16 October 2026

asongroup.com.au

Australian Institute of Sport Podium Project

Transport Assessment

Multi-Sports Dome, HPTTC and Athletes Accommodation

—

P3539



Document control

Project number	P3539
Issue number	B
Project title	Australian Institute of Sport Podium Project - Transport Assessment
Client	Richard Crookes Constructions
File reference	P3539r01v02_AIS Podium_transport assessment_final

Revision history

Issue no	Date	Details	Author	Reviewer	Approver
A	12 October 2026	Final	Milo Grillet	Rhys Hazell	Rhys Hazell
B	16 October 2026	Final – updated to include minor amendments	Milo Grillet, Ava Tan	Rhys Hazell	Rhys Hazell

info@asongroup.com.au
+61 2 9083 6601

Suite 17.02, Level 17,
1 Castlereagh Street,
Sydney NSW 2000

ABN: 81 168 423 872

This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Ason Group does not accept any responsibility for any use of or reliance on the contents on this report by any third party. This document has been prepared based on the Client's description of its requirements, information provided by the Client and other third parties.

Contents

1 Introduction 1

1.1 Background and proposal 1

1.2 Purpose of this report 1

2 Existing conditions 2

2.1 Site context 2

2.2 Surrounding road network 2

2.3 Public transport 3

2.4 Active transport 4

3 Development proposal 6

3.1 Overview 6

3.2 Vehicle access, parking and loading arrangement 9

4 Parking assessment 10

4.1 Car parking 10

4.2 Motorcycle parking 10

5 Loading and servicing 11

5.1 Waste collection and loading strategy 11

6 Design commentary 12

7 Traffic impact assessment 13

8 Preliminary construction pedestrian and traffic management plan 14

8.1 Overview 14

8.2 Principles of traffic management 14

8.3 Work hours 14

8.4 Site access, loading, and on-street work zones 15

8.5 Construction worker parking 15

8.6 Heavy vehicle generation and access routes 15

8.7 Pedestrian and cyclist access 16

9 Conclusion 17

Appendix A Vehicle swept paths 18

1 Introduction

1.1 Background and proposal

This masterplan Transport Assessment has been prepared for Richard Crookes Constructions (RCC) to support a Major Works Approval submission for a sports facility and associated accommodation facilities on Leverrier Street, Bruce (the site).

The Major Works Approval seeks approval for the construction of:

- a High-Performance Training and Testing Centre (HPTTC)
- a multi-sports dome
- athletes accommodation.

Car parking for the athletes accommodation is to be provided within an undercroft car park below the accommodation building and adjacent existing at-grade parking. Parking for the HPTTC and multi-sports dome is also accommodated in the at-grade car park on the western side of Leverrier Street and within a combination of existing and new at-grade parking south-east and east of the multi-sports dome.

1.2 Purpose of this report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

- existing transport and parking conditions surrounding the site
- summary of the proposal
- suitability of the proposed parking supply, access strategy and overall layout
- service vehicle requirements
- traffic generating characteristics of the proposed development
- transport impacts on the surrounding networks
- preliminary construction and pedestrian management measures.

2 Existing conditions

2.1 Site context

The Australian Institute of Sport (AIS) campus is located in Bruce, situated north-west of Canberra Civic Centre.

The AIS Podium Project involves development sites on either side of Leverrier Street toward the northern end of the campus. The project sites traverse Section 8 Block 26 and Section 46 Block 6 within the Belconnen district. The site benefits from moderate public transport accessibility, with the nearest bus stop being on Braybrooke Street and within a 400-metre walk of the site.

The precinct has historically accommodated parking for more than 200 vehicles within at-grade car parks for use by authorised staff and fleet vehicles. An access road extends from Leverrier Street to the south, providing access to the car park and the logistics complex (Building 21). The development site on the eastern side of Leverrier Street historically accommodated the Athletes Village Building (Building 16) which has recently been demolished. The development site on the western side of Leverrier Street is currently vacant and undeveloped.

The site and its immediate surrounding context are shown in Figure 1.



Figure 1: Site location

Base image source: Metromap

2.2 Surrounding road network

The site is bisected by Leverrier Street, with the other key surrounding roads including Masterman Street, Braybrooke Street, Ginninderra Drive and Gungahlin Drive. The characteristics of these key roads are summarised in Table 1.

Table 1: Key surrounding road network

Road	Classification	Description	Photo
Leverrier Street	Urban Residential 1	• Two-way road aligned in a north-south direction • One travel lane in each direction • On-street parking not permitted • 40km/h speed limit	
Masterman Street	Urban Residential 3	• Two-way local road aligned in an east-west direction • Two eastbound travel lanes and one westbound travel lane • On-street parking not permitted • 60km/h speed limit	
Braybrooke Street	Urban Residential 1	• Two-way road aligned in a north-south direction • One travel lane in each direction divided by a central median • Bike lane on both sides • Unrestricted parking in designated areas along street • 60km/h speed limit	
Ginninderra Drive	Urban Arterial Road	• Two-way key arterial road aligned in an east-west direction • Two travel lanes in each direction divided by a central median • Bike lane on both sides • No stopping at any time • 80km/h speed limit	

2.3 Public transport

The campus is accessible by public transport services, primarily the Rapid R9 bus operating along Braybrooke Street. This service provides connections between Belconnen and Watson, with services operating every 15 minutes during

weekday peak hours and frequently throughout the week. Connection to the Civic Centre is provided via the R1 light rail. The surrounding public transport network is indicatively shown in Figure 2.

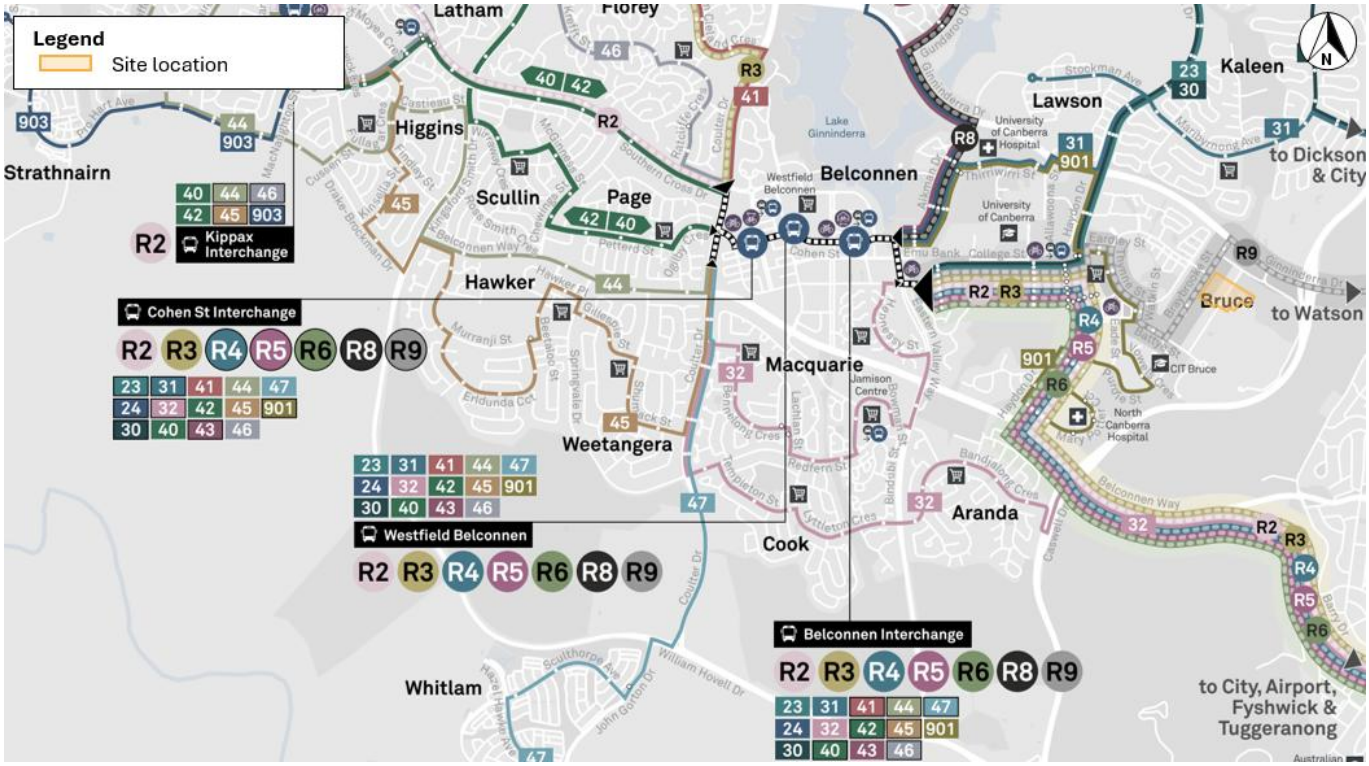


Figure 2: Public transport network

Base image source: Transport Canberra

2.4 Active transport

Well established pedestrian footpaths are located on both sides of surrounding roads, providing convenient connections to the local area, public transport services and nearby destinations. Pedestrian crossings are provided at various locations along Leverrier Street including near Podium Way, Braybrooke Street and Battye Street.

The site is well supported by surrounding cycling routes and infrastructure, with the C3 City to Belconnen cycle route travelling along Battye Street to the south of the campus, as well as along Ginninderra Drive to the north. These cycle paths provide convenient connections with the broader network. The current surrounding Canberra cycling network is displayed in Figure 3.

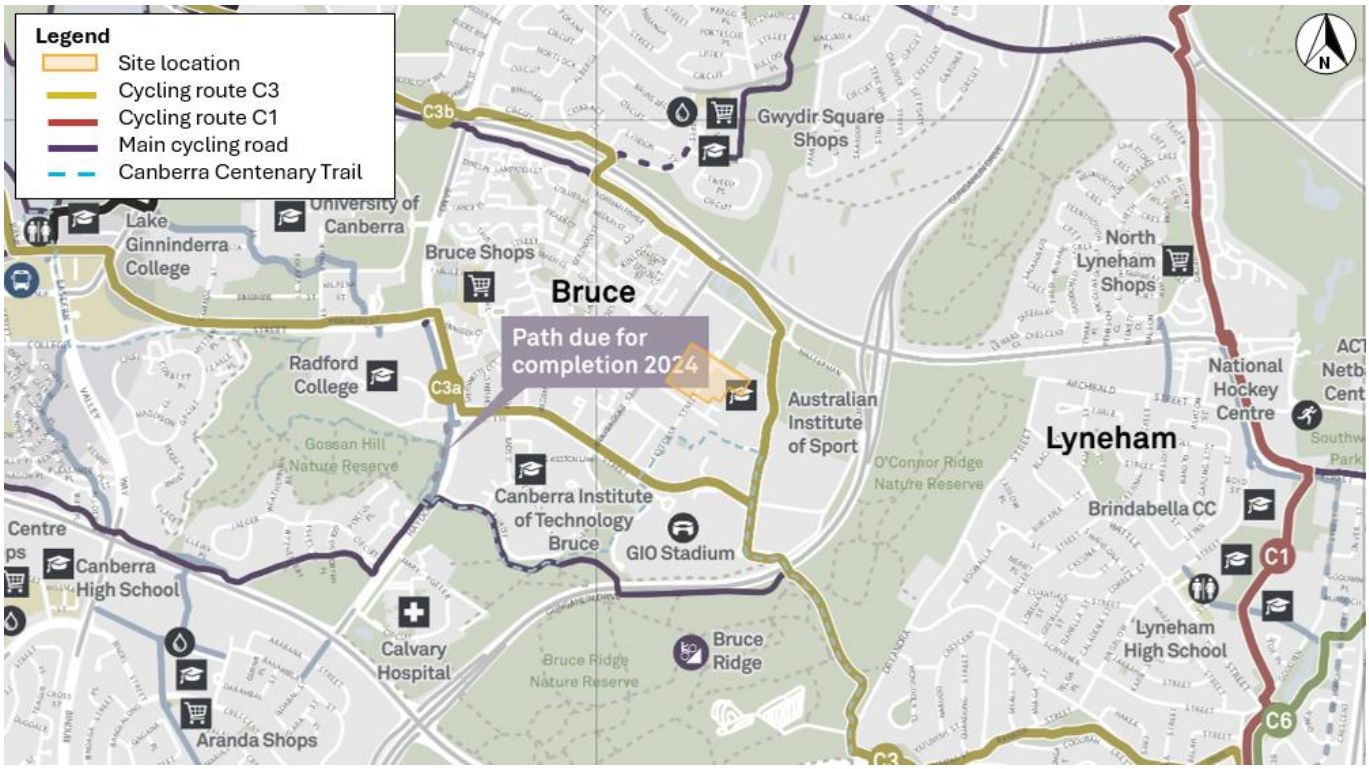


Figure 3: Current cycling network

Base image source: Transport Canberra

3 Development proposal

3.1 Overview

This application seeks the approval for modernised sporting facilities and accommodation within the existing AIS campus in Bruce, including:

- construction of a multi-sports dome, comprising:
  - the dome
  - a new internal logistics road providing vehicle access via Leverrier Street
  - at-grade car parking adjacent to the logistics compound
- construction of the HPTTC
- construction of new athletes accommodation, comprising:
  - accommodation, 300 beds across 180 rooms and apartments
  - one level of undercroft car parking with 19 spaces
  - associated housekeeping within the accommodation undercroft
  - waste storage, loading and building services
  - a new covered walkway to the south of the new accommodation building
  - service and outdoor recreation areas
- landscaping on the ground floor.

The site plan is shown in Figure 4 and separable portions detailed in Figure 5 and Figure 6.

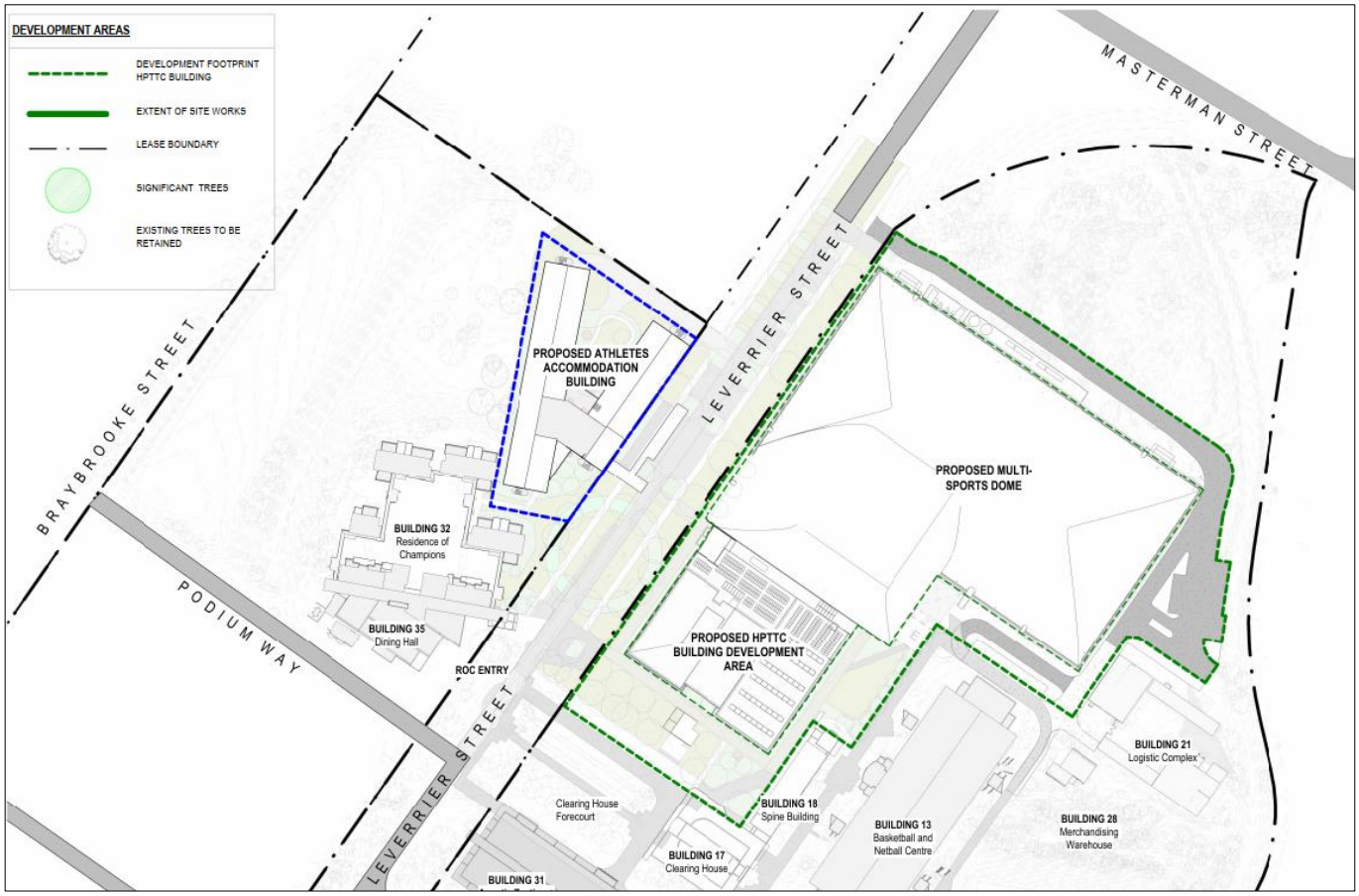


Figure 4: Proposed site layout plan

Base image source: Populous, drawing number: AIS-POP-AR-DRW-HPC-16-0002, revision C, dated 28 September 2026

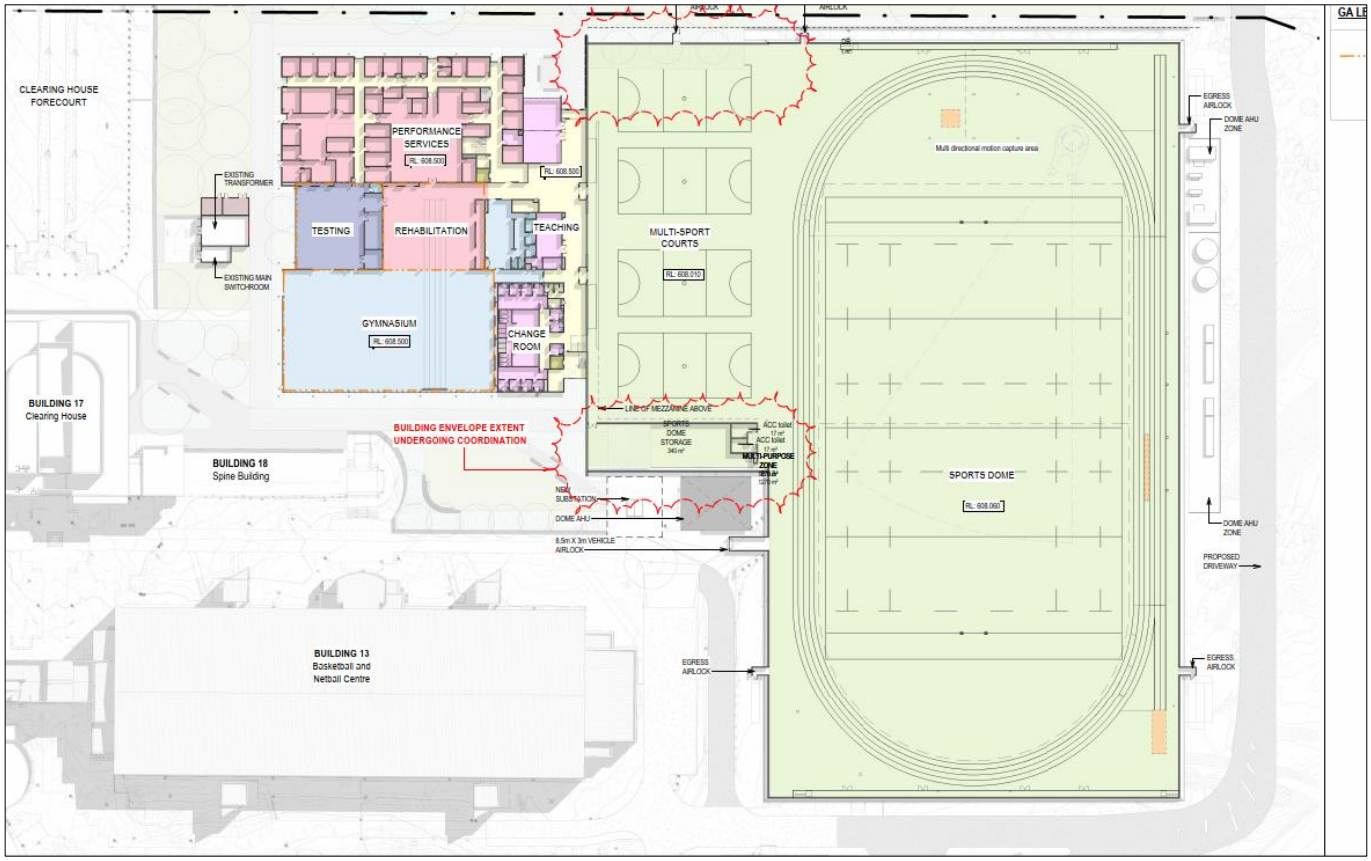


Figure 5: Multi-sports dome layout

Base image source: Populous, drawing number: AIS-POP-AR-DRW-HPC-20-0000, revision C, dated 28 September 2026

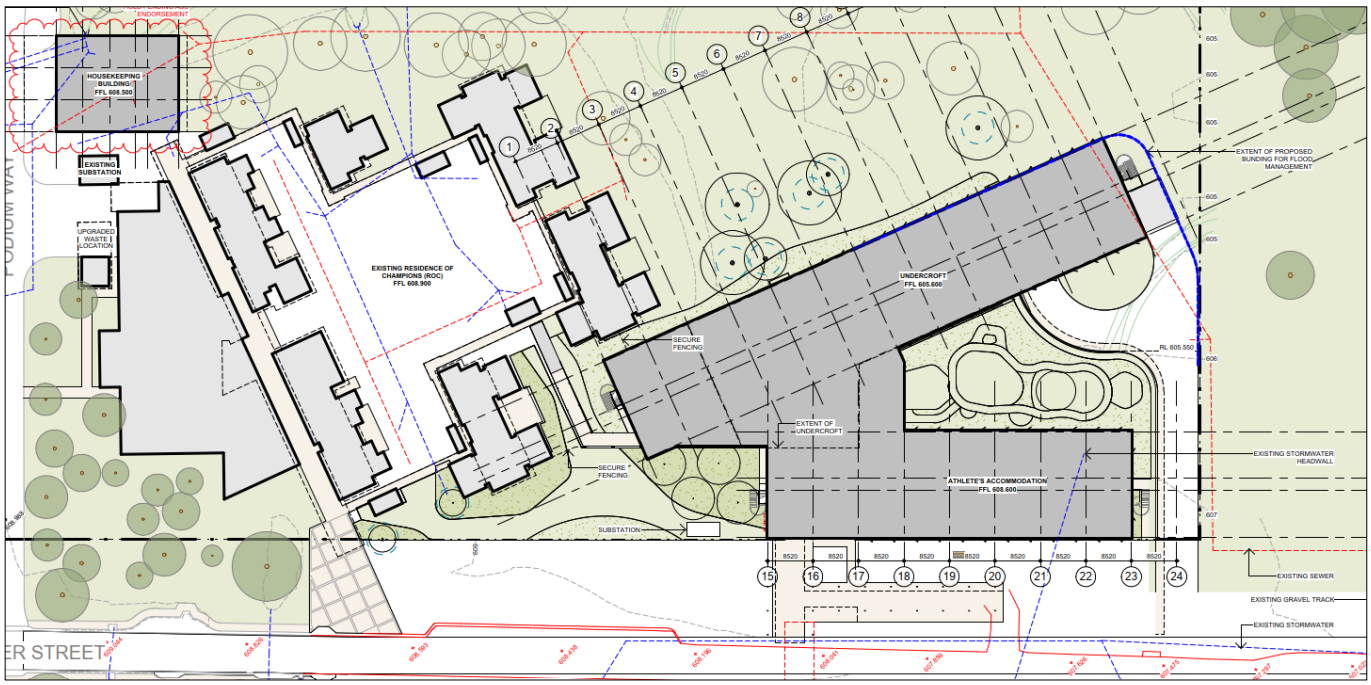


Figure 6: Athletes accommodation layout

Base image source: Populous, drawing number: AIS-POP-AR-DRW-HPC-20-0200, revision C, dated 28 September 2026

3.2 Vehicle access, parking and loading arrangement

Authorised vehicle and service vehicle access to the new dome is proposed via a single, two-way internal logistics access road that circulates around the eastern and northern boundaries and connects with Leverrier Street in the north-west corner of the site. The site layout and design triggers the removal of about 230 car parking spaces, including locked long-term athletes parking. These spaces are typically used by staff during the day and are available to patrons during events. The removal of these spaces was assessed as part of a separate Works Approval application, which found that other car parking on the campus has sufficient capacity to accommodate any such displaced demand.

