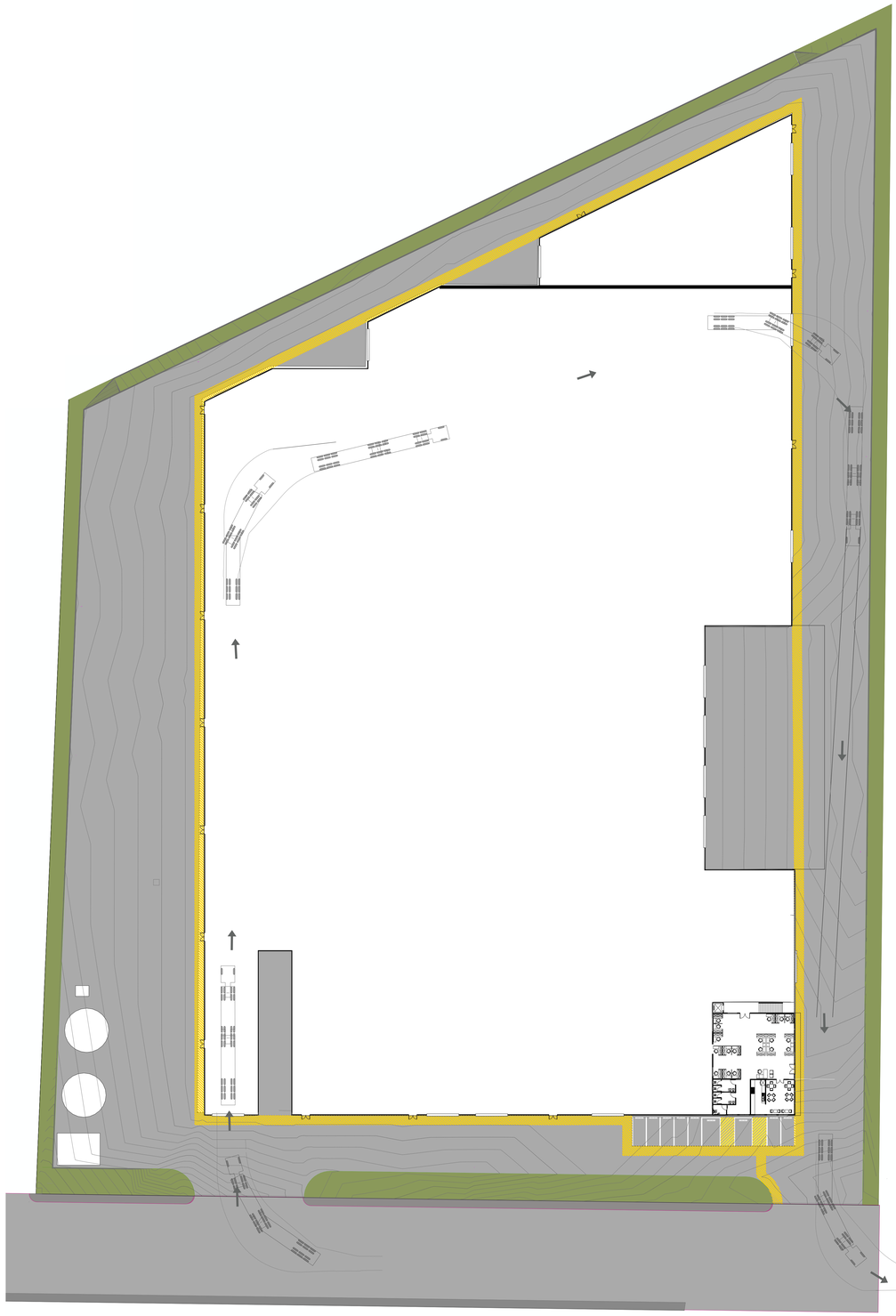
Date	Plan Number	Floor Plan (Building 1)
6-7-2023	1.2	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Floor Plan
Scale	1:240
Source	Jackson Environment and Planning Pty Ltd

01
A





Tractor Width	2.5m
Trailer Width	2.5m
Tractor Track	2.5m
Trailer Track	2.5m
Lock to Lock Time	6.0
Steering Angle	20.6
Articulating Angle	70

Turning Path 26m B-Double Truck

Scale 1:360

Date	Plan Number	Turning Path 26 m B Double Truck
6-7-2023	1.3	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Turning Path 26 m B Double Truck
Scale	1:360
Source	Jackson Environment and Planning Pty Ltd

01
A



Basement parking
Scale 1:380

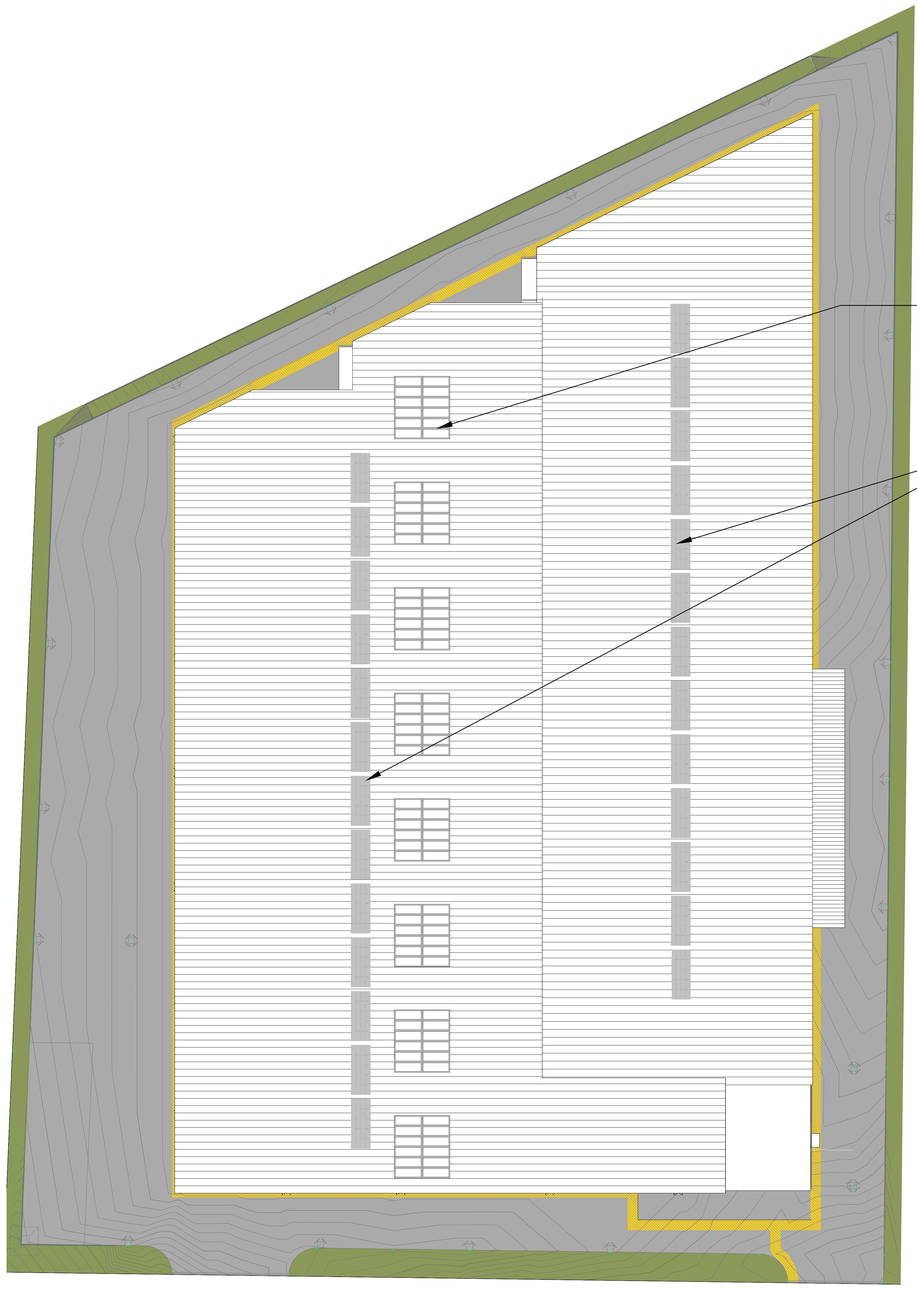
Date	Plan Number	Basement Parkng Plan (Building 1)
6-7-2023	1.4	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON
ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Basement Parking Plan
Scale	1:380
Source	Jackson Environment and Planning Pty Ltd

01
A



Lot 3 DP 1070888
(Moss Vale Resource Recovery Centre)

Building 1 Roof Plan

Scale 1:380

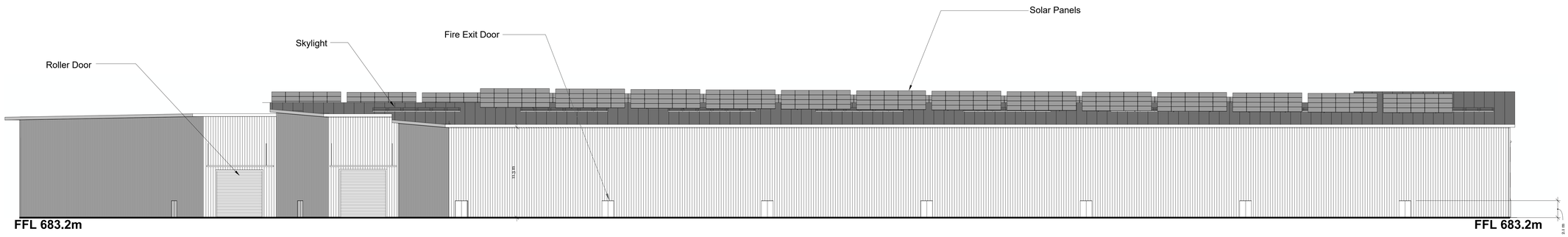
Date	Plan Number	Roof Plan (Building 1)
6-7-2023	1.5	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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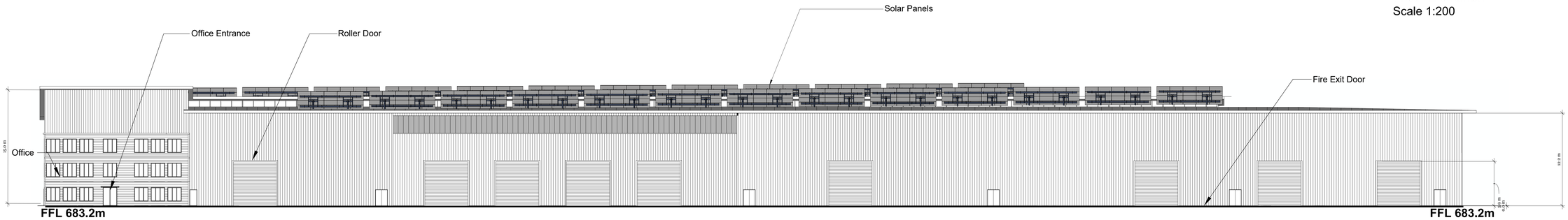
JACKSON
ENVIRONMENT AND PLANNING

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Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Roof Plan
Scale	1:380
Source	Jackson Environment and Planning Pty Ltd

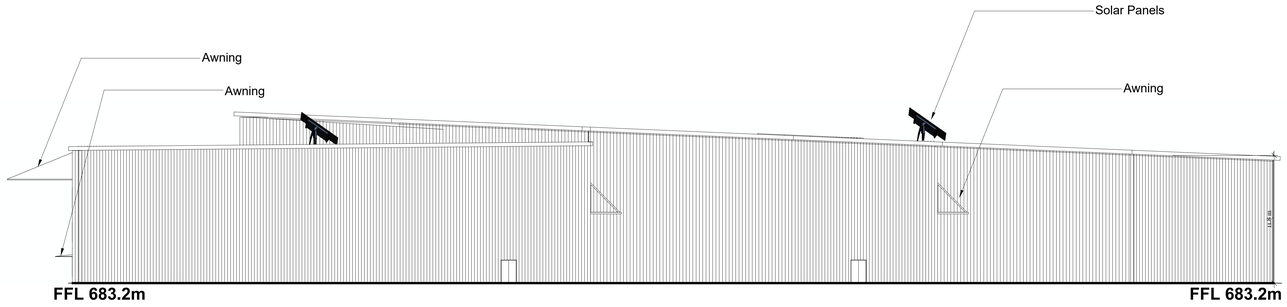
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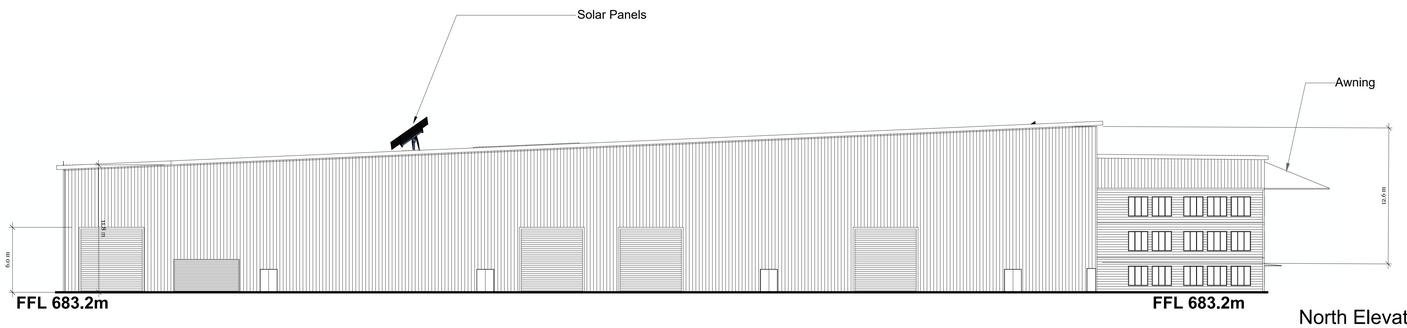
West Elevation
Scale 1:200



East Elevation
Scale 1:200



South Elevation
Scale 1:200



North Elevation
Scale 1:200

Schedule of Materials and Finishes

Wall Material: Colorbond Pale Eucalypt	
Roof Material : Colorbond Evening Haze	
Office Wall Material: Coen Composite Wood Panel (oak) or equivalent	
Office Roof Material : Colorbond Evening Haze	

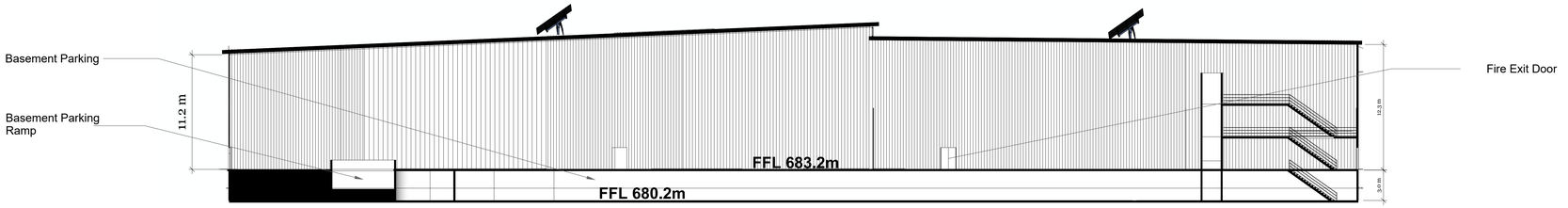
Date	Plan Number	Elevation (Building 1)
6-7-2023	1.6	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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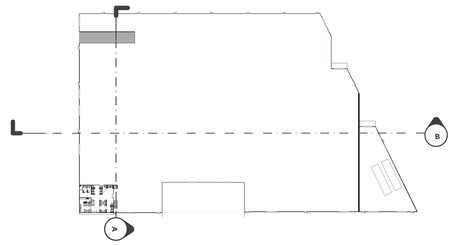
JACKSON ENVIRONMENT AND PLANNING

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Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Elevation
Scale	1:200
Source	Jackson Environment and Planning Pty Ltd

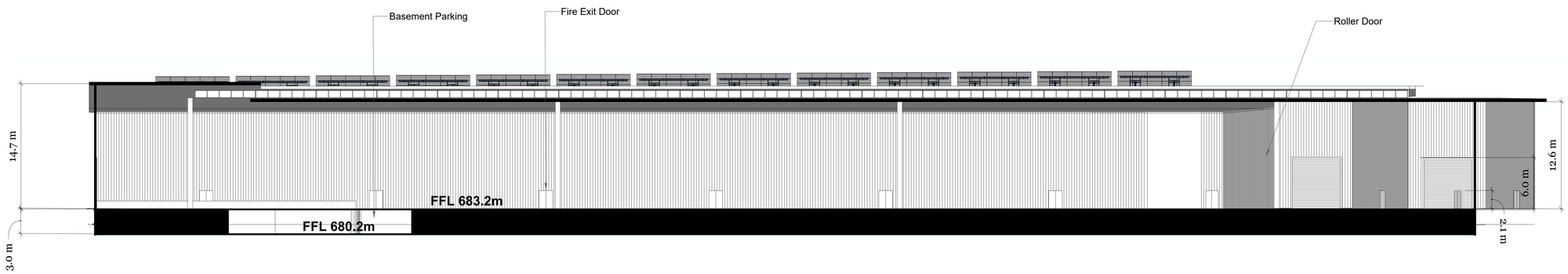
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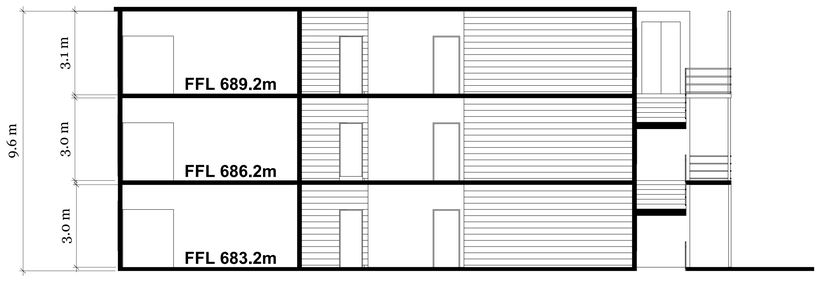
Building 1 Section A
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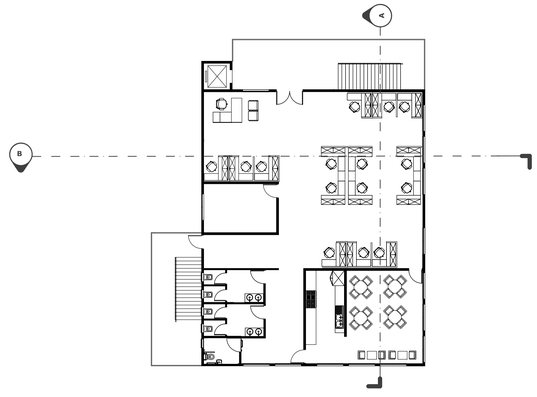
Building 1 Floor Plan
Scale 1:1200



Building 1 Section B
Scale 1:200



Office Section A
Scale 1:50



Office Floor Plan
Scale 1:150



Office Section B
Scale 1:50

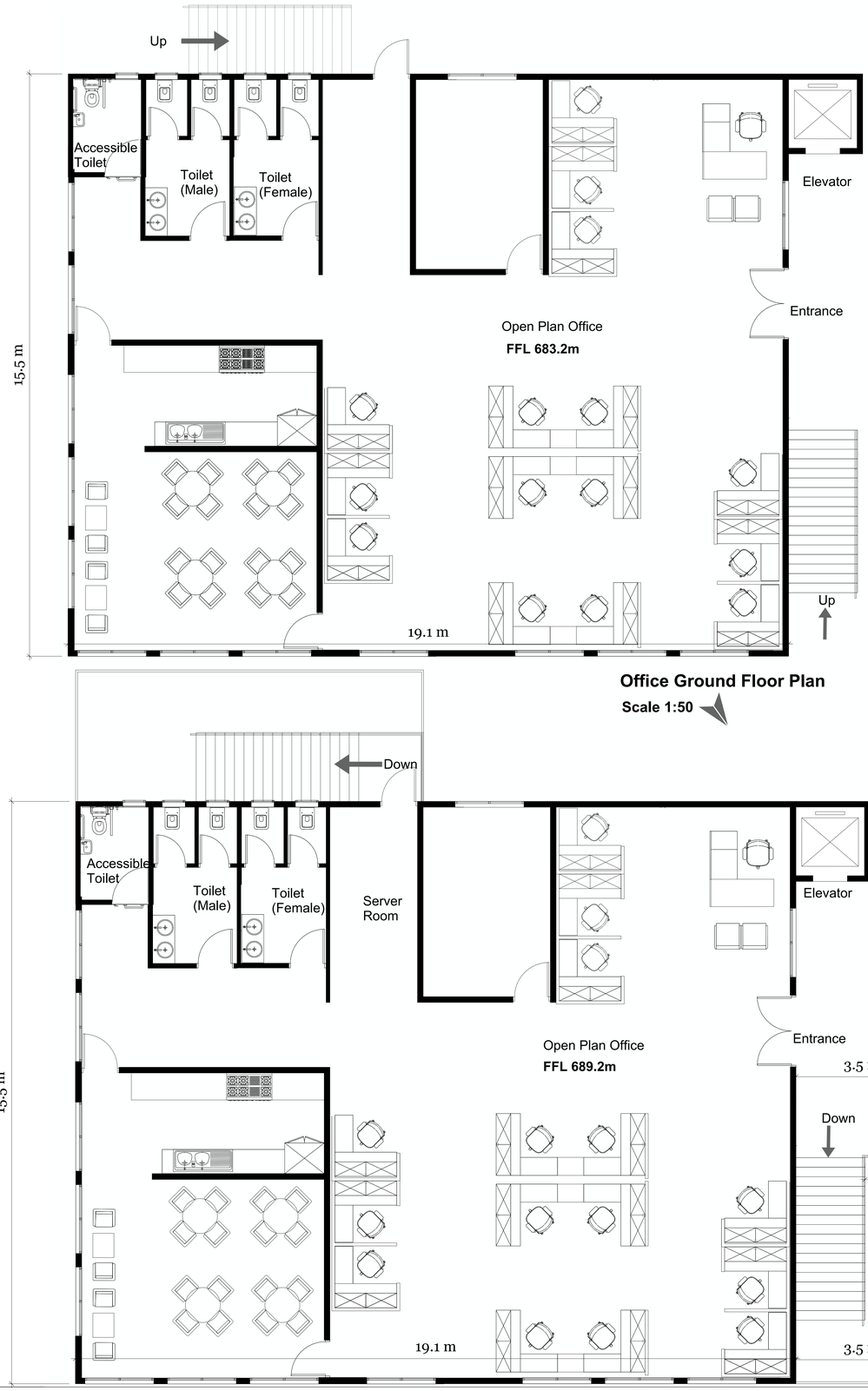
Date	Plan Number	Office and Building 1 Section
6-7-2023	1.7	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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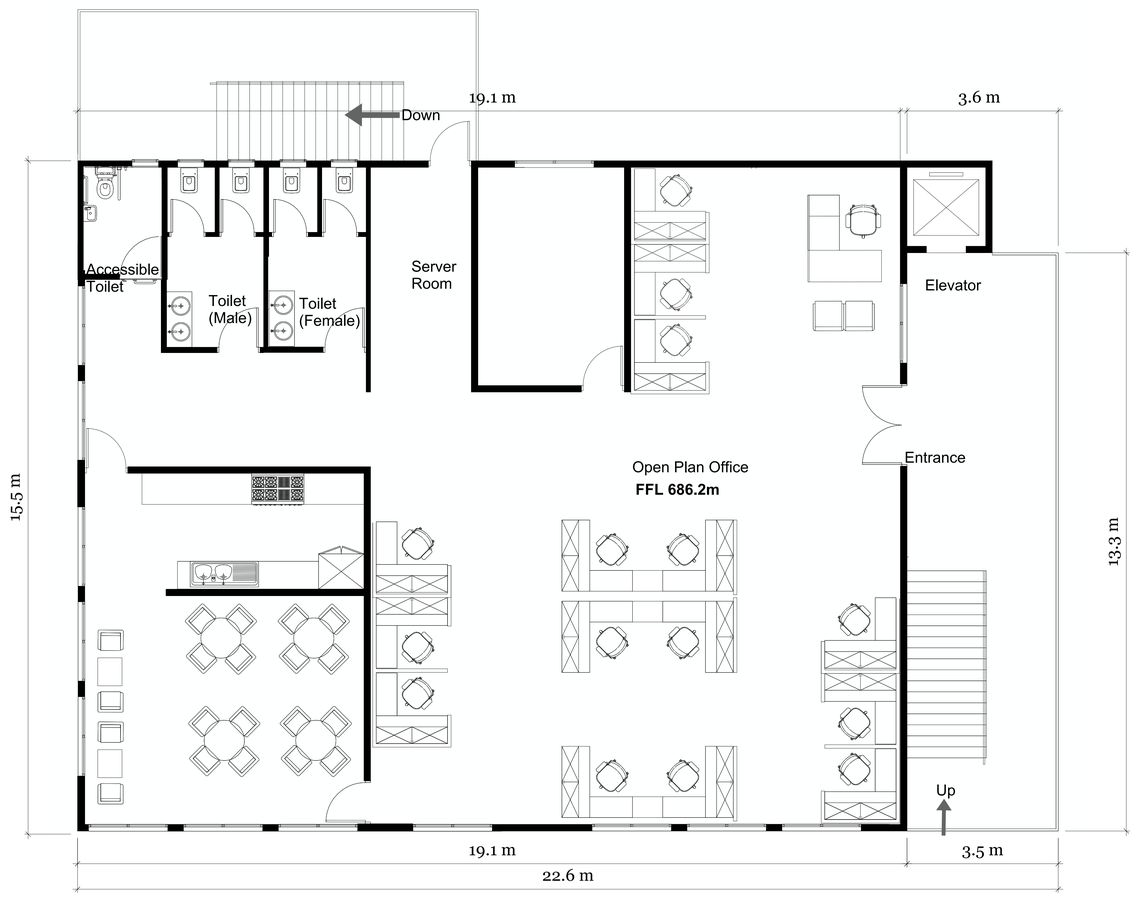
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Office Section
Scale	1:200 1:50
Source	Jackson Environment and Planning Pty Ltd

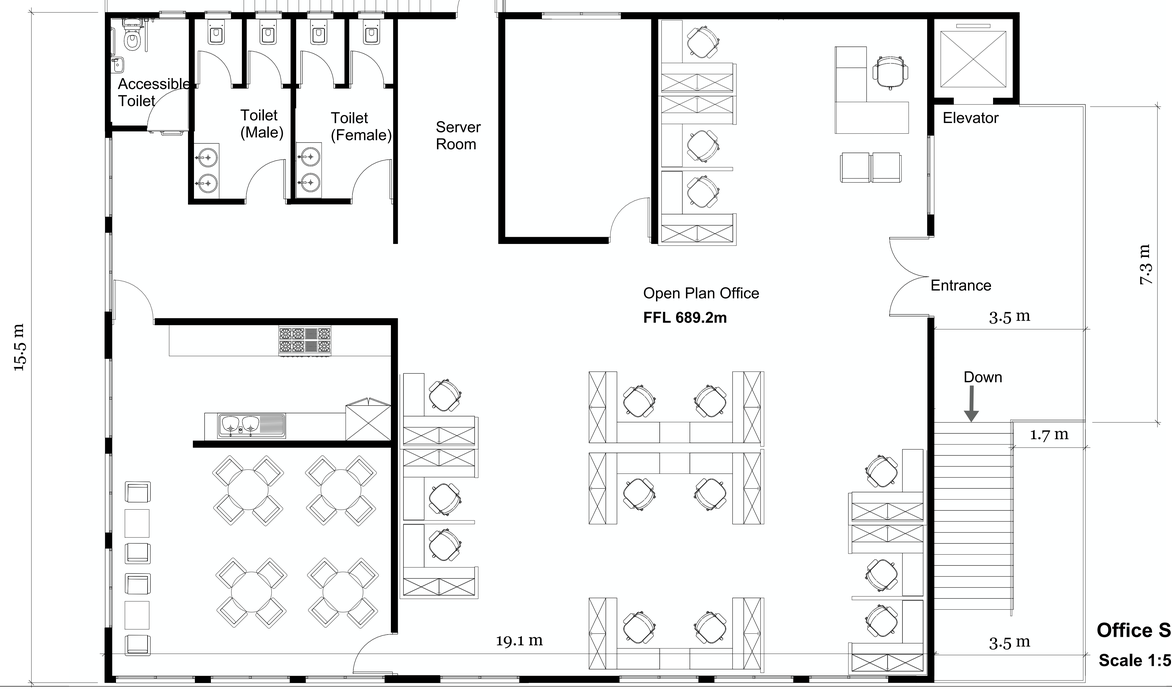
01
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Office Ground Floor Plan
Scale 1:50



Office First Floor Plan
Scale 1:50



Office Second Floor Plan
Scale 1:50

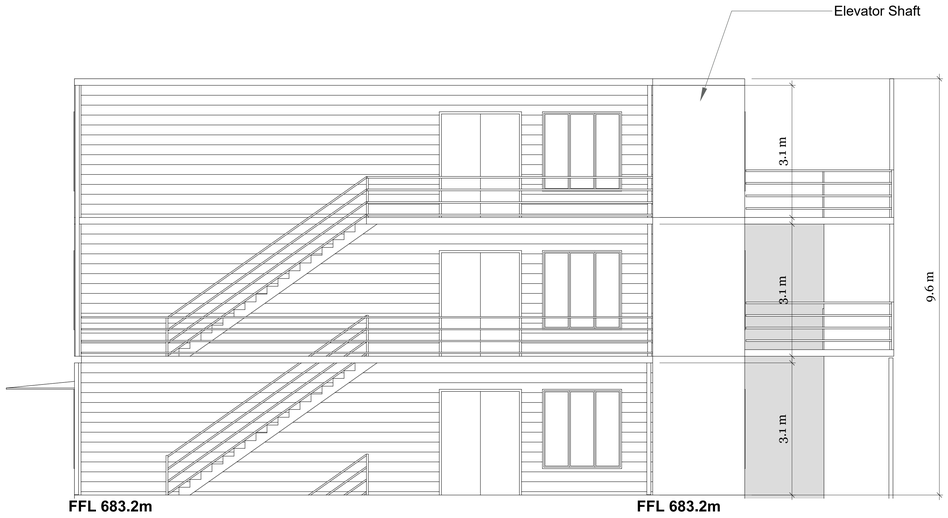
Date	Plan Number	Office Ground Floor Plan (Building 1)
6-7-2023	1.8	2 Bowman Road, Moss Vale (Lot 1, DP103123, Lot 2, DP1070888)