A row of parking adjacent to the equipment compound is to be retained and a new at-grade car park introduced to the east of the dome to accommodate vehicles associated with the logistics compound. This car park will be accessible during the day, evenings and weekends. This car park has been designed to accommodate the list of vehicles detailed in Figure 7.

The existing kitchen loading dock located on Podium Way to the south of the existing Residence of Champions building will be retained. This will comprise a single bay suitable for accommodating service vehicles up to and including 8.8m MRVs and remains unchanged from existing conditions.

Bus	Mitsubishi Fuso Bus - 25 Seater	24 Pax and Driver
Bus	Mitsubishi Fuso Bus - 22 Seater	21 Pax and driver
Bus	Mitsubishi Fuso Bus - Wheelchair Accessible	10 seats, 6 WC and driver
Bus	Toyota Coaster Bus - 21 Seater	20 pax and driver
Sedan	Toyota Camry Altise Sedan	5 seater
Sedan	Toyota Camry Altise Sedan	5 Seater
SUV	Toyota Rav 4 Hybrid	5 Seater
Sedan	Toyota Camry Ascent Sedan	5 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Van	Toyota HiAce SLWB Commuter - 12 Seater	12 Seater
Minivan	Volkswagon Multivan - 7 Seater	7 Seater
Minivan	Volkswagon Multivan - 7 Seater	7 Seater
Minivan	Volkswagon Caravelle Multivan - 9 Seater	9 seater
Van	Toyota HiAce Commuter - Wheelchair Accessible	11 seater

Figure 7: Logistics car park vehicle fleet

4 Parking assessment

4.1 Car parking

As outlined in the National Capital Plan (NCP), the AIS precinct is classified as a National Capital Use. The National Capital Authority (NCA) has prepared a Development Control Plan (DCP) for the precinct, and any later development on the site must align with it.

The DCP states that provisions for vehicular access/egress and parking accommodation should be made in accordance with the requirements of the relevant ACT Government authorities. In this regard, the traffic impacts of new development or development extensions in the area must be taken into consideration.

Drawing from the above, the AIS precinct is not bound by specific parking rates, only that suitable access and parking should be proposed and agreed with relevant authorities prior to any formal development permissions being granted.

The parking strategy relies on a combination of new undercroft and at-grade parking areas for the various land uses, other existing campus wide parking and existing at-grade parking along Leverrier Street in the immediate vicinity. 19 spaces are provided as an undercroft car park under the athletes accommodation, including 18 adaptable spaces to cater to the specific needs of end users. The adaptable spaces support para-athletes, ensuring convenient access to parked vehicles and to facilitate ease of movement for residents and guests with varying mobility needs.

4.2 Motorcycle parking

The ACT's relevant Planning Zone Technical Specifications under the Territory Plan outline that motorcycle parking should be provided at a rate of three dedicated spaces per 100 car parking spaces, with a minimum provision of one space for car parks with 30 or more spaces. Motorcycle parking is available throughout the precinct and within the existing and new at-grade car parks. Such provision will form part of ongoing design development to ensure the requirements are met or exceeded

5 Loading and servicing

5.1 Waste collection and loading strategy

Loading and servicing for the site including waste collection are to be undertaken per the existing waste service agreement for the subject site. All collections will be performed on-site by either rear-loading medium rigid waste collection vehicles (collecting 80L - 660L bins) or via front-loading waste collection (heavy rigid) vehicles (for large bins).

The athletes accommodation waste storage and collection are consolidated in the existing Residence of Champions (ROC) waste enclosure to the south of the accommodation building, with access via Podium Way. The loading dock includes one bay suitable for vehicles up to and including an 8.8m MRV with the layout allowing for all vehicles to enter and exit the site in a forward direction. The athletes accommodation has its own designated loading dock with capacity for one vehicle (up to 8.8m MRV). This loading dock will be used for linen and laundry collection, and all vehicles will enter and exit in a forward direction.

All loading and servicing for the Dome and HPTTC can occur within the hardstand area in the south-east extent, with access via the internal circulation road. The area can accommodate a single rigid vehicle at any one time with all vehicles able to enter and exit in a forward direction.

This provision generally meets the turnaround and clearance specifications of AS 2890.2, while also satisfying the Development Control Code for Best Practice Waste Management in the ACT for Transport Canberra and City Services (TCCS) on-site waste collection requirements, and is considered acceptable. As the site sits on National Land, these provisions also align with the safety and movement objectives of the NCA.

Basic loading dock management measures could be implemented to manage service vehicle activity and use of the loading areas. Waste collection typically occurs early on weekday mornings at times when other loading demand is zero or low.

Logical and efficient placement of the loading area has been considered by having the hardstand area adjacent to the existing ROC waste enclosure and close to Podium Way to avoid service vehicles manoeuvring in car parking and pedestrian areas.

6 Design commentary

The site access arrangements, internal circulation roads, on-site car parks and loading areas have been reviewed against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS2890.6:2022) and Off Street Commercial Vehicle Facilities (AS2890.2:2018). This assessment included a review of the following:

- bay and aisle widths
- adjacent structures
- circulation roads and ramp grades
- height clearances.

The site accesses via Leverrier Street and internal access and circulation roads have been designed to accommodate a range of light and heavy vehicle access needs. This includes all rigid vehicles and up to a 20m articulated design vehicle with independence achieved for opposing movements as necessary. The internal circulation road around the dome is a minimum 8m wide with splays and widening around bends and where necessary to facilitate manoeuvring. It is offset a minimum 1.5m from the dome infrastructure and allows for maintenance access around the perimeter, as necessary. Transitions, where level changes are necessary, are in accordance with AS2890.2 with any changes in grade no steeper than 1:16.

All car parking spaces have been designed appropriately in accordance with the minimum requirements for a Class 1A facility including 2.4-metre-wide and 5.4-metre-long spaces, with 5.8-metre-wide aisles.

Vehicle swept paths at key locations confirm appropriate design and are included in Appendix A. The swept paths confirm that service vehicles can appropriately enter and exit the site in a forward direction and access the loading and hardstand areas. Swept paths of the specialist fire appliance (12.5m heavy rigid vehicle) also confirm perimeter road access in both directions around the dome, with minimum 6m wide hardstand areas provided throughout. Any sections of the access road less than 6m wide are limited to no more than 50m in length, similarly in accordance with requirements. A minimum height clearance of 4.5 metres is provided in all areas, in accordance with AS2890.2:2018 requirements.

Overall, the car park and loading docks are expected to operate satisfactorily.

7 Traffic impact assessment

Given the nature of the intended use of the dome and athletes accommodation, in combination with the historical use of the precinct, the traffic related impacts are expected to be minor and able to be readily accommodated. This includes along all internal roads (including Leverrier Street), at the access driveways and through the surrounding intersections.

The use of the precinct wide parking areas, new parking facilities and service vehicle activity and drop-off/ pick-up activity is not expected to significantly change from the historical use of the site. As discussed, historical parking demand on the site will be equitably distributed across the sports precinct with internal pedestrian connectivity facilitating easy access throughout.

Improved pedestrian connectivity across Leverrier Street, in combination with signage and linemarking to delineate priority will also maintain safety and appropriate sightlines between the athletes accommodation and the dome. Through traffic unrelated to the development will remain largely unchanged, albeit within an environment aimed to reduce vehicle speed and maintain amenity.

8 Preliminary construction pedestrian and traffic management plan

8.1 Overview

This section provides an overview of the Construction Pedestrian and Traffic Management Plan (CPTMP) initiatives to be implemented as part of the construction works associated with the proposed development. Specifically, this overview CPTMP considers the following:

- expected truck routes to/ from the site
- anticipated truck volumes during all construction stages.
- potential construction site access arrangements.
- pedestrian and cyclist access.
- worker parking (if any).
- traffic control measures.

A detailed CPTMP, confirming the details within this preliminary CPTMP, will form part of subsequent planning stages and separate to the demolition CPTMP currently in progress.

8.2 Principles of traffic management

The general principles of traffic management during all construction activities are as follows:

- minimise the impact on pedestrian and cyclist movements
- maintain appropriate public transport access
- minimise the loss of on-street parking
- minimise the impact on adjacent and surrounding buildings
- maintain access to/from adjacent buildings
- restrict construction vehicle movements to designated routes to/from the site
- manage and control construction vehicle activity near the site
- carry out construction activity in accordance with approved hours of works.

8.3 Work hours

Building works would be completed during the approved construction hours. It is understood that ACT's permitted noise standards exceedance hours are:

- Monday to Saturday: 7:00am – 06:00pm
- Sunday and public holidays: no noise exceeding standards.

Workers would be advised of the approved work hours during induction. Any works outside of the approved work hours would be subject to specific prior approval from the appropriate authorities. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access.

8.4 Site access, loading, and on-street work zones

Construction vehicle access to the athletes village construction site will be via Leverrier Street and in a similar location to the ultimate driveway location for the proposed site access driveway. In the case of the Dome and HPTTC site, it is expected that construction vehicles would also access the site via Leverrier Street and in a similar location to the end-state internal circulation road close to the northern boundary of the dome construction site.

As part of the detailed CPTMP, a Traffic Guidance Scheme (TGS) will be prepared in accordance with the principles of AS 1742.3 and the Austroads Guide to Temporary Traffic Management. The TGS would primarily show where construction signs are to be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle activity.

Access to the neighbouring sites by emergency vehicles would not be affected by the works as the road and footpath frontages would be unaffected. Emergency protocols on the site would include a requirement for site personnel to assist with emergency access from the street. All truck movements to the site and/ or incident point would be suspended and cleared.

8.5 Construction worker parking

At this stage of planning, exact construction worker numbers are currently unknown. Some construction worker parking will be provided on-site and along Leverrier Street. Adequate parking will be provided on-site while avoiding impacts to existing users parking availability. During site induction, workers will be informed which parking areas are designated for use, in addition to the existing bus network servicing the precinct. Appropriate arrangements will be made for any equipment/tool storage and drop-off requirements.

8.6 Heavy vehicle generation and access routes

Construction vehicles generated by the construction works are expected to include vehicles up to 12.5-metre heavy rigid trucks, 18.1-metre truck and dog combinations and 19-metre articulated vehicles, subject to confirmation of access arrangements and vehicle swept paths to be completed as part of the detailed CPTMP. The expected number of construction traffic movements to be generated by the works are currently unknown. Based on other similar scale developments, it is expected that the construction works could generate up to 10 vehicles per hour. This is considered minor and not dissimilar to the expected operational traffic generation of the site and as such, construction works are not expected to have a material impact on the surrounding road network.

Specific approval will be sought from authorities for use of the construction vehicles and travel paths. Any oversize vehicles using local roads to access the site would require additional TCCS approval.

Heavy vehicle movements would be restricted to designated routes and confined to the arterial road network wherever feasible, noting that use of Leverrier Street close to the site is necessary. Truck routes to/from the site have been identified with the aim of providing the most direct routes as well as minimising the impact of heavy vehicles on local roads, as shown in Figure 8.

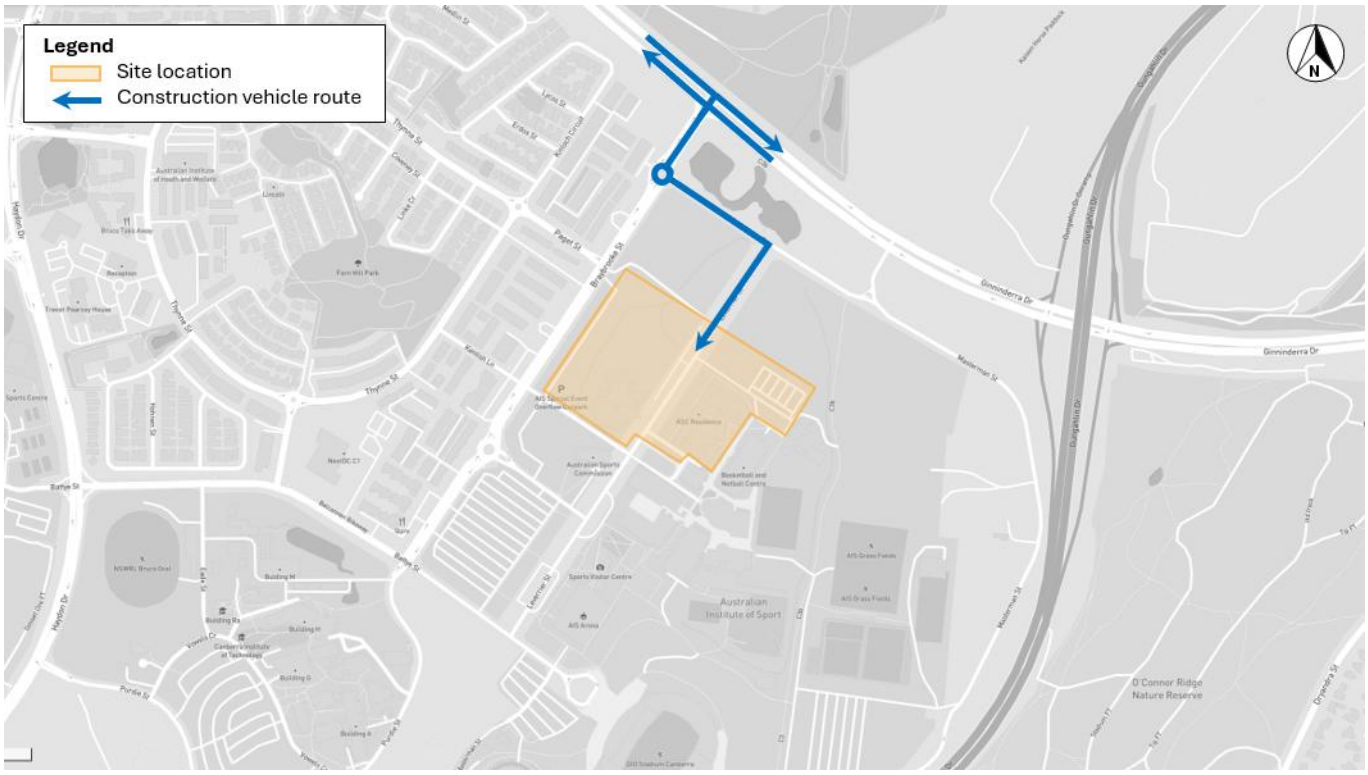


Figure 8: Anticipated heavy vehicle approach and departure routes

Base image source: Metromap

8.7 Pedestrian and cyclist access

A-Class hoarding and fencing would be installed around the perimeter of the site to provide physical separation between the construction works and pedestrians/cyclists. Should overhead lifting from an on-street work zone be required, management of pedestrians on the footpath adjacent to the site would be required. The detailed CPTMP will detail how the construction impacts to pedestrian and cyclist movements would be minimised or any mitigation required to offset any such impacts.

Construction vehicle movements would be minimised during peak hours wherever possible to minimise the associated impacts.

9 Conclusion

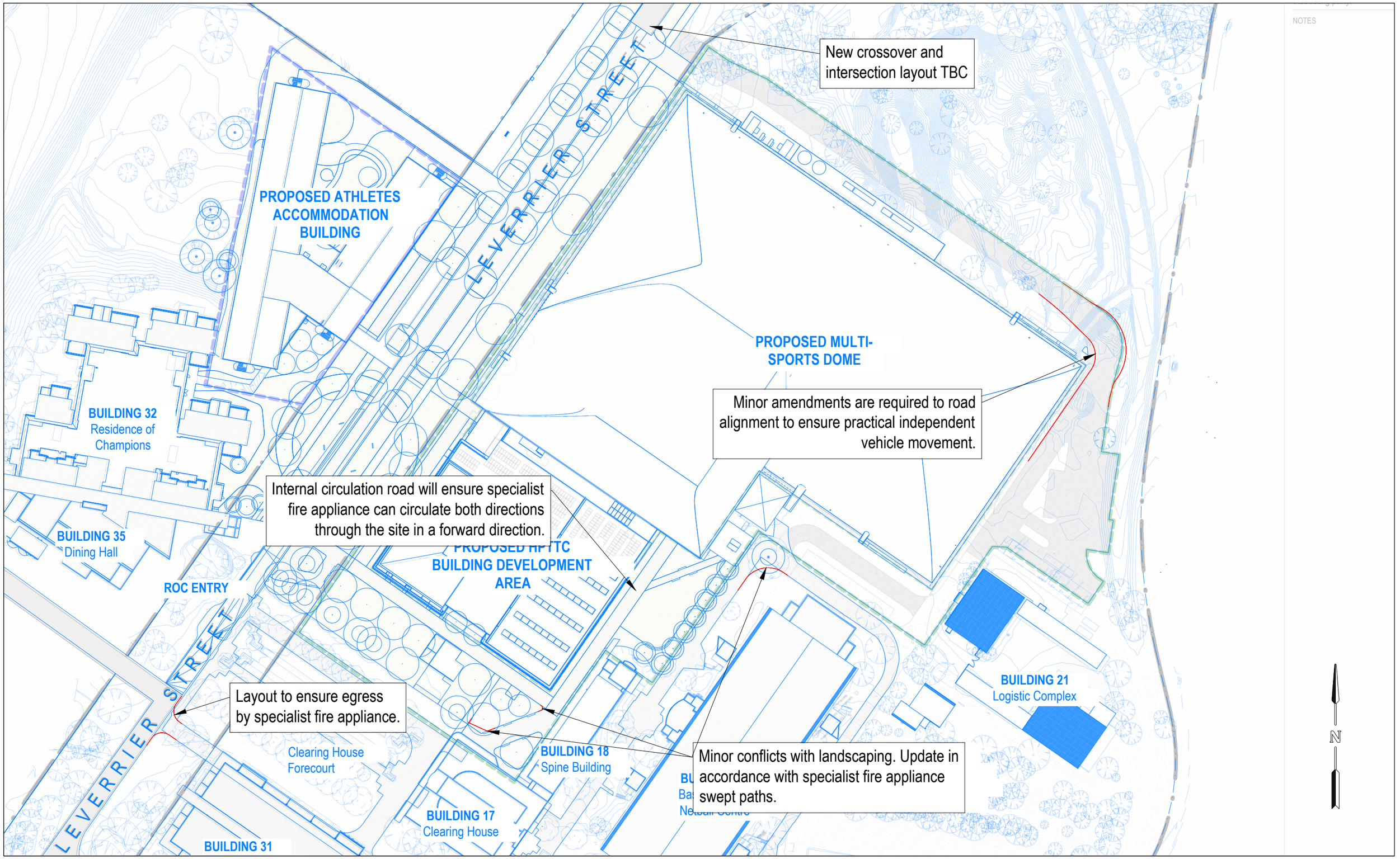
Based on the analysis and discussions presented within this report, the following conclusions are made:

1. This Transport Assessment has been prepared on behalf of Richard Crookes Constructions to support a Major Works Approval submission for the Australian Institute of Sport (AIS) Podium Project on Leverrier Street, Bruce.
2. The proposal has three parts. The first is a multi-sports dome with a new internal logistics road and at-grade car park. The second is the High-Performance Training and Testing Centre (HPTTC). The third is new athletes accommodation with 300 beds across 180 rooms and apartments, one level of undercroft car parking, and associated housekeeping and loading and waste facilities.
3. The site has moderate public transport access. The Rapid R9 bus on Braybrooke Street is within a 400-metre walk, runs every 15 minutes in weekday peak hours and connects to the R1 light rail. Established footpaths, pedestrian crossings on Leverrier Street and the C3 City to Belconnen cycle route support walking and cycling to and from the site.
4. The National Capital Plan and the precinct DCP do not set parking rates for the AIS precinct. Parking will be provided in new undercroft and at-grade car parks, together with existing campus parking. This includes 19 car parking spaces with 18 adaptable spaces in the athletes accommodation for para-athletes and other users with mobility needs. About 230 spaces will be removed. That removal was assessed in a separate Works Approval application, which found that other campus car parks have enough capacity for the displaced demand.
5. All loading and waste collection will occur on site under the existing waste service agreement. The ROC loading dock and the new accommodation loading dock each provide one bay for vehicles up to 8.8 metre medium rigid vehicles. The dome and HPTTC hardstand can facilitate one rigid vehicle at a time with all service vehicles able to enter and exit in a forward direction. This provision generally meets the turnaround and clearance specifications of AS 2890.2, while also satisfying the Development Control Code for Best Practice Waste Management in the ACT for Transport Canberra and City Services (TCCS) on-site waste collection requirements, and is considered acceptable.
6. The site accesses, internal circulation roads, car parks and loading areas have been reviewed against AS/NZS 2890.1:2004, AS 2890.2:2018 and AS 2890.6:2022, and are expected to operate satisfactorily. The internal roads can take vehicles up to a 20-metre articulated vehicle. Swept paths confirm that the specialist fire appliance can travel around the full perimeter of the dome with ongoing design development to ensure full compliance with ACT Fire and Rescue requirements.
7. Given the intended use of the facilities and the past use of the precinct, the traffic impact is expected to be minor. It can be readily accommodated on the internal roads, including Leverrier Street, at the access driveways and through the surrounding intersections. Improved pedestrian crossing of Leverrier Street, supported by signage and linemarking, will facilitate the safe movement of pedestrians between the accommodation and the dome.
8. Construction is expected to generate up to 10 vehicles per hour. Heavy vehicles will be kept to designated routes, using the arterial road network wherever feasible. A detailed Construction Pedestrian and Traffic Management Plan (CPTMP), including a Traffic Guidance Scheme (TGS), will be prepared at a later planning stage to manage the effects on pedestrians, cyclists and traffic.

Overall, the proposed development can be supported from a transport perspective. It modernises sporting and accommodation facilities within an established sports precinct. The estimated traffic and parking demand is consistent with the historical use of the site and can be accommodated by the surrounding existing and proposed facilities.

Appendix A Vehicle swept paths

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON ACCEPTS NO RESPONSIBILITY FOR ANY DEVIATIONS FROM CLASH DETECTION RESULTS ARISING FROM A THIRD PARTY'S MISUSE OF THE PLAN/DATA, WHETHER INTENTIONAL OR NOT. PLEASE REFER TO THE CLASH DETECTION REPORT FOR ANY CLASHES IN THIS PLAN/DATA.