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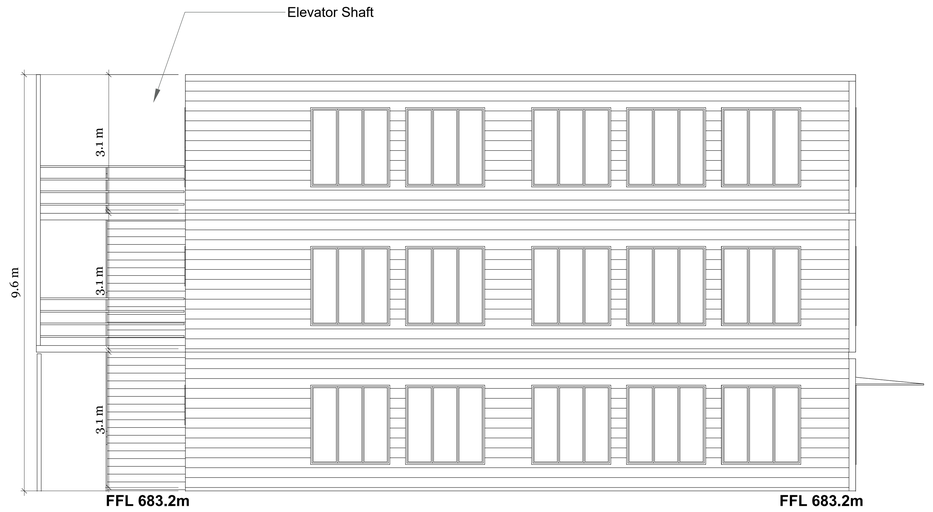
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Office Floor Plan
Scale	1:50
Source	Jackson Environment and Planning Pty Ltd

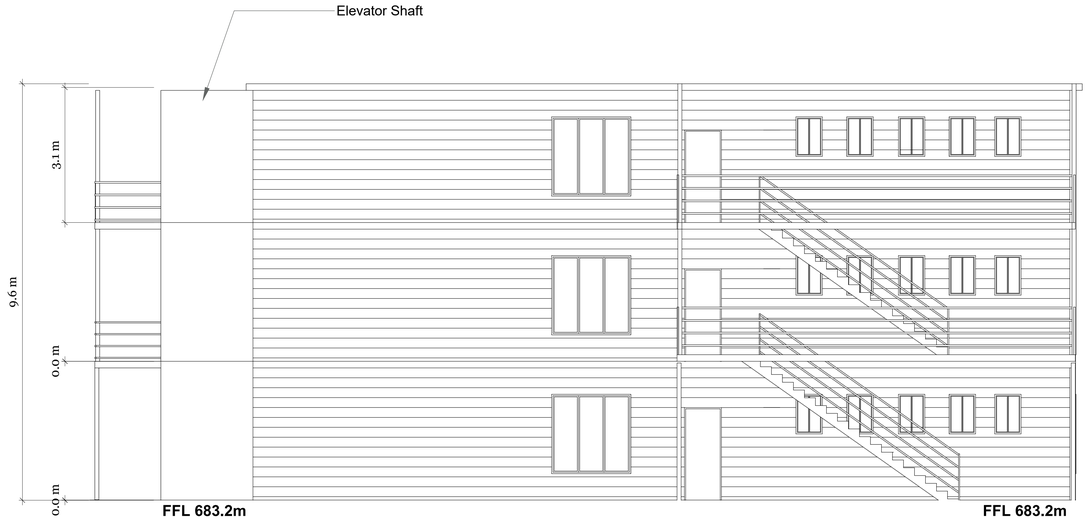
01
A



South Elevation
Scale 1:50



North Elevation
Scale 1:50



West Elevation
Scale 1:50



East Elevation
Scale 1:50

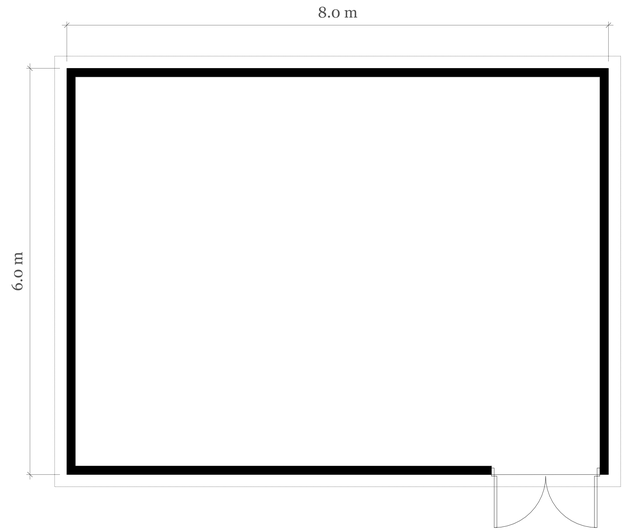
Date	Plan Number	Office Elevation (Building 1)
6-7-2023	1.9	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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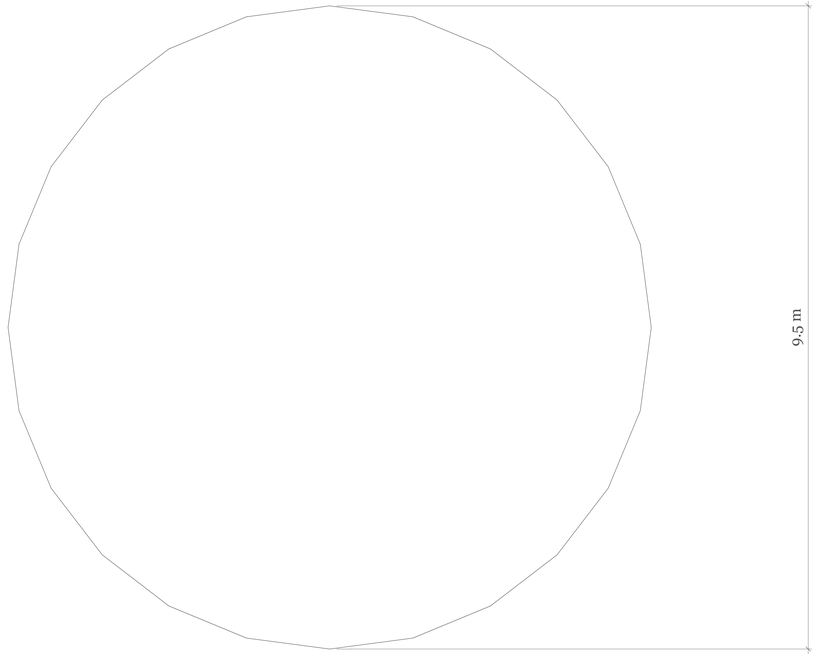
JACKSON
ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Office Elevation (Building 1)
Scale	1:50
Source	Jackson Environment and Planning Pty Ltd

01
A



Fire service pump room plan
Scale 1:32

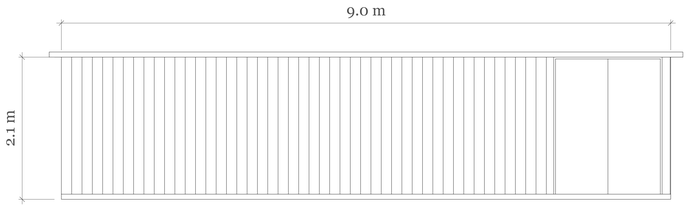


530,000L fire sprinkler tank top view
Scale 1:32

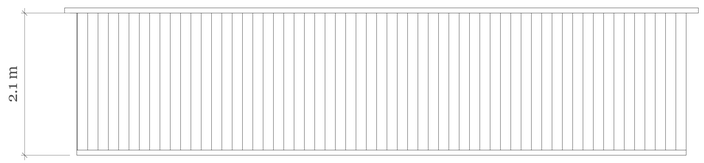
Schedule of Materials and Finishes

Wall Material: Colorbond Pale Eucalypt

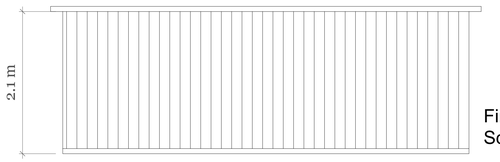
Roof Material : Colorbond Evening Haze



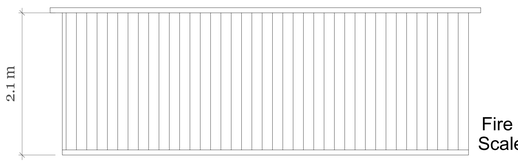
Fire service pump front view
Scale 1:32



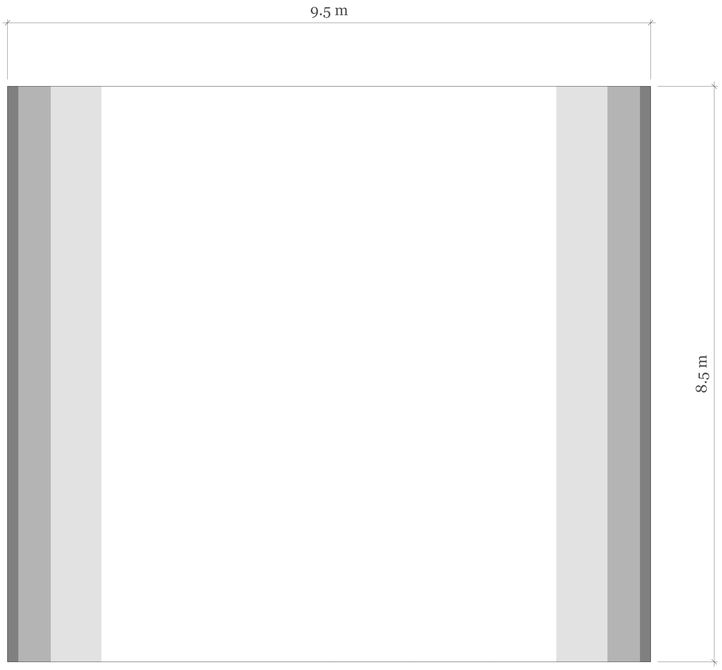
Fire service pump back view
Scale 1:32



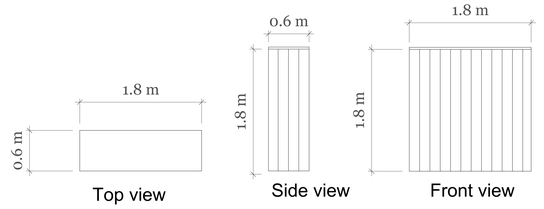
Fire service pump side view
Scale 1:32



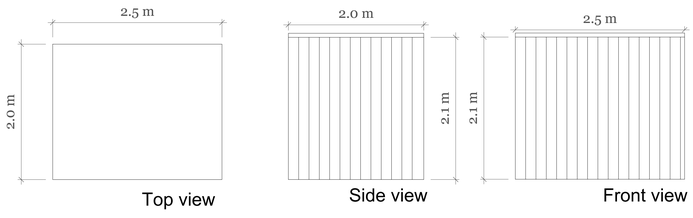
Fire service pump side view
Scale 1:32



530,000L fire sprinkler tank elevation
Scale 1:32



Fire hydrant booster valve assembly enclouser
Scale 1:32



Enclosure for rainwater tank reuse filters and control panel
Scale 1:32

Date	Plan Number	Fire pump room, Fire sprinkler tank
6-7-2023	1.10	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 1 Fire Pump room, fire sprinkler tank
Scale	1:32
Source	Jackson Environment and Planning Pty Ltd

01
A



Site Plan
Scale 1:600

Legend

- Roads
- Landscaping
- Internal Pedestrian Footpath
- External Pedestrian Footpath
- Gas Pipeline Easement
- Created Lot boundary

Development Statistics

Building Floor Area	10,863.68 m²
Office Ground Floor Area	607.07 m²
Office First Floor Area	1,324.6 m²
Gross Floor Area	12,795.35m²
Hardstand Area	10,283.88 m²
Total Lot Area	26,422.12 m²
Building 2 and office volume	185685.86 m³
Site Coverage	41%

Parking Rate - Building 2

1 Space per 300m² GFA

Required = 42

Provided = 42

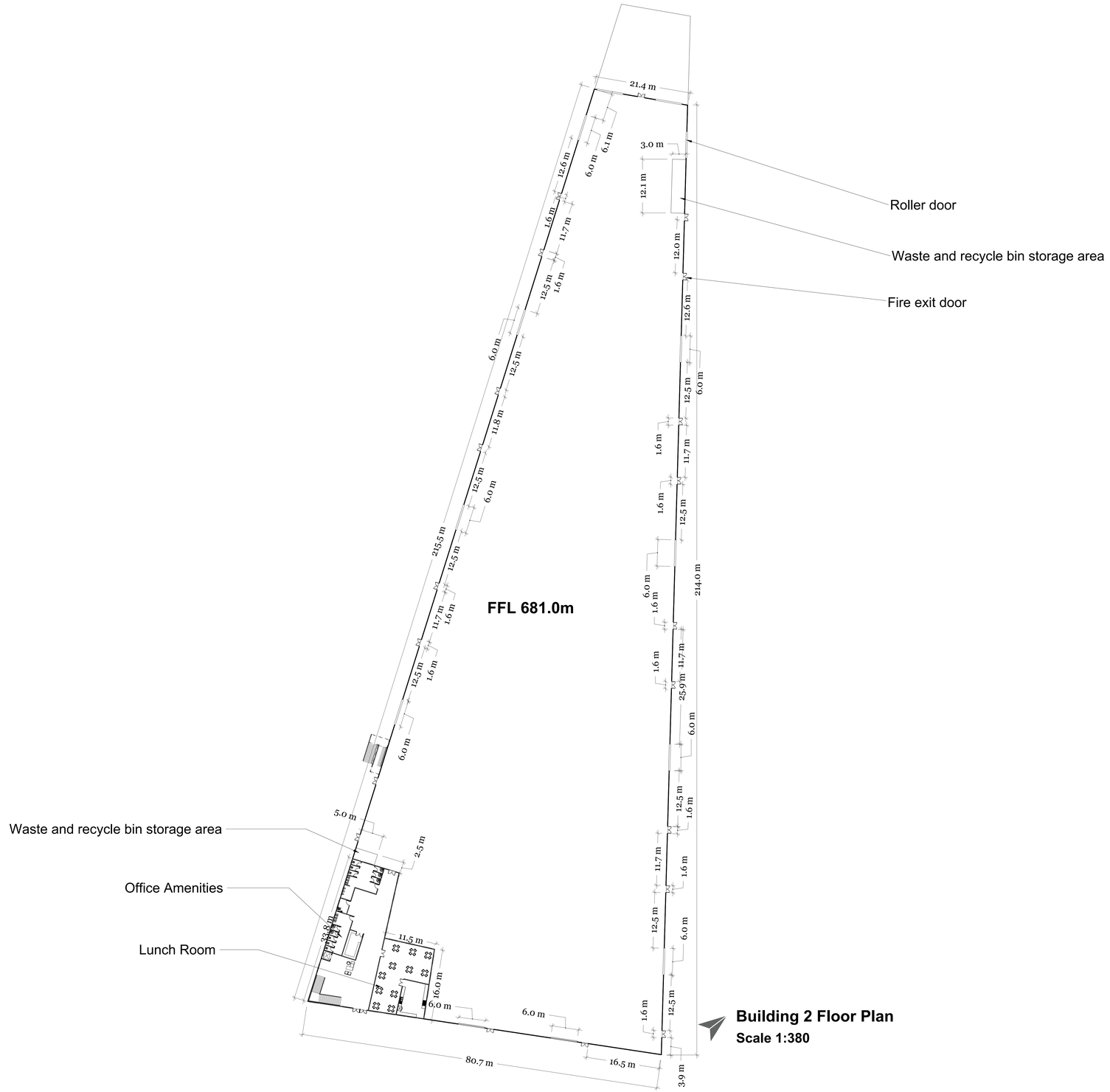
Date	Plan Number	Site Layout (Building 2)
6-7-2023	2.1	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Building 2 Site Layout Plan
Scale	1:600
Source	Jackson Environment and Planning Pty Ltd

01
A



Date	Plan Number	Floor Plan (Building 2)
6-7-2023	2.2	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

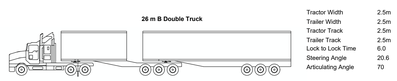
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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Floor Plan
Scale	1:380
Source	Jackson Environment and Planning Pty Ltd

01
A





Turning Path 26m B-Double Truck

Scale 1:500

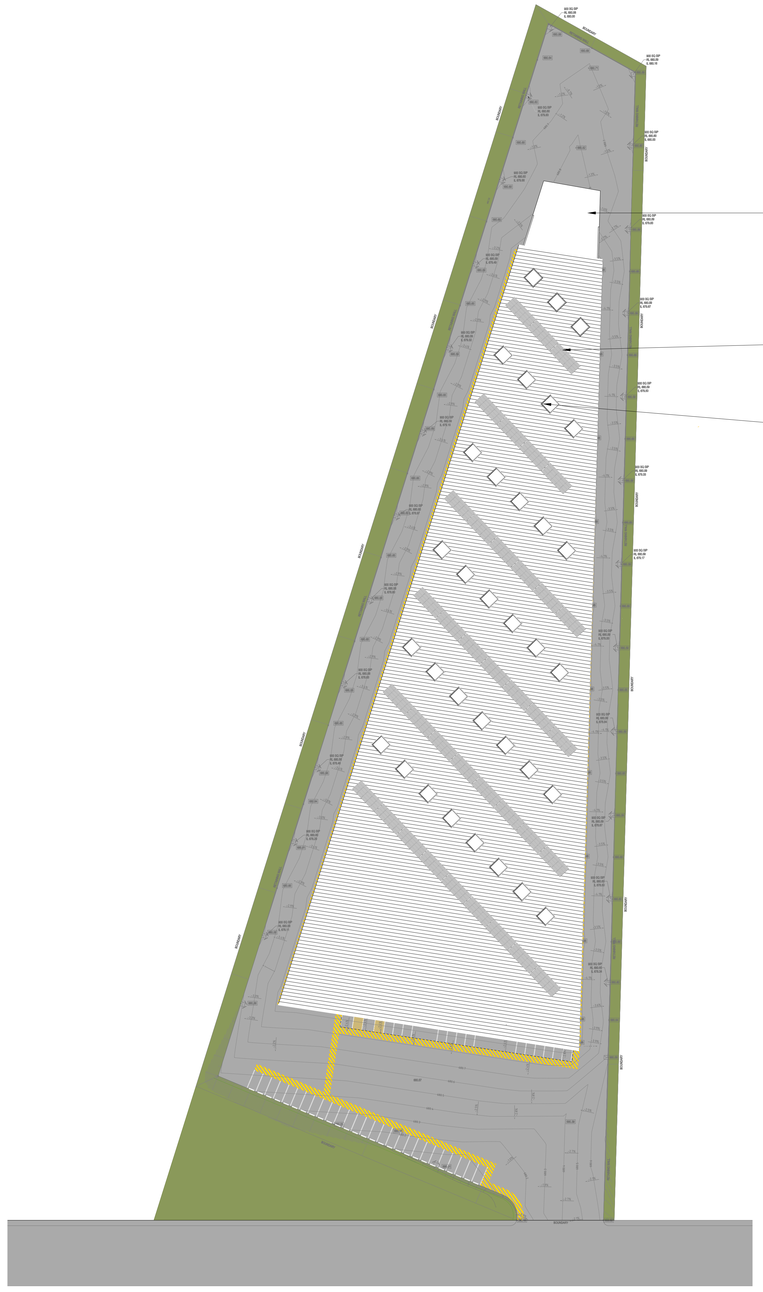
Date	Plan Number	Turning Path 26 m Truck (Building 2)
6-7-2023	2.3	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Turning Path 26m B-double Truck
Scale	1:500
Source	Jackson Environment and Planning Pty Ltd

01 A



Awning

Solar Panel

Skylights to be constructed from glass reinforced polyester
Each skylight bank not to exceed 14m2
Minimum of 1.5m between each skylight bank

Site Plan
Scale 1:600

Date	Plan Number	Roof Plan (Building 2)
6-7-2023	2.4	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

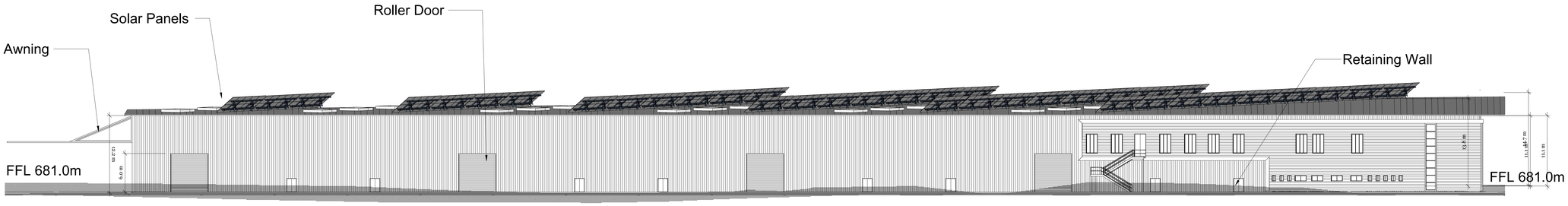
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JACKSON
ENVIRONMENT AND PLANNING

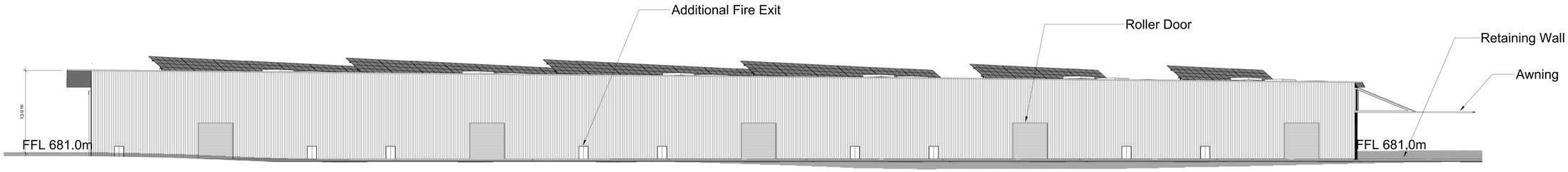
Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Roof Plan (Building 2)
Scale	1:600
Source	Jackson Environment and Planning Pty Ltd

01

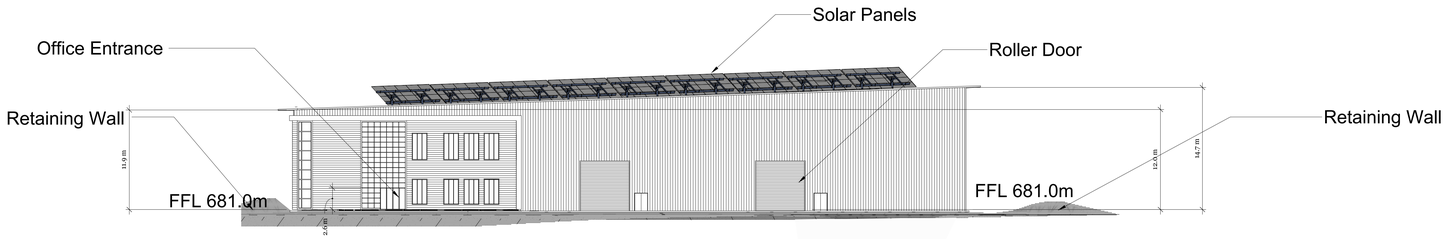
A



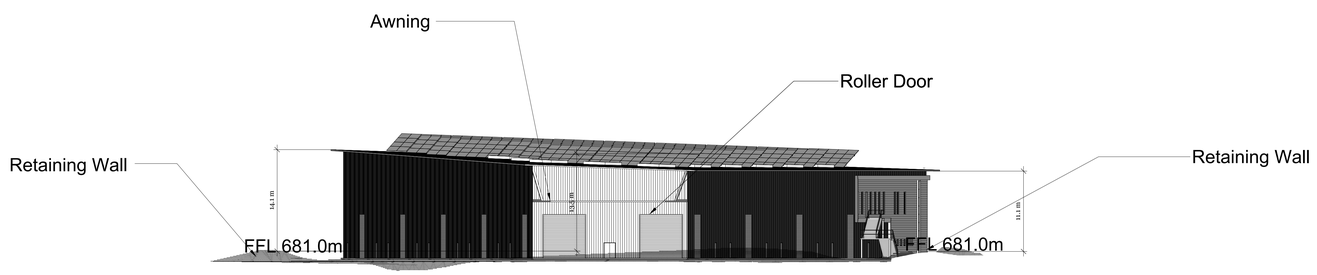
South Elevation
Scale 1:260



North Elevation
Scale 1:260



West Elevation
Scale 1:260



East Elevation
Scale 1:260

Schedule of Materials and Finishes

Wall Material: Colorbond Pale Eucalypt	
Roof Material : Colorbond Evening Haze	
Office Wall Material: Coen Composite Wood Panel (oak) or equivalent	
Office Roof Material : Colorbond Evening Haze	

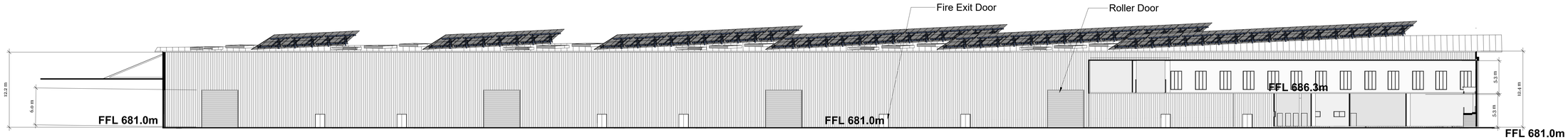
Date	Plan Number	Elevation Plan (Building 2)
6-7-2023	2.5	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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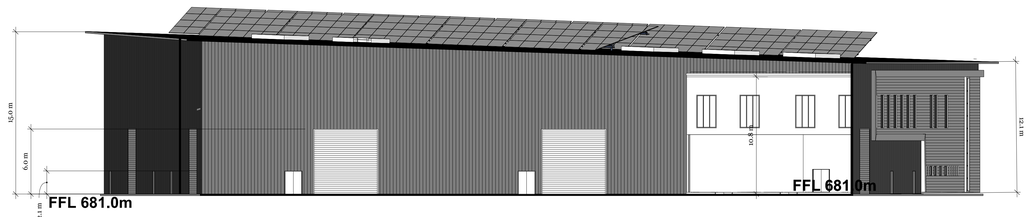
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Elevation
Scale	1:300
Source	Jackson Environment and Planning Pty Ltd