NOTES

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Design review
APPROVED BY: Rhys Hazell	DATE: 16.10.2026	PROJECT: P3539 AIS Podium Project, Canberra	FILE NAME: AG3539-01-v03.dwg
SCALE: 1:250			SHEET: AG01

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET-OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASONS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.

Indicative fire appliance circulation width:
- Less than 6m wide
- Between 6-7m wide
- More than 7m wide

NOTES

PROPOSED ATHLETES ACCOMMODATION BUILDING

LEVERRIER STREET

PROPOSED MULTI-SPORTS DOME

8050

BUILDING 32
Residence of Champions

BUILDING 35
Dining Hall

ROC ENTRY

PROPOSED HPTTC BUILDING DEVELOPMENT AREA

6100

6050

6550

7050

5000

BUILDING 21
Logistic Complex

Clearing House Forecourt

BUILDING 18
Spine Building

BUILDING 13
Basketball and Netball Centre

BUILDING 28
Merchandising Warehouse

BUILDING 17
Clearing House

BUILDING 31

LEVERRIER STREET

N

GENERAL NOTES

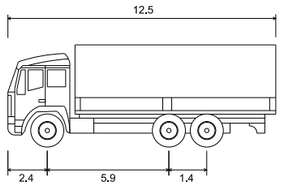
This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Circulation width dimensions
APPROVED BY: Rhys Hazell	DATE: 16.10.2026	PROJECT: P3539 AIS Podium Project, Canberra	FILE NAME: AG3539-01-v03.dwg
SCALE: 1:1250			SHEET: AG02

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET-OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON ACCEPTS NO RESPONSIBILITY FOR ANY ACTION TAKEN BY ANY PERSON OR ENTITY ON THE BASIS OF THE PLAN/DATA SUPPLIED BY THEM FAILURE TO INFORM ANY SUCH THIRD PARTY OF THE LIMITATIONS WHICH GIVEN TO THE INFORMATION CONTAINED IN THIS PLAN/DATA.

HRV - Heavy Rigid Vehicle (AS/NZS2890.2:2002)



VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	12,500m
Overall Width	2,500m
Track Width	2,500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	12,500m

PROPOSED MULTI-SPORTS DOME

PROPOSED HPTTC BUILDING DEVELOPMENT

Alignment of internal specialist fire appliance travel path TBC

ROC ENTRY

BUILDING 32
esidence of
hampions

G 35
Hall

BUILDING 21
Logistic Complex

BUILDING 28
Merchandising Warehouse

BUILDING 18
Spine Building

BUILDING 13
Basketball and Netball Centre

BUILDING 17
Clearing House

BUILDING 31
Aquatic Testing +
Training Pool

Clearing House
Forecourt

RRIER STREET

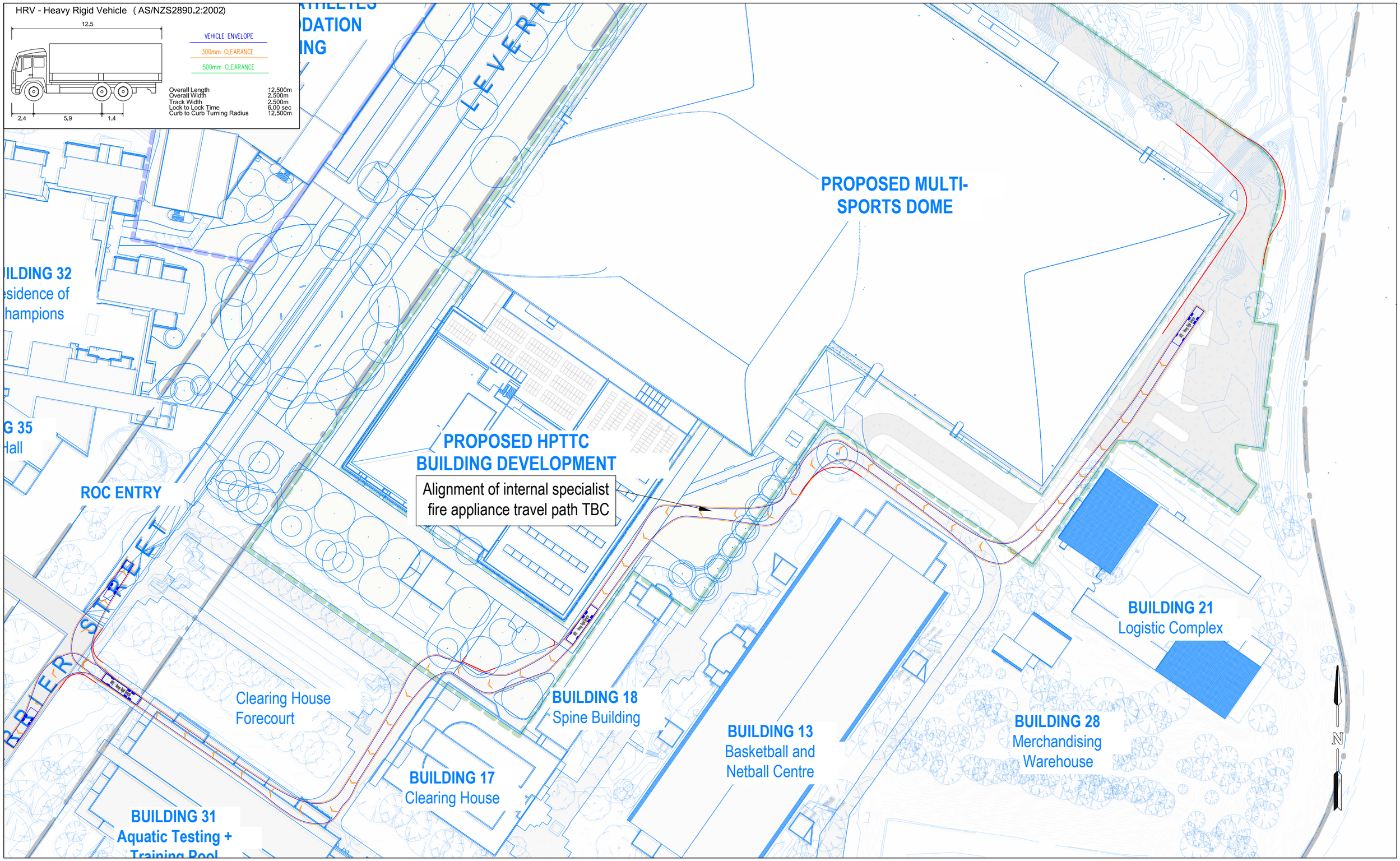
N

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED Ava Tan	PAPER SIZE A3	CLIENT AIS	DOCUMENT INFORMATION Swept path analysis Specialist fire appliance (anti-clockwise)
APPROVED BY Rhys Hazell	DATE 16.10.2026	PROJECT P3539 AIS Podium Project, Canberra	FILE NAME AG3539-01-v03.dwg / SHEET AG03
SCALE 1:1000			

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au



GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED Ava Tan	PAPER SIZE A3	CLIENT AIS
APPROVED BY	DATE 16.10.2026	PROJECT P3539 AIS Podium Project, Canberra
SCALE 1:1000		

DOCUMENT INFORMATION

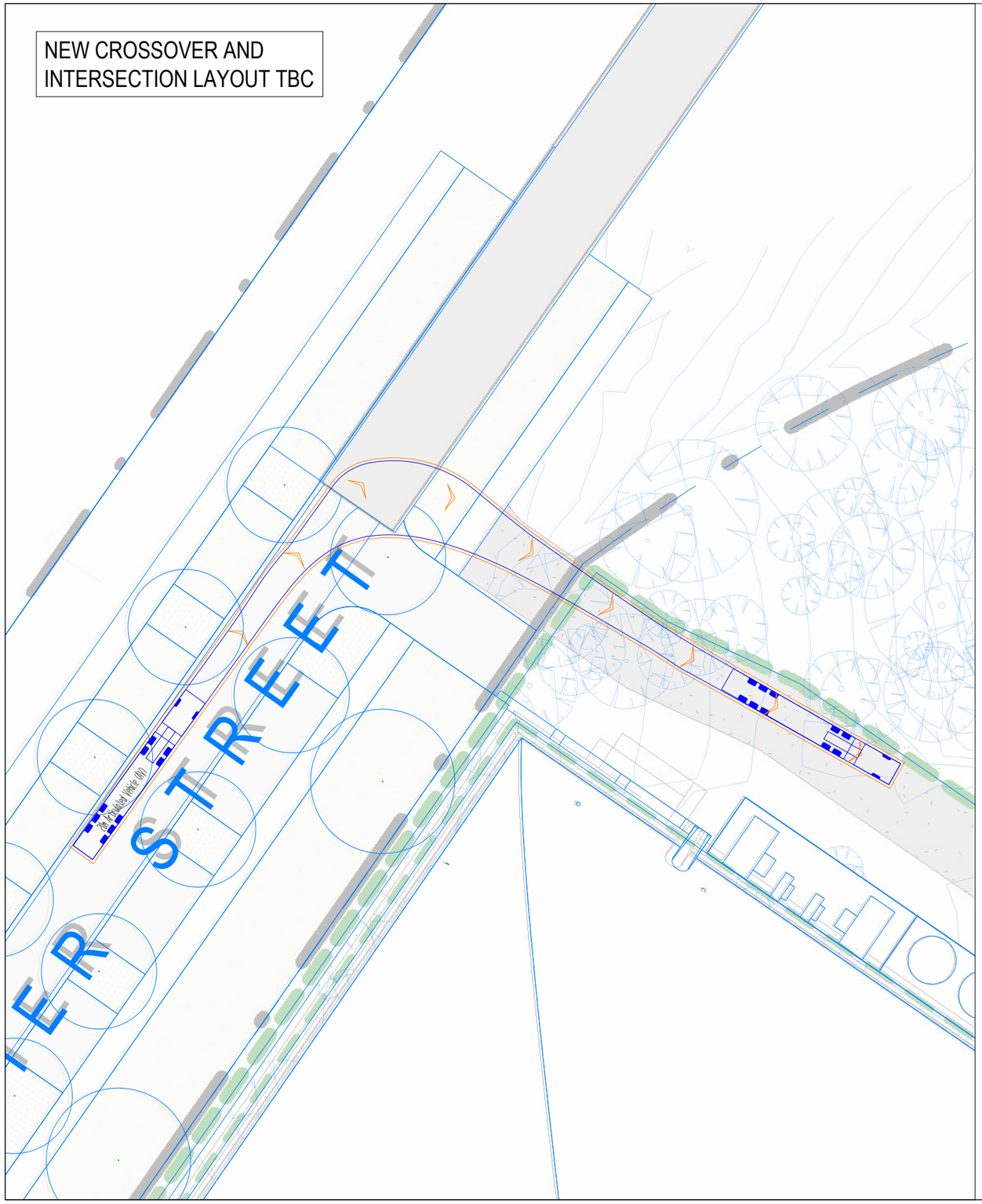
Swept path analysis
Specialist fire appliance (clockwise)

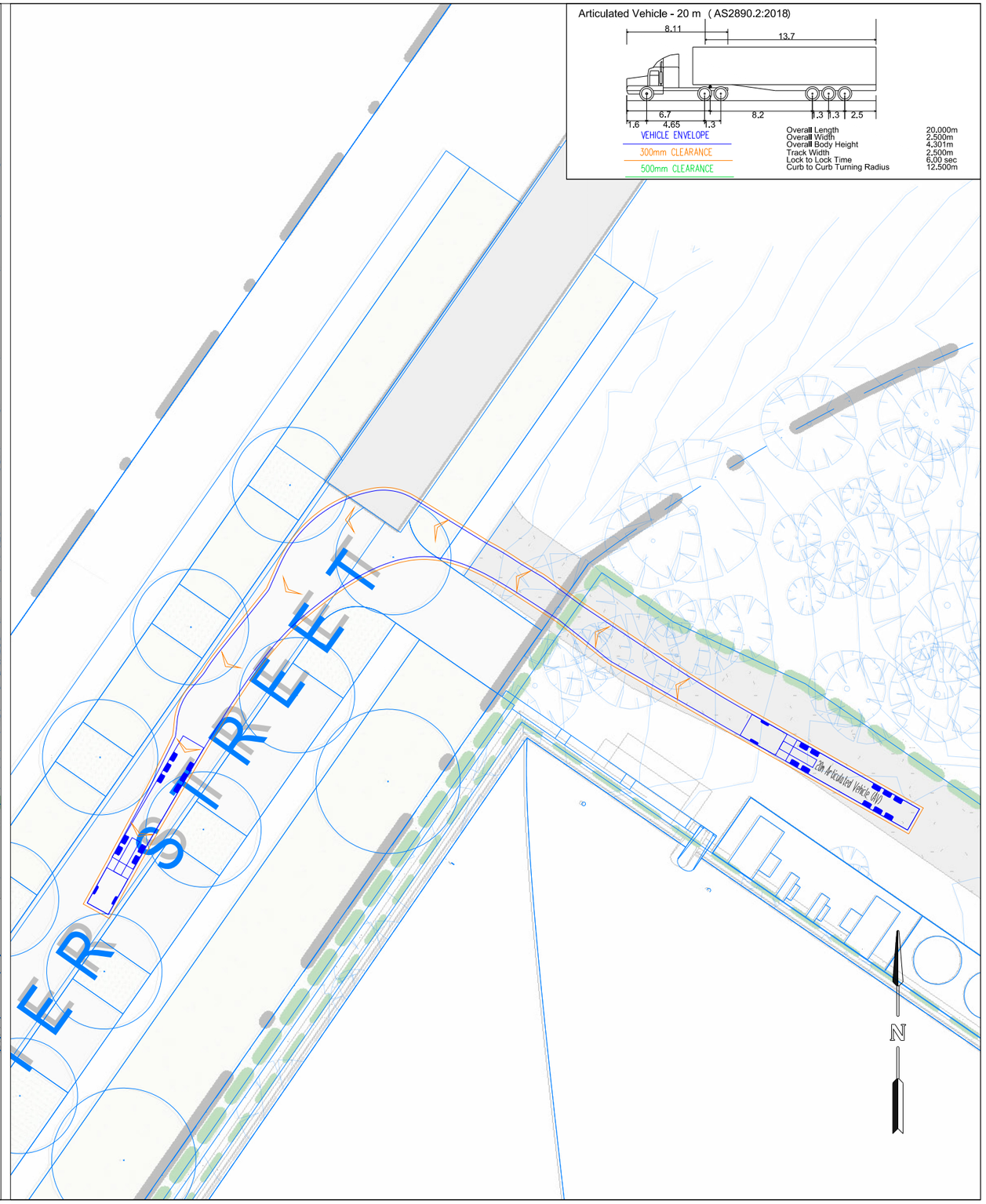
FILE NAME	SHEET
AG3539-01-v03.dwg	AG04

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET-OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.

NEW CROSSOVER AND
INTERSECTION LAYOUT TBC





Articulated Vehicle - 20 m (AS2890.2:2018)

VEHICLE ENVELOPE	Overall Length 20.000m
300mm CLEARANCE	Overall Width 2.500m
500mm CLEARANCE	Overall Body Height 4.301m
	Track Width 2.500m
	Lock to Lock Time 6.00 sec
	Curb to Curb Turning Radius 12.500m

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED Ava Tan	PAPER SIZE A3	CLIENT AIS	DOCUMENT INFORMATION Swept path analysis
APPROVED BY	DATE 16.10.2026	PROJECT P3539 AIS Podium Project, Canberra	FILE NAME AG3539-01-v03.dwg / SHEET AG05
SCALE 1:500			

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

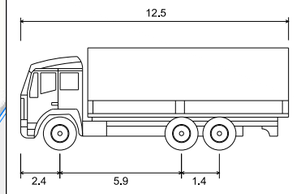
ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE SUFFERED BY A THIRD PARTY AS A RESULT OF THE PLAN/DATA BEING INCORRECT OR NOT CONSIDERED BY THE FAILURE TO PERFORM ANY SUCH THIRD PARTY OF THE LIMITATIONS WHICH APPLY TO THE INFORMATION CONTAINED IN THIS PLAN/DATA.

NEW CROSSOVER AND
INTERSECTION LAYOUT TBC

HRV - Heavy Rigid Vehicle

STREET

HRV - Heavy Rigid Vehicle (AS/NZS2890.2:2002)



VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	12.500m
Overall Width	2.500m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	12.500m

N

GENERAL NOTES

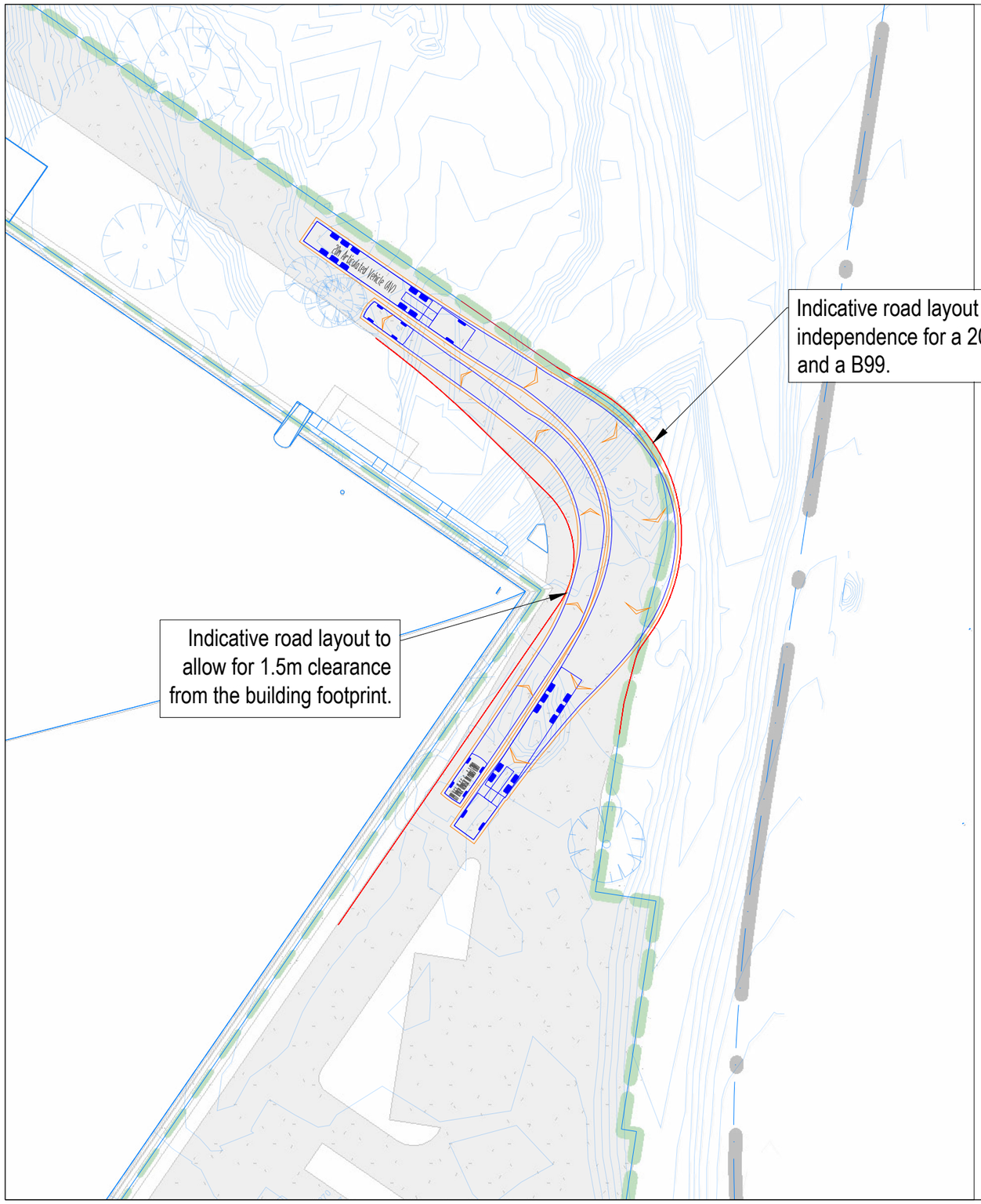
This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

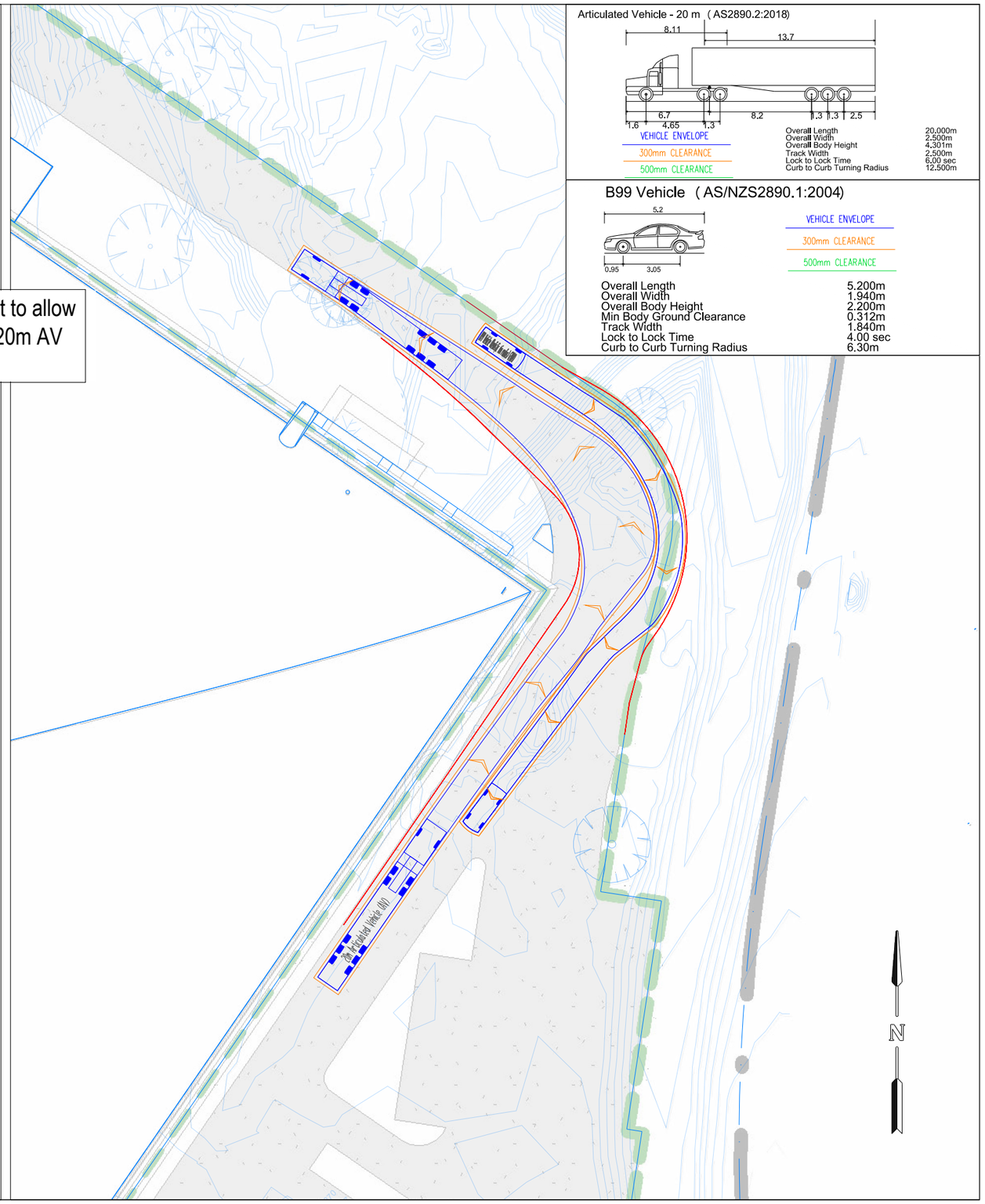
DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Swept path analysis
APPROVED BY:	DATE: 16.10.2026	PROJECT: P3539 AIS Podium Project, Canberra	
SCALE: 1:400			FILE NAME: AG3539-01-v03.dwg / SHEET: AG06

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
IF THE LIMITATIONS WHICH APPLY TO THE INFORMATION CONTAINED IN THIS PLAN/DATA WITHIN THE ASSOCIATED REPORT ARE NOT CLEARLY UNDERSTOOD, THE PLAN/DATA SHOULD NOT BE USED AND ASON SHOULD BE CONTACTED FOR A FURTHER EXPLANATION. ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF THIS PLAN/DATA IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET-OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON ACCEPTS NO RESPONSIBILITY FOR THE USE OF THIS PLAN OR ANY PART OF IT FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED AND PROVIDED BY ASON. ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET-OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.





Articulated Vehicle - 20 m (AS2890.2:2018)

Overall Length	20.000m
Overall Width	2.500m
Overall Body Height	4.301m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	12.500m

B99 Vehicle (AS/NZS2890.1:2004)

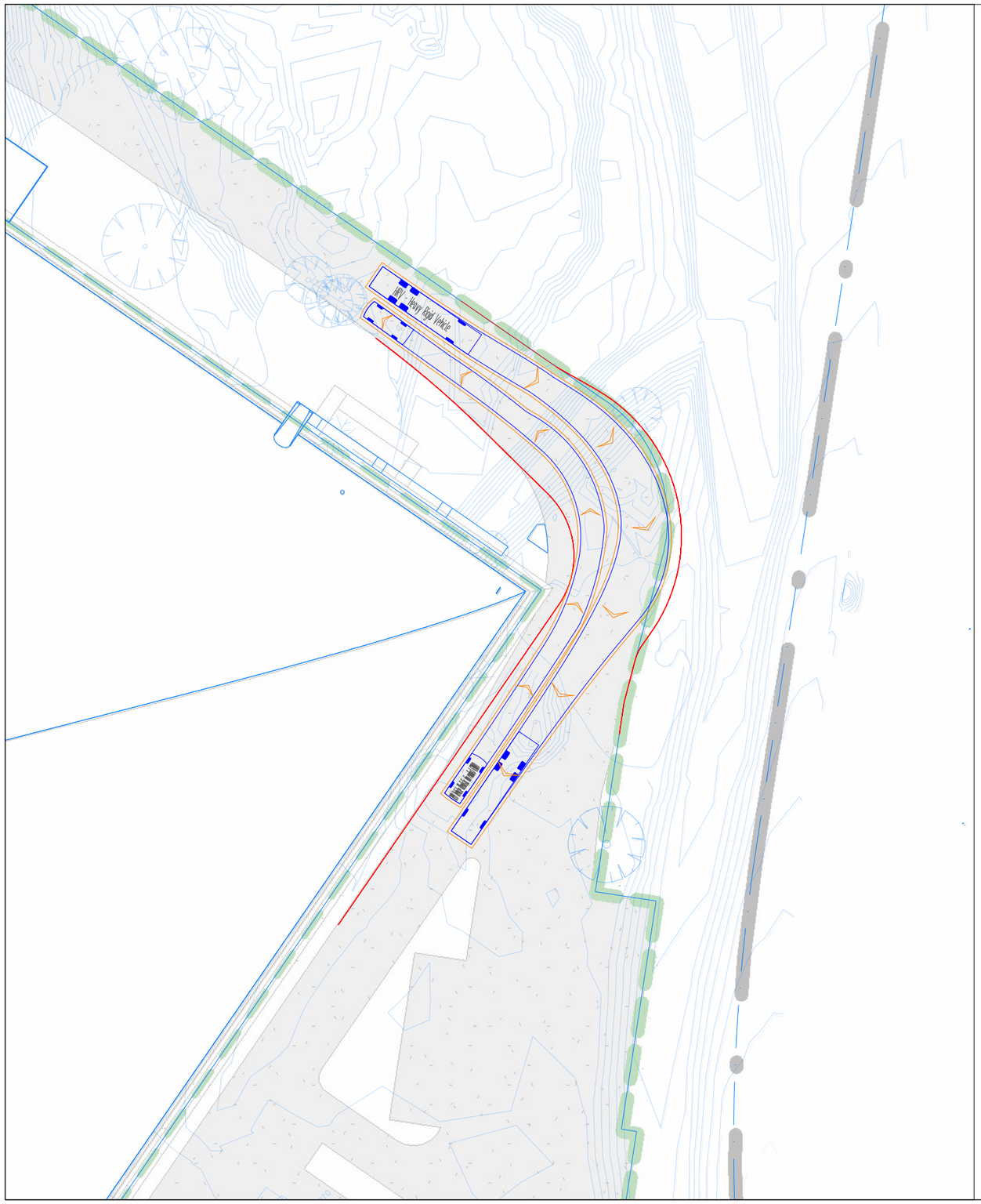
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

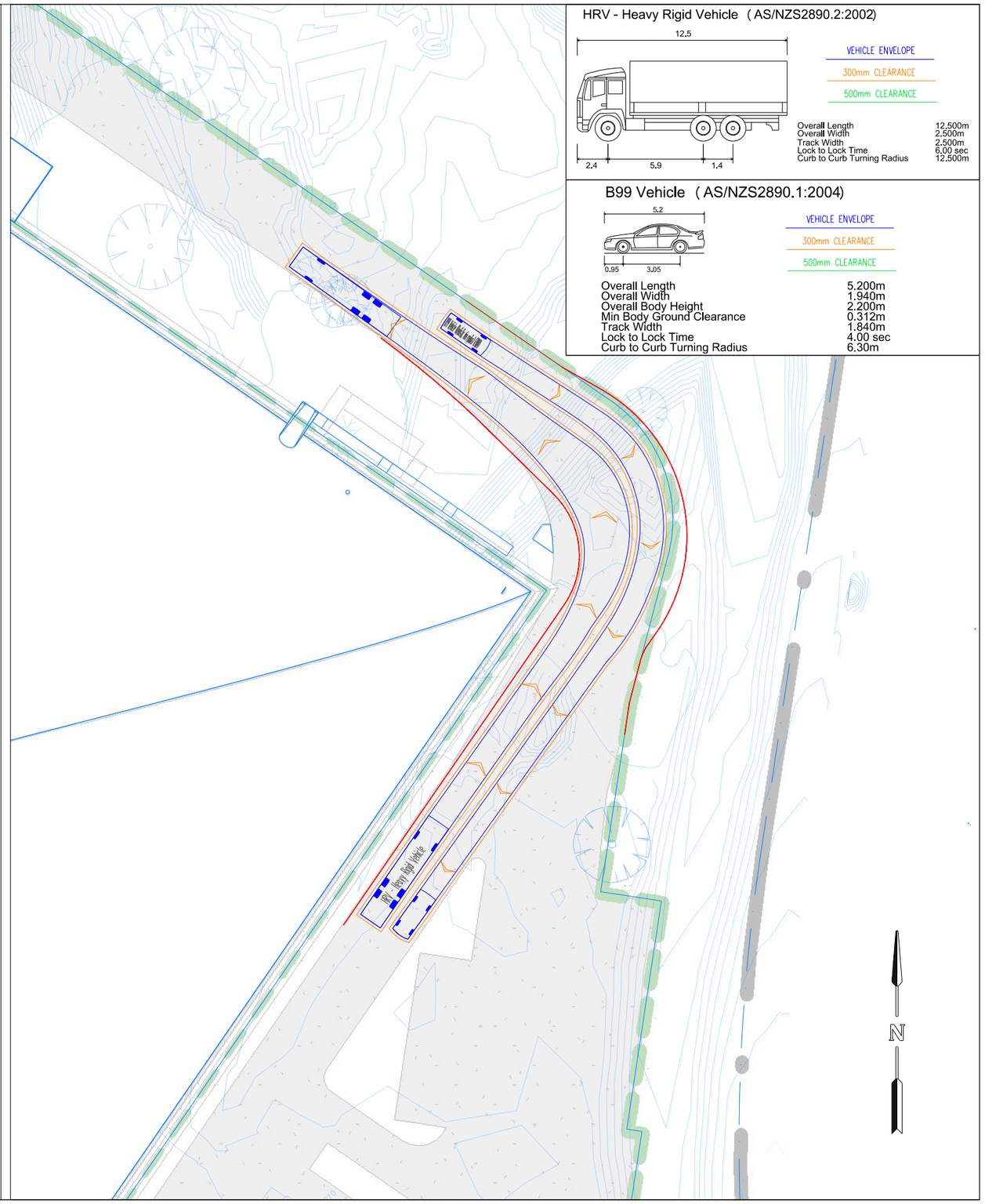
GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Swept path analysis
APPROVED BY	DATE: 16.10.2026	PROJECT: P3539	
SCALE: 1:500		AIS Podium Project, Canberra	FILE NAME: AG3539-01-v03.dwg / SHEET: AG07

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au





HRV - Heavy Rigid Vehicle (AS/NZS2890.2:2002)

VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	12.500m
Overall Width	2.500m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	12.500m

B99 Vehicle (AS/NZS2890.1:2004)

VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

N

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Swept path analysis
APPROVED BY:	DATE: 16.10.2026	PROJECT: P3539 AIS Podium Project, Canberra	FILE NAME: AG3539-01-v03.dwg
SCALE: 1:500			SHEET: AG08

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON ACCEPTS NO RESPONSIBILITY FOR ANY ERROR OR DISCREPANCY IN THE DATA SUPPLIED TO THE INFORMATION CONTAINED IN THIS PLAN/DATA. THIRD PARTY USE OF THE INFORMATION SHOWN ON THIS PLAN/DATA IS AT THE SOLE RISK OF THE THIRD PARTY UNLESS PRIOR AGREEMENT IN WRITING HAS BEEN ENTERED INTO WITH ASON. THE FAILURE TO INFORM ANY SUCH THIRD PARTY OF THE LIMITATIONS WHICH APPLY TO THE INFORMATION CONTAINED IN THIS PLAN/DATA MAY RESULT IN YOU BEING HELD RESPONSIBLE FOR ANY LOSS OR DAMAGE SUFFERED BY SUCH THIRD PARTY AS A RESULT OF RELYING ON THE INFORMATION CONTAINED IN THIS PLAN/DATA.

PLOT DATE: 16/10/2026 2:02:16 PM | CAD REFERENCE: C:\Users\Ava Tan\OneDrive - Ason Group\1.1 Active (Red Team)\3539 Ason Group Team Site - AIS Podium\Projects\Design\AG3539-01-v03.dwg | Ava Tan |

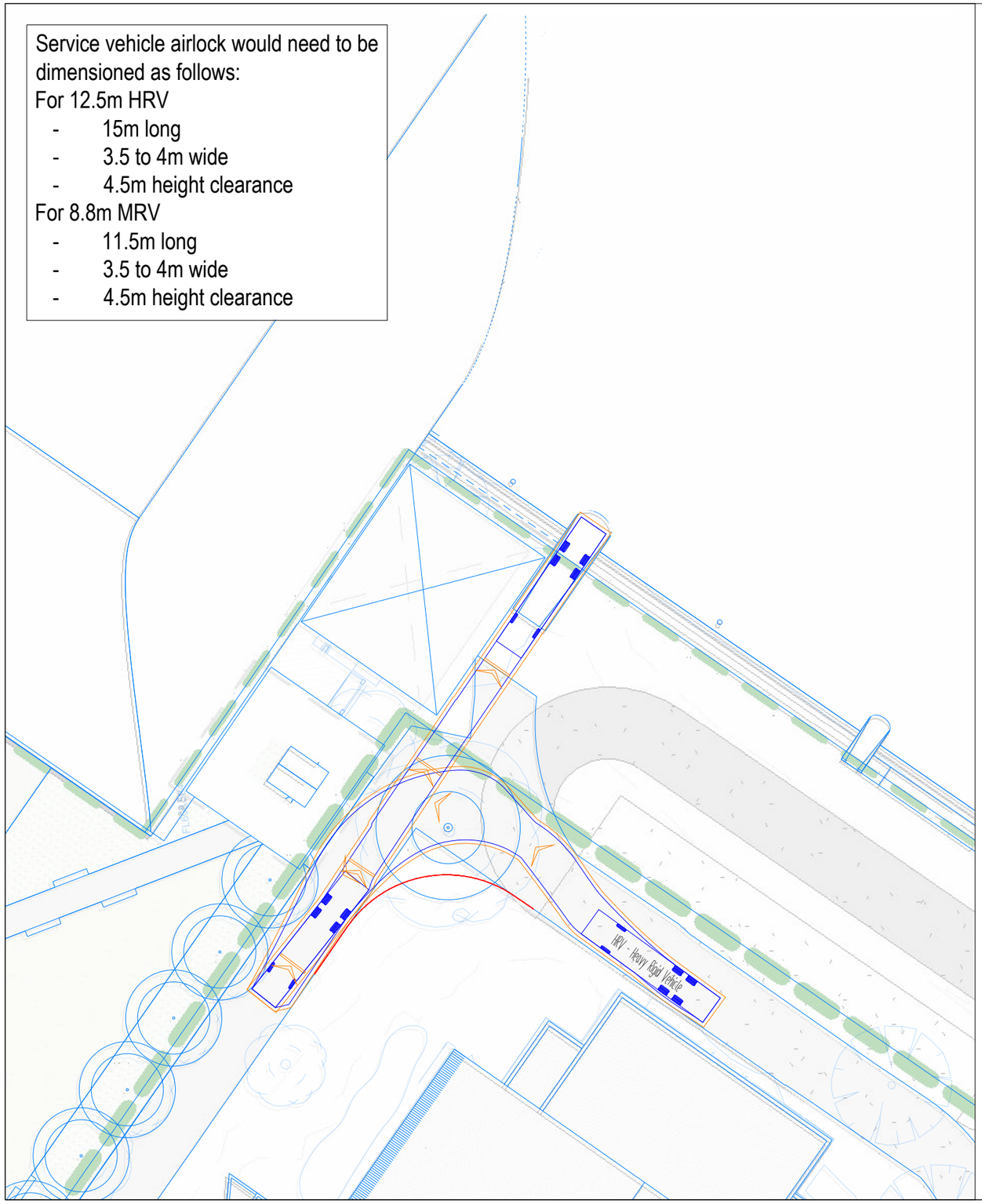
Service vehicle airlock would need to be dimensioned as follows:

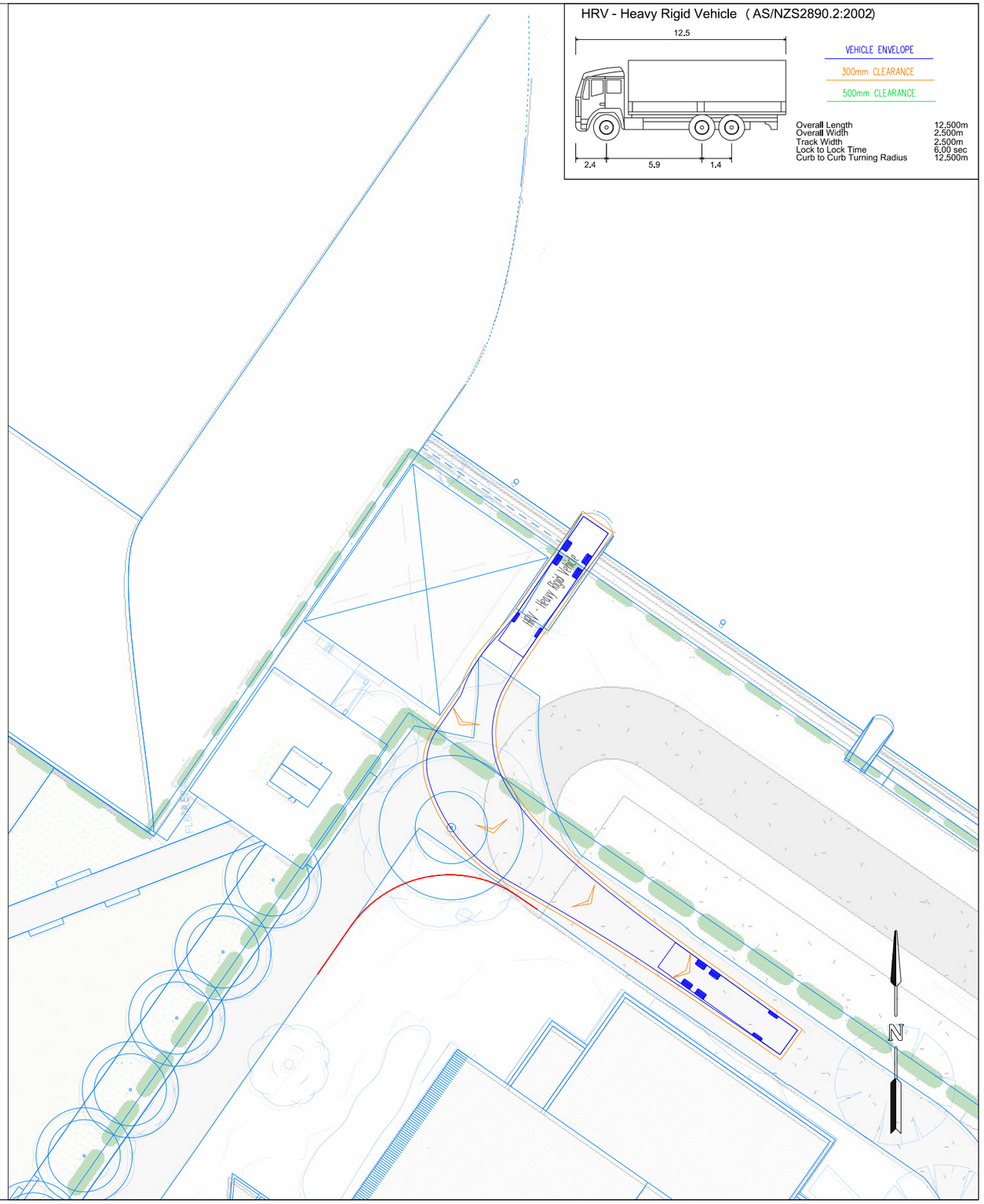
For 12.5m HRV

- 15m long
- 3.5 to 4m wide
- 4.5m height clearance

For 8.8m MRV

- 11.5m long
- 3.5 to 4m wide
- 4.5m height clearance





HRV - Heavy Rigid Vehicle (AS/NZS2890.2:2002)

VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	12.500m
Overall Width	2.500m
Track Width	2.500m
Lock to Lock Time	6.00 sec
Curb to Curb Turning Radius	12.500m

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED	Ava Tan
PAPER SIZE	A3
APPROVED BY	
DATE	16.10.2026
SCALE	1:400

CLIENT: AIS

PROJECT: P3539

AIS Podium Project, Canberra

DOCUMENT INFORMATION

Swept path analysis

FILE NAME	AG3539-01-v03.dwg
SHEET	AG09

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.
ASON ACCEPTS NO RESPONSIBILITY FOR THE INFORMATION CONTAINED IN THIS PLAN/DATA WHETHER SUPPLIED BY ASON OR A THIRD PARTY OF THE LIMITATIONS WHICH APPLY TO THE INFORMATION CONTAINED IN THIS PLAN/DATA.

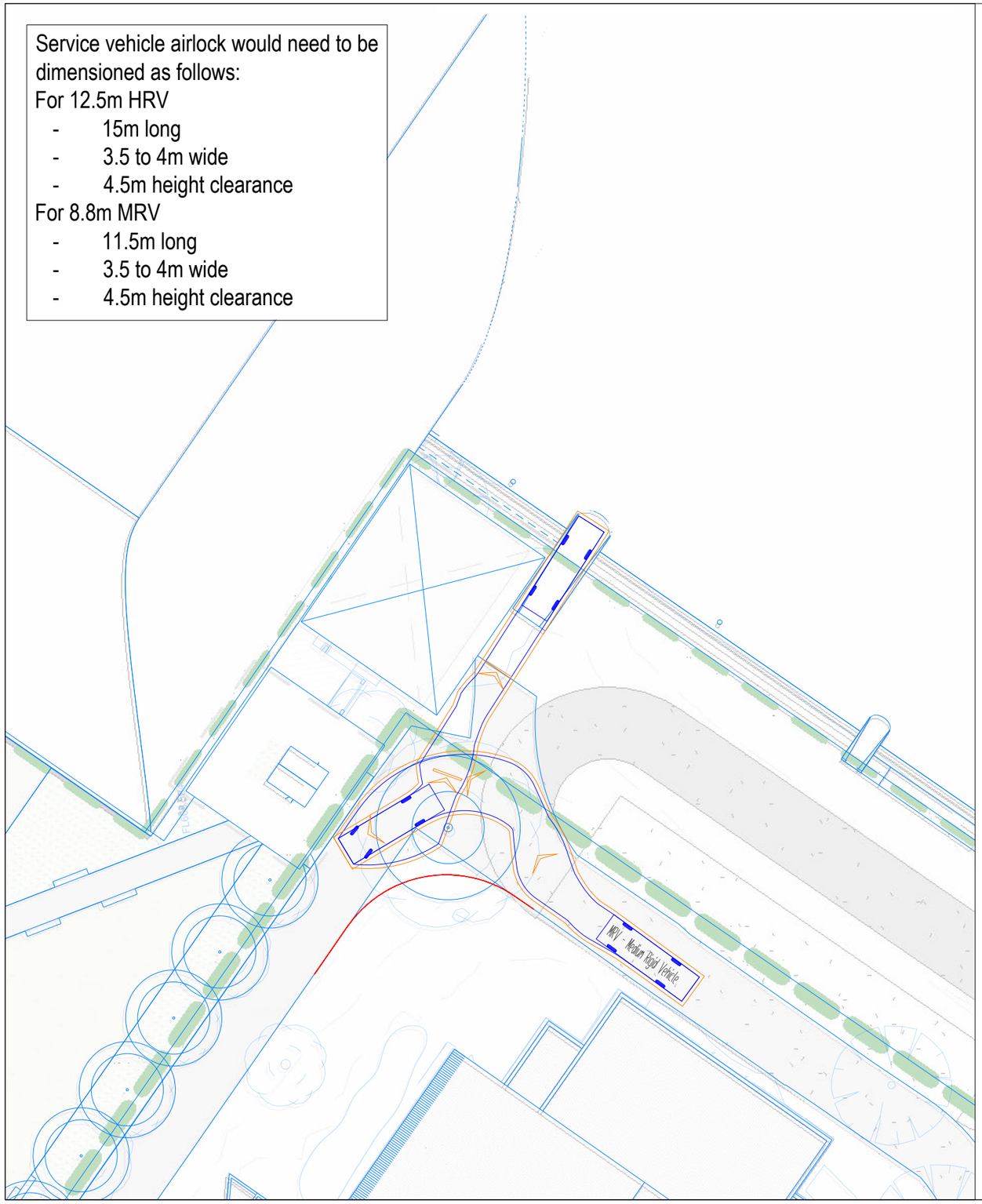
Service vehicle airlock would need to be dimensioned as follows:

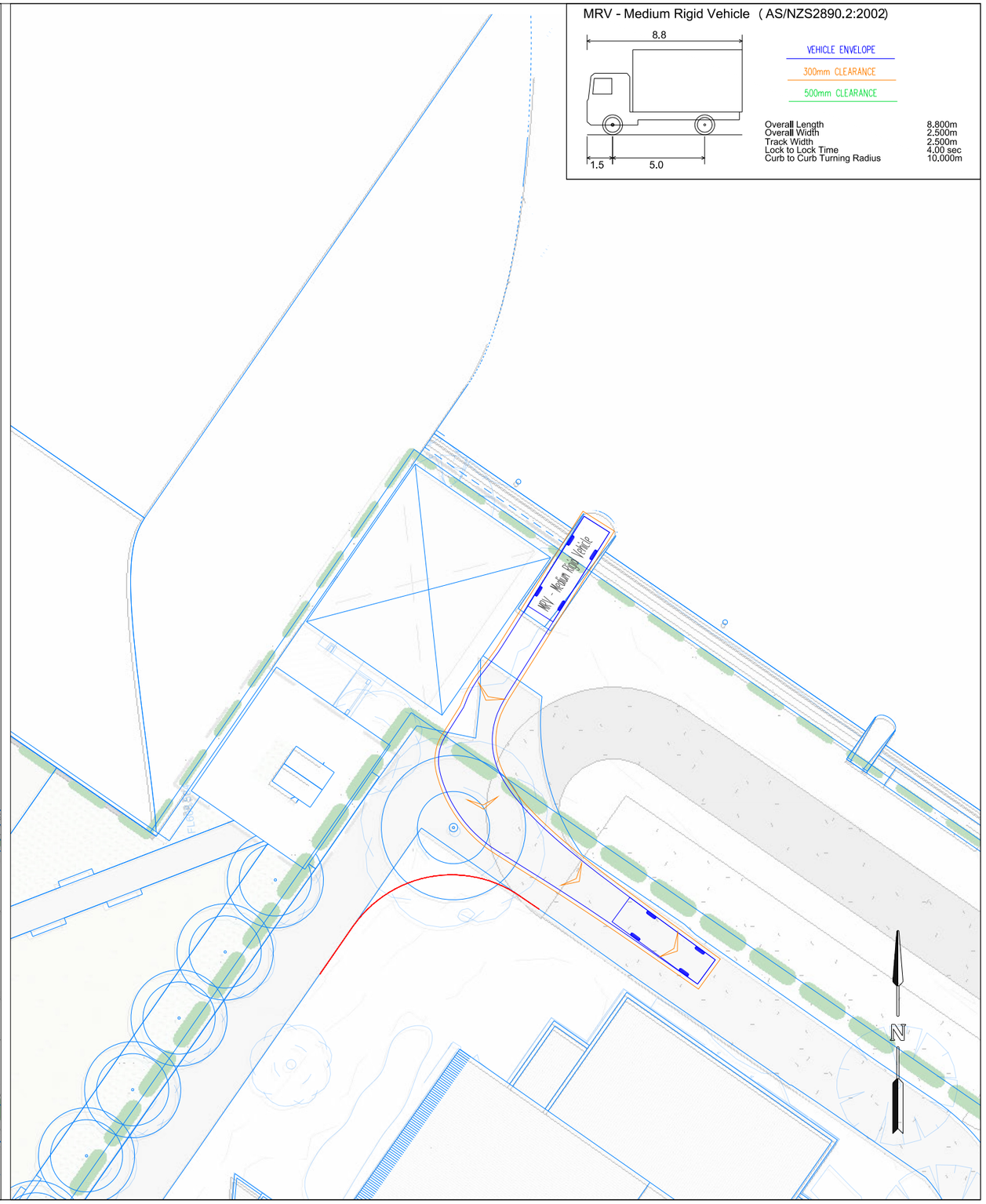
For 12.5m HRV

- 15m long
- 3.5 to 4m wide
- 4.5m height clearance

For 8.8m MRV

- 11.5m long
- 3.5 to 4m wide
- 4.5m height clearance





MRV - Medium Rigid Vehicle (AS/NZS2890.2:2002)

VEHICLE ENVELOPE
300mm CLEARANCE
500mm CLEARANCE

Overall Length	8.800m
Overall Width	2.500m
Track Width	2.500m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	10.000m

GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan prepared by Populous, received 02 October 2026.

DESIGNED: Ava Tan	PAPER SIZE: A3	CLIENT: AIS	DOCUMENT INFORMATION: Swept path analysis
APPROVED BY:	DATE: 16.10.2026	PROJECT: P3539	FILE NAME: AG3539-01-v03.dwg
SCALE: 1:400		AIS Podium Project, Canberra	SHEET: AG10

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA.
REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE.











Cultural Heritage Assessment

AIS Podium Project

Bruce

ACT

March 2026

A Report to Populous

Navin Officer

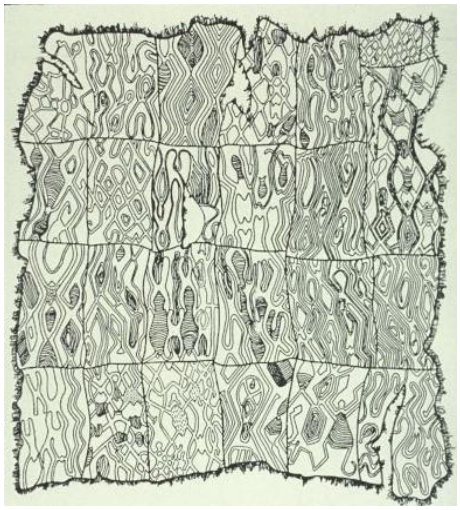
heritage consultants

acn: 092 901 605

Number 4
Kingston Warehouse
71 Leichhardt St.
Kingston ACT 2604

www.nohc.com.au

ph 02 6282 9415



Navin Officer Heritage Consultants acknowledges Australia's Aboriginal and Torres Strait Islander people, their many diverse communities across our nation and their rich culture. We pay respect to their Elders past and present. We acknowledge Aboriginal and Torres Strait Islander peoples as Australia's first peoples and as the Traditional Owners and custodians of the land and water across the Australian landscape and seascape. We recognise and value the ongoing contribution of Aboriginal people to Australian life and how their contribution continues to enrich our society. In our daily work we recognise, cherish, celebrate and defend the evidence of Aboriginal and Torres Strait Islander peoples rich and complex history and prehistory which extends back from the present day into a deep and distant past. We understand that this archaeological evidence has meaning to the descendants of those who created it. Through our research and conservation efforts we strive to unlock hidden meanings from these traces of the past and to make that knowledge available to current and future generations of Aboriginal and Torres Strait Islander people.

Document control

Project no.:	250118
Project client:	Populous
Project proponent:	Australian Sports Commission (ASC)
Document description:	Cultural Heritage Assessment
Project Manager:	Nicola Hayes
Authors:	Ellaine Dickens and Alisdair Bryant
Internal review:	Nicola Hayes
Document status:	V1.2

Document revision status

Author	Revision number	Internal review	Date issued
Ellaine Dickens and Alisdair Bryant	V1.1	Nicola Hayes	24/03/2026
Ellaine Dickens	V1.2	Following updated project design	27/03/2026

Copyright to this report rests with Populous except for the following:

- The Navin Officer Heritage Consultants logo and business name (copyright to this rests with Navin Officer Heritage Consultants Pty Ltd);
- Generic content and formatting which is not specific to this project or its results (copyright to this material rests with Navin Officer Heritage Consultants Pty Ltd);
- Descriptive text and data relating to Aboriginal objects which must, by law, be provided to ACT Heritage for its purposes and use;
- Information which, under Australian law, can be identified as belonging to Indigenous intellectual property; and
- Content which was sourced from and remains part of the public domain.

Cover photographs: NOHC field photos 2026

Previous page: Aboriginal possum skin rug collected 1839-1840 from the Hunter River region, eastern NSW (Smithsonian Inst. Washington D.C. Cat. no. E5803).

EXECUTIVE SUMMARY

This report documents the results of a Cultural Heritage Assessment of the AIS Podium Project. The report was commissioned by Populous on behalf of the Australian Sports Commission (ASC).

ASC are seeking design services for a new Athlete Accommodation, a new Multi Sports Dome and a new High-Performance Testing and Training Centre (HPTTC) (hereafter the 'Study Areas') at the Australian Institute of Sport (AIS). It is separated into package 1: Athlete Accommodation and package 2: HPTTC and multi-sport dome. The purpose of this project is to deliver a suite of new, fit-for-purpose facilities at the AIS campus in Canberra that will strengthen Australia's high-performance sport system in the lead-up to Brisbane 2032 and beyond. These developments will provide the following:

- Athlete Accommodation to support short, medium, and long-term stays for elite and pre-elite athletes, support staff, and select precinct users, enabling world-class preparation, recovery, and development.

- A High-Performance Testing and Training Centre (HPTTC) to integrate advanced sport science, testing, and training capabilities in a centralised, accessible location.

- A Multi-Sports Dome, providing a climate-controlled, para-athlete accessible indoor space for multidisciplinary training, testing, and analysis.

The Study Areas are located in Belconnen, Australian Capital Territory (ACT) and are bordered by Gungahlin Drive to the south and Ginninderra Drive to the north (Figure 1-1, Figure 1-2). The accommodation Study Area is 6,335 m^2 and the High-Performance Testing and Training Centre (HPTTC) and Sports Dome Study Area is 41,871 m^2.

There are no previously recorded Aboriginal sites within either of the Study Areas. There are four Aboriginal sites in the broader vicinity of the study area (Bruce IF1, Bruce IF2, Bruce Ridge 4, and Bruce Ridge 6), the closest of which (Bruce IF1) is 198 m east of the Study Areas. Bruce Ridge 4 and Bruce Ridge 6 were salvaged in 2006 (NOHC, 2006).

There are no listed historic sites within either of the Study Areas. James Shanahan Hut site is located 367 m southwest of the Study Areas and is noted as a point of interest, however is not listed on the ACT Heritage Register. The Bruce Stadium and National Indoor Stadium Precinct is listed as 'R2 - Removed from the Provisional Register by expiration of interim effect – all located on 'National Land' managed by the National Capital Authority (NCA)'. The ACT Heritage Council has therefore decided not to enter the place in the ACT Heritage Register. The NCA manages Commonwealth and National Heritage listed places on behalf of the ACT Government. The Bruce Stadium and National Indoor Stadium Precinct is **not** listed on either the Commonwealth or National Heritage lists.

No new Aboriginal or historic sites were recorded during the field survey. There is a possible scarred tree identified within the AIS precinct, but the location of this tree is unknown and is not one of the trees identified as a significant tree in ngh 2019.

There are no Aboriginal or historic sites within the Study Areas therefore there is no impact to heritage from the project.

It is recommended that:

1. The project includes either naming or signage that tells of the area's Aboriginal past and connections.

2. A copy of this report should be provided to the ACT Heritage.

3. One copy of this report should be provided to each of the ACT RAOs.

4. The unanticipated discovery protocols in Appendix 1 should be implemented for this project.

~ o0o ~

TABLE OF CONTENTS

EXECUTIVE SUMMARY III

1 INTRODUCTION 1

1.1 Study Area Location and Description 1
1.2 Project Description 1
1.3 Heritage Status of the Study Areas 1
1.4 This Report 1
1.4.1 Outline 1
1.4.2 Restricted Information and Confidentiality 2

2 RESEARCH DESIGN AND METHODOLOGY 1

2.1 Literature and Database Review 1
2.2 Fieldwork 3
2.3 Project Personnel 3
2.4 Recording Parameters 3
2.4.1 Aboriginal Sites and PADs 3
2.4.2 Historical Sites and Features 6
2.5 Study Limitations 7
2.6 Glossary 8

3 ENVIRONMENTAL CONTEXT 10

3.1 Geology 10
3.2 Soils 10
3.3 Landform (topography) 10
3.4 Drainage and Hydrology 10
3.5 Vegetation 10
3.6 Land Use Impacts 11

4 ABORIGINAL CULTURAL CONTEXT 17

4.1 ACT Ethnohistory 17
4.2 Representative Aboriginal Organisations 18
4.3 Evidence of RAO Consultation 18

5 ARCHAEOLOGICAL CONTEXT 20

5.1 Regional Overview 20
5.2 Related Reports and Information 20
5.3 Previously recorded sites 26
5.4 Predictive Archaeological Model – Aboriginal Heritage 28

6 HISTORICAL CONTEXT 29

6.1 Regional Overview 29
6.2 The Study Areas 29
6.3 Previously Recorded sites 30
6.4 Predictive Archaeological Model – Historical Heritage 31

7 PHYSICAL INVESTIGATIONS 34

7.1 Results 34
7.2 Survey Coverage and Visibility Variables 34

8 STATUTORY CONTEXT 35

8.1 Commonwealth 35
8.1.1 Aboriginal and Torres Strait Islander Heritage Protection Act 1984 35
8.1.2 Environment Protection and Biodiversity Conservation Act 1999 35
8.1.3 Environment and Heritage Legislation Amendment Act (No 1) 2003 37
8.2 ACT 38
8.2.1 Heritage Act 2004 38
8.3 Implications for the AIS Podium Project 39

9 RECOMMENDATIONS 40

10 LIST OF REFERENCES 41

APPENDIX 1 UNANTICIPATED DISCOVERY PROTOCOLS 45

Tables

Table 2-1. Statutory Heritage Register Searches 1

Table 2-2 Matrix showing the basis for assessing the archaeological potential Matrix showing the basis for assessing the archaeological potential (shown in bolded black text) of a potential archaeological deposit. 6

Table 4-1 Consultation Log 18

Table 5-1 List of sites recorded during GDE development within 2.5 km of current Study Areas 23

Figures

Figure 1-1 AIS Podium Project Study Areas 1

Figure 1-2 Study Areas on topographic map 2

Figure 1-3 Proposed site plan (from Populous) 3

Figure 3-1 Study Areas (yellow dashed line) on 1915 Federal Territory Feature Map (from ACTmapi) 11

Figure 3-2 Geological units within the vicinity of the Study Areas 12

Figure 3-3 Soil Landscapes within the vicinity of the Study Areas 13

Figure 3-4 Water Courses, Topographic Contours within the vicinity of the Study Areas 14

Figure 3-5 Approximate location of the Study Areas and broader landscape on historic aerials from 1961, 1976, 1992, and 2005 (from NSW Historical Imagery Viewer) 15

Figure 3-6 Close view of the Study Areas on aerials from 2007, 2008, 2012, and 2018 (from Google Earth Pro) 16

Figure 5-1 Previously recorded Aboriginal sites within the vicinity of the Study Areas 27

Figure 6-1 Peter ‘Big Pete’ Schumack, 1844-1912 (Gillespie Collection, Hall School Museum and Heritage Centre) 30

Figure 6-2 Peter Schumack and family at ‘Fern Hill’ (Hall Heritage Centre, website) 30

Figure 6-3 Extract of potion plan for Portion 92, Parish of Canberra showing “hut” location 31

Figure 1-1 Previously recorded historic sites within the vicinity of the Study Areas 33

Figure 7-1 Field photos of the Study Areas 34

1 INTRODUCTION

1.1 Study Area Location and Description

This report documents the results of a Cultural Heritage Assessment of the AIS Podium Project. The report was commissioned by Populous on behalf of the Australian Sports Commission (ASC).

The Study Areas are located in Belconnen, Australian Capital Territory (ACT) and are bordered by Gungahlin Drive to the south and Ginninderra Drive to the north (Figure 1-1, Figure 1-2). The accommodation Study Area is 6,335 m^2 and the High-Performance Testing and Training Centre (HPTTC) and Sports Dome Study Area is 41,871 m^2.

1.2 Project Description

ASC are seeking design services for a new Athlete Accommodation, a new Multi Sports Dome and a new High-Performance Testing and Training Centre (HPTTC) (hereafter the 'Study Areas') at the Australian Institute of Sport (AIS) (Figure 1-3). It is separated into package 1: Athlete Accommodation and package 2: HPTTC and multi-sport dome. The purpose of this project is to deliver a suite of new, fit-for-purpose facilities at the AIS campus in Canberra that will strengthen Australia's high-performance sport system in the lead-up to Brisbane 2032 and beyond. These developments will provide the following:

- Athlete Accommodation to support short, medium, and long-term stays for elite and pre-elite athletes, support staff, and select precinct users, enabling world-class preparation, recovery, and development.
- A High-Performance Testing and Training Centre (HPTTC) to integrate advanced sport science, testing, and training capabilities in a centralised, accessible location.
- A Multi-Sports Dome, providing a climate-controlled, para-athlete accessible indoor space for multidisciplinary training, testing, and analysis.

Together, these facilities will ensure the AIS remains a globally recognised leader in high-performance sport, research, and innovation.

1.3 Heritage Status of the Study Areas

There are no previously recorded Aboriginal sites within either of the Study Areas. There are four Aboriginal sites in the broader vicinity of the study area (Bruce IF1, Bruce IF2, Bruce Ridge 4, and Bruce Ridge 6), the closest of which (Bruce IF1) is 198 m east of the Study Areas. Bruce Ridge 4 and Bruce Ridge 6 were salvaged in 2006 (NOHC, 2006).

There are no listed historic sites within either of the Study Areas. The James Shanahan Hut site is located 367 m southwest of the Study Areas is noted as a point of interest, however is not listed on the ACT Heritage Register. The Bruce Stadium and National Indoor Stadium Precinct is listed as 'R2 - Removed from the Provisional Register by expiration of interim effect – all located on 'National Land' managed by the National Capital Authority (NCA)'. The ACT Heritage Council has therefore decided not to enter the place in the ACT Heritage Register. The NCA manages Commonwealth and National Heritage listed places on behalf of the ACT Government. The Bruce Stadium and National Indoor Stadium Precinct is **not** listed on either the Commonwealth or National Heritage lists.

1.4 This Report

1.4.1 Outline

This report:

- Describes the proposed development/works etc (Section 1);

- Describes the methodology employed in the study (Section 2);
- Describes the environmental setting of the Study Areas (Section 3);
- Provides information relevant to the Aboriginal cultural context of the Study Areas (Section 4);
- Provides information on the archaeological context of the Study Areas (Section 5);
- Provides a heritage context for the Study Areas (Sections 6);
- Describes the results of the field survey conducted in the context of the assessment (Section 7);
- Provides a statutory information as it relates to the cultural heritage identified within the Study Areas (Section 8); and
- Provides management recommendations based on the results of the investigation (Section 9).

1.4.2 Restricted Information and Confidentiality

Information in this report relating to the exact location of Aboriginal sites should not be published or promoted in the public domain. The following images and report sections should be restricted in a public version of this document:

- Figures 5-1; and
- Section 5.3 (grid references and site location information).

No information provided by Aboriginal stakeholders in this report has been specifically identified as requiring access restrictions due to its cultural sensitivity.

No information in this report has been classified as confidential.



Figure 1-1 AIS Podium Project Study Areas

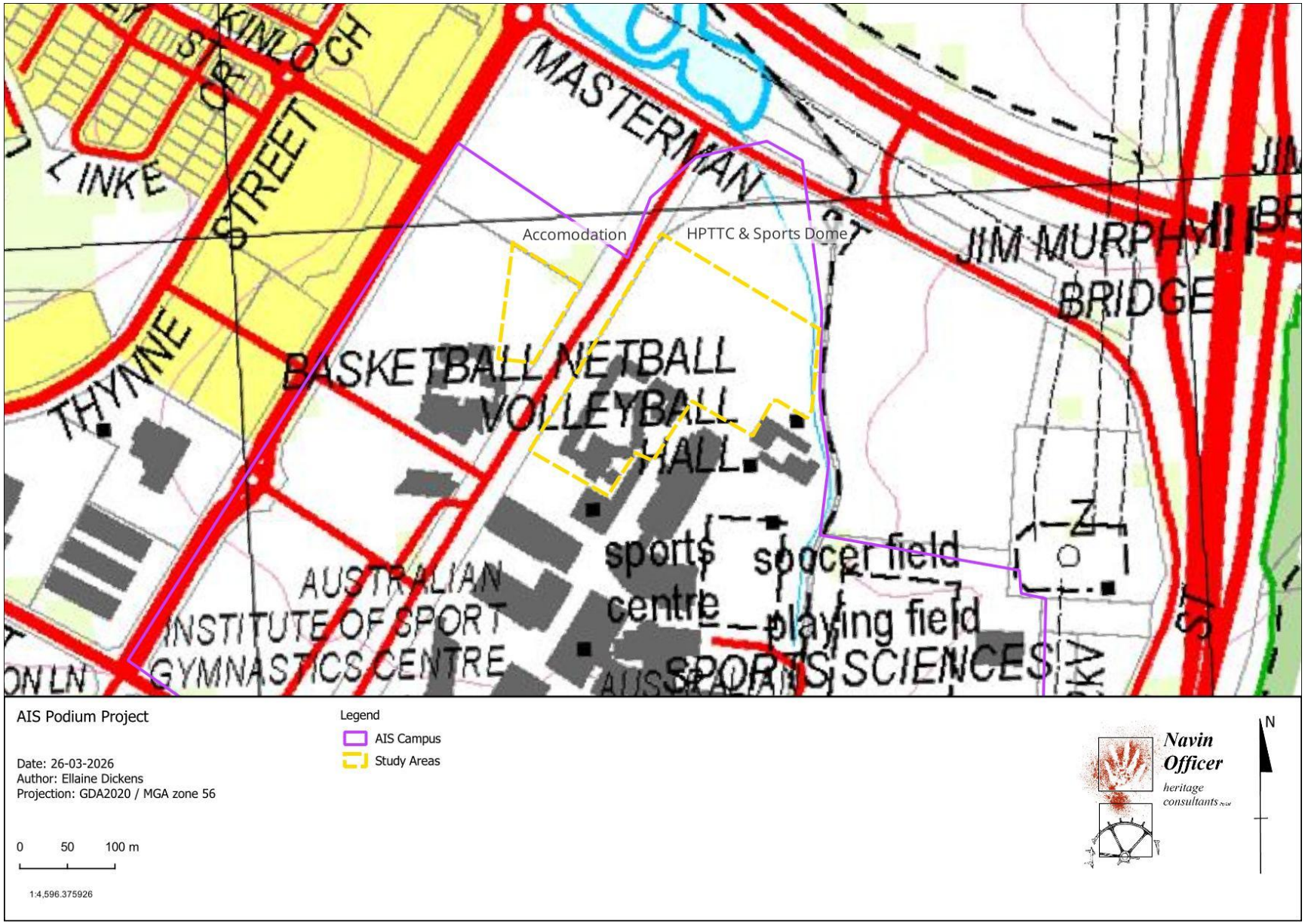


Figure 1-2 Study Areas on topographic map

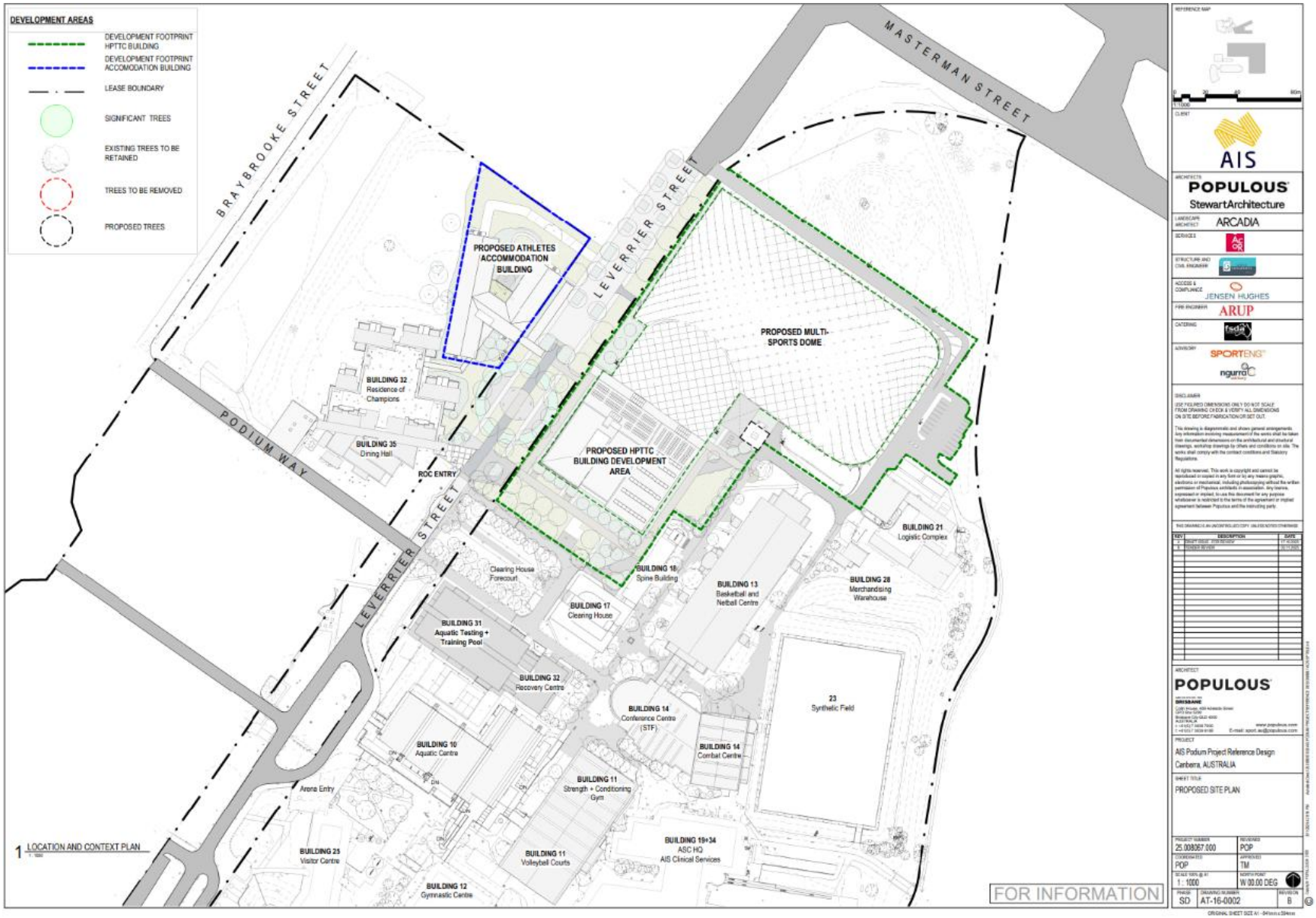


Figure 1-3 Proposed site plan (from Populous)

2 RESEARCH DESIGN AND METHODOLOGY

2.1 Literature and Database Review

A range of archaeological and historical data was reviewed for the Study Areas and their surrounds. This literature and data review was used to determine if known Aboriginal and historical sites were located within the area under investigation, to facilitate site prediction on the basis of known regional and local site patterns, and to place the area within an archaeological and heritage management context. The review of documentary sources included heritage registers and schedules, local histories, and archaeological reports.