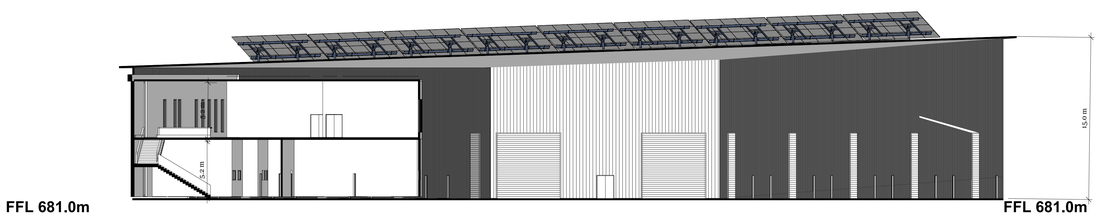
01
A



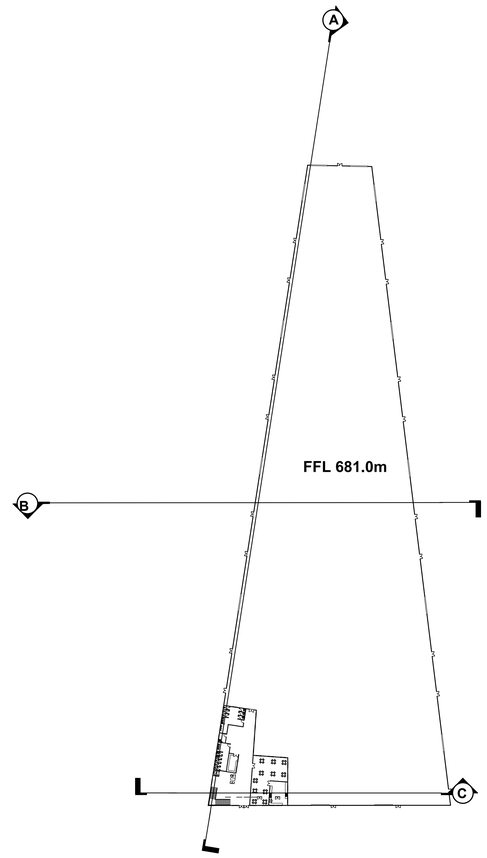
Section A
Scale 1:200



Section B
Scale 1:250



Section C
Scale 1:250



Building 2 Floor Plan
Scale 1:720

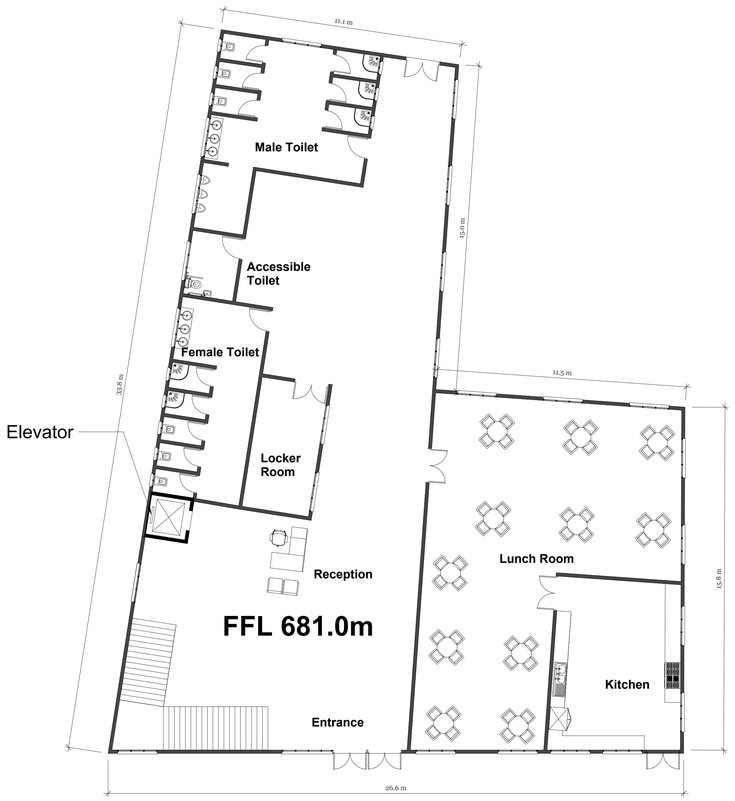
Date	Plan Number	Section (Building 2)
6-7-2023	2.6	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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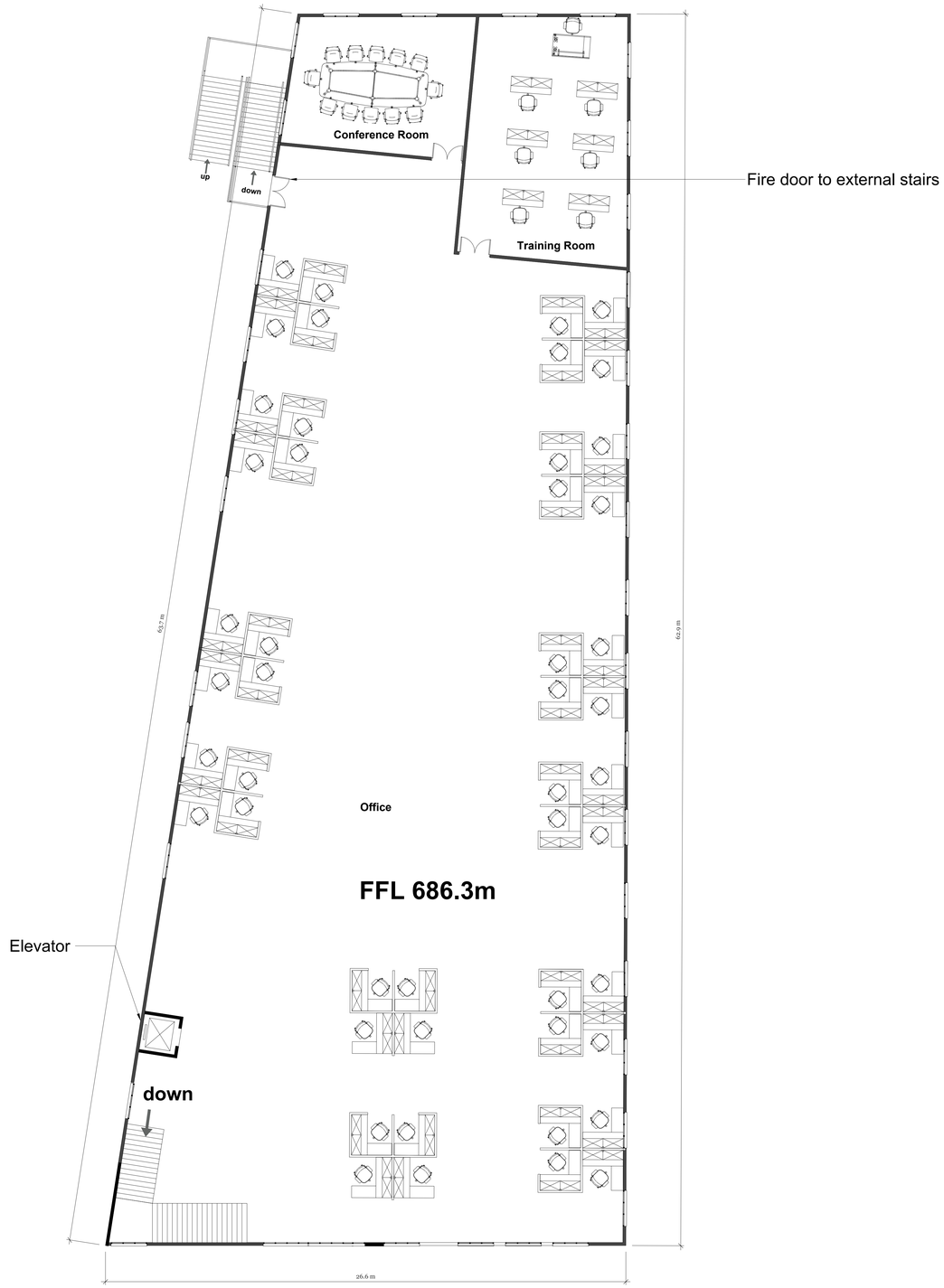
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Section
Scale	1:200
Source	Jackson Environment and Planning Pty Ltd

01
A



Office Ground Floor Plan
Scale 1:150



Office First Floor Plan
Scale 1:100

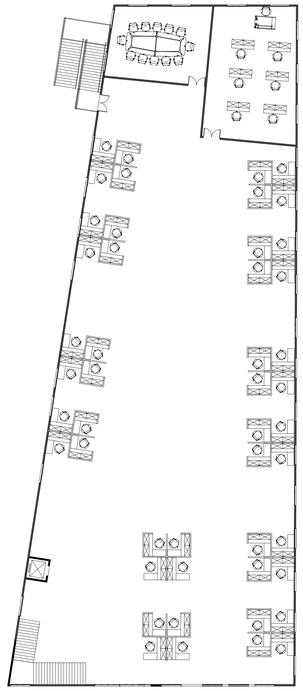
Date	Plan Number	Office Floor Plan (Building 2)
6-7-2023	2.7	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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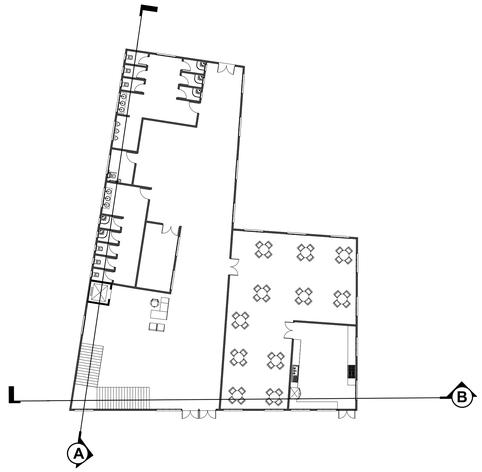
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Office Floor Plan
Scale	1:100
Source	Jackson Environment and Planning Pty Ltd

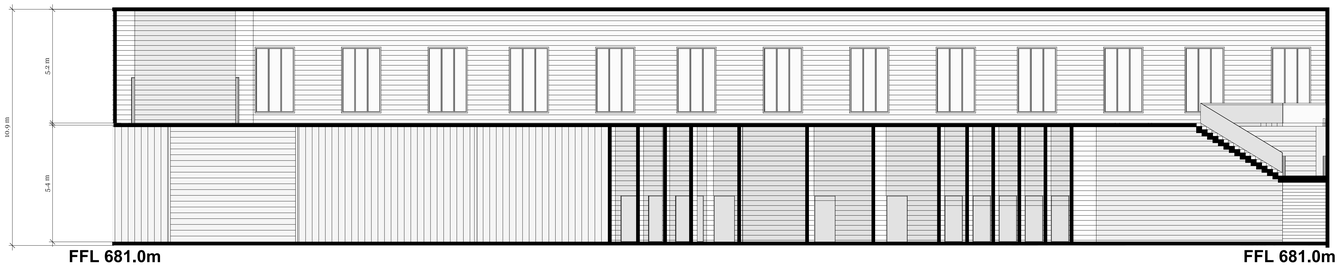
01
A



Office First Floor Plan
Scale 1:100



Office Ground Floor Plan
Scale 1:150



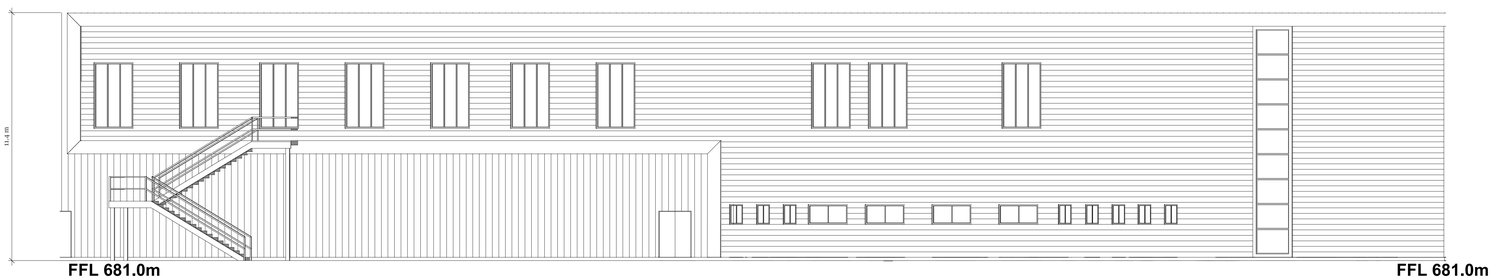
Section A
Scale 1:100



East Elevation
Scale 1:100



Section B
Scale 1:100



South Elevation
Scale 1:100



West Elevation
Scale 1:100



North Elevation
Scale 1:100

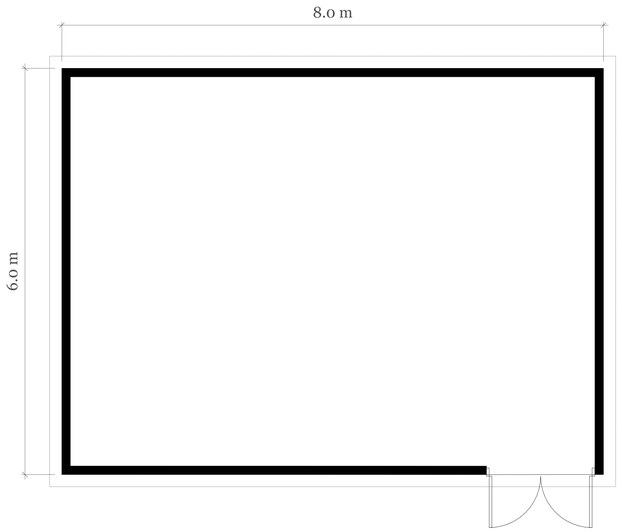
Date	Plan Number	Office Elevation & Section Plan (Building 2)
6-7-2023	2.8	2 Bowman Road, Moss Vale (Part of Lot 51, DP130176, Lot 2, DP1070888)

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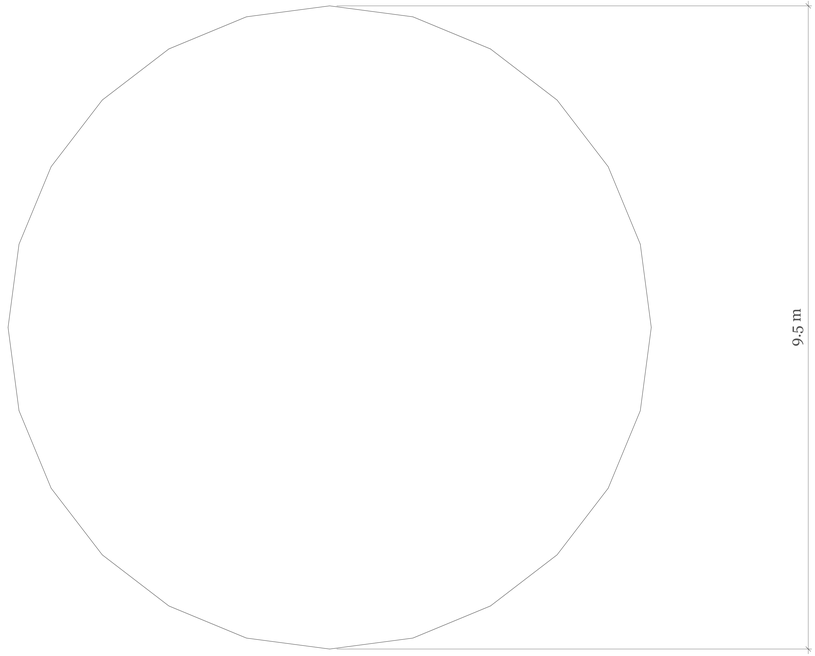
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Office Floor Plan
Scale	1:100
Source	Jackson Environment and Planning Pty Ltd

01
A



Fire service pump room plan
Scale 1:32

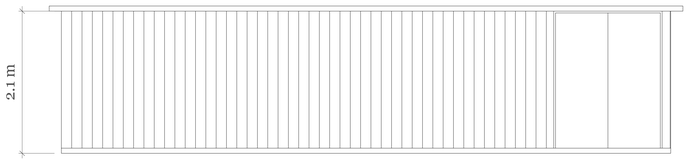


530,000L fire sprinkler tank top view
Scale 1:32

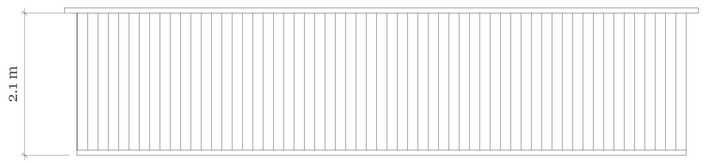
Schedule of Materials and Finishes

Wall Material: Colorbond Pale Eucalypt

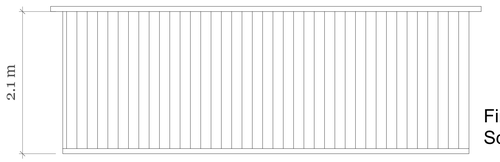
Roof Material : Colorbond Evening Haze



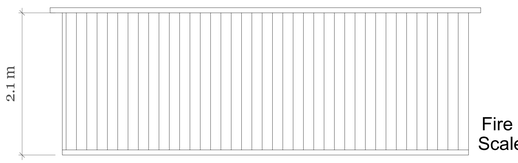
Fire service pump front view
Scale 1:32



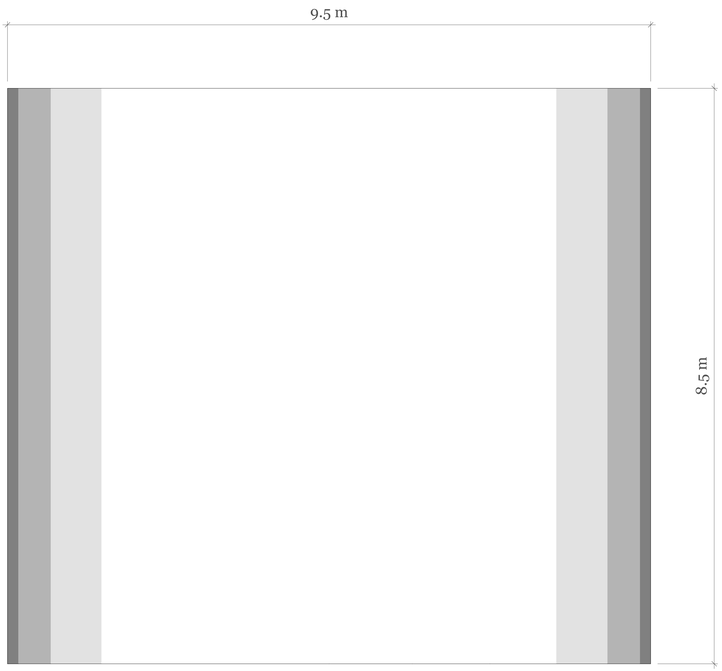
Fire service pump back view
Scale 1:32



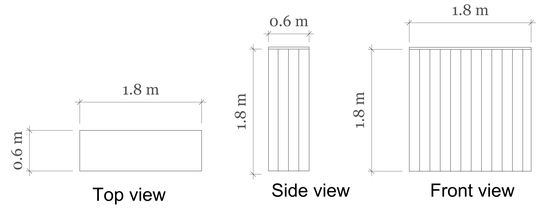
Fire service pump side view
Scale 1:32



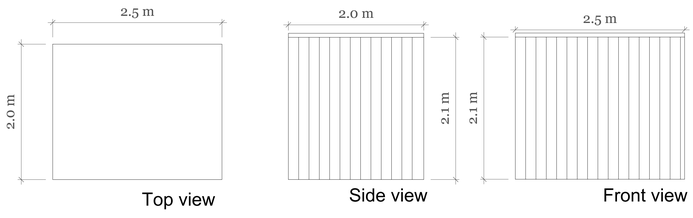
Fire service pump side view
Scale 1:32



530,000L fire sprinkler tank elevation
Scale 1:32



Fire hydrant booster valve assembly enclouser
Scale 1:32



Enclosure for rainwater tank reuse filters and control panel
Scale 1:32

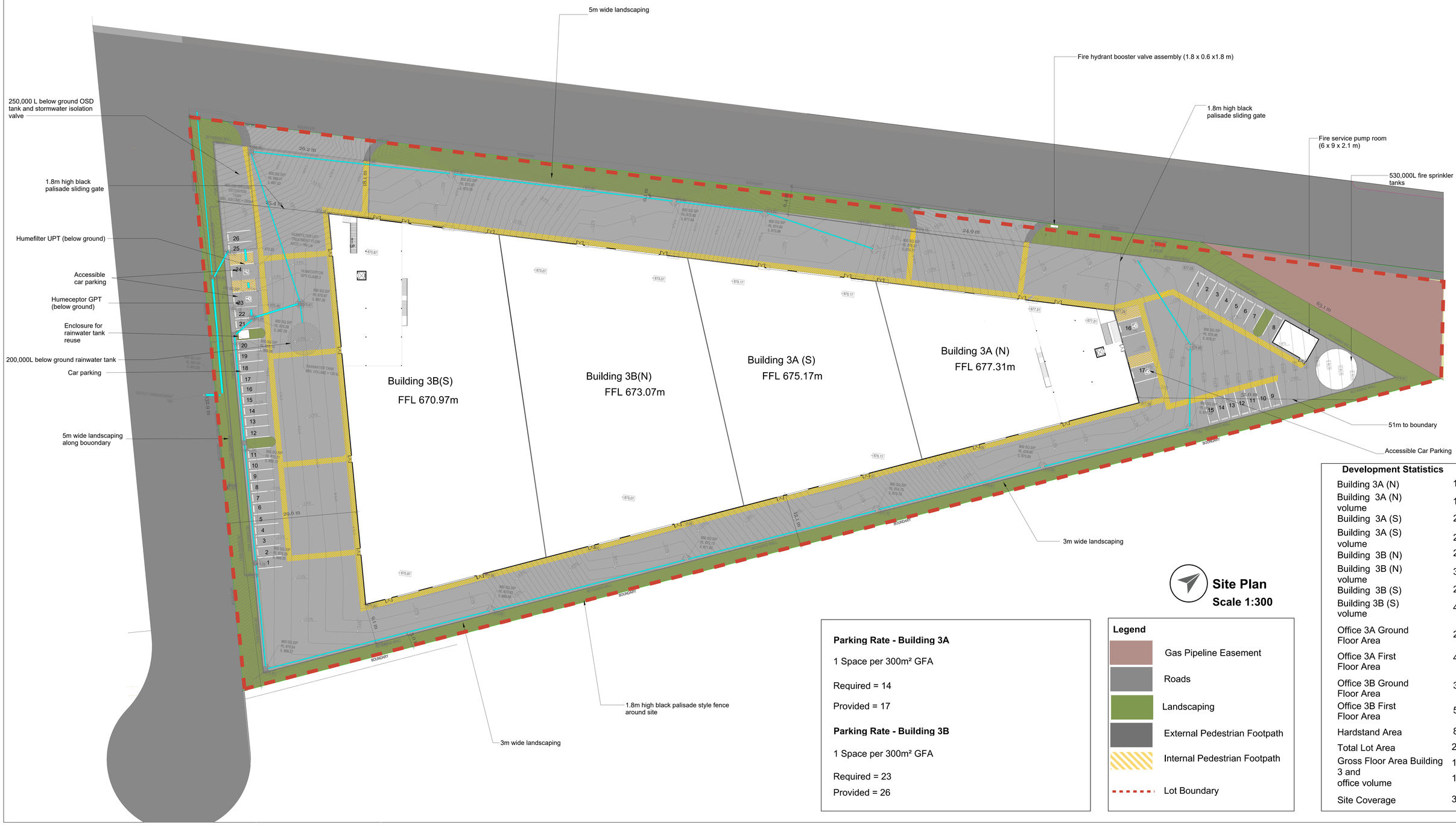
Date	Plan Number	Fire pump room, Fire sprinkler tank
6-7-2023	2.9	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 2 Fire Pump room, fire sprinkler tank
Scale	1:32
Source	Jackson Environment and Planning Pty Ltd

01
A



Site Plan
Scale 1:300

Parking Rate - Building 3A

1 Space per 300m² GFA

Required = 14

Provided = 17

Parking Rate - Building 3B

1 Space per 300m² GFA

Required = 23

Provided = 26

Legend

- Gas Pipeline Easement
- Roads
- Landscaping
- External Pedestrian Footpath
- Internal Pedestrian Footpath
- Lot Boundary

Development Statistics

Building 3A (N)	1394.26 m²
Building 3A (N) volume	18870.57 m³
Building 3A (S)	2092.76 m²
Building 3A (S) volume	21973.25 m³
Building 3B (N)	2949.87 m²
Building 3B (N) volume	33797.26 m³
Building 3B (S)	2971.83 m²
Building 3B (S) volume	41973.39 m³
Office 3A Ground Floor Area	257.89 m²
Office 3A First Floor Area	432.78 m²
Office 3B Ground Floor Area	376.15 m²
Office 3B First Floor Area	517.62 m²
Hardstand Area	8055.64 m²
Total Lot Area	26119.49 m²
Gross Floor Area Building 3 and office volume	10993.04 m² 170,411.87m³
Site Coverage	38.45%

Date	Plan Number	Site Layout (Building 3A, 3B)
6-7-2023	3.1	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Building 3A, 3B Site Layout Plan
Scale	1:300
Source	Jackson Environment and Planning Pty Ltd

01 A



Site Plan
Scale 1:300

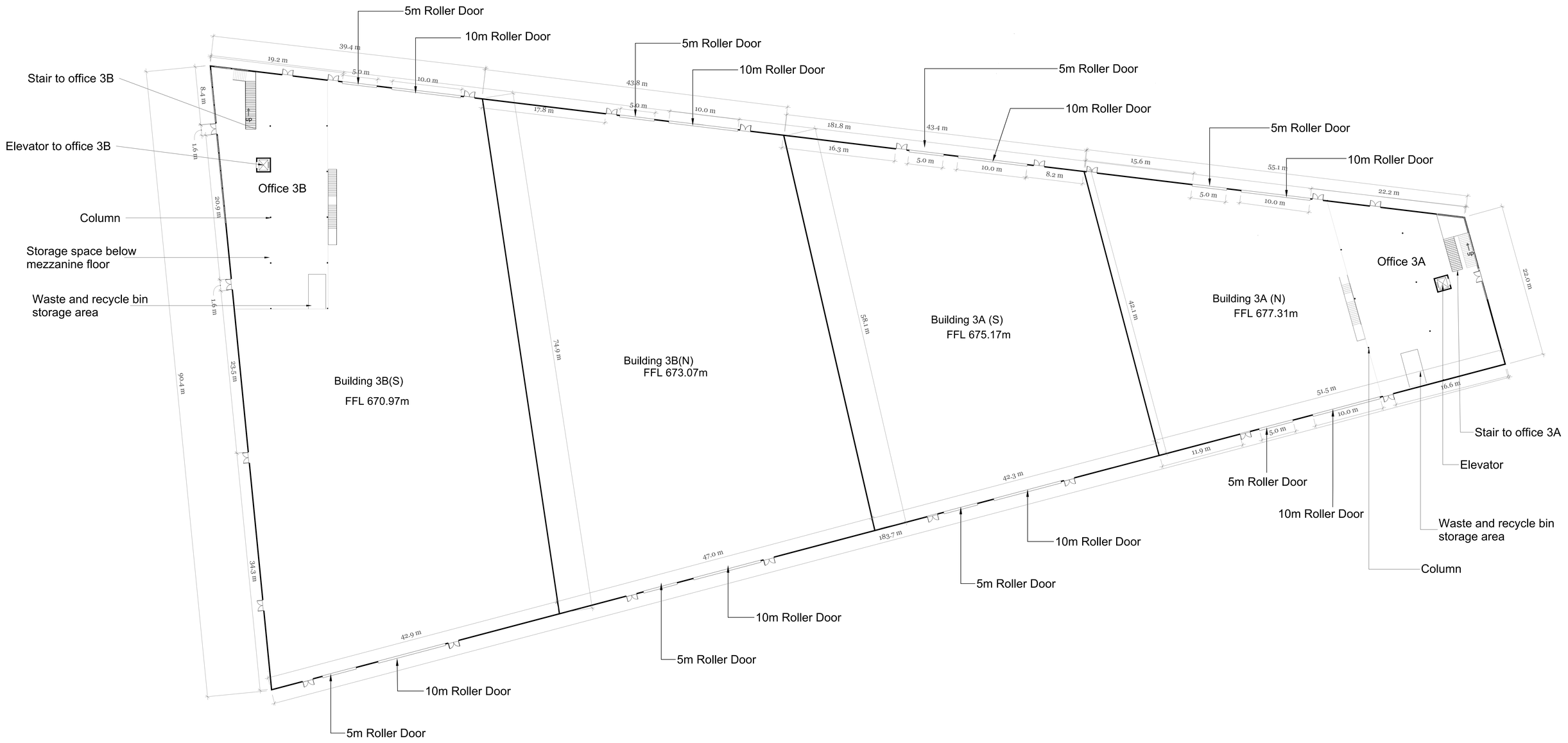
Date	Plan Number	19m Truck Turning Path
6-7-2023	3.2	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3 semi-trailer truck turning path
Scale	1:300
Source	Jackson Environment and Planning Pty Ltd

01
A


5m Roller Door
10m Roller Door
5m Roller Door
10m Roller Door
5m Roller Door
10m Roller Door
5m Roller Door
10m Roller Door
Stair to office 3B
Elevator to office 3B
Office 3B
Column
Storage space below mezzanine floor
Waste and recycle bin storage area
Building 3B(S)
FFL 670.97m
Building 3B(N)
FFL 673.07m
Building 3A (S)
FFL 675.17m
Building 3A (N)
FFL 677.31m
Office 3A
Stair to office 3A
Elevator
Waste and recycle bin storage area
Column
5m Roller Door
10m Roller Door
5m Roller Door
10m Roller Door
5m Roller Door
10m Roller Door



Building 3A and 3B Roof Plan
Scale 1:300

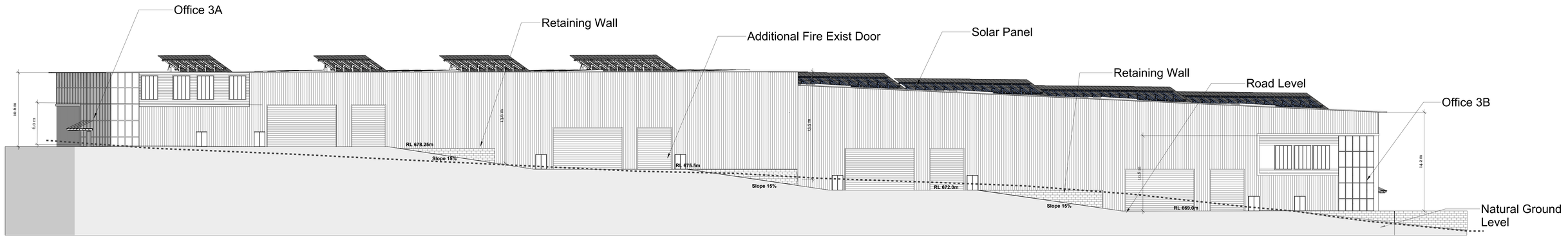
Date	Plan Number	Building 3A and 3B Roof Plan
6-7-2023	3.4	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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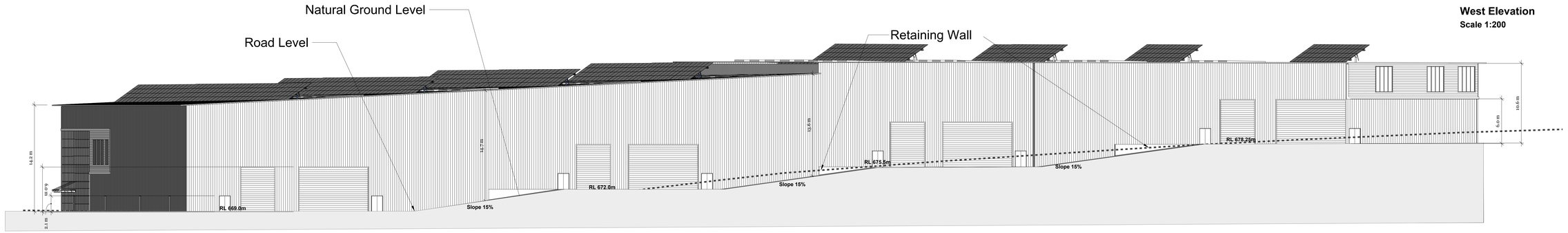
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3A 3B Roof Plan
Scale	1:300
Source	Jackson Environment and Planning Pty Ltd

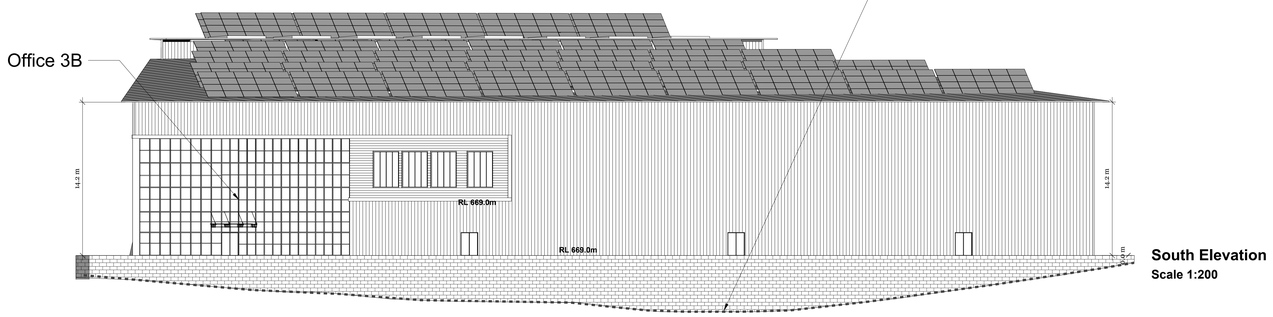
01
A



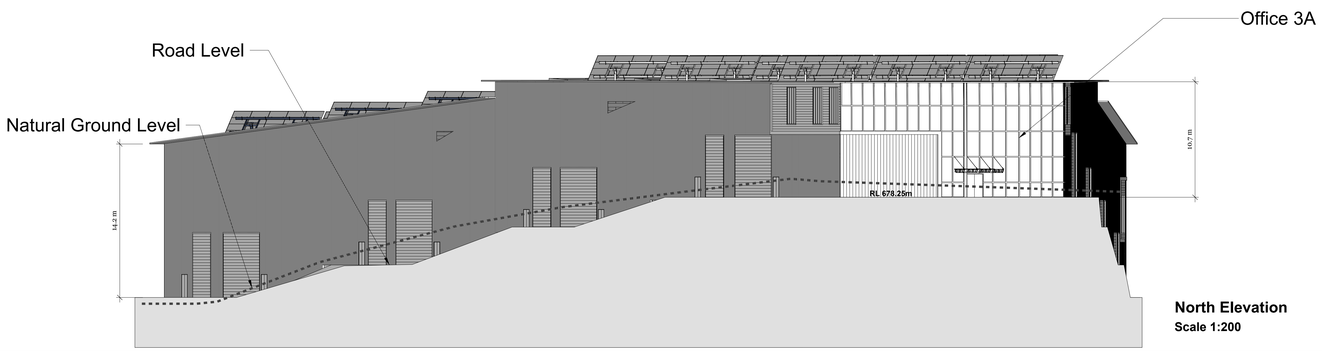
West Elevation
Scale 1:200



East Elevation
Scale 1:200



South Elevation
Scale 1:200



North Elevation
Scale 1:200

Schedule of Materials and Finishes

Wall Material: Colorbond Pale Eucalypt	
Roof Material : Colorbond Evening Haze	
Office Wall Material: Coen Composite Wood Panel (oak) or equivalent	
Office Roof Material : Colorbond Evening Haze	

Date	Plan Number	Building 3A and 3B Elevation
6-7-2023	3.5	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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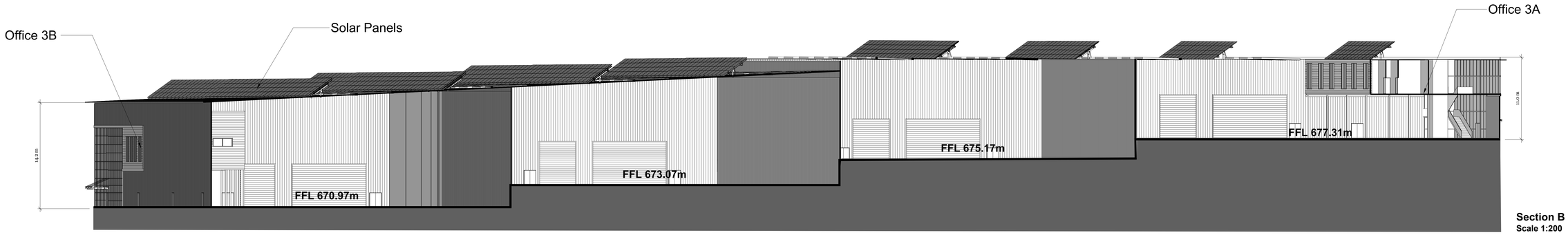
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3A and 3B Elevation
Scale	1:200
Source	Jackson Environment and Planning Pty Ltd

01
A



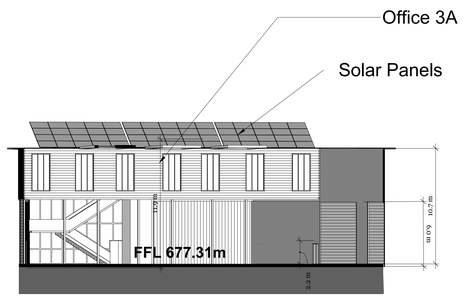
Section A
Scale 1:100



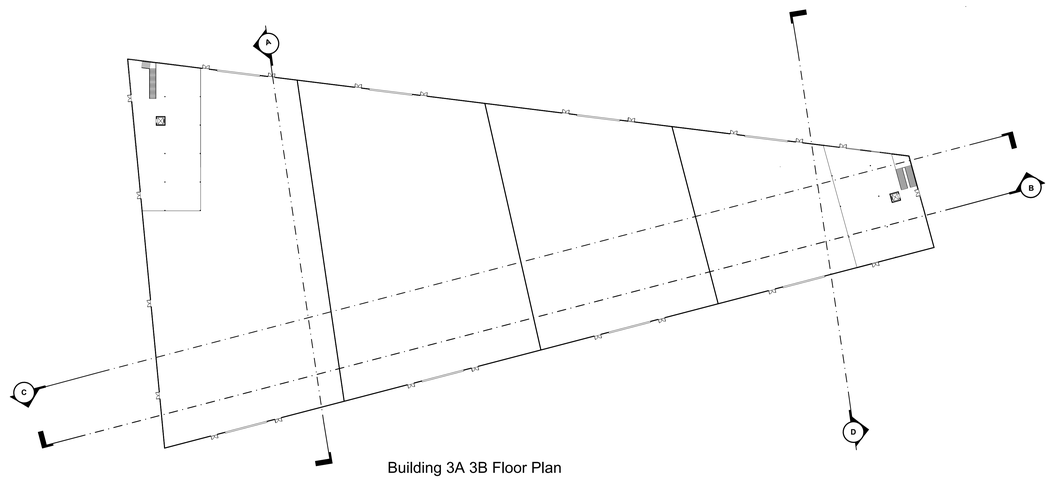
Section B
Scale 1:200



Section C
Scale 1:200



Section D
Scale 1:200



Building 3A 3B Floor Plan
Scale 1:500

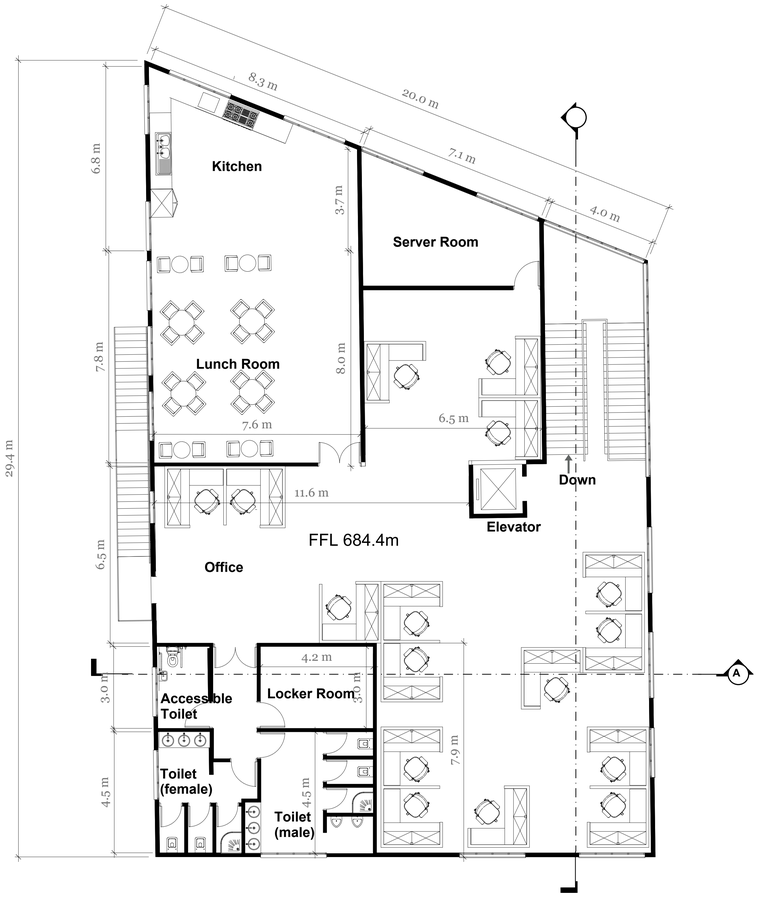
Date	Plan Number	Building 3A and 3B Section
6-7-2023	3.6	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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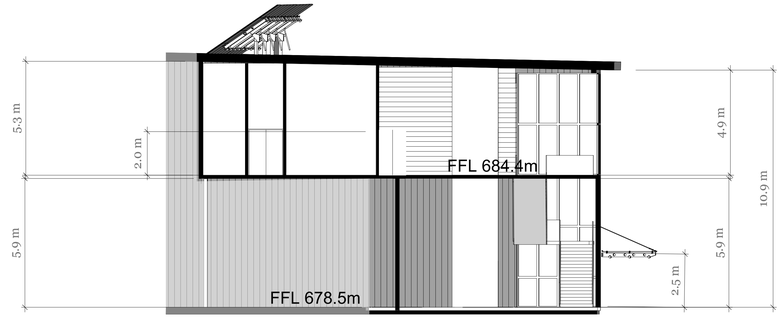
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3A and 3B Section
Scale	1:200 1:100
Source	Jackson Environment and Planning Pty Ltd

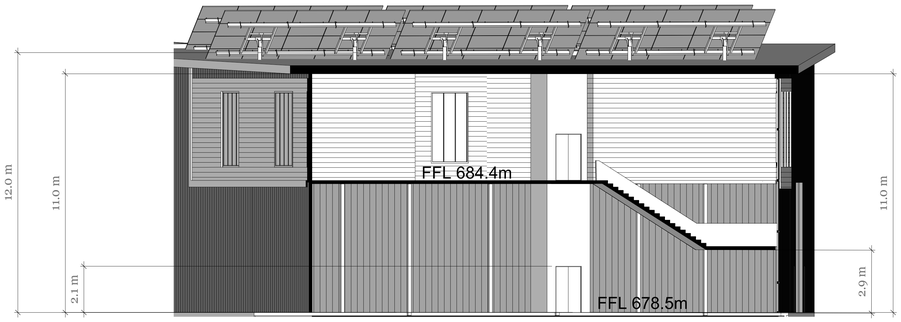
01
A



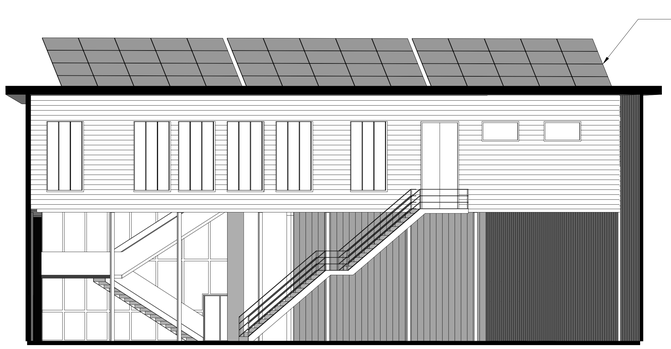
Office 3A Mezzanine Floor Plan
Scale 1:80



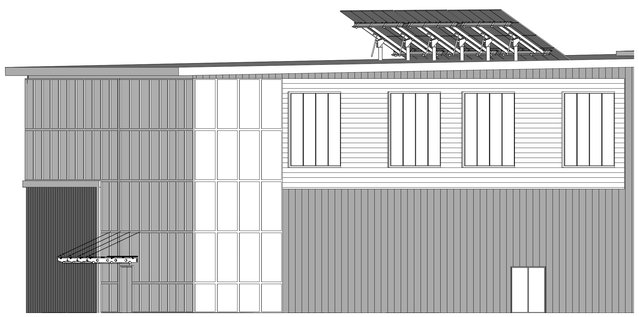
Section A
Scale 1:100



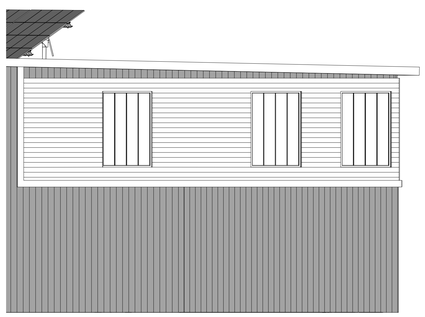
Section B
Scale 1:100



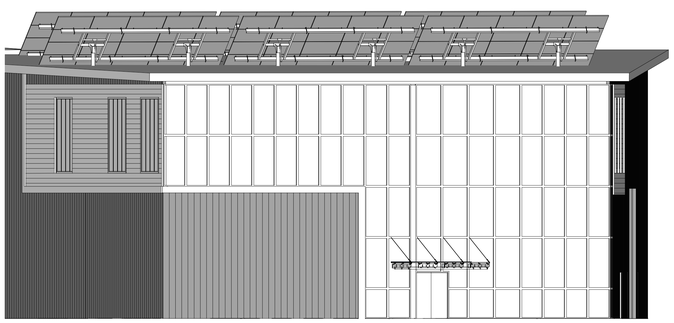
North Elevation
Scale 1:100



East Elevation
Scale 1:100



South Elevation
Scale 1:100



West Elevation
Scale 1:100

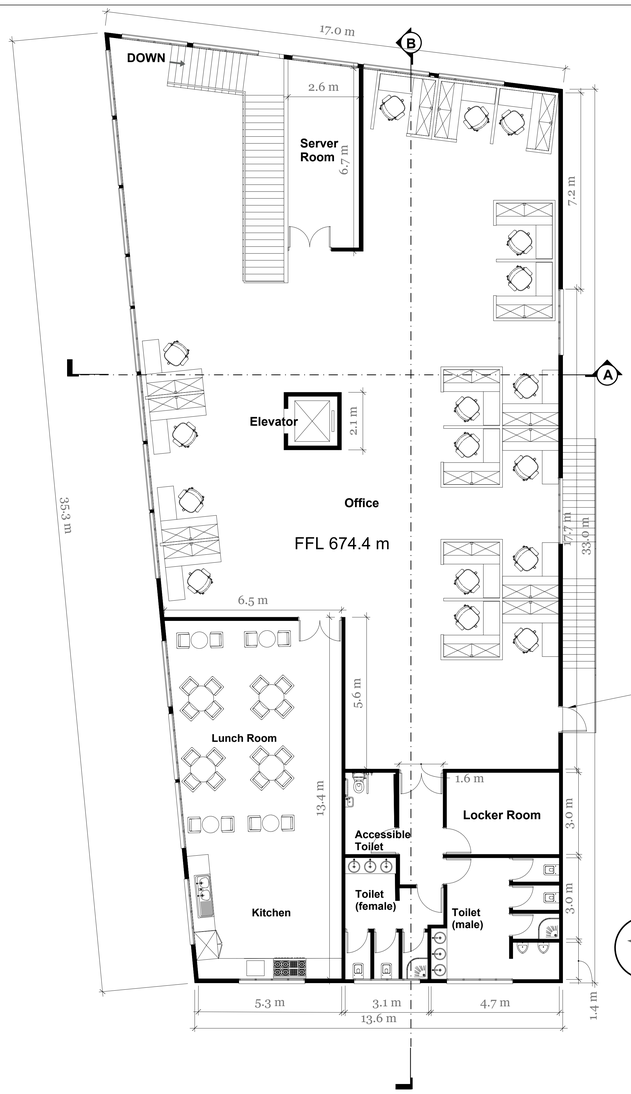
Date	Plan Number	Office 3A Plan, Elevation, Section
6-7-2023	3.7	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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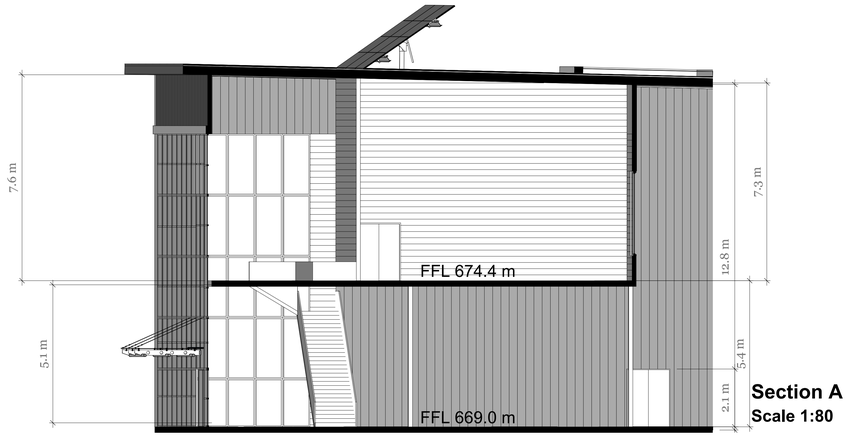
Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3A Office Floor Plan, Elevation and Section
Scale	1:100
Source	Jackson Environment and Planning Pty Ltd

01
A



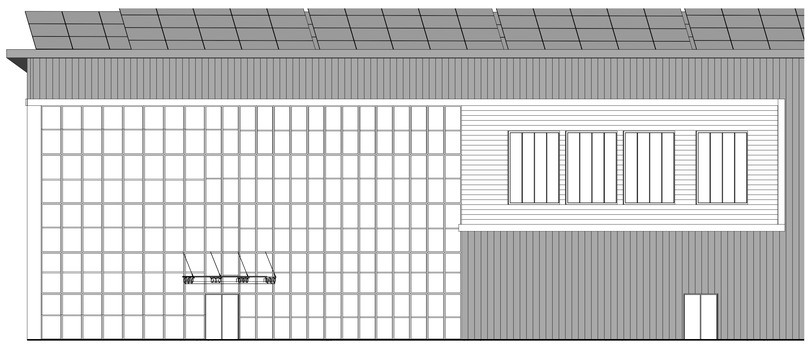
Fire door to internal stair

Office 3B Mezzanine Floor Plan
Scale 1:80

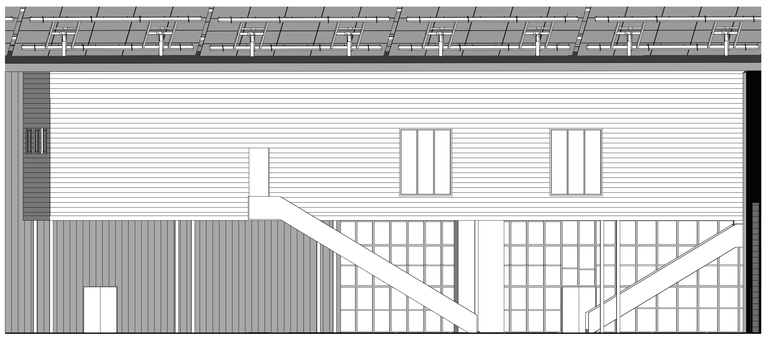


Section A
Scale 1:80

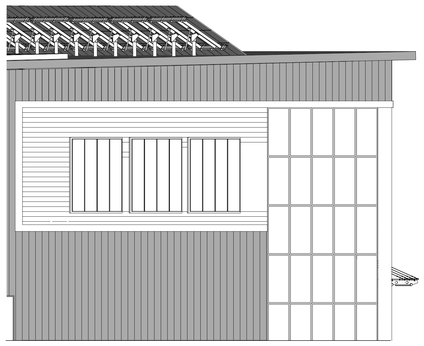
Section B
Scale 1:80



West Elevation
Scale 1:100



East Elevation
Scale 1:100



South Elevation
Scale 1:100



West Elevation
Scale 1:100

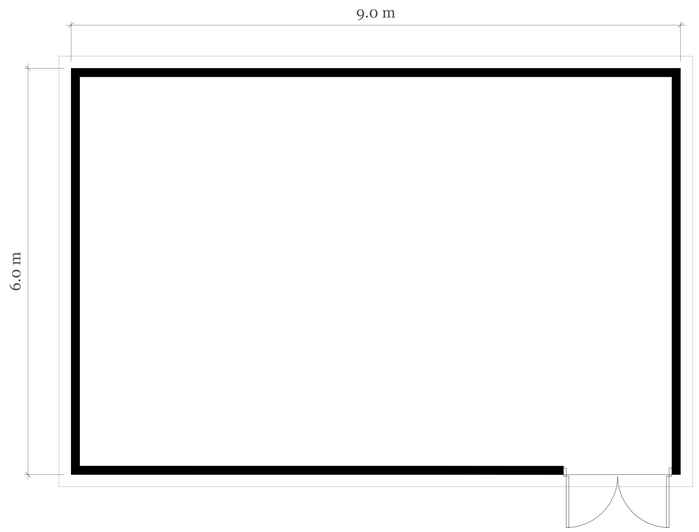
Date	Plan Number	Office 3B Plan, Elevation, Section
6-7-2023	3.8	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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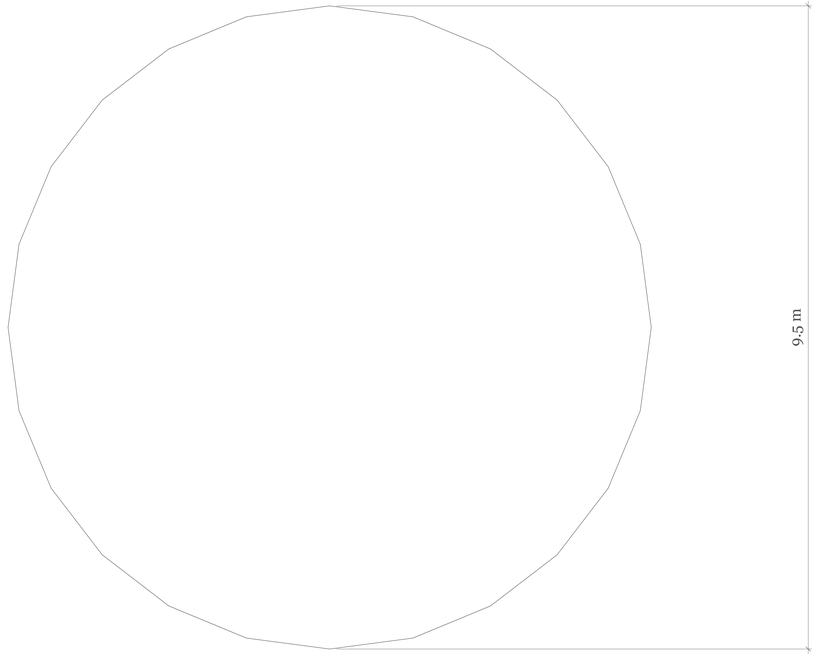
JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3B Office Floor Plan, Elevation and Section
Scale	1:100
Source	Jackson Environment and Planning Pty Ltd

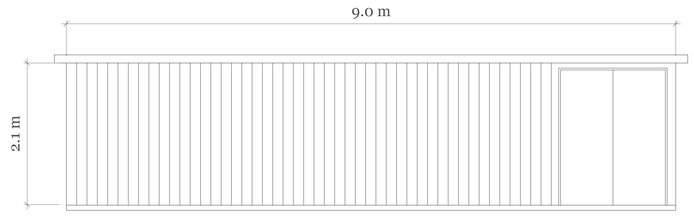
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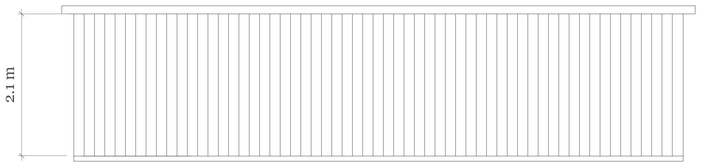
Fire service pump room plan
Scale 1:32



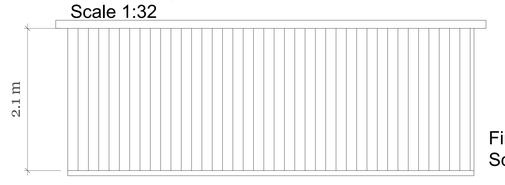
530,000L fire sprinkler tank top view
Scale 1:32



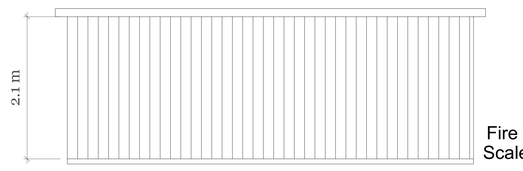
Fire service pump front view
Scale 1:32



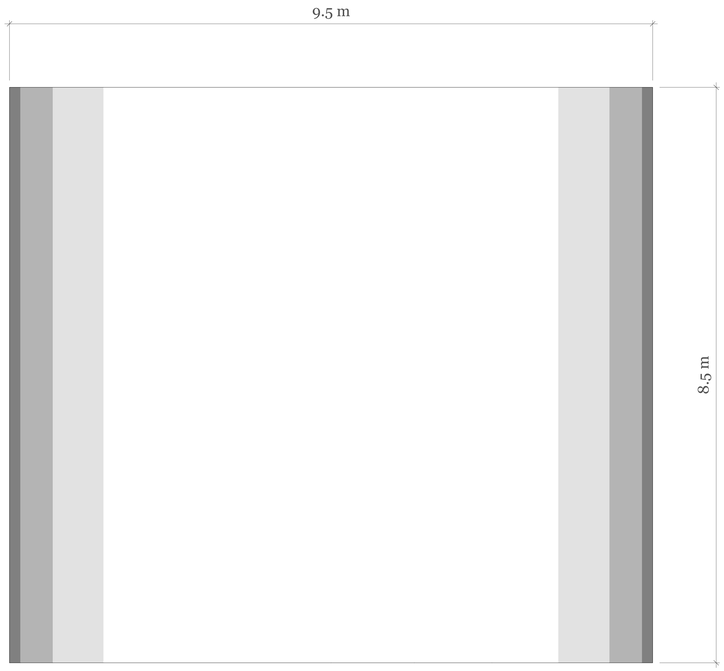
Fire service pump back view
Scale 1:32



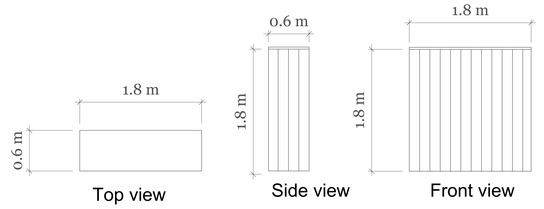
Fire service pump side view
Scale 1:32



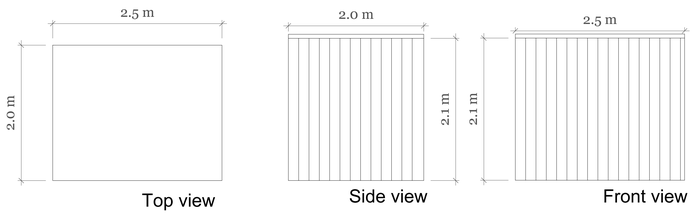
Fire service pump side view
Scale 1:32



530,000L fire sprinkler tank elevation
Scale 1:32



Fire hydrant booster valve assembly enclouser
Scale 1:32



Enclosure for rainwater tank reuse filters and control panel
Scale 1:32

Date	Plan Number	Fire pump room, Fire sprinkler tank
6-7-2023	3.9	2 Bowman Road, Moss Vale (Lot 2, DP1070888)

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JACKSON ENVIRONMENT AND PLANNING

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivsion and General Industry Developpment
Title	Building 3A, 3B Fire Pump room, fire sprinkler tank
Scale	1:32
Source	Jackson Environment and Planning Pty Ltd

01
A

Appendix B

Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 13 Sep 2022 09:04:33

Reference: LS036227 EP

Address: Part of 2 Bowman Road, Moss Vale, NSW 2577

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Customer Service - Spatial Services	17/06/2022	17/06/2022	Quarterly	-	-	-	-
Topographic Data	NSW Department of Customer Service - Spatial Services	22/08/2022	22/08/2022	Annually	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	02/09/2022	10/08/2022	Monthly	1000m	0	0	0
Contaminated Land Records of Notice	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	1	1
Former Gasworks	Environment Protection Authority	02/09/2022	14/07/2021	Quarterly	1000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	26/05/2022	07/03/2017	Annually	1000m	0	1	1
National Liquid Fuel Facilities	Geoscience Australia	23/08/2022	13/07/2012	Annually	1000m	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	02/09/2022	14/07/2021	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	02/09/2022	02/09/2022	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	02/09/2022	02/09/2022	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	02/09/2022	02/09/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	02/09/2022	02/09/2022	Quarterly	2000m	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	16/02/2022	13/12/2018	Annually	1000m	0	0	1
Licensed Activities under the POEO Act 1997	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	1	6	7
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	0	1
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	3	3	3
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150m	0	0	0
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150m	-	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500m	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500m	-	0	0
Points of Interest	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	0	0	8
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	0	0	1
Major Easements	NSW Department of Customer Service - Spatial Services	29/08/2022	29/08/2022	Quarterly	1000m	1	1	7
State Forest	Forestry Corporation of NSW	16/08/2022	14/08/2022	Annually	1000m	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	10/02/2022	31/12/2021	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	29/08/2022	19/08/2019	Annually	1000m	2	2	2
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Industry and Environment	28/03/2022	23/02/2018	Annually	1000m	0	0	0
National Groundwater Information System (NGIS) Boreholes	Bureau of Meteorology; Water NSW	24/01/2022	24/01/2022	Annually	2000m	0	2	18