Literature sources included the Heritage Registers maintained by the Australian Heritage Council, Department of Environment and the Heritage Registers and associated reports held by ACT Heritage, ACT Department of Environment, Planning and Sustainable Development Directorate. Regional and local histories and heritage studies were also reviewed.

Searches were undertaken of the following statutory and non-statutory heritage registers and schedules:

- Statutory Listings:
  - World Heritage List;
  - The National Heritage List (Australian Heritage Council);
  - The Commonwealth Heritage List (Australian Heritage Council); and
  - The Heritage Register (ACT Heritage Council).
- Non-Statutory Listings:
  - The Register of the National Estate (Australian Heritage Council);
  - Register of the National Trust of Australia (ACT);
  - Australian Institute of Architects, Heritage Buildings List; and
  - Engineers Australia (Engineering Heritage Recognition Program).

Table 2-1. Statutory Heritage Register Searches

Register	Date Searched	Search Result
Statutory		
World Heritage List	23 September 2025	No items within the vicinity of the Study Areas.
National Heritage List (Australian Heritage Council)	23 September 2025	No items within the vicinity of the Study Areas.
Commonwealth Heritage List (Australian Heritage Council)	23 September 2025	No items within the vicinity of the Study Areas.

Register	Date Searched	Search Result
ACT Heritage Register	6 December 2025	No Aboriginal sites within the Study Areas. There are three Aboriginal sites located within the vicinity of the Study Areas: • Bruce IF1 – located 80 m from the Study Areas. • Bruce IF2 – located 220 m from the study Areas • Bruce Ridge 4 (BR4) – located 738 m from the Study Areas. • Bruce Ridge 6 (BR6) – located 705 m from the Study Areas. There is one historic item that overlaps the Study Areas, however this site is not listed as a place on the ACT heritage register: • Bruce Stadium and National Indoor Stadium precinct – listed as 'R2 - Removed from the Provisional Register by expiration of interim effect – all located on 'National Land' managed by the National Capital Authority (NCA)'. The ACT Heritage Council therefore decided not to enter the place in the ACT Heritage Register. There is one historic item that is within the vicinity of the Study Areas: • James Shanahan Hut Site – 367 m from the Study Areas - noted as a point of interest, however not listed on the ACT Heritage Register.
Non-statutory		
Register of the National Estate (RNE)	23 September 2025	There are two items listed on the RNE within the vicinity of the Study Areas: • Bruce Stadium, Original Grandstand & the National Indoor Stadium – 253 m from the Study Areas – listed as an historic Indicative Place. • Black Mountain, Aranda Bushland, O'Connor Ridge and Gossan Hill – 560 m from the Study Areas – listed as a natural Indicative Place.
Register of the National Trust of Australia (ACT)	23 September 2025	No items within the vicinity of the Study Areas.
Australian Institute of Architects, Heritage Buildings List	23 September 2025	There is one place within the vicinity of the Study Areas listed on the Register of Significant Architecture: • GIO Stadium Canberra & AIS Arena Precinct (Bruce Stadium & National Indoor Stadium Precinct National Athletics Stadium & National Indoor

Register	Date Searched	Search Result
		Sports & Training Centre) – 100 m from the Study Areas ○ Listed in 2003 as an item of National significance, in the Late Twentieth Century Structuralist Style.
Engineers Australia (Engineering Heritage Recognition Program)	23 September 2025	No items within the vicinity of the Study Areas.

2.2 Fieldwork

A site survey was undertaken by Navin Officer Heritage Consultants (NOHC) staff on the 19 March 2026 (Nicola Hayes and Garth Thompson). This involved a walk over of the area proposed to be impacted by the project. All areas subject to direct impact were traversed. Field participants walked 5-10 m apart to ensure full coverage of all impact areas.

A foot survey was chosen as the best approach due to the contained nature of the project and the limited area of impact. The survey was aimed at assessing the previously recorded sites in the study area and to determine whether any other historical or Aboriginal sites were evident in the area.

Field recording of sites involved:

- Taking GPS positions for each site;
- Taking one or more digital photographs, showing the general context of the site and each artefact recorded;
- Recording basic technological traits for each artefact; and
- Recording the landscape setting of each site.

NOHC was accompanied by Adrian Brown from the Representative Aboriginal Organization King Brown Tribal Group (KBTG).

2.3 Project Personnel

This report was compiled by Ellaine Dickens (Senior Archaeologist / Heritage Consultant) and Alisdair Bryant (Archaeologist / Heritage Consultant) and reviewed by Nicola Hayes.

2.4 Recording Parameters

The archaeological survey aimed at identifying material evidence of Aboriginal occupation as revealed by surface artefacts and areas of archaeological potential unassociated with surface artefacts. Potential recordings fall into two broad categories: sites and potential archaeological deposits.

2.4.1 Aboriginal Sites and PADs

A site is defined as any material evidence of past Aboriginal activity that remains within a context or place which can be reliably related to that activity.

Most Aboriginal sites are identified by the presence of three main categories of artefacts: stone or shell artefacts situated on or in a sedimentary matrix, marks located on or in rock surfaces, and scars on trees.

Frequently encountered site types within southeastern Australia include stone artefact occurrences - including isolated finds and open artefact scatters, coastal and freshwater middens, rock shelter sites - including occupation deposit and/or rock art, grinding groove sites and scarred trees. For the purposes of this section, only the methodologies used in basic site identification are outlined, together with those for the recording types most likely to be encountered by this investigation.

Stone Artefact Occurrences

Stone artefact occurrences are the most commonly recorded site type in Australia. They may consist of single artefacts - described as isolated finds; or as a distribution of more than one artefact – often described as an artefact scatter or 'open camp site' when recording surface artefacts, or as a subsurface artefact distribution when dealing with an archaeological deposit.

Where artefact incidence is very low, either in terms of areal distribution (artefacts per square metre) or density (artefacts per cubic metre), then the differentiation of the recording from background artefacts counts or *background scatter* may be an issue.

Isolated finds

An isolated find is a single stone artefact, not located within a rock shelter, and which occurs without any associated evidence of Aboriginal occupation within a radius of 60 metres. Isolated finds may be indicative of:

- Random loss or deliberate discard of a single artefact;
- The remnant of a now dispersed and disturbed artefact scatter; and
- An otherwise obscured or sub-surface artefact scatter.

Except in the case of the latter, isolated finds may be considered to be constituent components of the *background scatter* present within any particular landform.

The distance used to define an isolated artefact varies according to the survey objectives, the incidence of ground surface exposure, the extent of ground surface disturbance, and estimates of *background scatter* or *background discard* densities. In the absence of baseline information relating to background scatter densities, the defining distance for an isolated find must be based on methodological and visibility considerations. Given the varied incidence of ground surface exposure and deposit disturbance within the study area, and the lack of background baseline data, the specification of 60 metres is considered to be an effective parameter for surface survey methodologies. This distance provides a balance between detecting fine scale patterns of Aboriginal occupation and avoiding environmental biases caused by ground disturbance or high ground surface exposure rates. The 60 metre parameter has provided an effective separation of low density artefact occurrences in similar southeast Australian topographies outside of semi-arid landscapes.

Background scatter

Background scatter is a term used generally by archaeologists to refer to artefacts which cannot be usefully related to a place or focus of past activity (except for the net accumulation of single artefact losses).

There is no single concept for background discard or 'scatter', and therefore no agreed definition. The definitions in current use are based on the postulated nature of prehistoric activity, and often they are phrased in general terms and do not include quantitative criteria. Commonly agreed is that background discard occurs in the absence of 'focused' activity involving the production or discard of stone artefacts in a particular location. An example of unfocused activity is occasional isolated discard of artefacts during travel along a route or pathway. Examples of 'focused activity' are camping, knapping and heat-

treating stone, cooking in a hearth, and processing food with stone tools. In practical terms, over a period of thousands of years an accumulation of 'unfocused' discard may result in an archaeological concentration that may be identified as a 'site'. Definitions of background discard comprising only qualitative criteria do not specify the numbers (numerical flux) or 'density' of artefacts required to discriminate site areas from background discard.

Artefact scatters

Artefacts situated within an open context are classed as an open artefact scatter (or 'open camp site') when two or more occur no more than 60 metres away from any other constituent artefact. The 60 metre specification relates back to the definition of an isolated find (*Refer above*). The use of the term *scatter* is intended only to be descriptive of the current archaeological evidence and does not infer the original human behaviour which formed the site. The term *open camp site* has been used extensively in the past to describe open artefact scatters. This was based on ethnographic modelling suggesting that most artefact occurrences resulted from activities at camp sites. However, in order to separate the description from the interpretation of field evidence, the terms *artefact scatter*, *artefact distribution* or *artefact occurrence* are now more extensively used. The latter two options can also be used to categorise artefacts occurring in sub-surface contexts.

Scarred Trees

Trees with scars of Aboriginal origin form the other major type of artefactual evidence. Each tree is normally considered to be a separate site. The identification of a scar as Aboriginal in origin is dependent on a set of inter-related interpretive criteria. The credibility of alternative causal explanations such as natural traumas and other types of human scarring must be tested for each scar.

A range of diagnostic criteria has been developed to assist in the identification of Aboriginal scarred trees. The following criteria are based on archaeological work conducted by Simmons (1977) and Beesley (1989), and the field manual for Aboriginal scarred trees developed by Long (2005):

1. The scar does not normally run to ground level: (scars resulting from fire, fungal attack or lightning nearly always reach ground level). However, ground termination does not necessarily discount an Aboriginal origin (some ethno-historical examples of canoe scars reach the ground);

1(a). If a scar extends to the ground, the sides of the original scar must be relatively parallel: (natural scars tend to be triangular in shape;

2. The scar is either approximately parallel sided or concave, and symmetrical: (few natural scars are likely to have these properties except fire scars which may be symmetrical but are wider at the base than their apex. Surveyors marks are typically triangular, and often adzed);

3. The scar should be reasonably regular in outline and regrowth: scars of natural origin tend to have irregular outlines and may have uneven regrowth;

4. The ends of the scar should be 'shaped', either squared off, or pointed (often as a result of regrowth): (a 'keyhole' profile with a 'tail' is suggestive of branch loss);

5. A scar which contains adze or axe marks on the original scar surface is likely to be the result of human scarring. Their morphology and distribution may lend support to an interpretation of an Aboriginal origin: (marks produced after the scarring event may need to be discounted);

6. The scar must date to the time of Aboriginal bark exploitation within its region: The traditional Aboriginal exploitation of bark probably ceased in most regions between 100 and 150 years ago. However, in some locations associated with Aboriginal settlement, the Aboriginal removal of bark may have continued to the present day, or restarted as part of new cultural movements.

7. The tree must be endemic to the region: (and thus exclude historic plantings).

Field based identification of Aboriginal scars, is based on surface evidence only and will not necessarily provide a definitive classification. In many cases the possibility of a natural origin cannot be ruled out,

despite the presence of several diagnostic criteria or the balance of interpretation leaning toward an Aboriginal origin. For this reason interpretations of an Aboriginal origin are qualified by the recorder's degree of certainty. The following categories were used:

- Aboriginal scar - This is a scar where an Aboriginal origin is considered the most likely. The scar conforms to all of the criteria and a natural origin is considered unlikely and improbable;
- Probable Aboriginal scar - This is a scar that conforms to all of the criteria and where an Aboriginal origin is considered to be the most likely. Despite this, a natural origin cannot be ruled out; and
- Possible Aboriginal scar - This is a scar which conforms to all or most of the criteria and where an Aboriginal origin cannot be reliably considered as more likely than alternative natural causes. The characteristics of this scar will also be consistent with a natural cause.

Potential Archaeological Deposits

A potential archaeological deposit, or PAD, is defined as any location where the potential for subsurface archaeological material is considered to be moderate or high, relative to the surrounding study area landscape. The potential for subsurface material to be present is assessed using criteria developed from the results of previous surveys and excavations relevant to the region. Where necessary, PADs can be given an indicative rating of their 'archaeological potential' based on a combined assessment of their potential to contain artefacts, and the potential archaeological value of the deposit. Table 2-2 illustrates the matrix on which this assessment is based. Locations with low potential for artefacts fall below the threshold of classification. In such cases the potential incidence of artefactual material is considered to be the same as, or close to that for background scatter. Where there is moderate potential for artefacts, the predicted archaeological potential parallels the potential significance of the deposit. For deposits with high potential for artefacts, the assessed archaeological potential is weighted positively.

The boundaries of PADs are generally defined by the extent of particular micro-landforms known to have high correlations with archaeological material. A PAD may or may not be associated with surface artefacts. In the absence of artefacts, a location with potential will be recorded as a PAD. Where one or more surface artefacts occur on a sedimentary deposit, a PAD may also be identified where there is insufficient evidence to assess the nature and content of the underlying deposit. This situation is due mostly to poor ground surface visibility.

Table 2-2 Matrix showing the basis for assessing the archaeological potential Matrix showing the basis for assessing the archaeological potential (shown in bolded black text) of a potential archaeological deposit.

		Potential to contain Aboriginal objects		
		Low	*Moderate*	*High*
Potential archaeological significance	*Low*	---	**low**	**moderate**
	Moderate	---	**moderate**	**high**
	High	---	**high**	**high**

2.4.2 Historical Sites and Features

Historical archaeology refers to the 'post-contact' period and includes: domestic, commercial and industrial sites as well as most maritime sites. It is the study of the past using physical evidence in conjunction with historical sources. The two primary types of places or items that may form part of the historical archaeology context include:

1. Below ground evidence, including building foundations, occupation deposits, features and artefacts; and above ground evidence, including buildings, works, industrial structures and relics that are intact or ruined; and

2. Areas of land that display evidence of human activity or occupation.

Within these broad parameters, an historical archaeological site may include:

- Topographical features and evidence of past environments (that is, resident in pollens and diatoms);
- Evidence of site formation, evolution, redundancy and abandonment (that is, features and materials associated with land reclamation, sequences of structural development, demolition/deconstruction, and renewal);
- Evidence of function and activities according to historical theme/s represented (for example, an industrial site may contain diagnostic evidence of process, products and by-products);
- Evidence associated with domestic occupation including household items and consumables, ornaments, personal effects and toys;
- Evidence of diet including animal and fish bones, and plant residues;
- Evidence of pastimes and occupations including tools of trade and the often fragmentary signatures of these activities and processes;
- Methods of waste disposal and sanitation, including the waste itself which may contain discarded elements from all classes of artefact as well as indicators of diet and pathology; and
- Any surviving physical evidence of the interplay between site environment and people.

The information found in historical archaeological sites is often part of a bigger picture which offers opportunities to compare and contrast results between sites. The most common comparisons are made at the local level, however, due to advances in research and the increasing sophistication and standardisation of methods of data collection, the capacity for wider reference (nationally and, occasionally, internationally) exists and places added emphasis on identification and conservation of historical archaeological resources.

2.5 Study Limitations

Archaeological assessments commissioned for development projects are restricted to the specific footprint that will be impacted by the project. The area of land being assessed is specifically constrained, and in many cases will not representatively sample the different landforms found across the wider region being studied. Therefore, a full picture of the archaeology of an area cannot be gained or assumed by this type of assessment.

These limitations will usually become less pronounced as further assessments are carried out in a region, since additional sites are assessed. A systematic bias in the data can still easily occur, however, if the patches of ground are concentrated in one landform type over another. This could be the case if the assessments relate to development projects which preferentially occur on specific landforms.

Data on uses of the land by Aboriginal groups in the post-contact period, including the present day, might be limited if activities practised by Aboriginal groups have not been reported in the public domain or to NOHC. This could occur if land use practises are associated with knowledge that is culturally restricted.

2.6 Glossary

Aboriginal Object	An object associated with Aboriginal people because of Aboriginal tradition (*Heritage Act 2004*).
Aboriginal Place	A place associated with Aboriginal people because of Aboriginal tradition (*Heritage Act 2004*).
Aboriginal site	A place or location which relates to past or contemporary Aboriginal occupation. Sites can be divided into those identified from archaeological evidence (archaeological sites), and those related to intangible cultural values, such as revealed by oral tradition and lore, or from the historical record. An Aboriginal site may have both archaeological and intangible values.
Archaeological site	A place or location with the confirmed presence of archaeological evidence of Aboriginal occupation, where the context of that evidence can be reliably related to the Aboriginal actions which produced the evidence.
Artefact	An object, normally portable, made or modified by human hand (see 'stone artefact').
Artefact occurrence	A term usually applied to site recordings comprising stone artefacts and which refers to one or more stone artefacts situated within a specified surface area or subsurface deposit. Various measures are used for defining the boundaries of such recordings. Refer also to 'surface' and 'subsurface artefact occurrence'.
Artefact scatter	A formerly used open site-type classification defined as two or more stone artefacts situated no more than a specified distance (such as 60 m) away from any other included artefact. Typically, this category did not include isolated finds. The use of the term *scatter* was intended only to be descriptive and did not infer the original human behaviour which formed the site. The term *open camp site* has been used extensively in the past to describe open artefact scatters.
Background discard or scatter	There is no single concept for background discard or 'scatter', and therefore no agreed definition. The definitions in current use are based on the postulated nature of prehistoric activity, and often they are phrased in general terms and do not include quantitative criteria. It is commonly agreed that background discard occurs in the absence of 'focused' activity involving the production or discard of stone artefacts in a particular location. An example of unfocused activity is occasional isolated discard of artefacts during travel along a route or pathway. Examples of 'focused activity' are camping, knapping and heat-treating stone, cooking in a hearth, and processing food with stone tools. In practical terms, over a period of thousands of years an accumulation of 'unfocused' discard may result in an archaeological concentration that may be identified as a 'site'. Definitions of background discard comprising only qualitative criteria do not specify the numbers (numerical flux) or 'density' of artefacts required to discriminate site areas from background discard.
Exposure incidence	The percentage of the ground (i.e., without grass, leaf litter, gravel cover) that can be seen in the overall area.
Isolated find	A single stone artefact, not located within a rock shelter, and which occurs without any associated evidence of Aboriginal occupation within

	a specified radius, such as 60 m (depending on which archaeological convention is used). Isolated finds may represent single discard events, be constituent components of background scatter, or be indicative of larger obscured, remnant and disturbed sites.
Lithic assemblage (of stone)	Collection of whole and fragmentary stone artefacts and manuports obtained from an archaeological site, either by collecting items scattered on the present ground surface (see lithic scatter) or by controlled excavation (see also 'stone artefact').
Open camp site	A formerly-used site type classification defined as an open context stone artefact occurrence (or artefact scatter), containing two or more artefacts situated no more than a specified arbitrary distance (such as 60 m) away from any other included artefact. The term *open camp site* was based on ethnographic modelling suggesting that most artefact occurrences resulted from activities at camp sites. However, in order to separate the description from the interpretation of field evidence, both open camp sites and isolated finds are now referred to as *artefact occurrences*.
Potential archaeological deposit (PAD)	A discrete location or area, defined spatially either by geomorphological, disturbance or administrative criteria, within which there is a predicted likelihood that subsurface archaeological material is present, and that this material would warrant archaeological investigation in order to determine its scientific, cultural, or statutory value and status.
Study Areas	The area for which the assessment is being undertaken.
Visibility	Visibility within exposures relates to what can be seen as a percentage of the ground within exposures.

3 ENVIRONMENTAL CONTEXT

3.1 Geology

The underlying geology of the Study Areas is dominated by Silurian sedimentary rocks (formed approximately 443 million years ago) that feature sandstone and siltstone metamorphosed to slate and quartzite (Figure 3-2). Also present is volcanic rocks including dacite and airfall tuffs (Figure 3-2). Immediately south of the Study Areas is Ordovician sedimentary rocks (formed 491 million years ago), featuring quartz-rich interbedded and laminated siltstone and mudstone. Another prominent geological unit, late Ordovician Warbisco Shale, runs centrally through O'Connor and Bruce Ridge, located South of the Study Areas**.** The underlying geology of a region can significantly influence trends in Indigenous stone tool production, procurement and distribution, with materials such as tuff, quartz, and silcrete favoured by past Indigenous groups (Flenniken and White, 1985).