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
NSW Seamless Geology Single Layer: Rock Units	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	3	3	6
NSW Seamless Geology – Single Layer: Trendlines	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	0	0	0
NSW Seamless Geology – Single Layer: Geological Boundaries and Faults	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	0	0	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000m	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000m	1	1	1
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	02/09/2022	12/08/2022	Monthly	500m	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	1	1	1
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000m	0	0	0
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	19/08/2021	05/08/2021	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Industry	02/09/2022	02/09/2022	Monthly	1000m	0	0	0
Mining Title Applications	NSW Department of Industry	02/09/2022	02/09/2022	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Industry	02/09/2022	02/09/2022	Monthly	1000m	9	9	9
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	15/11/2021	07/12/2018	Monthly	1000m	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	15/11/2021	05/11/2021	Monthly	1000m	3	3	14
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	17/08/2022	11/02/2022	Quarterly	1000m	0	0	0
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Industry and Environment	02/09/2022	26/08/2022	Monthly	1000m	1	1	3
Bush Fire Prone Land	NSW Rural Fire Service	05/09/2022	08/08/2022	Weekly	1000m	2	2	2
Vegetation Mapping Wingecarribee	NSW Office of Environment & Heritage	06/09/2016	04/08/2011	Unknown	1000m	0	1	1
Ramsar Wetlands of Australia	Australian Government Department of Agriculture, Water and the Environment	28/03/2022	19/03/2020	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Annually	1000m	0	1	1
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	0	1	1
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	05/09/2022	05/09/2022	Weekly	10000m	-	-	-

Site Diagram

Part of 2 Bowman Road, Moss Vale, NSW 2577



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 102516m²

Total Perimeter: 1.77km

Scale: 0 25 50 100 Meters

Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

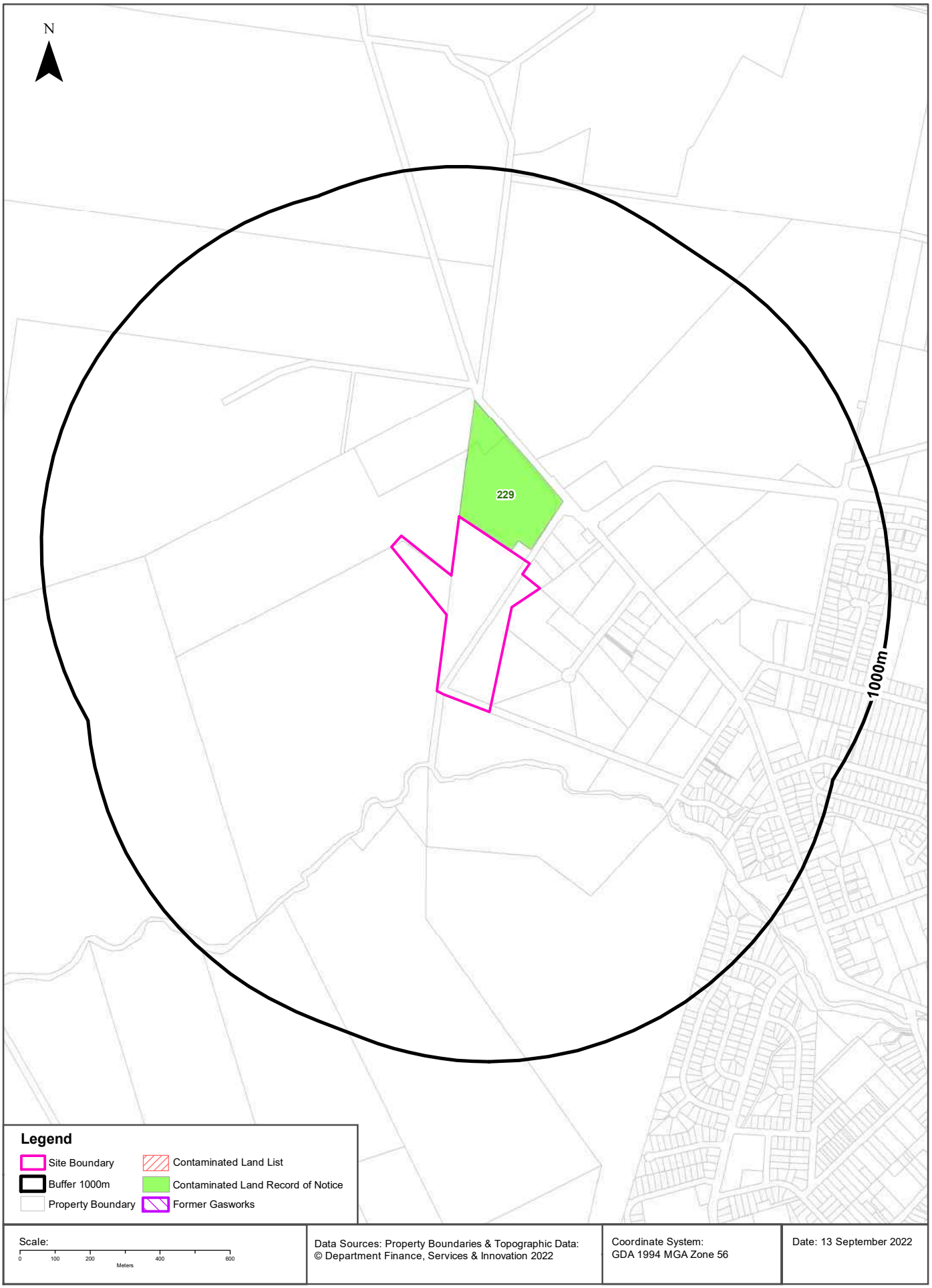
Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Coordinate System:
GDA 1994 MGA Zone 56

Date: 13 September 2022

Contaminated Land

Part of 2 Bowman Road, Moss Vale, NSW 2577



Contaminated Land

Part of 2 Bowman Road, Moss Vale, NSW 2577

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist	Direction
N/A	No records in buffer								

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

Part of 2 Bowman Road, Moss Vale, NSW 2577

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
229	Moss Vale North Depot	Bowman/Berrima Road	Moss Vale	1 current	3056	Premise Match	1m	North

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

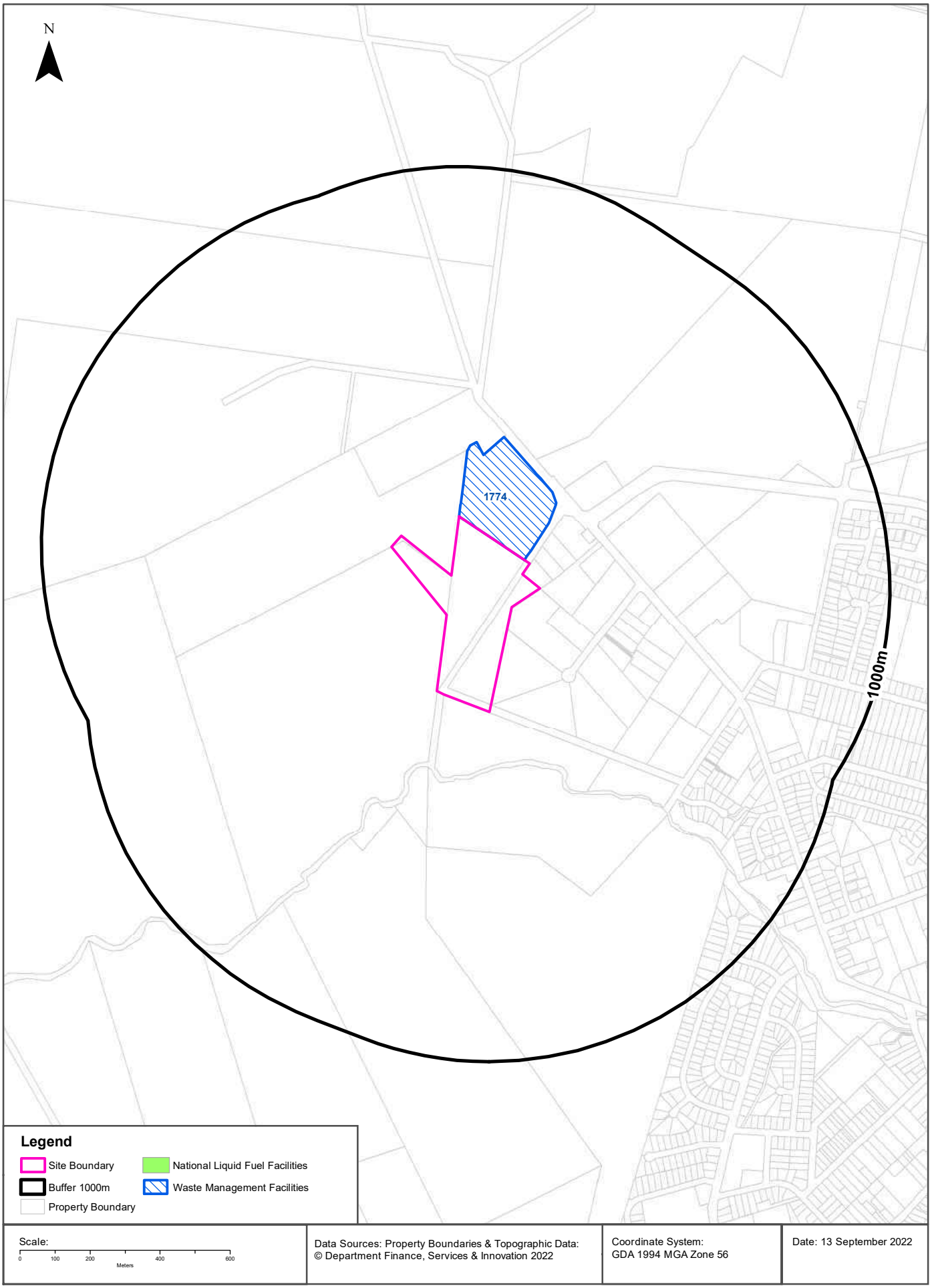
Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities

Part of 2 Bowman Road, Moss Vale, NSW 2577



Waste Management & Liquid Fuel Facilities

Part of 2 Bowman Road, Moss Vale, NSW 2577

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist	Direction
1774		Resource Recovery Centre	Berrima Road	Moss Vale	Transfer Station			Operational		Premise Match	0m	North

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Liquid Fuel Facilities

National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Direction
N/A	No records in buffer										

National Liquid Fuel Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

PFAS Investigation & Management Programs

Part of 2 Bowman Road, Moss Vale, NSW 2577

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Map ID	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

Part of 2 Bowman Road, Moss Vale, NSW 2577

Defence 3 Year Regional Contamination Investigation Program

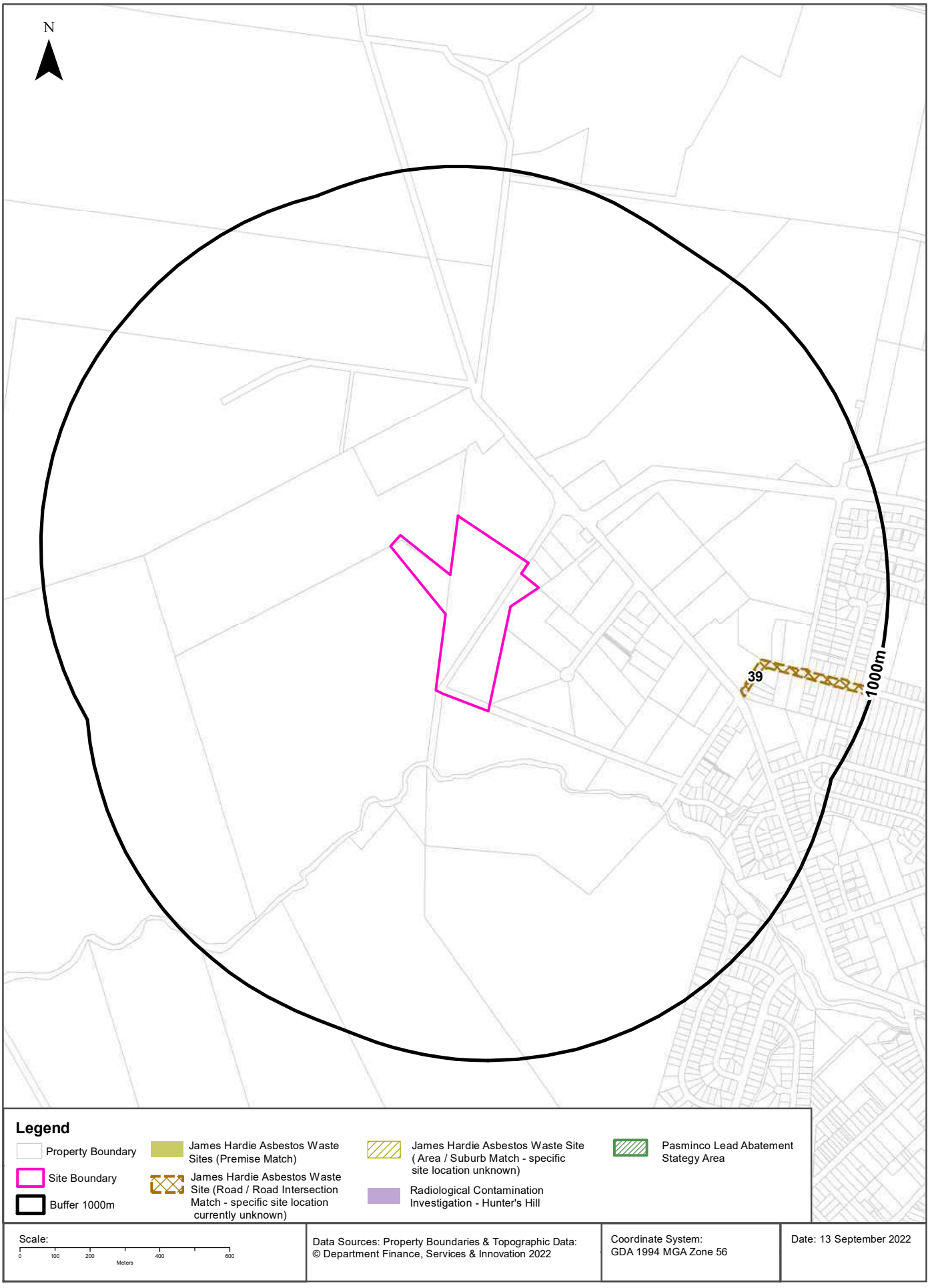
Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

Part of 2 Bowman Road, Moss Vale, NSW 2577



EPA Other Sites with Contamination Issues

Part of 2 Bowman Road, Moss Vale, NSW 2577

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

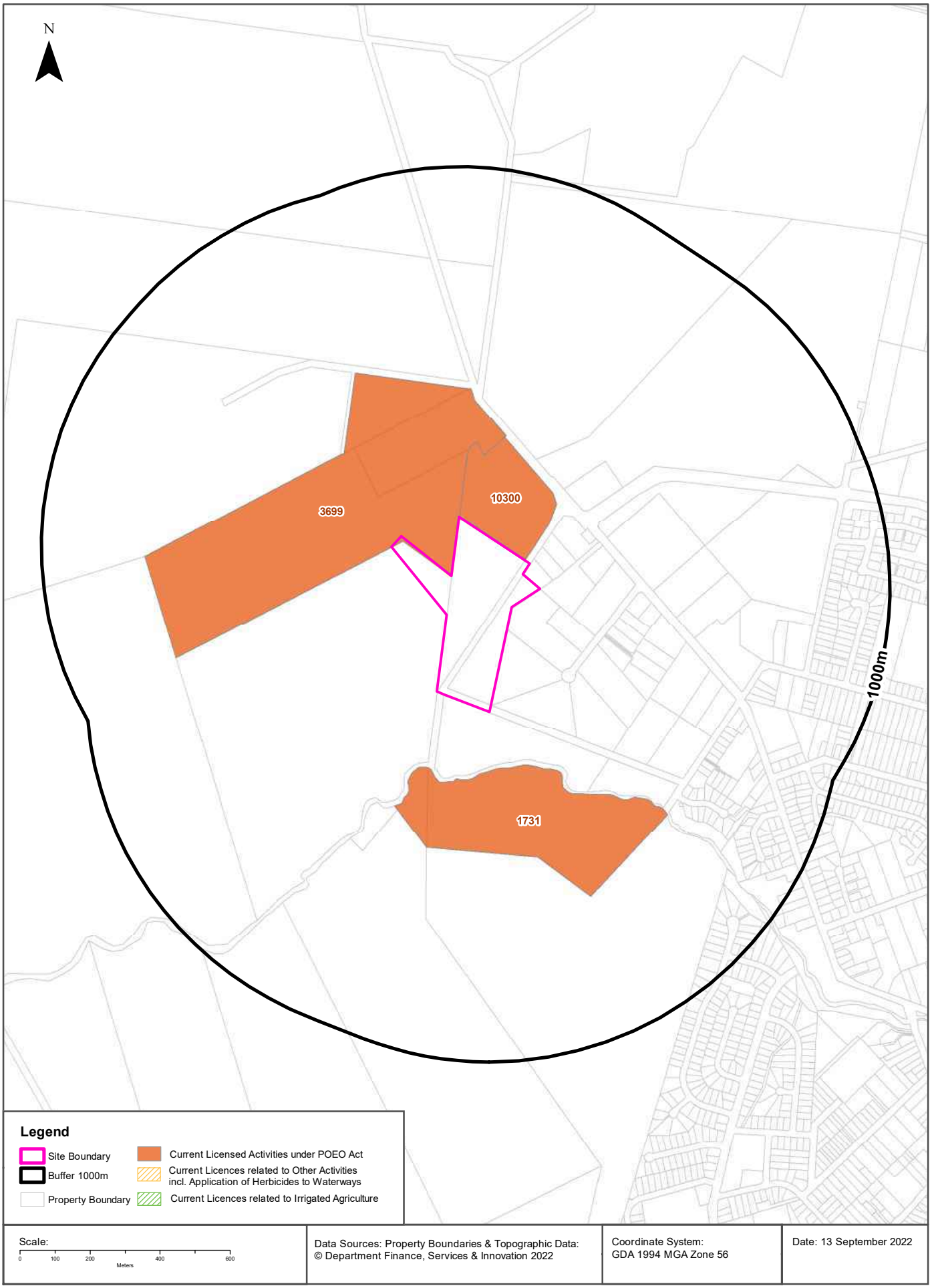
Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
39	Moss Vale tip	Lytton Rd, Moss Vale	James Hardie Asbestos Waste Sites		Road Match	648m	East

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

Part of 2 Bowman Road, Moss Vale, NSW 2577



EPA Activities

Part of 2 Bowman Road, Moss Vale, NSW 2577

Licensed Activities under the POEO Act 1997

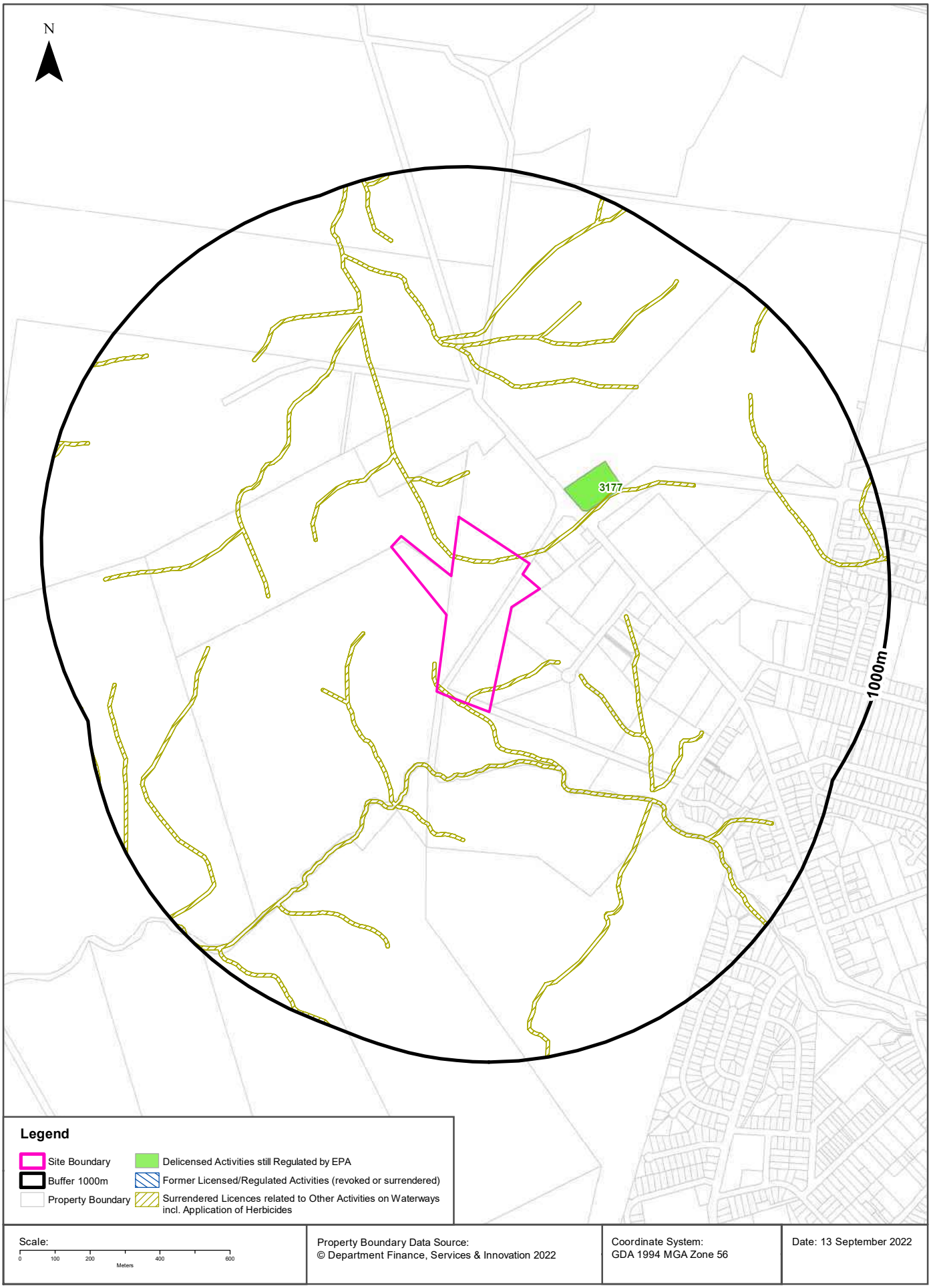
Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
3699	WINGECARRIBEE SHIRE COUNCIL	SOUTHERN REGIONAL LIVESTOCK EXCHANGE	BERRIMA ROAD	MOSS VALE	Animal accommodation	Premise Match	0m	On-site
10300	WINGECARRIBEE SHIRE COUNCIL	RESOURCE RECOVERY CENTRE	Berrima Road	MOSS VALE	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	0m	North
10300	WINGECARRIBEE SHIRE COUNCIL	RESOURCE RECOVERY CENTRE	Berrima Road	MOSS VALE	Composting	Premise Match	0m	North
10300	WINGECARRIBEE SHIRE COUNCIL	RESOURCE RECOVERY CENTRE	Berrima Road	MOSS VALE	Recovery of general waste	Premise Match	0m	North
10300	WINGECARRIBEE SHIRE COUNCIL	RESOURCE RECOVERY CENTRE	Berrima Road	MOSS VALE	Non-thermal treatment of general waste	Premise Match	0m	North
10300	WINGECARRIBEE SHIRE COUNCIL	RESOURCE RECOVERY CENTRE	Berrima Road	MOSS VALE	Waste storage - other types of waste	Premise Match	0m	North
1731	WINGECARRIBEE SHIRE COUNCIL	MOSS VALE SEWAGE TREATMENT SYSTEM including the STP at	KENNEDY CLOSE	MOSS VALE	Sewage treatment processing by small plants	Premise Match	162m	South

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

Part of 2 Bowman Road, Moss Vale, NSW 2577



EPA Activities

Part of 2 Bowman Road, Moss Vale, NSW 2577

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
3177	CONCRITE PTY LTD	CONCRITE PTY LIMITED	178 Berrima Road	MOSS VALE	Concrete works	Premise Match	215m	North East

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	On-site
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	On-site
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	0m	On-site

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Historical Business Directories

Part of 2 Bowman Road, Moss Vale, NSW 2577

Business Directory Records 1950-1991
Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Business Directory Records 1950-1991
Road or Area Matches

Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Historical Business Directories

Part of 2 Bowman Road, Moss Vale, NSW 2577

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Aerial Imagery 2021

Part of 2 Bowman Road, Moss Vale, NSW 2577



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 13 September 2022
0 50 100 150 200 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 56	

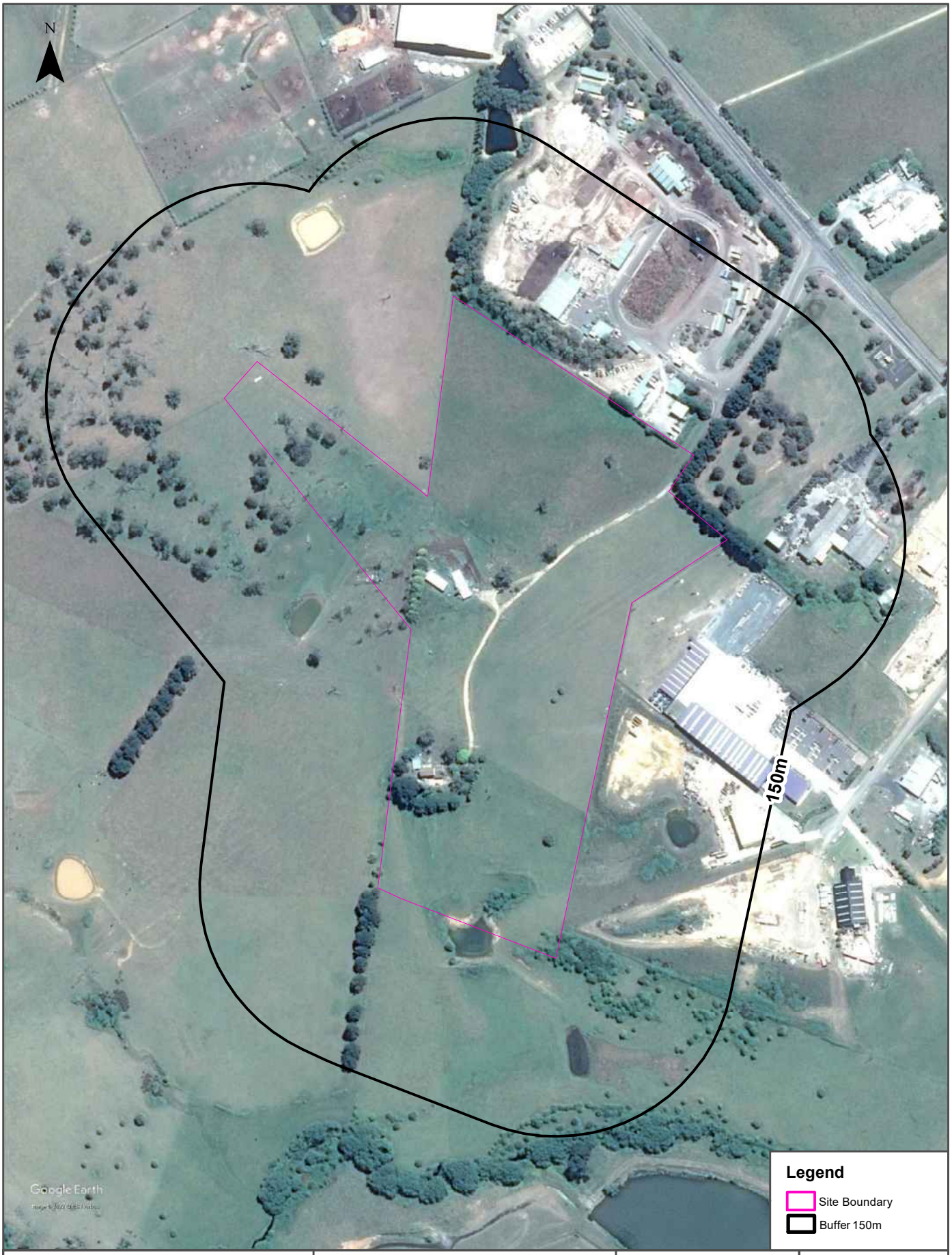
Aerial Imagery 2018

Part of 2 Bowman Road, Moss Vale, NSW 2577



Aerial Imagery 2013

Part of 2 Bowman Road, Moss Vale, NSW 2577



Scale: 0 50 100 150 200 Meters

Data Source Aerial Imagery: © 2022 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 13 September 2022

Aerial Imagery 2006

Part of 2 Bowman Road, Moss Vale, NSW 2577



Scale: 0 50 100 150 200 Meters

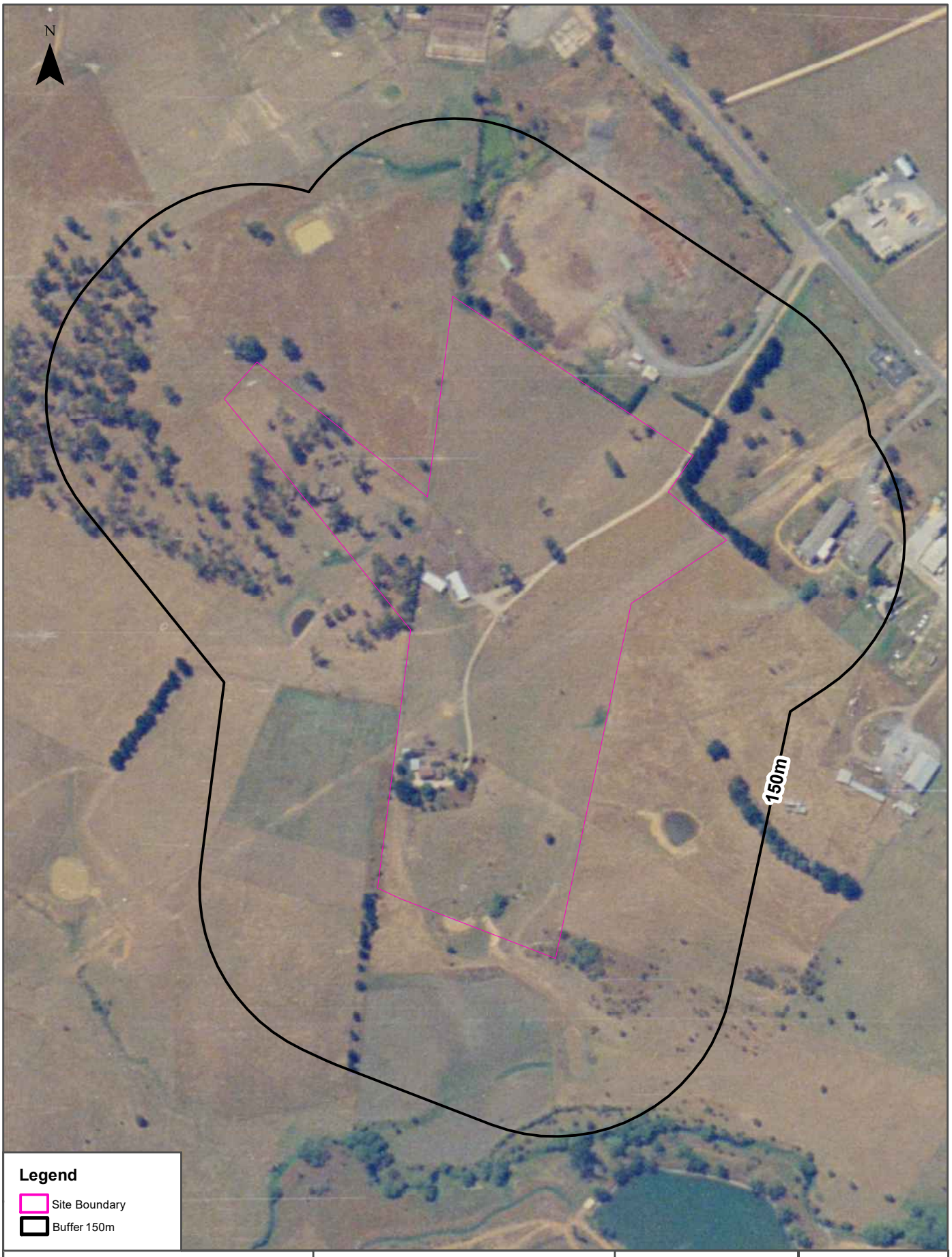
Data Source Aerial Imagery: © 2022 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System: GDA 1994 MGA Zone 56

Date: 13 September 2022

Aerial Imagery 1997

Part of 2 Bowman Road, Moss Vale, NSW 2577



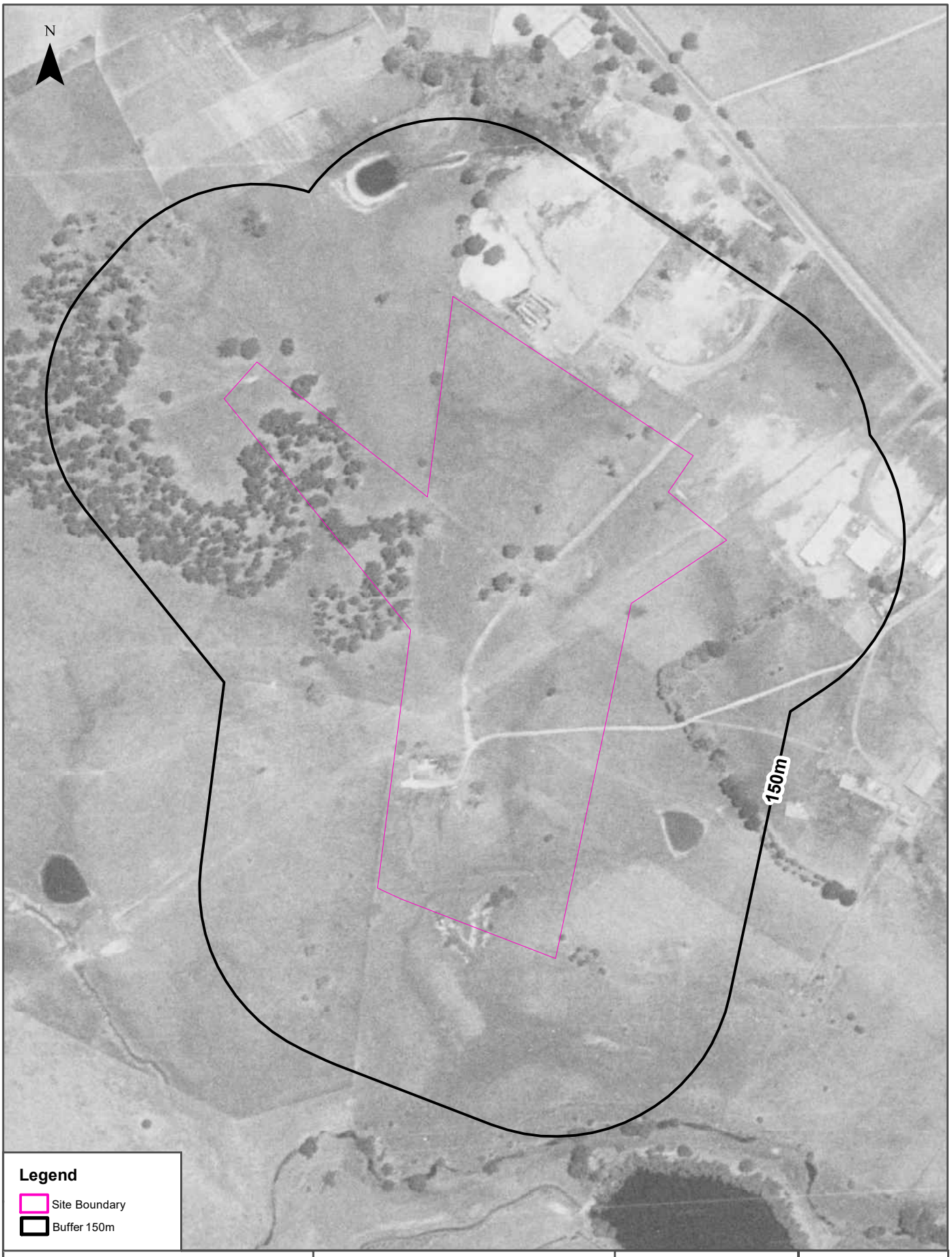
Aerial Imagery 1989

Part of 2 Bowman Road, Moss Vale, NSW 2577



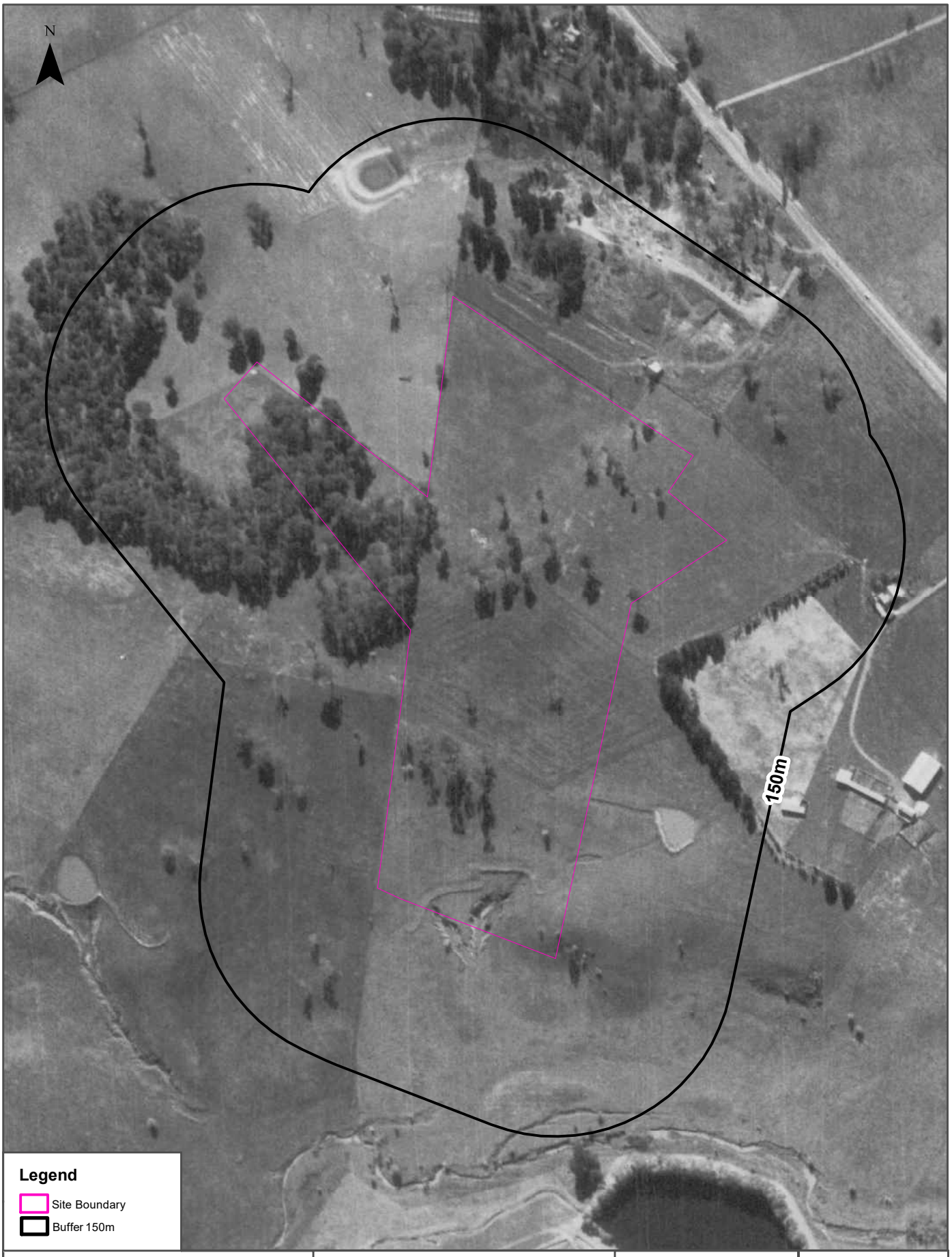
Aerial Imagery 1979

Part of 2 Bowman Road, Moss Vale, NSW 2577



Aerial Imagery 1969

Part of 2 Bowman Road, Moss Vale, NSW 2577



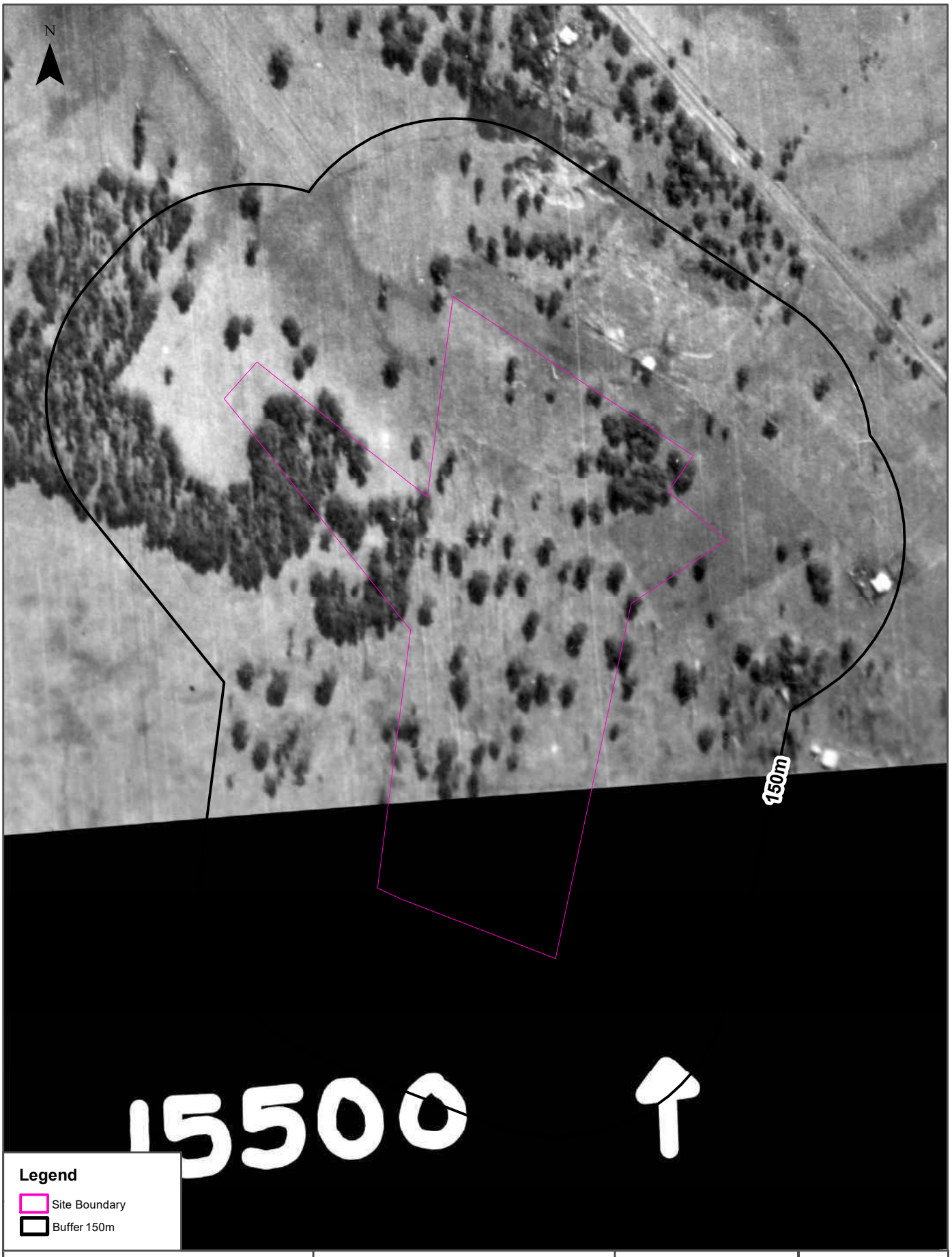
Aerial Imagery 1963

Part of 2 Bowman Road, Moss Vale, NSW 2577



Aerial Imagery 1949

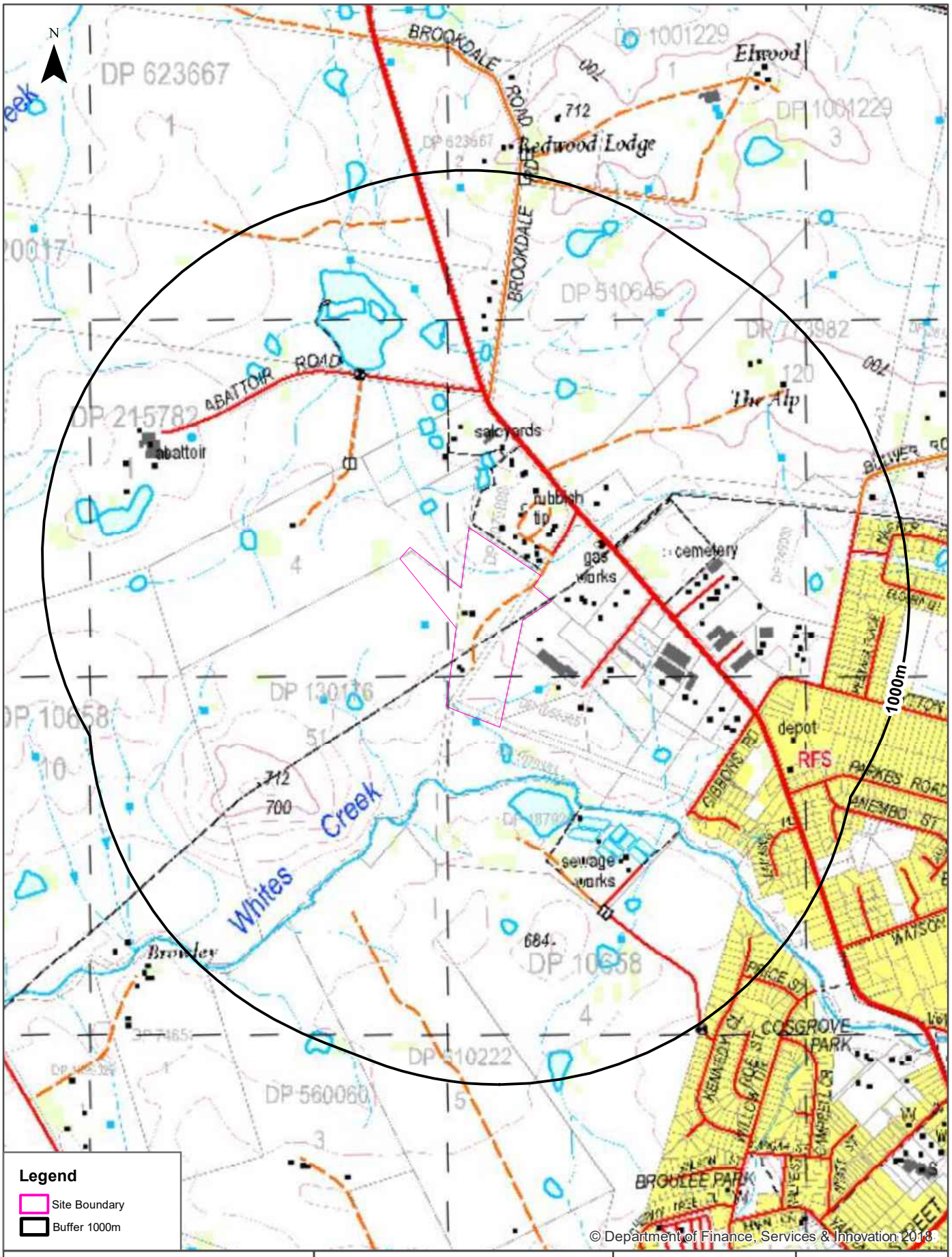
Part of 2 Bowman Road, Moss Vale, NSW 2577



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 15 September 2022
0 50 100 150 200 Meters	© NSW Department of Customer Service	GDA 1994 MGA Zone 56	

Topographic Map 2015

Part of 2 Bowman Road, Moss Vale, NSW 2577

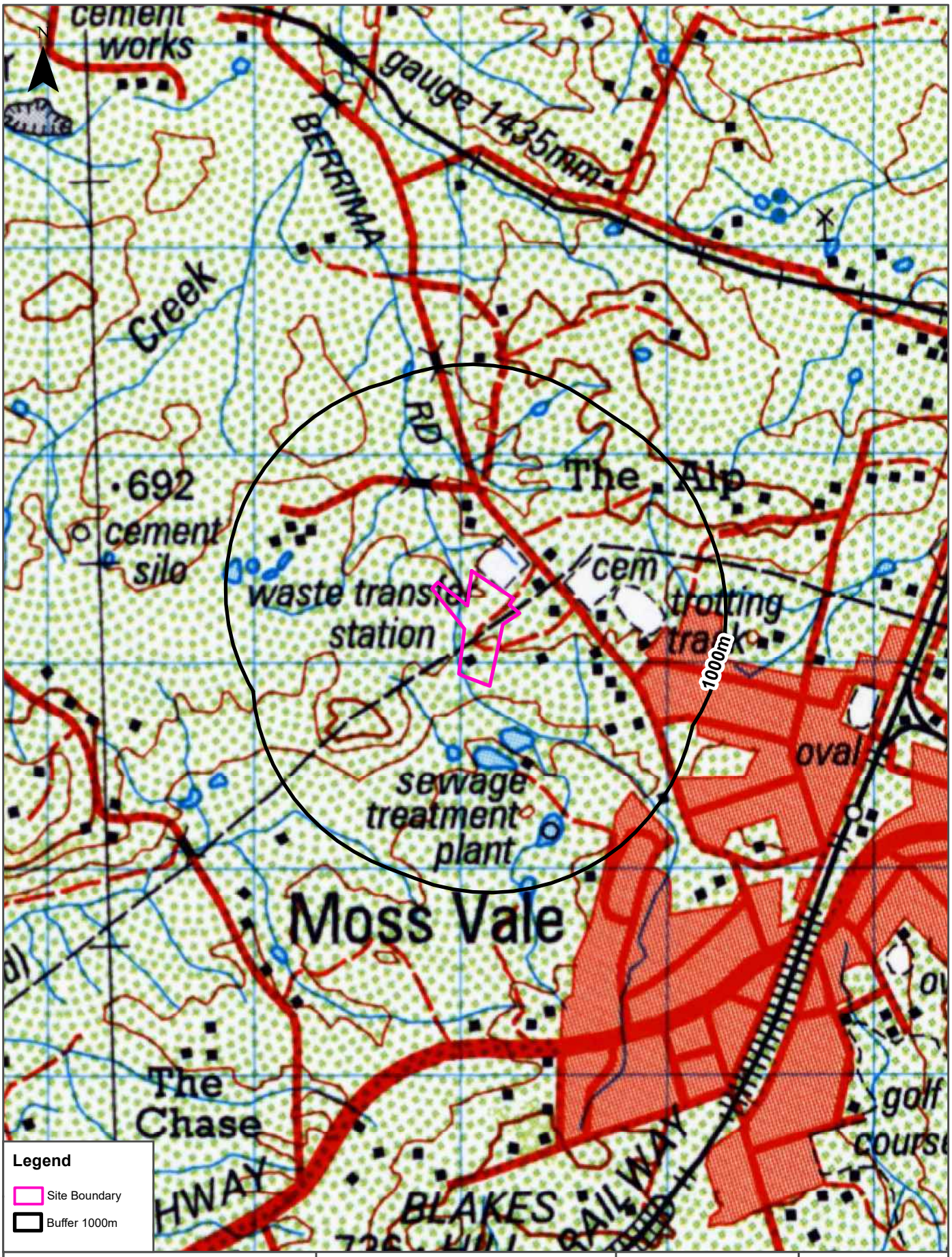


Scale:	Data Sources: Topographic Map Data © NSW Land and Property Information	Coordinate System: GDA 1994 MGA Zone 56	Date: 13 September 2022

0 170 340 510 680 Meters

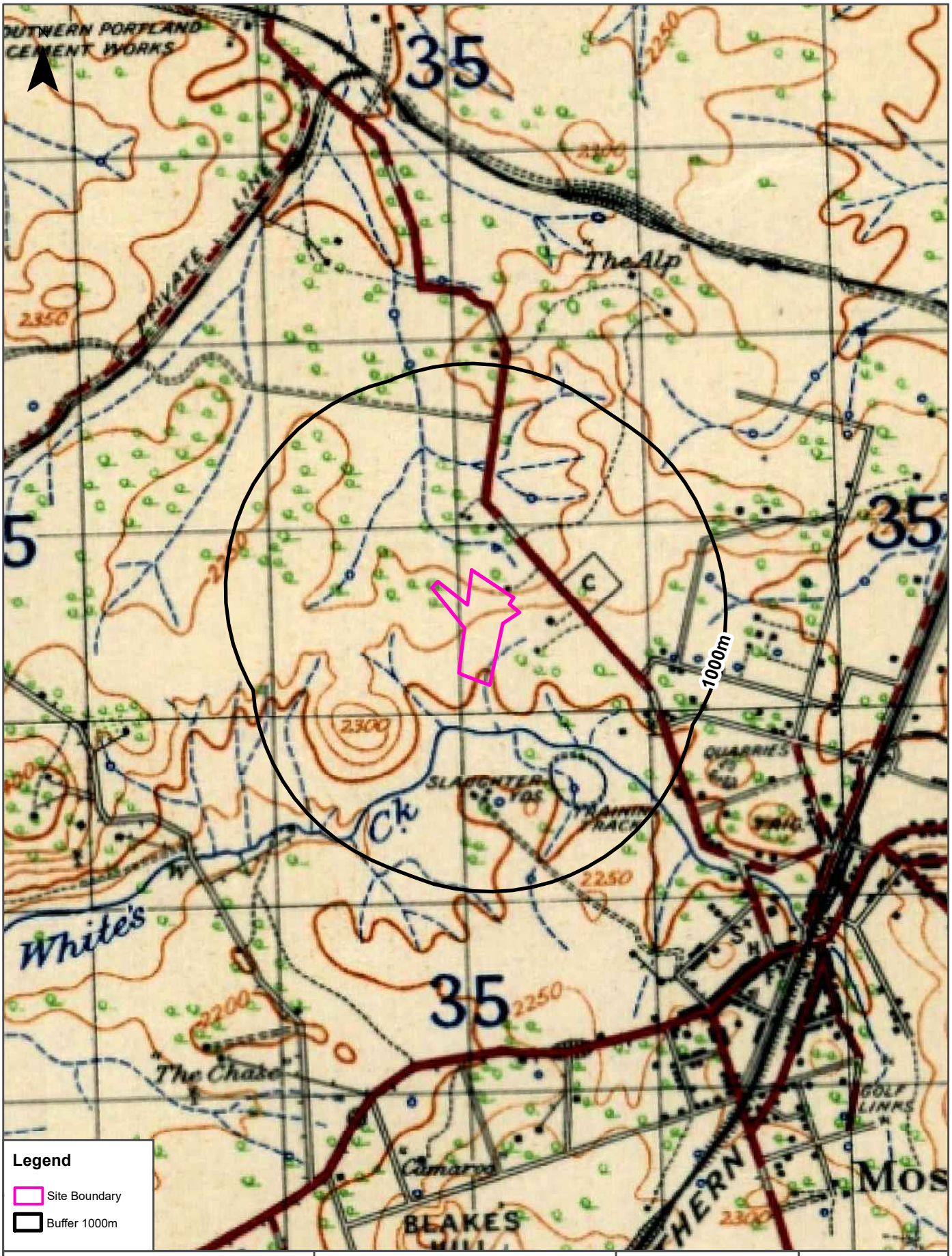
Historical Map 1998

Part of 2 Bowman Road, Moss Vale, NSW 2577



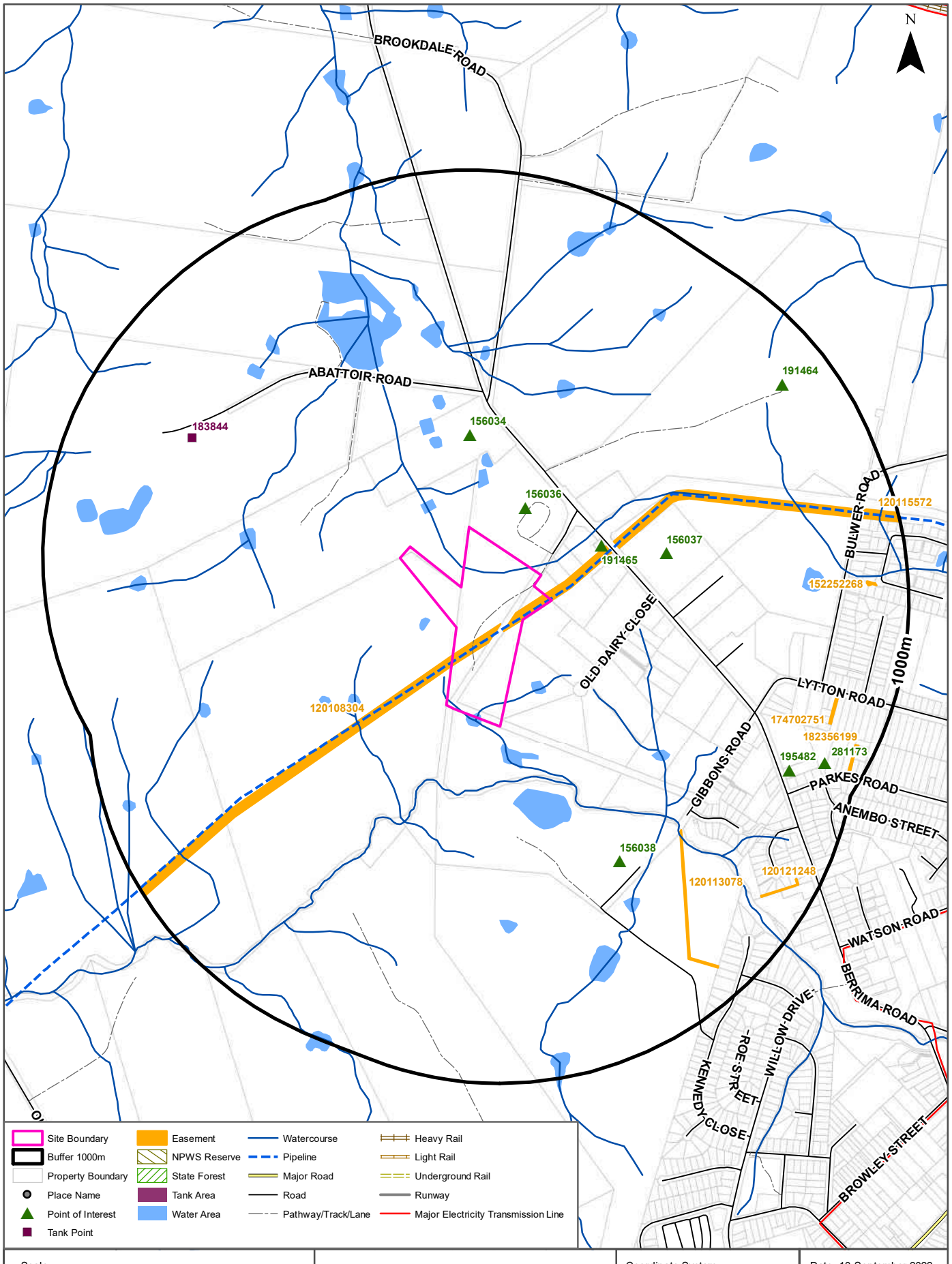
Historical Map c.1933

Part of 2 Bowman Road, Moss Vale, NSW 2577



Topographic Features

Part of 2 Bowman Road, Moss Vale, NSW 2577



Topographic Features

Part of 2 Bowman Road, Moss Vale, NSW 2577

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
156036	Rubbish Depot	Rubbish Depot	132m	North
191465	Gas Facility	Gas Facility	188m	North East
156034	Stock Sale Yard	MOSS VALE LIFESTOCK SELLING CENTRE	258m	North
156037	Cemetery	MOSS VALE CEMETERY	348m	East
156038	Sewage Works	MOSS VALE SEWERAGE TREATMENT PLANT	506m	South East
195482	Firestation - Bush	MOSS VALE RFB	817m	South East
191464	Homestead	THE ALP	860m	North East
281173	SES Facility	MOSS VALE SES	889m	South East

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Topographic Features

Part of 2 Bowman Road, Moss Vale, NSW 2577

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
183844	Water	Operational		01/10/2013	671m	North West

Tanks Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120108304	Primary	Undefined		0m	On-site
120113078	Primary	Undefined		584m	South East
174702751	Primary	Right of way	6m	840m	East
120121248	Primary	Undefined		871m	South East
152252268	Primary	Right of way	VARIABLE	883m	East
120115572	Primary	Undefined		896m	East
182356199	Primary	Right of way	variable	941m	East