3.2 Soils

The Study Areas cross two of the Great Soil Groups (Figure 3-3) and are dominated by Yellow Podzolic Soils, featuring granites and metasediments, associated with the Ginninderra's catchment. The East, South and West of the Study Areas consist of a boundary with Red Podzolic Soils. These soils are categorised in the Australian Soil Classification as 'Kurosols', generally acidic and nutrient poor soils with limited fertility and agricultural application (DCCEEW, 2012).

3.3 Landform (topography)

The Study Areas are situated within a low relief rolling topography of open hills and basal valley slopes, bounded by the gently sloping Bruce and O'Connor ridges to the south (Figure 3-4). The Study Areas feature gently sloping hills, which have experienced considerable grading associated with the construction of the existing AIS campus. Elevation ranges from 605 to 623 m above sea level within the Study Areas.

3.4 Drainage and Hydrology

Water sources are some of the most culturally significant landforms to contemporary Indigenous groups and are thus considered a key resource in the development of predictive modelling for Aboriginal archaeology (Langton, 2006). The site is drained to the north into 'Pinker Pond' via an intermittent tributary of Ginninderra Creek which runs north-south 80 m east of the Study Areas (Figure 3-4).

3.5 Vegetation

The majority of the vegetation within the Study Areas has been extensively cleared due to previous agricultural and pastoral land use, and the construction and maintenance of the existing AIS campus. Few areas of remnant vegetation are present within the study area, with vegetated areas generally consisting of regrowth and isolated old growth trees, consisting of Stringybark (*E. macrohyncha*), Yellow Box (*E. melliodora*), and Blakely's Red Gum (*E. blakelyi*). Prior to land clearing, the environment would have consisted primarily of Eucalypt woodland and dry sclerophyll forest, broadly similar to the Yellow Box – Blakely's Red Gum grassy woodland vegetation. Likewise, native grassland would have been prominent, with understorey species, especially in association with alluvial flats, including a variety of grass species such as *Poa spp*. and *Stipa sp*. (snow grass & spear grass), *Danthonia pallida* (wallaby grass), *Themeda triandra* (kangaroo grass), *Panicum effusum* (hairy panic) and *Sporobolus elongatus* (rat's tail) (Pryor, 1938). A wide range of plant species throughout the environment had practical, medicinal, and ritual significance to Aboriginal groups. These groups engaged in a complex process of exploitation and renewal, resulting in the wholesale creation of patterns of biodiversity throughout the region (Gott, 2008).

3.6 Land Use Impacts

Historical land use within the region consists primarily of agricultural activity, either modified pastoral use (i.e., grazing) and rural residential/farm infrastructure (DCCEEW, 2017) (Figure 3-1). Historical aerials demonstrate pastoral/grazing activities as the dominant land use surrounding the study area through 1961 until 1976, when construction begun on the associated stadium 500 m to the south. By 1991 most of the AIS campus had been constructed, with further developments of Eastern Bruce and the Gungahlin Drive Extension visible in 2005 (Figure 3-5).

Within the Study Areas the predominant contemporary type of land use consists of urban/intensive residential infrastructure, with smaller areas of land having been used for services, transport, and communication. Considerable recreational infrastructure, including the GIO stadium, have all been constructed in association with the AIS. The majority of the Study Areas have been extensively developed since 2005, involving considerable grading, construction of roads, car parks, and buildings (Figure 3-1).

Considerable disturbance in the Study Areas is further documented through a detailed view of historical imagery from 2007 to present day (Figure 3-6). The Accommodation Study Area appears to have been extensively disturbed prior to 1991 when the AIS campus was constructed. Imagery in December 2005 follows the demolition of a carpark adjacent to the southern border of the study area, demonstrating extensive grading and construction across the entire bounded area. The area of vegetation to the northeast of the Study Areas is comprised largely of isolated new-growth trees and low scrub, which has been cleared and then died back several times since 2005, as well as having been impacted by vehicle use in the area, as is evident in imagery from 2018. The HPTTC & Sports Dome Study Area has been extensively cleared and graded since the earliest available imagery in 2004, with only the northern section of the Study Area remaining relatively undeveloped since the construction of the AIS compound in 1991. The 2005 imagery demonstrates very little vegetation within the northern extent of the Study Area, except for isolated Eucalyptus trees. Clearance for the construction of a carpark and two adjacent buildings, one of which effectively comprised the last remaining area of undeveloped land within the current Study Area, occurred in 2005. Both buildings were demolished in 2008, resulting in further disturbance throughout the Study Areas.

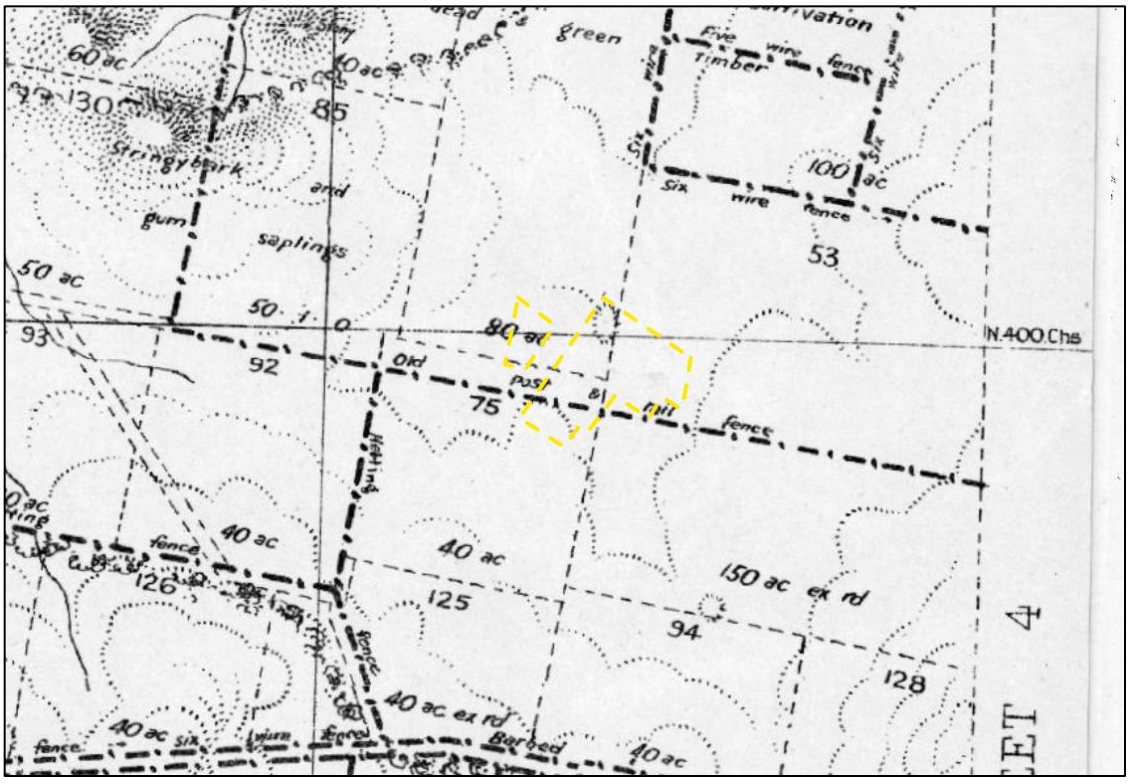


Figure 3-1 Study Areas (yellow dashed line) on 1915 Federal Territory Feature Map (from ACTmapi)

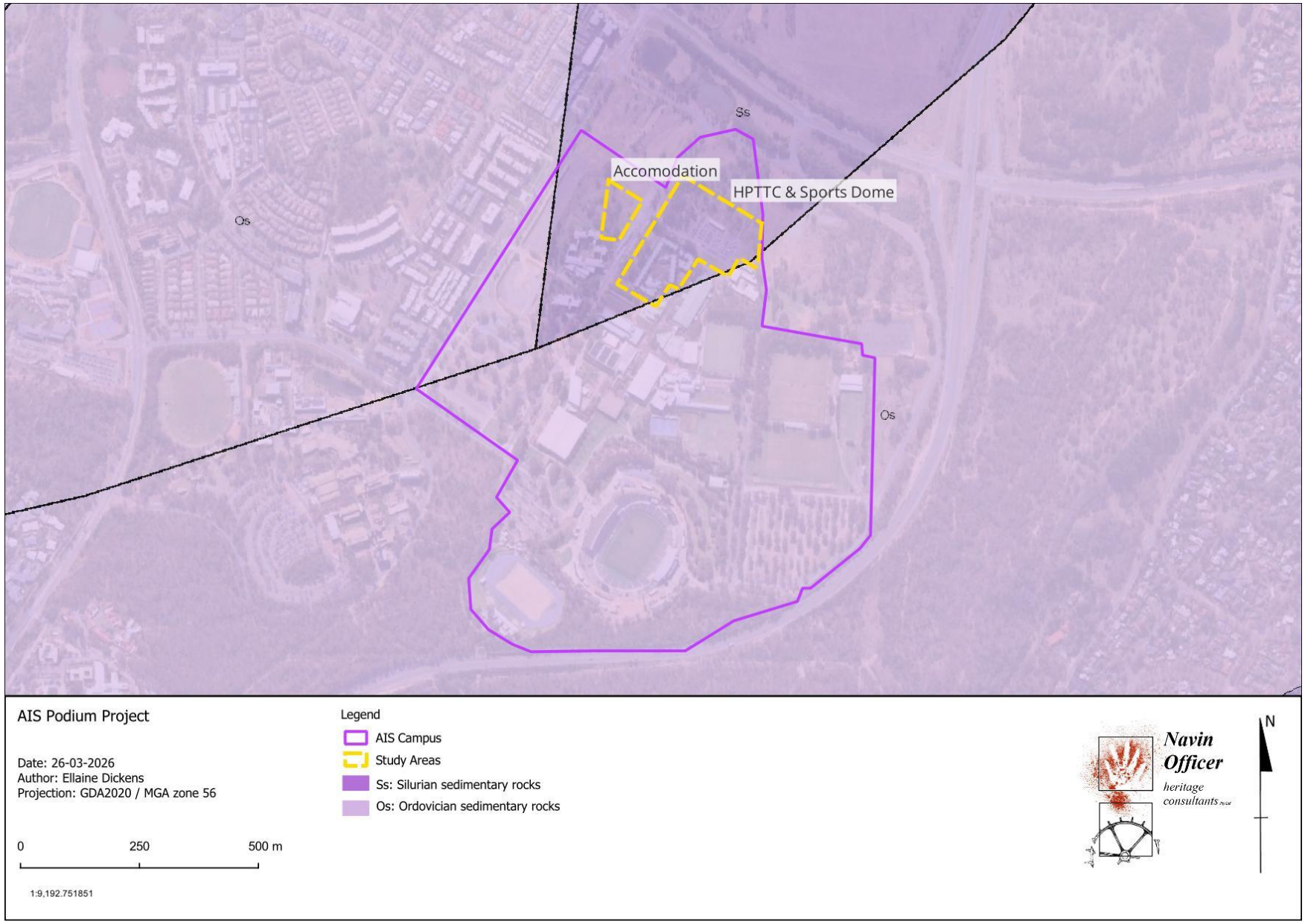


Figure 3-2 Geological units within the vicinity of the Study Areas

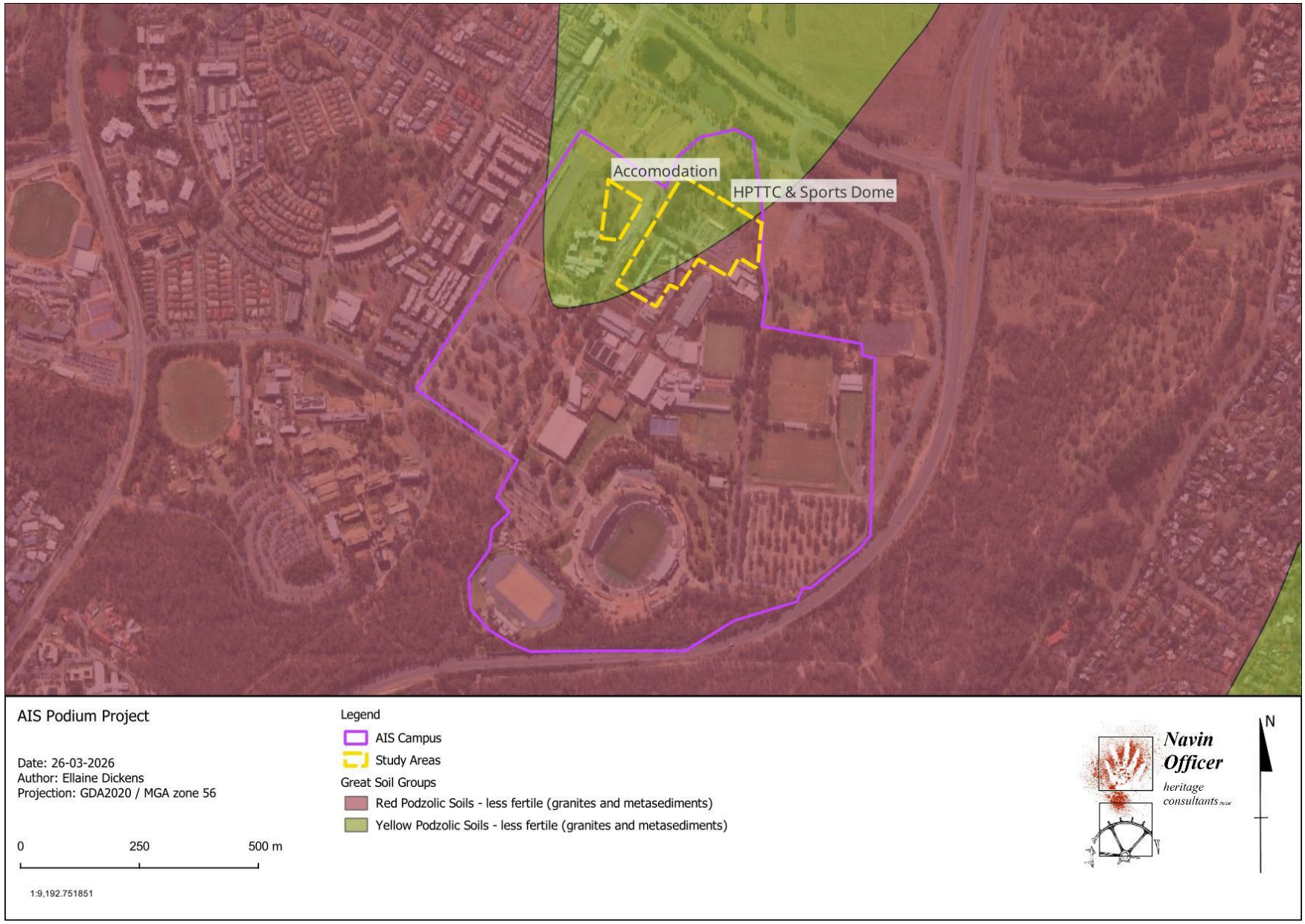


Figure 3-3 Soil Landscapes within the vicinity of the Study Areas

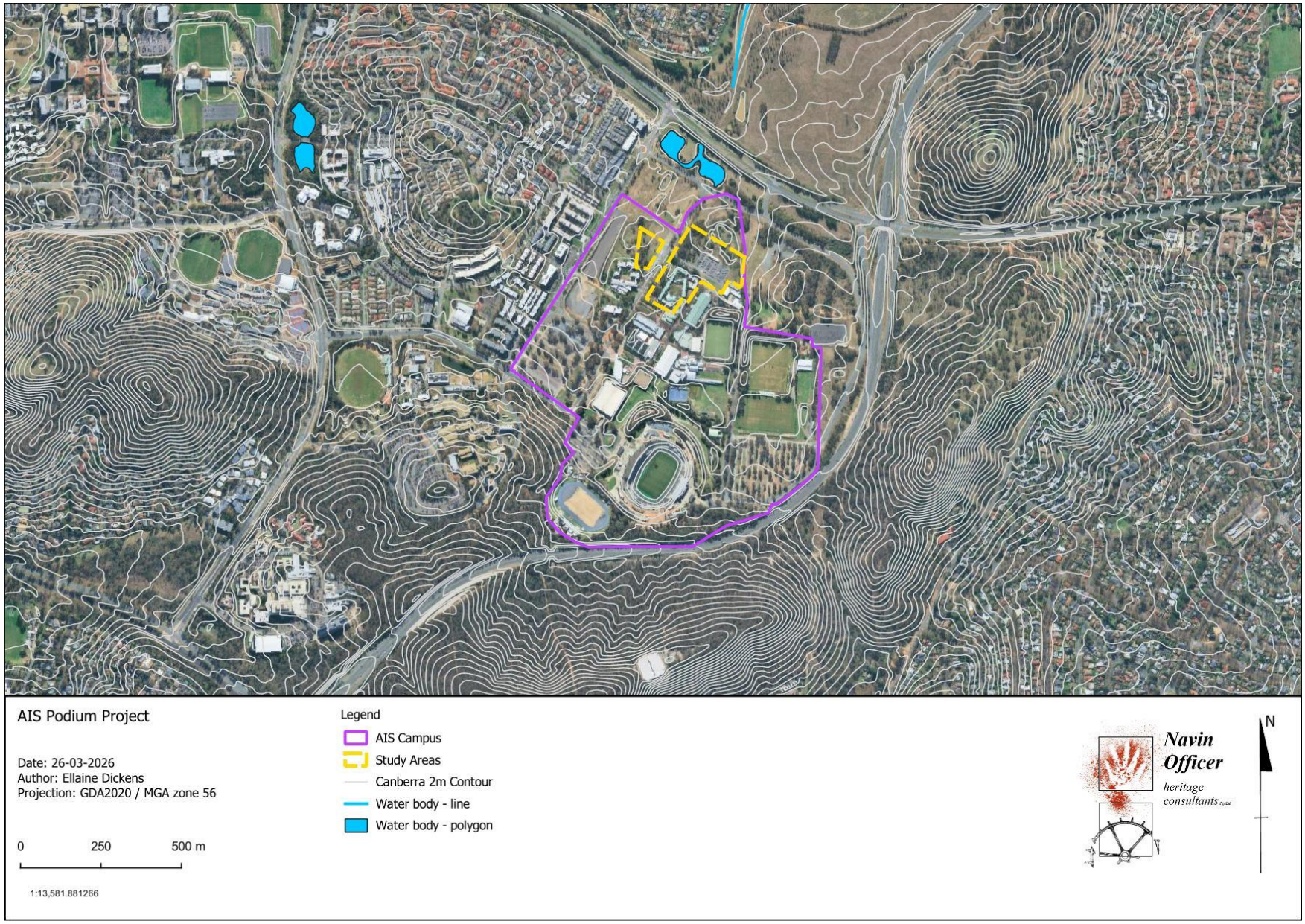


Figure 3-4 Water Courses, Topographic Contours within the vicinity of the Study Areas

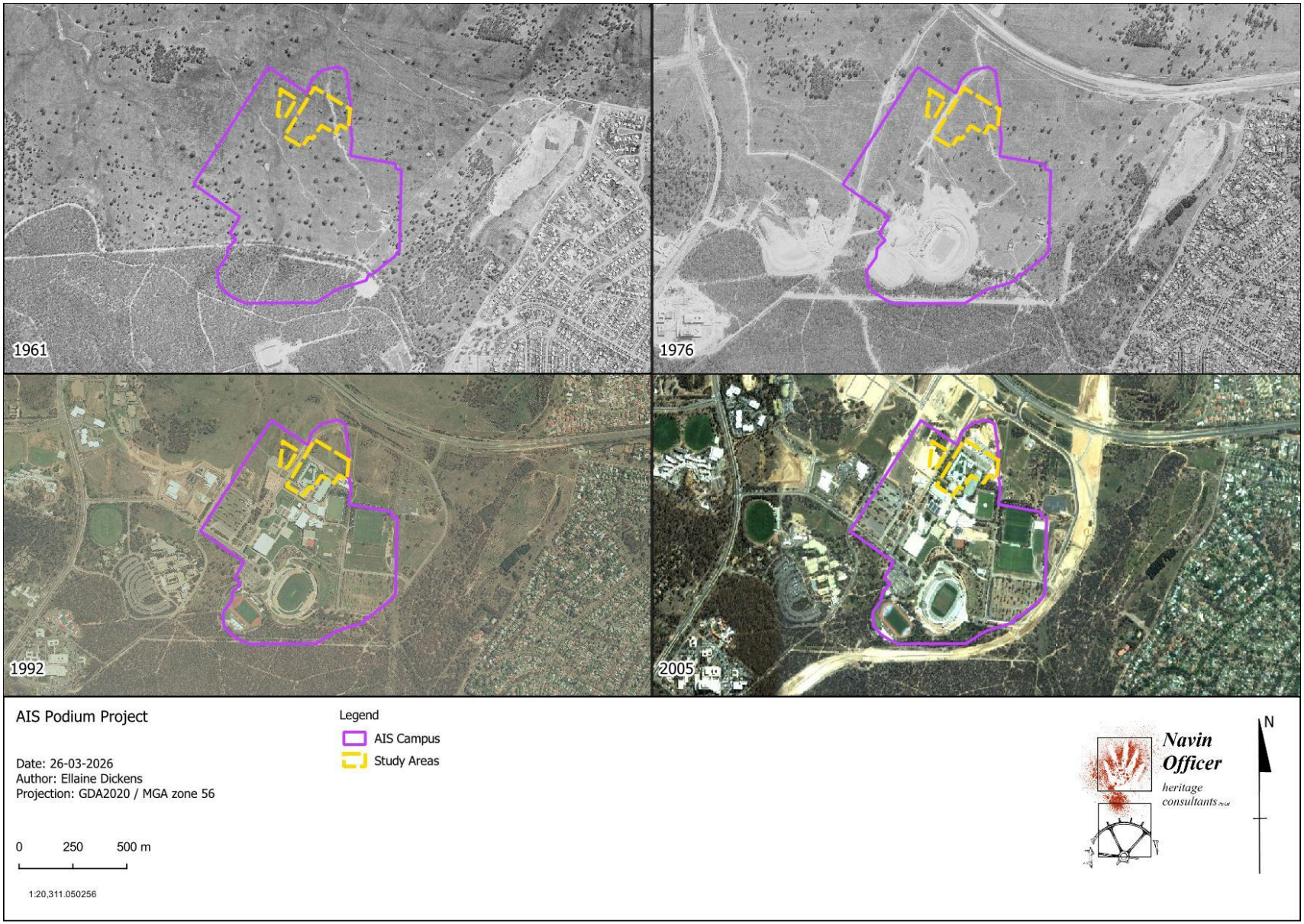


Figure 3-5 Approximate location of the Study Areas and broader landscape on historic aerials from 1961, 1976, 1992, and 2005 (from NSW Historical Imagery Viewer)



Figure 3-6 Close view of the Study Areas on aerials from 2007, 2008, 2012, and 2018 (from Google Earth Pro)

4 ABORIGINAL CULTURAL CONTEXT

4.1 ACT Ethnohistory

Tribal boundaries within Australia are based largely on linguistic evidence and it is probable that boundaries, clan estates and band ranges were fluid and varied over time. Consequently 'tribal boundaries' as delineated today must be regarded as approximations only, and relative to the period of, or immediately before, European contact. Social interaction across these language boundaries appears to have been a common occurrence.

There have been several attempts to identify historical boundaries between Aboriginal language groups and the local kinship families within these groups. Wilhelm Schmidt published the first large-scale map of the native languages of Australia in 1919, based in part on the maps published by explorer Alfred William Howitt in 1904 showing the boundaries of Aboriginal language groups in south-east Australia (Briggs, 2018; Howitt, 1996 [1904]:823). The Ngunnawal and Ngarigo language groups form part of the Yuin linguistic group, which Schmidt shows as extending southward from Sydney to Cape Howe (Schmidt, 1919).