Easements Data Source: © Land and Property Information (2015)
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Topographic Features

Part of 2 Bowman Road, Moss Vale, NSW 2577

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
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Elevation Contours (m AHD)

Part of 2 Bowman Road, Moss Vale, NSW 2577



Hydrogeology & Groundwater

Part of 2 Bowman Road, Moss Vale, NSW 2577

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive aquifers of low to moderate productivity	0m	On-site
Porous, extensive highly productive aquifers	0m	On-site

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

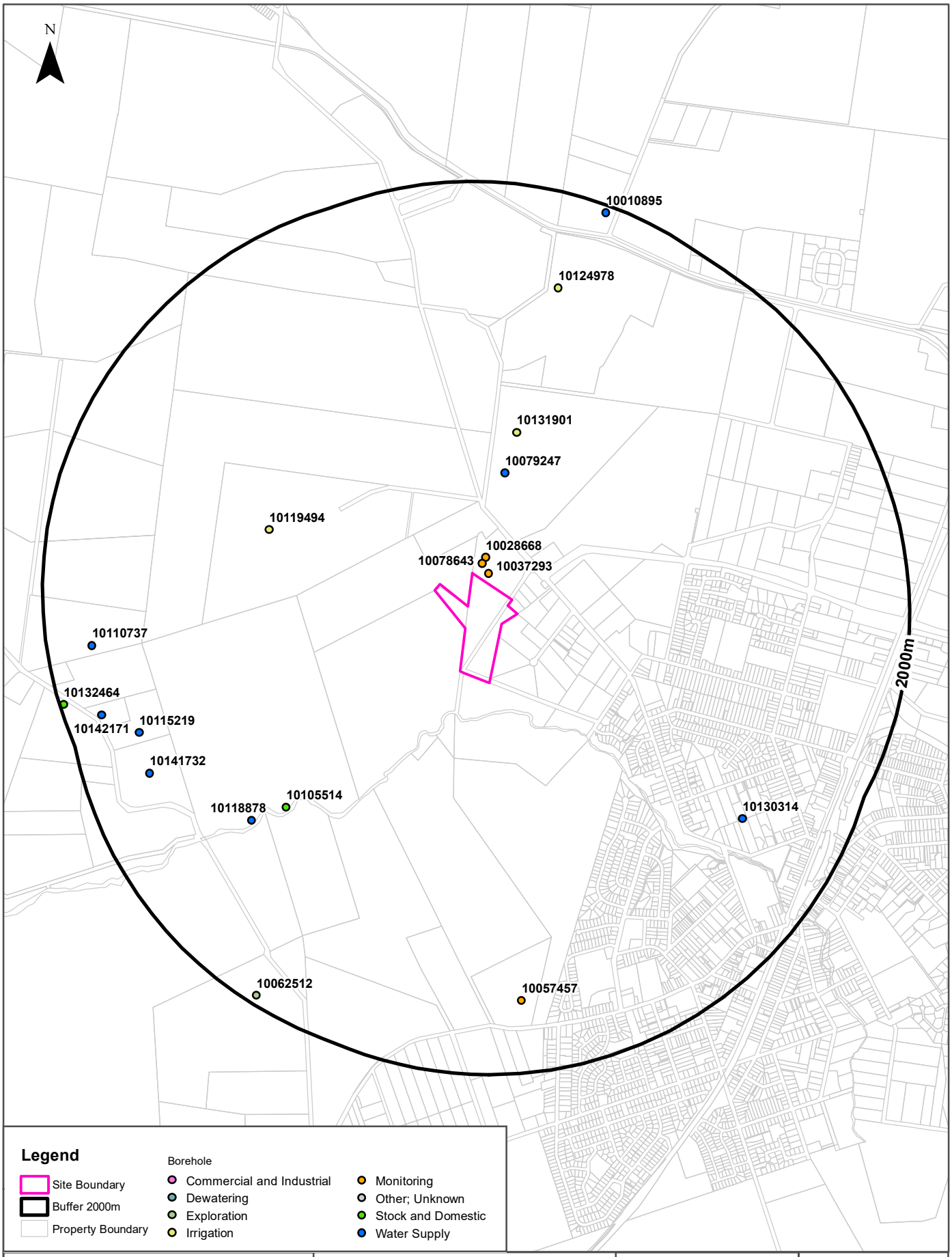
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries

Groundwater Boreholes

Part of 2 Bowman Road, Moss Vale, NSW 2577



Hydrogeology & Groundwater

Part of 2 Bowman Road, Moss Vale, NSW 2577

Groundwater Boreholes

Boreholes within the dataset buffer:

NGIS Bore ID	NSW Bore ID	Bore Type	Status	Drill Date	Bore Depth (m)	Reference Elevation	Height Datum	Salinity (mg/L)	Yield (L/s)	SWL (mbgl)	Distance	Direction
10037293	GW107220	Monitoring	Unknown	02/12/2003	10.00		AHD				46m	North
10078643	GW107222	Monitoring	Unknown	02/12/2003	9.00		AHD				70m	North
10028668	GW107221	Monitoring	Unknown	01/12/2003	9.00		AHD				106m	North
10079247	GW105099	Water Supply	Functioning	01/01/2002			AHD		22.000	85.00	538m	North
10131901	GW037449	Irrigation	Unknown	01/02/1973	108.20		AHD				752m	North
10119494	GW103201	Irrigation	Unknown	20/10/1999	192.00		AHD	300			897m	North West
10105514	GW025571	Stock and Domestic	Unknown		57.90		AHD				1125m	South West
10118878	GW023519	Water Supply	Unknown	01/07/1965	18.50		AHD				1307m	South West
10130314	GW105087	Water Supply	Functioning	09/10/2003	150.00		AHD	205	0.250	55.00	1468m	South East
10124978	GW105049	Irrigation	Functioning	05/06/2001	184.00		AHD	100	0.650	38.00	1521m	North
10057457	GW067320	Monitoring	Functioning	12/04/1990	134.00	690.00	AHD		3.800	53.00	1632m	South
10115219	GW102589	Water Supply	Unknown	30/07/1999	139.00		AHD				1664m	West
10141732	GW113046	Water Supply	Functioning	27/02/2008	120.00		AHD	0.56	0.900		1664m	South West
10110737	GW104110	Water Supply	Unknown	23/10/2001	140.00		AHD	Good			1769m	West
10142171	GW108469	Water Supply	Functioning	31/08/2007	114.00		AHD	400	4.000	76.00	1812m	West
10062512	GW042640	Exploration	Proposed	01/01/1971	182.80		AHD				1954m	South West
10010895	GW035522	Water Supply	Unknown	01/07/1973	112.70		AHD				1961m	North
10132464	GW034742	Stock and Domestic	Unknown	01/01/1972	76.20		AHD	1001-3000 ppm			1979m	West

Borehole Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

Part of 2 Bowman Road, Moss Vale, NSW 2577

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

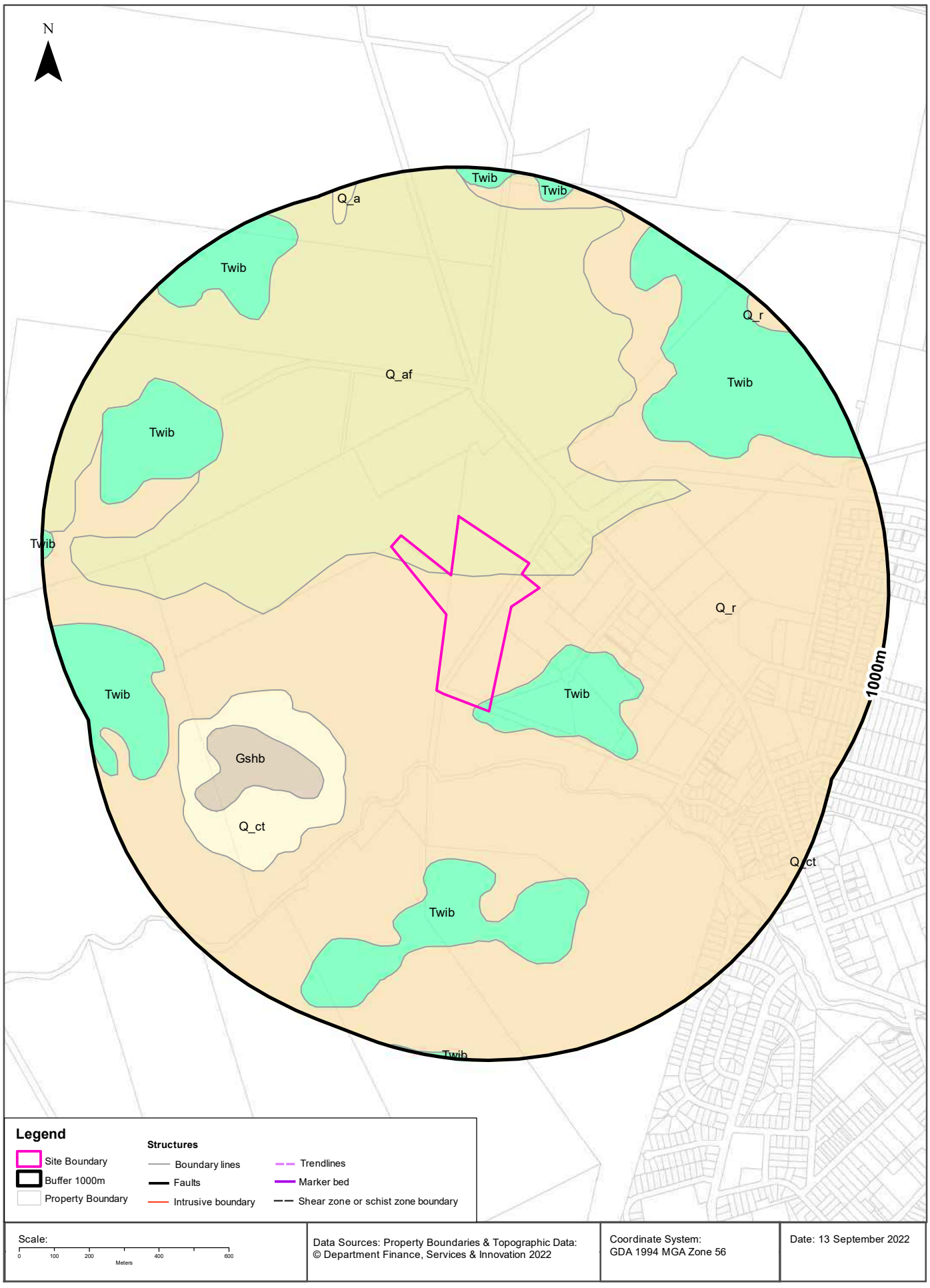
NGIS Bore ID	Drillers Log	Distance	Direction
10037293	0.00m-1.00m TOPSOIL 1.00m-5.50m SANDY CLAY 5.50m-10.00m SILTSTONE	46m	North
10078643	0.00m-3.00m SILTY CLAY 3.00m-4.60m CLAY 4.60m-9.00m SILTSTONE	70m	North
10028668	0.00m-4.50m CLAY L/BROWN 4.50m-9.00m SILTSTONE	106m	North
10131901	0.00m-0.30m Topsoil 0.30m-1.22m Clay 1.22m-1.83m Clay White Sandy 1.83m-3.66m Shale Grey Soft 3.66m-18.29m Shale Grey 18.29m-60.96m Shale Dark Water Supply 60.96m-82.30m Sandstone Fine 82.30m-97.54m Sandstone White Sugary Coarse Water Supply 97.54m-108.20m Sandstone Fine	752m	North
10119494	0.00m-0.35m TOPSOIL 0.35m-3.80m CLAYS 3.80m-74.00m SHALE 74.00m-192.00m SANDSTONE	897m	North West
10118878	0.00m-0.30m Humus 0.30m-1.82m Clay 1.82m-4.26m Clay 4.26m-7.31m Shale Black 7.31m-9.44m Shale Siliceous 9.44m-11.27m Granite Water Supply 11.27m-18.59m Porphyry Very Hard Water Supply	1307m	South West
10130314	0.00m-3.00m CLAY 3.00m-114.00m SHALE 114.00m-150.00m WHITE SANDSTONE	1468m	South East
10124978	0.00m-5.00m CLAY 5.00m-70.00m SHALE 70.00m-78.00m SHALE/SANDSTONE BANDS 78.00m-184.00m SANDSTONE	1521m	North
10115219	0.00m-9.00m YELLOW CLAY 9.00m-27.00m DARK SHALE 27.00m-32.00m FINE LIGHT SHALE 32.00m-75.00m SHALE 75.00m-83.00m GREY SANDSTONE 83.00m-139.00m LIGHT GREY SANDSTONE	1664m	West
10141732	0.00m-5.00m CLAY 5.00m-54.00m SHALE 54.00m-78.00m SANDSTONE FINE GREY 78.00m-120.00m SANDSTONE COARSE GREY	1664m	South West
10110737	0.00m-1.00m TOPSOIL 1.00m-10.00m CLAY 10.00m-90.00m SOFT SHALE 90.00m-112.00m HARD SHALE 112.00m-140.00m SANDSTONE	1769m	West
10142171	0.00m-1.00m Topsoil, light brown creme Clay 1.00m-5.00m Shale, light grey, with white Clay 5.00m-6.00m Shale, light grey 6.00m-30.00m Shale, light dark grey 30.00m-42.00m Shale, white pale grey 42.00m-78.00m Shale, grey 78.00m-90.00m Shale, light dark mix 90.00m-94.00m Shale, dark 94.00m-111.00m Sandstone, white creme 111.00m-114.00m Shale, grey	1812m	West

NGIS Bore ID	Drillers Log	Distance	Direction
10010895	0.00m-0.45m Soil 0.45m-1.52m Clay Red Gravel 1.52m-6.09m Clay Red White 6.09m-7.01m Clay Soft 7.01m-10.66m Shale Grey 10.66m-80.77m Shale Dark Grey Water Supply 80.77m-85.95m Sandstone Grey White 85.95m-91.44m Sandstone Grey White Coarse Water Supply 91.44m-93.57m Shale Sandstone Bands 93.57m-112.16m Sandstone White Sugary Coarse Water Supply 112.16m-112.77m Shale Grey Sandy	1961m	North
10132464	0.00m-0.60m Topsoil Dark 0.60m-1.82m Clay Shale 1.82m-4.87m Shale Clay 4.87m-14.63m Shale Grey 14.63m-27.43m Basalt 27.43m-55.47m Shale Hard Water Supply 55.47m-59.74m Shale White 59.74m-76.20m Shale Very Hard Bands	1979m	West

Drill Log Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Geology

Part of 2 Bowman Road, Moss Vale, NSW 2577



Geological Units

What are the Geological Units within the dataset buffer?

Unit Code	Unit Name	Description	Unit Stratigraphy	Age	Dominant Lithology	Distance
Q_r	Residual deposits	A weakly-consolidated regolithic residuum such as soil or saprolite mostly developed in-situ as a result of advanced weathering and/or pedogenesis.	/Residual deposits////	Quaternary (base) to Now (top)	Saprolite	0m
Q_af	Alluvial floodplain deposits	Silt, very fine- to medium-grained lithic to quartz-rich sand, clay.	/Alluvium//Alluvial floodplain deposits//	Quaternary (base) to Now (top)	Clastic sediment	0m
Twib	Bringelly Shale	Shale, carbonaceous claystone, laminite, lithic sandstone, rare coal.	/Wianamatta Group//Bringelly Shale//	Middle Triassic (base) to Middle Triassic (top)	Shale	0m
Q_ct	Colluvial talus deposits	Poorly sorted, weakly cemented to unconsolidated coalescing fans of pebble- to cobble-sized polymictic conglomerate with medium- to very coarse-grained clayey sand matrix; sporadically caped with sandy loam, weakly modified by pedogenesis.	/Colluvium/Colluvial talus deposits///	Quaternary (base) to Now (top)	Clastic sediment	316m
Gshb	Robertson Basalt	Alkaline olivine dolerite plug; basalt and basanite.	/Southern Highlands Volcanic Complex//Robertson Basalt//	Ypresian (base) to Priabonian (top)	Basalt	404m
Q_a	Alluvium	Unconsolidated grey to brown to beige humic (±)micaceous silty clay, quartz-(±)lithic silt, fine- to medium-grained quartz-rich to quartz-lithic sand, polymictic pebble to cobble gravel (as sporadic lenses); sporadic palaeosol horizons.	/Alluvium////	Quaternary (base) to Now (top)	Clastic sediment	904m

Linear Geological Structures

What are the Dyke, Sill, Fracture, Lineament and Vein trendlines within the dataset buffer?

Map ID	Feature Description	Map Sheet Name	Distance
No Features			

What are the Faults, Shear zones or Schist zones, Intrusive boundaries & Marker beds within the dataset buffer?

Map ID	Boundary Type	Description	Map Sheet Name	Distance
No Features				

Geological Data Source: Statewide Seamless Geology v2.1, Department of Regional NSW
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Naturally Occurring Asbestos Potential

Part of 2 Bowman Road, Moss Vale, NSW 2577

Naturally Occurring Asbestos Potential

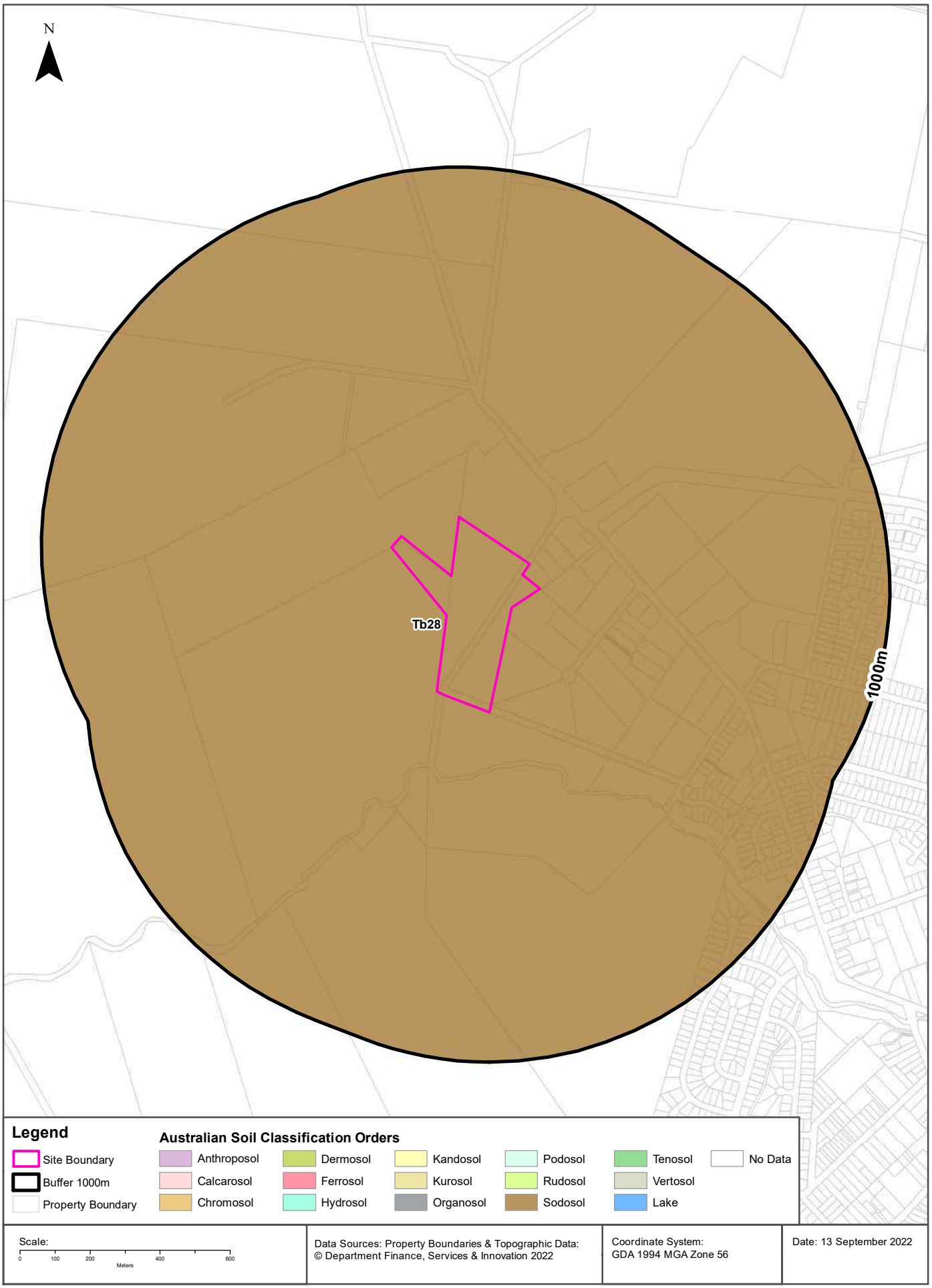
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils

Part of 2 Bowman Road, Moss Vale, NSW 2577



Soils

Part of 2 Bowman Road, Moss Vale, NSW 2577

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Tb28	Sodosol	Flat to undulating with low rises, knolls and ridges, swampy depressions, and valleys: chief soils are hard acidic yellow mottled soils (Dy3.41) with more or less regular occurrences of red earths (Gn2.14) on low rises, and various undescribed soils probably occurring in specific topographic situations. As mapped, islands of the soils of unit Gd3 and some areas of soils, especially the yellow earths, of unit Mb2 are included. Compare units Tb29 and Mu5.	0m	On-site

Atlas of Australian Soils Data Source: CSIRO
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Acid Sulfate Soils

Part of 2 Bowman Road, Moss Vale, NSW 2577

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
N/A		

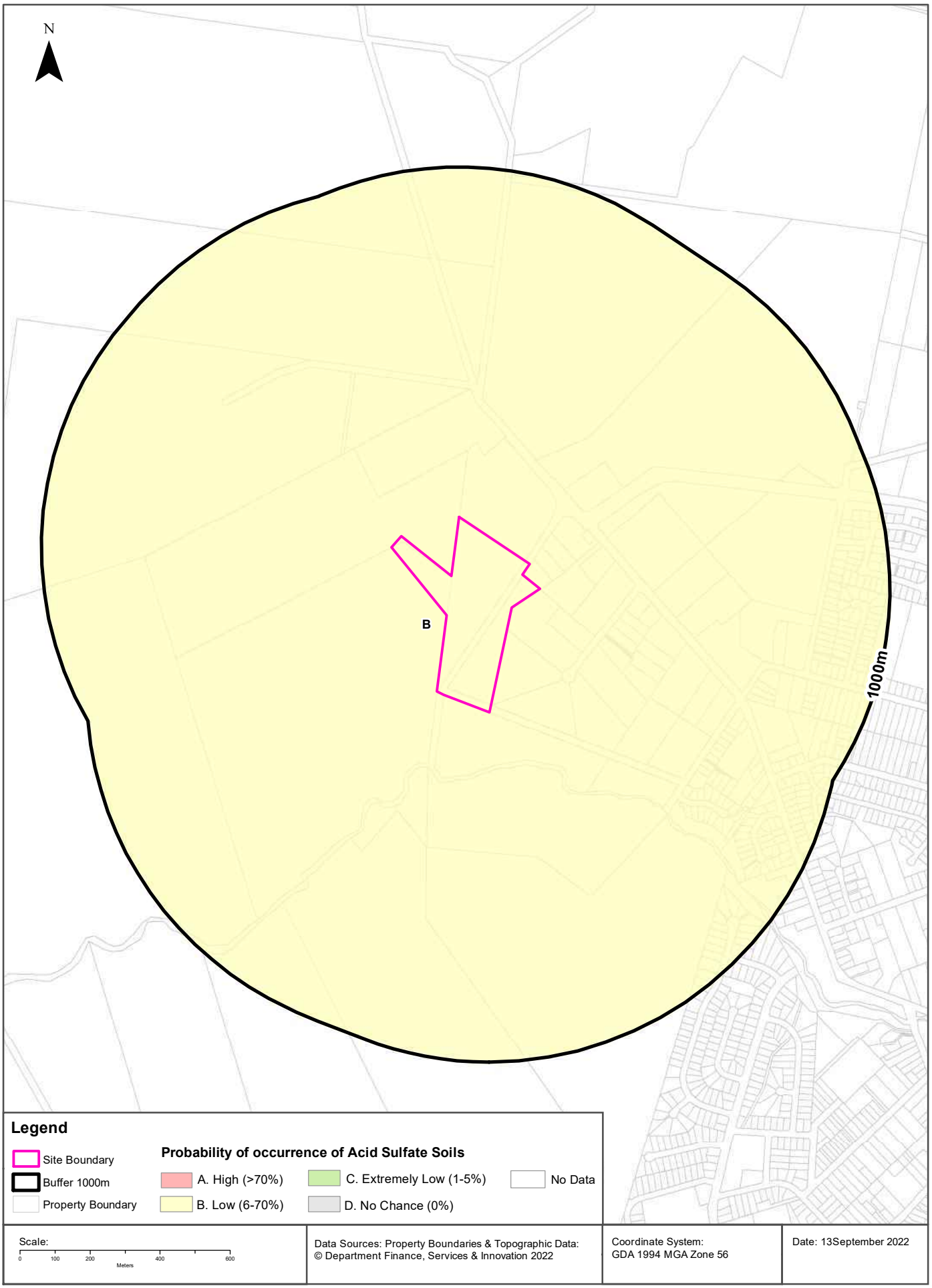
If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

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Atlas of Australian Acid Sulfate Soils

Part of 2 Bowman Road, Moss Vale, NSW 2577



Acid Sulfate Soils

Part of 2 Bowman Road, Moss Vale, NSW 2577

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m	On-site

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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Dryland Salinity

Part of 2 Bowman Road, Moss Vale, NSW 2577

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A		

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Mining

Part of 2 Bowman Road, Moss Vale, NSW 2577

Mining Subsidence Districts

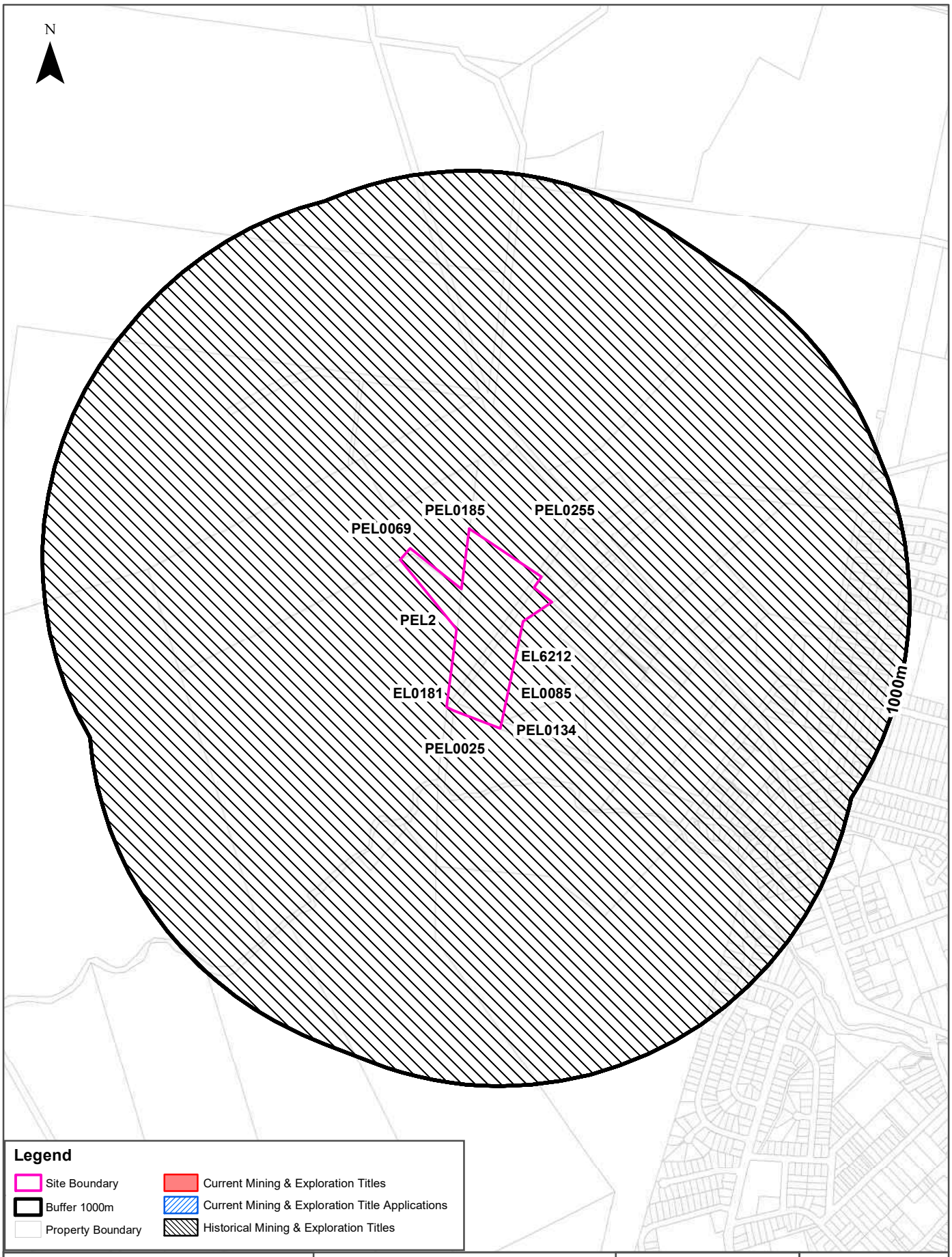
Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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Mining & Exploration Titles

Part of 2 Bowman Road, Moss Vale, NSW 2577



Mining

Part of 2 Bowman Road, Moss Vale, NSW 2577

Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer								

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

Part of 2 Bowman Road, Moss Vale, NSW 2577

Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
EL0181	BELLAMBI COAL COMPANY	01 Jan 1969	01 Jun 1970	COAL	Coal	0m	On-site
EL0085	CONTINENTAL OIL CO OF AUSTRALIA LIMITED	01 Feb 1967	01 Feb 1968	MINERALS		0m	On-site
PEL0025	AUSTRALIAN IRON AND STEEL LTD			PETROLEUM	Petroleum	0m	On-site
PEL0255	AGL PETROLEUM OPERATIONS PTY LTD, THE AUSTRALIAN GAS LIGHT COMPANY	3/12/1980	8/03/1993	PETROLEUM	Petroleum	0m	On-site
PEL2	AGL UPSTREAM INVESTMENTS PTY LIMITED			MINERALS		0m	On-site
PEL0185	JOHN STREVENS (TERRIGAL) NL			PETROLEUM	Petroleum	0m	On-site
PEL0134	CANADIAN AUSTRALIAN PETROLEUM NL			PETROLEUM	Petroleum	0m	On-site
PEL0069	ALLIANCE OIL DEVELOPMENT AUSTRALIA NL, OIL DEVELOPMENT NL			PETROLEUM	Petroleum	0m	On-site
EL6212	HOT ROCK ENERGY PTY LTD,LONGREACH OIL LIMITED	4 Mar 2004	3 Mar 2013	MINERALS	Geothermal	0m	On-site

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

State Environmental Planning Policy

Part of 2 Bowman Road, Moss Vale, NSW 2577

State Significant Precincts

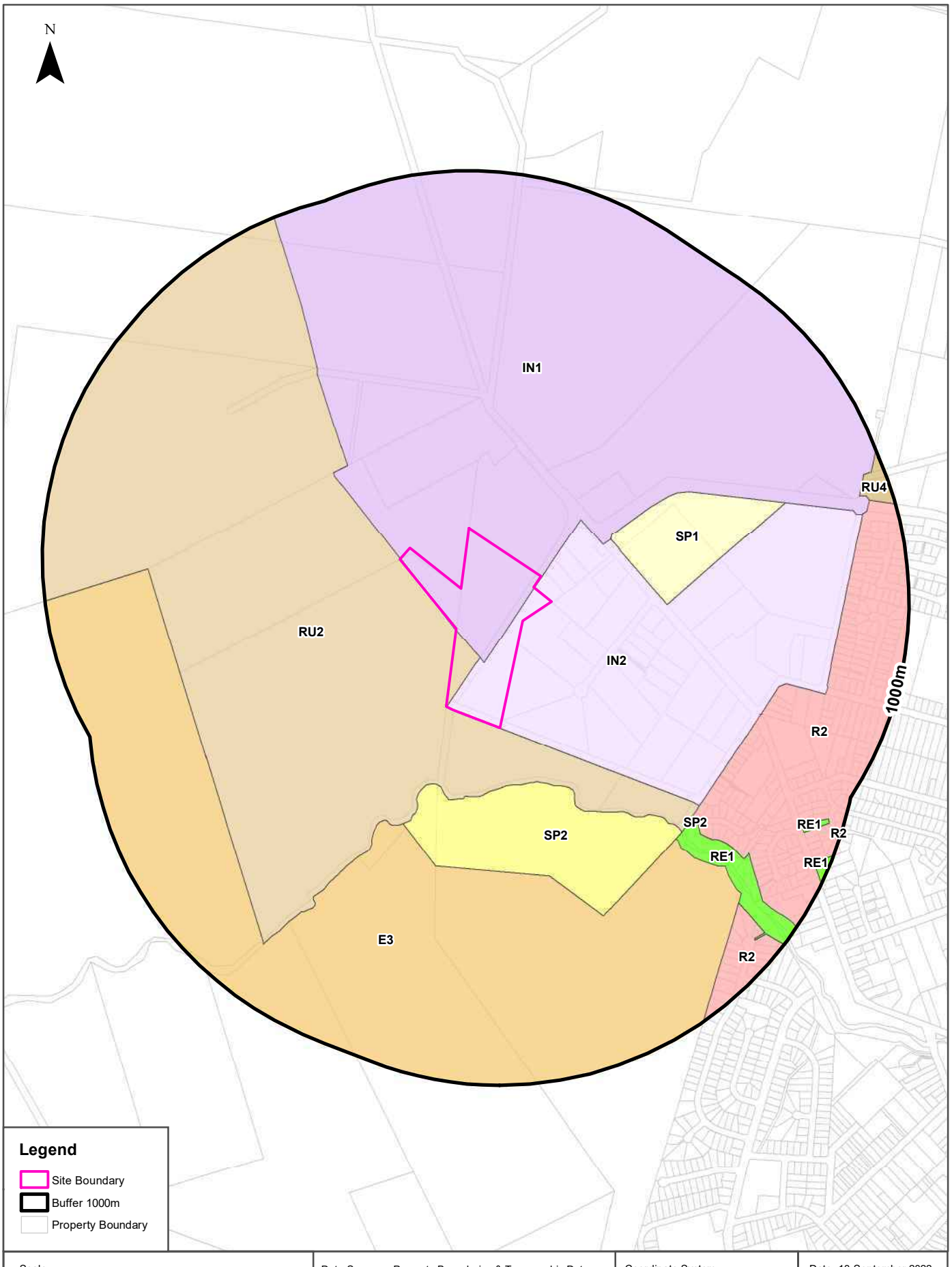
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No records in buffer							

State Environment Planning Policy Data Source: NSW Crown Copyright - Planning & Environment
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EPI Planning Zones

Part of 2 Bowman Road, Moss Vale, NSW 2577



Environmental Planning Instrument

Part of 2 Bowman Road, Moss Vale, NSW 2577

Land Zoning

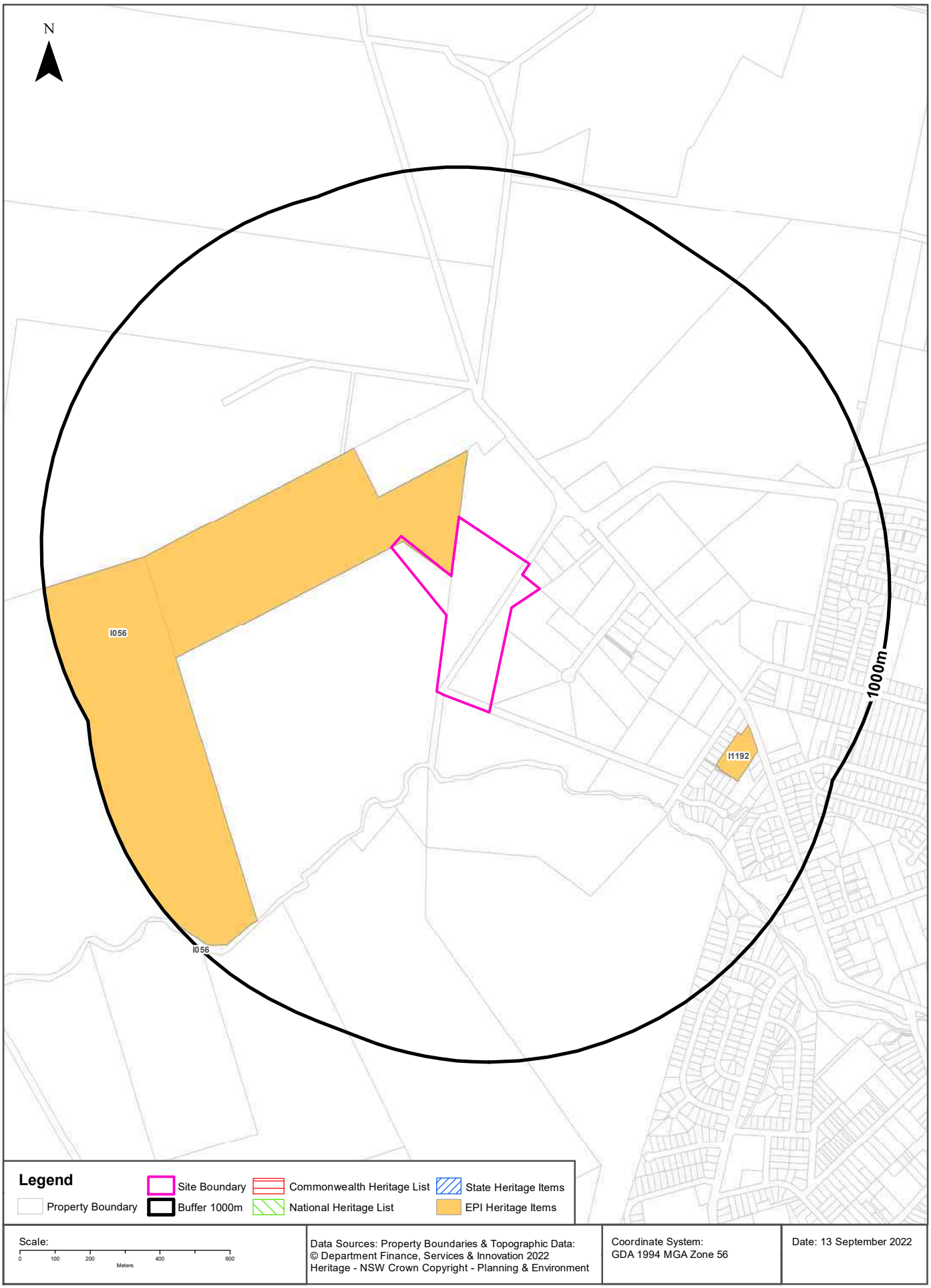
What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RU2	Rural Landscape		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		0m	On-site
IN1	General Industrial		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		0m	On-site
IN2	Light Industrial		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		0m	On-site
SP2	Infrastructure	Sewerage System	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		162m	South
SP1	Special Activities	Cemetery	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		219m	North East
E3	Environmental Management		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		347m	South
RE1	Public Recreation		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		580m	South East
R2	Low Density Residential		Wingecarribee Local Environmental Plan 2010	03/05/2019	03/05/2019	20/03/2020	Amendment No 49	591m	East
SP2	Infrastructure	Sewerage System	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		600m	South East
R2	Low Density Residential		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		826m	South East
RE1	Public Recreation		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		886m	South East
RU4	Primary Production Small Lots		Wingecarribee Local Environmental Plan 2010	20/03/2020	20/03/2020	20/03/2020	Amendment No 52	909m	East
RE1	Public Recreation		Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	20/03/2020		954m	South East
R2	Low Density Residential		Wingecarribee Local Environmental Plan 2010	22/01/2016	22/01/2016	20/03/2020	Amendment No 36	982m	South East

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Heritage Items

Part of 2 Bowman Road, Moss Vale, NSW 2577



Heritage

Part of 2 Bowman Road, Moss Vale, NSW 2577

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage
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Environmental Planning Instrument - Heritage

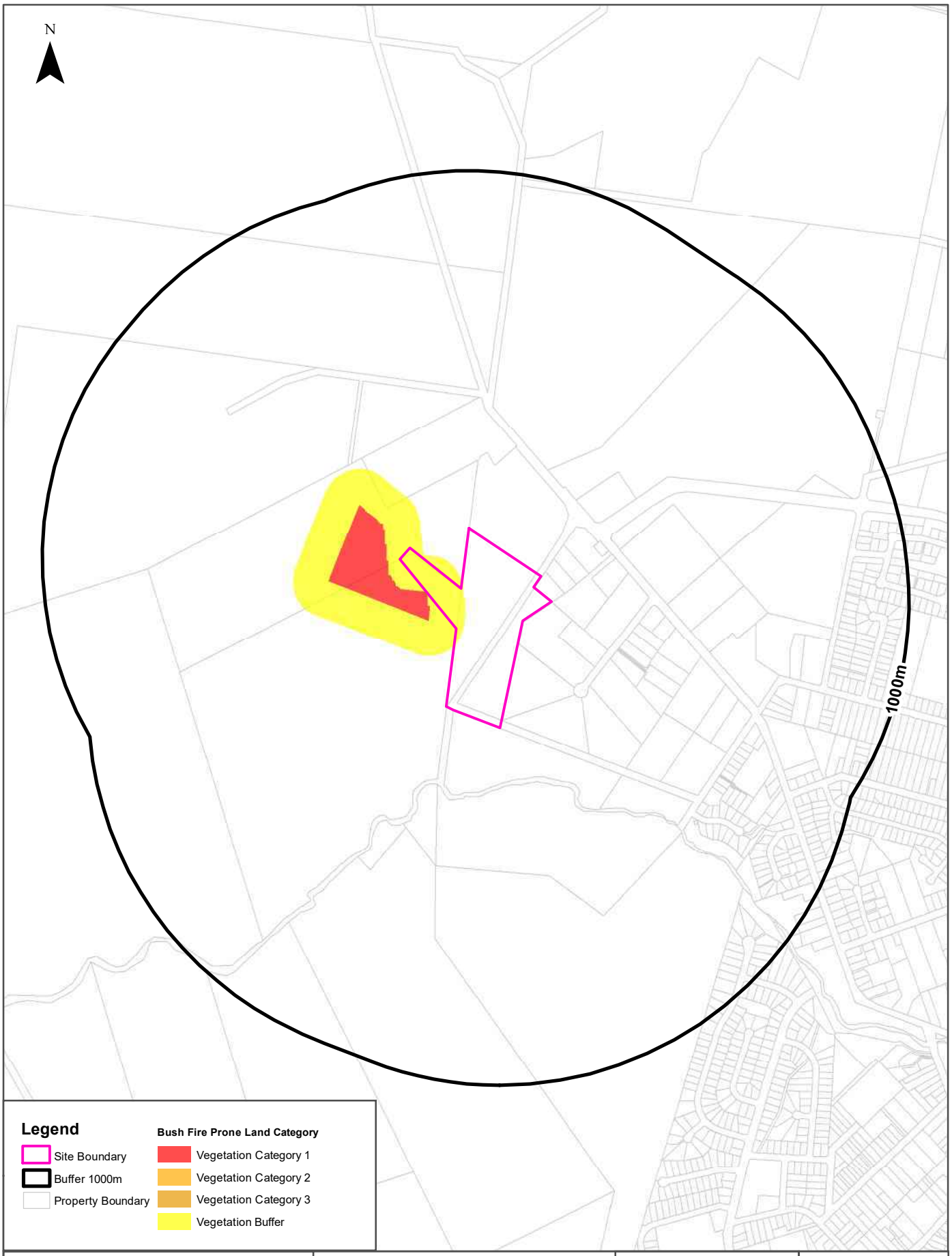
What are the EPI Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I056	Browley house, grounds and outbuildings	Item - General	Local	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	01/10/2021	0m	On-site
I1192	Willow Grange house and grounds	Item - General	Local	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	01/10/2021	664m	South East
I056	Browley house, grounds and outbuildings	Item - General	Local	Wingecarribee Local Environmental Plan 2010	16/06/2010	16/06/2010	01/10/2021	996m	South West

Heritage Data Source: NSW Crown Copyright - Planning & Environment
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Natural Hazards - Bush Fire Prone Land

Part of 2 Bowman Road, Moss Vale, NSW 2577



Data Sources: Bush Fire Prone Land: © NSW Rural Fire Service 2022. Property Boundaries: © Department Finance, Services & Innovation 2022

Coordinate System: GDA 1994 MGA Zone 56

Date: 13 September 2022

Natural Hazards

Part of 2 Bowman Road, Moss Vale, NSW 2577

Bush Fire Prone Land

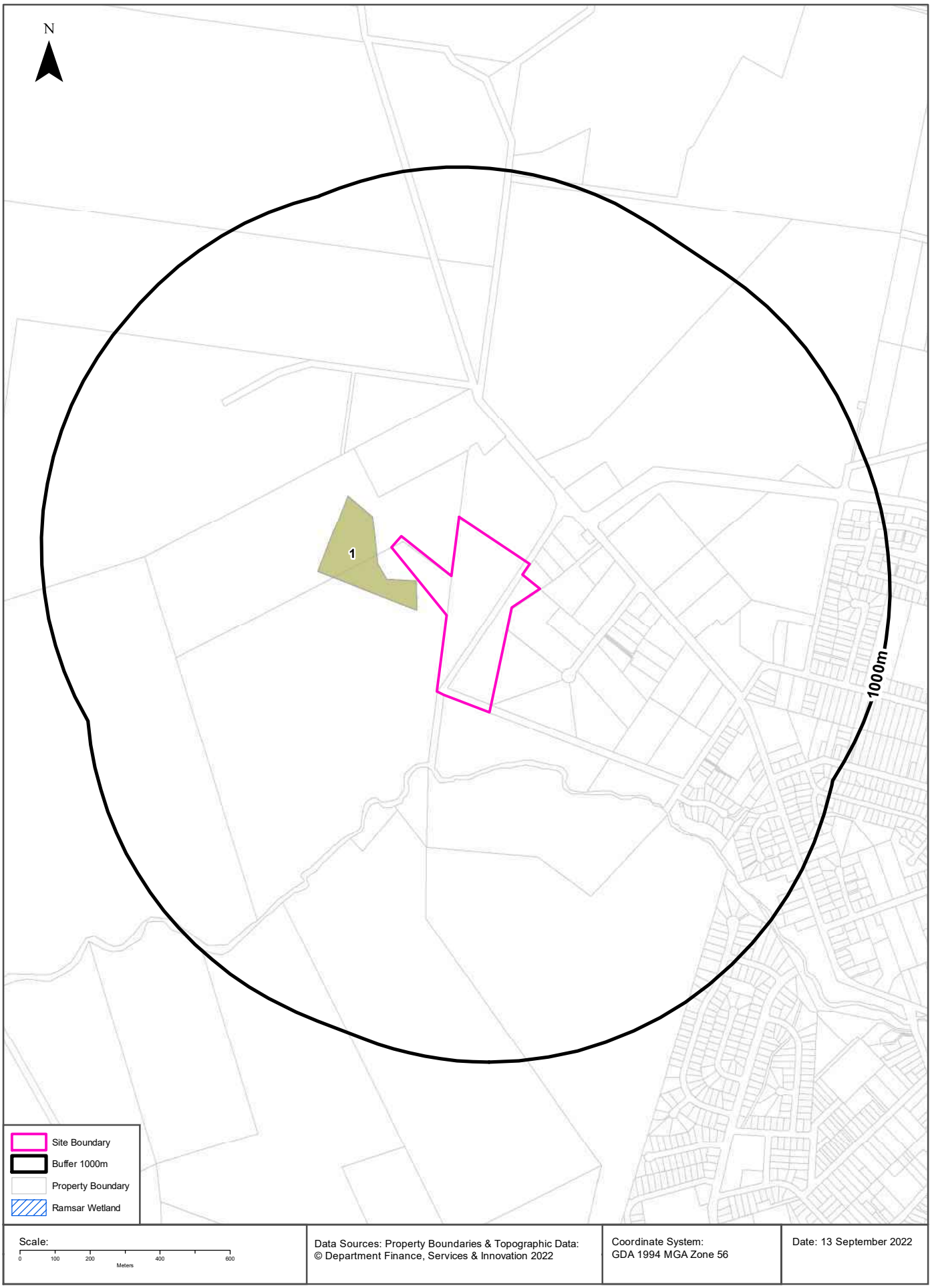
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
Vegetation Category 1	0m	On-site
Vegetation Buffer	0m	On-site

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & Ramsar Wetlands

Part of 2 Bowman Road, Moss Vale, NSW 2577



Ecological Constraints

Part of 2 Bowman Road, Moss Vale, NSW 2577

Vegetation Mapping - Wingecarribee

What Vegetation exists within the dataset buffer?

Map Id	Map Unit	SEPP44 Tree	Distance	Direction
1	Southern Highlands Shale Woodland	Not Recorded	6m	North West

Vegetation Mapping Wingecarribee Data Source: NSW Office of Environment and Heritage
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Ramsar Wetlands

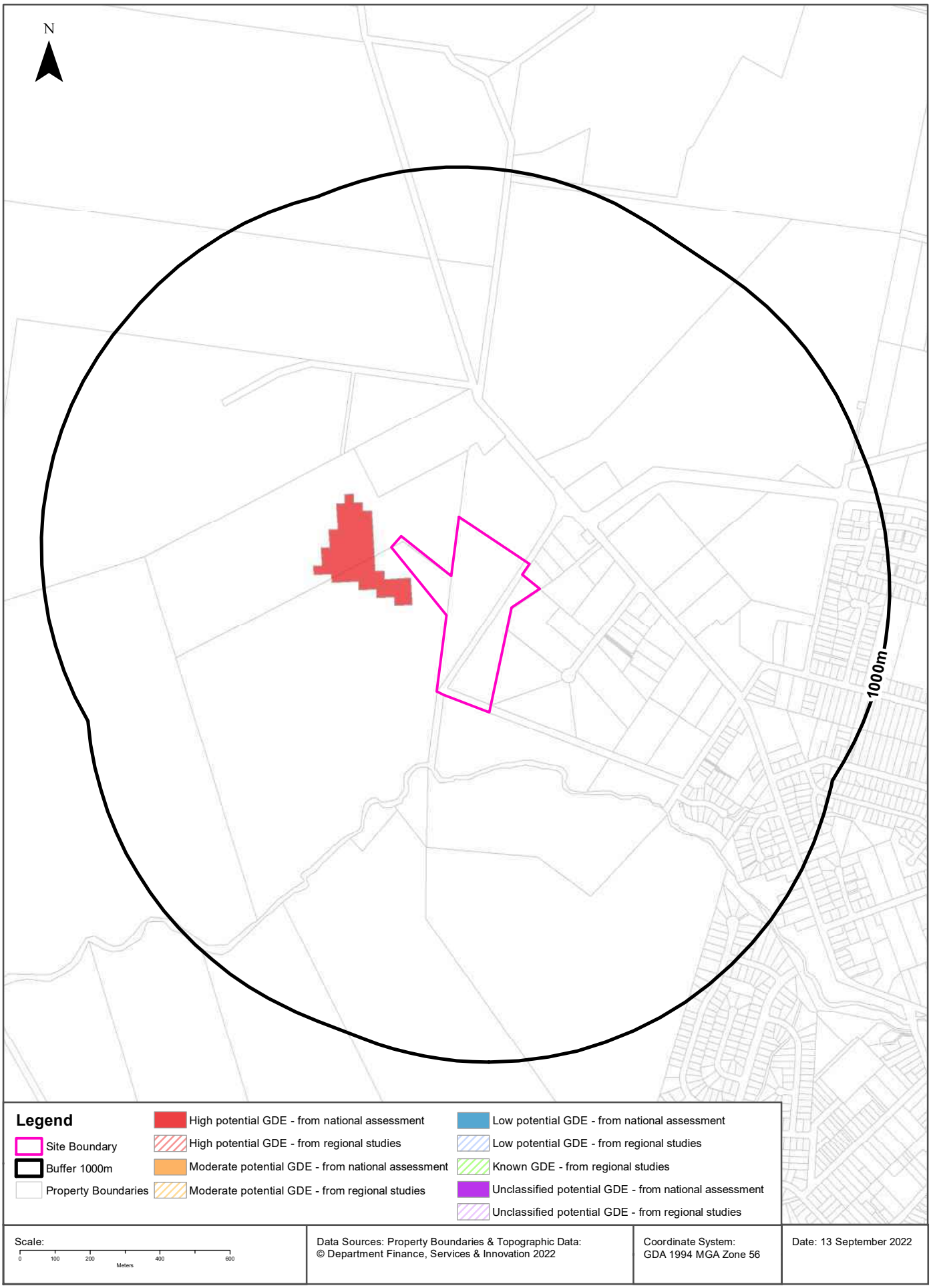
What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Part of 2 Bowman Road, Moss Vale, NSW 2577



Ecological Constraints

Part of 2 Bowman Road, Moss Vale, NSW 2577

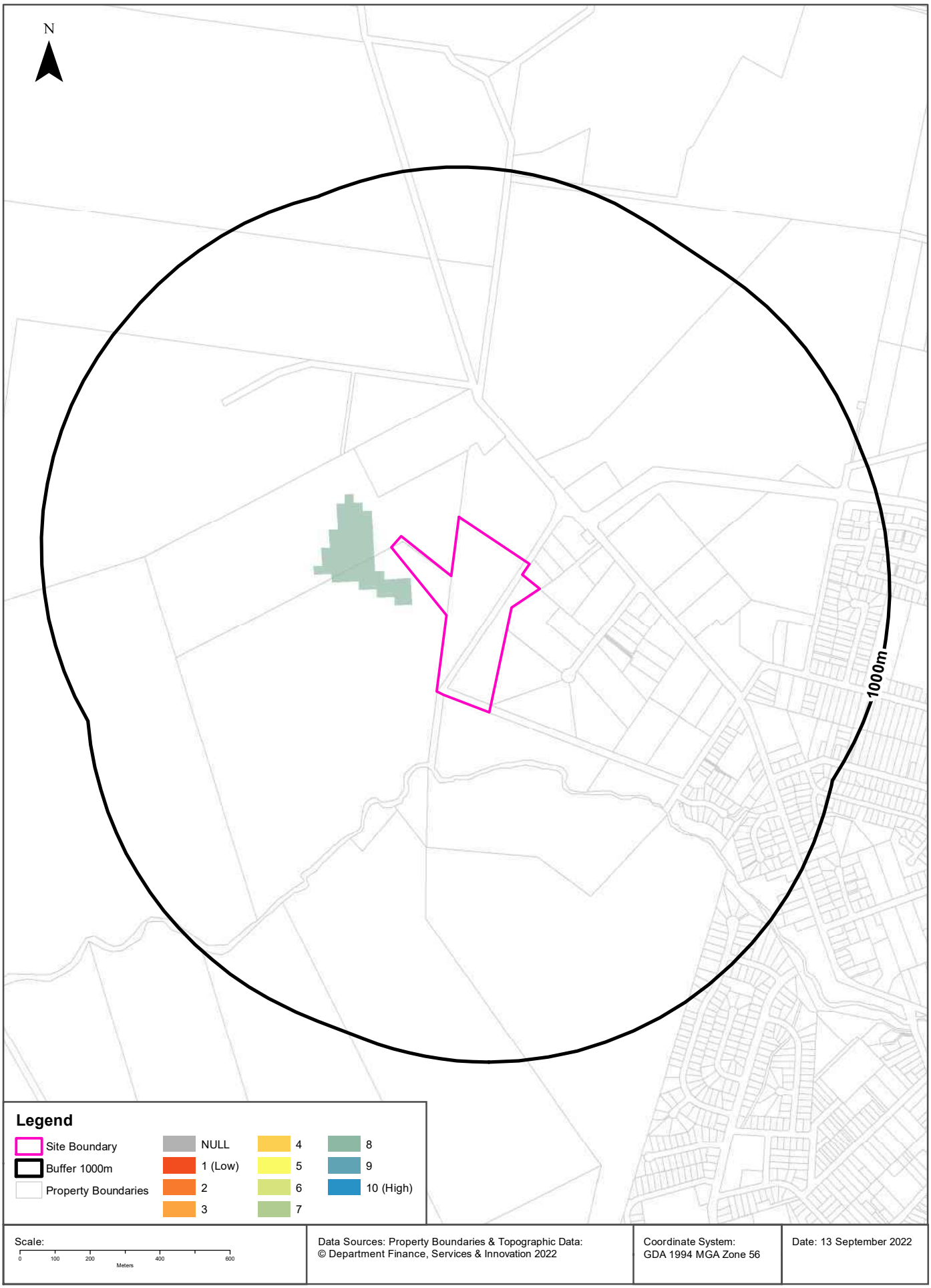
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	High potential GDE - from national assessment	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	12m	North West

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Ecological Constraints - Inflow Dependent Ecosystems Likelihood

Part of 2 Bowman Road, Moss Vale, NSW 2577



Ecological Constraints

Part of 2 Bowman Road, Moss Vale, NSW 2577

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	8	Deeply dissected sandstone plateaus.	Vegetation	Consolidated sedimentary	12m	North West

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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Ecological Constraints

Part of 2 Bowman Road, Moss Vale, NSW 2577

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Endangered	
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black-Cockatoo (inland subspecies)	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Falco subniger	Black Falcon	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophoictinia isura	Square-tailed Kite	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Pycnoptilus floccosus	Pilotbird	Not Listed	Not Sensitive	Vulnerable	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Endangered	
Animalia	Mammalia	Petaurus norfolcensis	Squirrel Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Vespadelus troughtoni	Eastern Cave Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Diuris aequalis	Buttercup Doubletail	Endangered	Category 2	Vulnerable	
Plantae	Flora	Eucalyptus aggregata	Black Gum	Endangered Population, Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus macarthurii	Paddys River Box, Camden Woollybutt	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Grevillea raybrownii		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Helichrysum calvertianum		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Kunzea cambagei	Cambage Kunzea	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Leucochrysum albicans var. tricolor	Hoary Sunray	Not Listed	Not Sensitive	Endangered	
Plantae	Flora	Persoonia glaucescens	Mittagong Geebung	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia mollis subsp. revoluta		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Persoonia oxycoccoides		Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Phyllota humifusa	Dwarf Phyllota	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Pomaderris sericea	Silky Pomaderris	Endangered	Not Sensitive	Vulnerable	

Data does not include NSW category 1 sensitive species.

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Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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Appendix C

Photographic Log

Site Photographs

Client Name: Jackson Environment and Planning Pty Ltd	**Site Location:** 2 Bowman Road, Moss Vale NSW 2577	**Project Number:** CES220803-JEP

Date:	**Plate No:**
25/10/2022	1

Description: View south towards the house from Bowman Road



Date:	**Plate No:**
25/10/2022	2

Description: View north-east from Bowman Road towards industrial area



Site Photographs

Client Name: Jackson Environment and Planning Pty Ltd

Site Location: 2 Bowman Road, Moss Vale NSW 2577

Project Number: CES220803-JEP

Date:	Plate No:
25/10/2022	3

Description: View south-west from Bowman Road



Date:	Plate No:
25/10/2022	4

Description: View south-east from Bowman Road towards waste depot



Site Photographs

Client Name: Jackson Environment and Planning Pty Ltd

Site Location: 2 Bowman Road, Moss Vale NSW 2577

Project Number: CES220803-JEP

Date:	Plate No:
25/10/2022	5

Description: View to south towards dam, from near house



Date:	Plate No:
25/10/2022	6

Description: Looking west at farm sheds



Site Photographs

Client Name: Jackson Environment and Planning Pty Ltd	**Site Location:** 2 Bowman Road, Moss Vale NSW 2577	**Project Number:** CES220803-JEP

Date:	**Plate No:**
25/10/2022	7



Description:
View to north-west from near farm sheds.