Tindale's map of tribal boundaries attempted to reconstruct the distribution of Aboriginal language groups at the time of European contact, prior to the onset of the major disruptions and displacements that followed in the 19th and early 20th Centuries (Tindale, 1974:5). Tindale regarded the boundaries between language groups to be stable and long-standing, being affected more by climate variables than the European invaders (Tindale, 1974: 56). In regard to the ACT, the map shows the Ngunnawal language group extending across Canberra, bordering the Gundungurra language group in the north, the Walgalu and Ngarigo language groups in the south, and the Wiradjuri language group in the West.

Jackson-Nakano's map shows the kinships groups in the Canberra region from the 1820s (Jackson-Nakano, 2001). Jackson-Nakano (2001:xiv) notes that Aboriginal family groups within the Canberra-Queanbeyan district and surrounds were known by many names in the early nineteenth century, but local Europeans who knew them best referred to them as Kamberri – also spelled Kgamberry, Kamberra and even Nganbra (Ngambri). She says the heart of their country was centred on the area now referred to as the Acton Peninsular. To the Northeast, the Kamberri shared a border with the Gundungurra speaking Pajong, to the Northwest the Kamberri and Pajong share borders with the Ngunawal speaking Wallabalooa. The Kamberri share borders to the East with the Ngarigo speaking Moolinggoolah kinship group, to the West the Kamberri share a border with the Walgalu speaking Gurmal, and the Ngarigo speaking Monaro kinship group share a border to the South. Some of these kinship groups shared Country as well as borders. Jackson-Nakano asserts that the Kamberri were a multilingual kinship group by the 1820s, speaking the languages and dialects of their neighbouring groups, and at this time the families joined neighbouring friendly groups as they were pushed off their land. Some Kamberri individuals, she says, intermarried with neighbouring Ngunawal families from the 1880s, and some descendants of such marriages re-identify in modern times as Ngunnawal. While maintaining their distinct association with the ACT and surrounds, members of Kamberri-Ngunnawal families might also identify personally as Ngunawal, Walgalu or even Wiradjuri through their familial links to these other groups (Jackson-Nakano, 2001: xv).

References to the traditional Aboriginal inhabitants of the Canberra region are rare and often difficult to interpret (Flood, 1980; Huys, 1993). The consistent impression however is one of rapid depopulation and a desperate disintegration of a traditional way of life over little more than fifty years from initial white contact (Officer, 1989). The disappearance of Aboriginal people from the tablelands was probably accelerated by the impact of European diseases which may have included the smallpox epidemic in 1830, influenza, and a severe measles epidemic by the 1860s (Flood, 1980; Butlin, 1983).

By the 1850s the traditional Aboriginal economy had largely been replaced by an economy based on European commodities and supply points. Reduced population, isolation from the most productive grasslands, and the destruction of traditional social networks meant that the final decades of the region's indigenous culture and economy was centred on white settlements and properties (Officer, 1989).

By 1856 the local 'Canberra Tribe' were reported to number around seventy (Schumack, 1967) and by 1872 was recorded as only five or six 'survivors' (The Queanbeyan Age, 7 November 1872 p. 2). While the Aboriginal population had no doubt decreased, a more likely scenario is that of dispossession and the movement of people off their traditional lands. In the 1880s, the 'NSW Aborigines Protection Board' had been formed and began establishing reserves across the state, the largest of which for the Canberra region were located around Yass. While a few Aboriginal people were able to continue living in the Canberra and Queanbeyan area, by 1900 it seems the majority of families had moved to reserves near Yass (Jackson-Nakano, 2001).

Early accounts of Aboriginal lifestyles in and comparable with the current study localities describe aspects of a successful hunting and gathering economy and eventful social life and inter-group contacts. The material culture, which is partly reflected in the surviving archaeological record, included stone and wooden artefacts, skin clothing and bark and bough temporary dwellings (Flood, 1980; Huys, 1993).

The Aboriginal people of the Canberra region continue to hold strong association with the area and take an active role in retaining their connection to their traditional lands.

4.2 Representative Aboriginal Organisations

Four local Aboriginal organisations have stated an objective to represent traditional Aboriginal cultural values and interests within the ACT. These groups have been recognised by the Minister as Representative Aboriginal Organisations (RAOs) as defined under the ACT *Heritage Act 2004*. These groups are the:

- Buru Ngunawal Aboriginal Corporation (Buru Ngunawal);
- King Brown's Tribal Group Pty Ltd (KBTG);
- Mirrabei; and
- Ngarigu Currawong Clan (Ngarigu).

It is the policy of the ACT Heritage Council that the RAOs should be consulted with regard to the management of, and potential impacts to, Aboriginal cultural values and places within the ACT.

4.3 Evidence of RAO Consultation

Contact was made by email with the RAOs to inform them of this assessment and to organise representation during the field survey. Adrian Brown (KBTG) participated in the fieldwork program and represented the interests of their group in the project.

A draft copy of this report will be provided to the RAOs for comment prior to finalisation.

Table 4-1 Consultation Log

Date	Type of Contact (email, phone etc)	Group/Individual	Comment/Action
12/03/2026	Email	All RAOs	Invitation to field assessment
13/3/2026	email	Wally Bell Buru Ngunawal	Confirmed attendance to field assessment
16/03/2026	email	Arian Brown KBTG	Confirmed attendance to field assessment
18/03/2026	email	Cheryl Garland Ngarigu	James will not be able to attend field assessment

Date	Type of Contact (email, phone etc)	Group/Individual	Comment/Action
19/03/2026	Field survey	Arian Brown KBTG	Participated in the field assessment

5 ARCHAEOLOGICAL CONTEXT

5.1 Regional Overview

Stone artefact scatters are the most frequently occurring residue of prehistoric activity in the region. They may range considerably in size and density, factors that are often interpreted as an indication of intensity of the Aboriginal land use. As well, they provide insight into stylistic and technological behaviours. Such scatters are representative of one or more stages in what is termed a 'reduction sequence'. That is, the entire process from obtaining stone raw material, to manufacture of stone artefacts and to eventual discard or loss and incorporation into the archaeological record. Isolated finds are artefacts that occur without any apparently associated archaeological materials or deposit. Open scatters are defined as spatially concentrated occurrences of two or more flaked stone artefacts.

Broad distinctions may be made between sites formed as a result of general living and habitation activities and sites located in response to the fixed locations of specific resources. Occupation sites relating to the former activities are most commonly recognised by the discard of flaked stone materials in sedimentary deposits. Subsequent processes of erosion or land use may deflate or section these sediments to reveal surficial or embedded (sometimes stratified) materials. Sites formed as a result of resource location may be recognised by a range of features including the proximity of discarded stone materials to source stone materials and characteristic extraction and use marks upon stone or wood materials, that is, quarries, hatchet grinding grooves and scarred trees.

The wider regional pattern of Aboriginal occupation site occurrence within the ACT is one of higher site size and frequency in areas proximate to major permanent creek lines with a reduction in site size and frequency around less permanent water sources. While sites have been found to occur throughout topographic and vegetational zones, there is a tendency for more of the larger sites to be located in proximity to creeks, wetlands and proximate parts of valley floors. A trend for larger sites to be near major water sources, but avoiding frost drainage hollows, was noted at a regional level by Flood (1980). Elsewhere in the Canberra region high site and artefact frequencies have also been correlated with the geographic occurrence of specific resources particularly, stone procurement outcrop locations.

Scarred trees may be the result of Aboriginal uses of bark and/or wood materials. Various other activities, including the retrieval of honey and other foodstuffs may also result in distinctive 'toe hold' and extractive scars. Scarred trees are sparsely documented in the wider Canberra region where suitable mature woodland has been retained. The identification of scars as Aboriginal in origin is problematic for a number of reasons. A variety of natural processes such as fire damage, lightning strike and branch tears may mimic the scars formed by Aboriginal bark removal. In addition, bark was also a building material favoured by early European settlers, and there are instances where Aboriginal people were employed to strip bark for European buildings. The distinction between Aboriginal and historic scarred trees is therefore often difficult.

5.2 Related Reports and Information

Navin Officer (1994) was contacted by Lend Lease to provide a cultural heritage assessment (CHA) for Block 9, Section 35, Bruce ACT, located approximately 360 m west of the current Study Areas. A comprehensive cultural resource survey located two Aboriginal sites, Bruce Site 1 (BS1), an artefact scatter consisting of six stone artefacts and Isolated Find 1, an isolated white quartzite flake. Artefacts at Bruce Site 1 consisted of five grey-green chert artefacts, one core and four flakes/blades, and one grey chert flake featuring secondary retouch. Chert was identified as a naturally occurring resource within the study area. The degree of land clearance and land surface disturbance within the study area indicated that the area was of low archaeological potential. Isolated Find 1 was determined as having low archaeological significance in a local context.

Navin (1995) conducted a CHA of Section 2, Bruce, ACT on behalf of Ron Bell & Associates, for the purpose of urban and commercial development, located approximately 250 m northwest from the Study Areas. This assessment involved both desktop analysis and physical survey of the Section 2 study area. Background research indicated the presence of potential historical sites related to agricultural and pastoral use of the land, as well as five previously recorded Aboriginal sites by Marika Behr in

1992, consisting of one artefact scatter and four isolated finds. No historical sites or features were identified in the study area. The artefact scatter and two of the isolated artefact sites were reidentified during survey. The artefact scatter was comprised of material and artefact types typical of the region and was 'unlikely to be associated with an undisturbed archaeological deposit', resulting in a classification of 'low significance' (Navin, 1995:14). Likewise, the remaining isolated finds were determined to be of low archaeological significance.

Williams Barber Archaeological Services (1996) were conducted by OPTUS to complete a preliminary cultural resource survey regarding the route of a proposed fibre optic cable from the intersection of Randwick Road and the Barton Highway, Mitchell, to Battye Street Bruce in the ACT, located approximately 500 m west of the current Study Areas. The surveyed area consisted of a five metre road corridor and immediate surroundings. No Aboriginal archaeological sites were identified during the survey. Further archaeological analysis was recommended for identified sites associated with the corridor prior to further development.

Officer (1997) was commissioned by Maunsell Pty. Ltd. to conduct a staged CHA of the known and potential impacts of the construction of the proposed John Dedman Drive (now Gungahlin Drive) on cultural heritage places and values. A total of six Aboriginal sites were identified among the three potential route options for John Dedman drive, with one being located approximately 700 m south of the current Study Areas. This site, O'Connor Ridge 1, was an open artefact scatter consisting of three milky quartz flakes. Two of the flakes were broken, with potential secondary flaking evident on one of the flakes. The site had been disturbed on account of fencing, vegetation clearing, track grading and maintenance, and was determined to have minimal research potential and low significance.

'Belconnen's Aboriginal Past', written by Peter Kaibala in 1997, details elements of Aboriginal occupation in the ACT, specifically around Belconnen. Elements of the ethnohistorical record are supplemented by recorded sites from the Belconnen and inner-west area. The study lists two sites (Sites 2 & 3) located 500 m and 600 m northeast of the current Study Areas respectively. Site 2 consists of a jasper flake identified south of Ginninderra Drive, and Site 3 consists of a grey chert flake located north of Ginninderra Drive. Both artefacts were categorised by Kaibala as 'local low-grade material' (1997:41). Two more sites, Site 11 and Site 16, were recorded ~1.3 km southwest of the current Study Areas in the suburb of Bruce. Site 11 consists of three recorded artefacts: raw chert material, one grey chert flake and what is described as a 'meta/volcanic chopper', a smooth river pebble with several negative flakes. Site 16 is a medium density artefact scatter consisting of one fine volcanic core, two split dark volcanic cobbles and 14 flakes comprised of quartzite, grey silcrete, grey chert, fine volcanic and quartz material. These sites are considered representative of site types found across the Canberra region and are indicative of low-intensity occupation and ephemeral land use.

NOHC (2000) conducted an archaeological investigation of Block 9, Sections 5 & 32, Block 10 Section 3 and part of Block 1, Section 85 Bruce ACT as part of a preliminary assessment. The development area covered lands situated between the AIS and Fern Hill Technology Park (now Fern Hill) in Bruce, ACT, located approximately 1.15 km west of the current Study Areas. Five previously recorded Aboriginal sites occurred within the study area including three isolated finds (Sites 1 & 2 and IF1) and two open artefact scatters (Site 4 and Bruce Site 1) containing six and five artefacts respectively. None of these previously recorded sites could be located during a secondary survey in March 2000. No indications of disturbance were present at this time, and it was assumed that the sites remained concealed by grass cover. One new site (Bruce Site 8) was recorded during the survey. This site is an open scatter of six stone artefacts, situated on the mid-slopes of a low spur, present in the eroding surface of a cattle track. All artefact types and materials were common to those found in the Canberra region. The removal of identifiable surface Aboriginal artefacts from known site locations was recommended, as well as a program of vegetation clearance to aid with the identification and collection of further exposed artefacts.

NOHC (2001a) were commissioned by WP Brown & Partners Pty Ltd to complete a preliminary CHA of the Aranda Residents Group option for the southern extension of Gungahlin Drive in Belconnen, ACT. The area of investigation consisted of ~110 ha of land located between north and south of Belconnen Way, including the western fall of Black Mountain and Bruce Ridge, with the northern limit of the area of investigation located approximately 600 m from the current Study Areas. The preliminary assessment identified five previously located sites consisting of two Aboriginal artefact scatters (Belconnen 1 and Belconnen 17) and three isolated finds (IF1, IF2, and CDIF1) that were previously

located at the southern extent of the investigation area. No artefacts were identified during the re-survey of these sites. No further sites were identified during a field survey of the investigation area. It was determined that sites consist largely of low-density artefact scatters located on relatively flat sections of ridgeline crest, especially on shoulders or saddles. A comprehensive archaeological survey of the proposed alignment was recommended prior to the proposed development, especially in areas of identified archaeological potential or in association with known Aboriginal sites.

NOHC (2001b) were commissioned by Brown & Partners on behalf of Roads ACT to conduct a CHA of a 10.5 ha area of land situated on basal slopes at the southwestern end of Bruce Ridge and the northeastern corner of the Canberra suburb of Aranda. This area is located approximately 1.2 km southwest of the current Study Areas. No previously recorded artefacts were identified, with one Aboriginal isolated find (a single stone artefact) identified during the field survey. The isolated find, Caswell Drive Isolated Find 1, was located 1.15 km southwest of the current study area and was assessed as having low scientific value. Surface collection was recommended in the case of development unavoidably impacting this site. Subsurface testing was not deemed warranted given the nature of the site and present landform.

NOHC (2002) were commissioned on behalf of the ACT Department of Urban Services – Territory Planning Branch to conduct a preliminary CHA of an area of land located at Glenloch Interchange in the ACT, as part of the corridor for the proposed Gungahlin Drive Extension, located four kilometres from the current Study Areas. No previously recorded sites were identified within the Glenloch Interchange study area. Four Aboriginal sites and two isolated finds were identified during the field survey. Sites G1, G2, and G3 are low density artefact scatters consisting of quartz and chert artefacts, found on valley floors, basal slopes and low spur lines, consistent with common site types found in the Canberra region. Site G4 is a moderately sized scatter of artefacts (40+) identified in a 30 x 10 m area of sheet erosion on basal slopes adjacent to the southern bank of Black Mountain Creek. The density of artefacts was determined to be 'probably indicative of further artefacts being present subsurface' in associated north-facing basal slopes bordering Black Mountain Creek (NOHC, 2002:10). Surface collection was recommended for sites G2, G5, and G6 prior to works potentially impacting these sites. A documented collection of artefacts, potentially extended to salvage collection, and an assessment of potential archaeological deposit was recommended prior to proposed developments impacting sites G1, G3, or G4.

Saunders (2003) was commissioned by Capital Planners ACT Pty Ltd to conduct an Aboriginal and European CHA for Blocks 4 and 5, Section 46 and Blocks 6, 7 and 8, Section 47, Bruce. This was as part of the Australian Sports Commission's proposed redevelopment of the Australian Institute of Sport (AIS) complex at Bruce, ACT, consisting of the area between Leverrier and Braybrooke Streets west and northwest of the AIS complex, located 300 m from the current Study Areas. One Aboriginal archaeological site and one European historical site were recorded during field survey. The European site AIS-H1 consists of three old wooden fence posts with wire netting more recently attached. This site was considered to pose no further heritage constraints to the proposed development The Aboriginal site AIS-A1 consists of a single volcanic stone flake located in a broad drainage depression near the northern section of Braybrooke Road. The artefact was considered 'unlikely to be *in situ*' with 'the potential for additional artefacts occurring in the area considered low' (Saunders, 2003:13). It was recommended that two options could be followed for site AIS-A1, consisting either of preservation of the artefact *in situ* with the erection of a five-metre protective curtilage, or a program of archaeological investigation and salvage. Both options were to be considered in consultation with the ACT Heritage Council and Local Aboriginal Land Councils.

NOHC (2003a; 2003c) were commissioned on behalf of the ACT Department of Urban Services to conduct a CHA for two proposed intersections for the Gungahlin Drive Extension, located 2.1 km southwest from the current Study Areas. Four Aboriginal sites were identified within the combined intersection study area, consisting of two isolated finds (IF1 and CDIF1) and two low density artefact scatters (B1 and B17). IF1 and CDIF1 consist of two isolated milky quartz flakes identified on forested basal slopes adjacent to drainage lines. Site B1 was originally recorded in 1995 by Officer as six artefacts in areas of exposure on a spur-line crest. However, in a 2001 survey NOHC (2001a) were unable to reidentify any artefacts at the site. The spur-line crest was still considered an area of archaeological potential. Site B17, also originally recorded by Officer in 1995, is a low-density artefact scatter located on basal slopes adjacent to a tributary approximately 50-90 m north of the site B1. No artefacts were reidentified during the 2001 NOHC field survey. A programme of subsurface

archaeological testing was recommended to determine the nature and significance of surviving Aboriginal heritage at the locations of IF1 and B1 as well as its associated potential PAD.

NOHC (2003b) were commissioned on behalf of the ACT Department of Urban Services to conduct a CHA for the proposed Gungahlin Drive Eastern Alignment, a development located 600 m east of the current Study Areas. Three Aboriginal recordings, and a single historic recording were identified within the development area. The historical site, a section of *Old Weetangera Road*, was assessed as falling below the threshold of the ACT heritage significance criteria due to the relatively recent construction and poor preservation. Aboriginal site O'Connor Ridge 1 is located 850 m southeast of the current Study Areas and consists of a low-density open artefact scatter of milky quartz flakes. Sites PAD 1 and Isolated Find 3 are both located 800 m north of the current Study Areas. PAD 1 consists of a low rise or spur extending across a valley floor grassland context, located 50 south of an ephemeral watercourse. Site Isolated Find 3 consists of a light green rhyolite or chert-like broken flake recorded by Officer in 1997; however, the site could not be reidentified during survey. Surface collection was recommended for O'Connor Ridge 1, should it be directly impacted by developments, and subsurface testing was recommended for IF3 and PAD1 to more accurately identify the extent and archaeological significance of subsurface material.

Saunders (2004a) was commissioned on behalf of Capital Planners Pty Ltd to conduct a CHA for proposed additional parking areas at Calvary Hospital in Bruce, ACT, located 1.5 km southwest of the current Study Areas. No Aboriginal sites, areas of potential archaeological deposit (PAD), or European historic sites were located in the study area. A monitoring program of vegetation clearance and topsoil removal was recommended for the future development works.

Saunders (2004b) was commissioned on behalf of Young Consulting Engineers to conduct a CHA of Diddams Close Park, Belconnen and Block 28 Section 8, Bruce, the latter being located 160 m away from the current Study Areas. Two Aboriginal sites, Bruce IF1 and Bruce IF2 were identified during the survey the Block 28 Section 8, Bruce. Bruce IF1 consists of an isolated grey chert flake located on a gently inclined basal slope, 140 m east of an ephemeral drainage line. Bruce IF2 consists of a single milky quartz flake located on an unformed vehicle track, 120 m southeast of Bruce IF1 and 180 m east of the ephemeral drainage line. Both sites were assessed as having low archaeological significance, with Saunders stating that 'overall, the block has low Aboriginal archaeological potential' (2004b:1).

NOHC (2004) collated all Aboriginal heritage recordings made within the Gungahlin Drive Extension development area since the Preliminary Assessment until 17th September 2004. Artefacts found within 2.5 km of the current Study Areas are presented in a table below (Table 5-1).

Table 5-1 List of sites recorded during GDE development within 2.5 km of current Study Areas

Site Name	Site Type	Number of recorded Artefacts	Landform	Approximate distance to current Study Area
Bruce Ridge Isolated Find 3	Isolated find	1	Crest, upper slope	1.28 km south
Bruce Ridge Isolated Find 4	Isolated find	1	Spur line, mid slope	1.8 km southwest
Bruce Ridge 4	Artefact scatter	7	Crest	980 m south
Bruce Ridge 5	Possible modified tree	N/A	Mid slope	1.75 km southwest
Ochre Occurrence 1	Ochre nodules within road base	No Aboriginal artefacts present	Gully	975 m south

Site Name	Site Type	Number of recorded Artefacts	Landform	Approximate distance to current Study Area
Caswell Drive Isolated Find 2	Isolated find	1	Upper slope, spur line	1.91 km southwest
Caswell Drive Isolated Find 3	Isolated find	1	Drainage line feature	2.3 km southwest
Black Mountain Fire trail 3	Artefact scatter	7	Saddle	1.92 km southeast
Black Mountain Fire trail 6	Artefact scatter	20	Saddle, mid slope	2.03 km southwest
BHDS 3	Artefact scatter	2	Upper slopes, ridgeline crest	2.29 km northeast

Saunders (2005) was commissioned on behalf of Redbox Design Group Pty Ltd to conduct an archaeological assessment of the proposed site for a future Radford College Junior School, located 1.28 km west of the current Study Areas. No Aboriginal sites were located within the study area, resulting in the area being assessed as having low archaeological potential, with no further heritage restraints considered for the proposed development.

NOHC (2006) was commissioned by Brown Consulting Pty Ltd to provide a CHA for a several proposed transit way routes, the closest of which (the Northern Route) is 630 m southeast of the current Study Areas. An inspection of the Northern Route identified ten Aboriginal sites, including nine artefact scatters and one scarred tree, and four previously recorded European sites (including the Bruce Stadium and National Indoor Stadium precinct, located within the current Study Areas). After the course of field survey and desktop survey, ten new Aboriginal sites and one new European site were identified. Avoidance of sites where possible was recommended, and a system of field survey was recommended following the initial clearing of all routes prior to full development. Sites to be impacted by the development were recommended to be salvaged in accordance with the heritage management plan endorsed by the Heritage Council in consultation with representative Aboriginal organisations. A program of subsurface testing was recommended prior to developments impacting the Bruce Ridge PAD site.

Saunders (2007) was commissioned on behalf of CBRE Consulting to undertake an Aboriginal Heritage Assessment for a proposed student accommodation at the University of Canberra in Bruce, located approximately 1.8 km west of the current Study Areas. No Aboriginal sites were identified within the study area and no further management recommendations were made.

AASC (2008) and CHMA (2008) were commissioned by Daly International to carry out a cultural heritage survey and assessment of a proposed phone facility works area and associated fibre optic conduit route in West Lyneham, located approximately 1.57 km northeast of the current Study Areas. One previously identified Aboriginal heritage site was located in the study area, site NLAS1 which consisted of a low-density artefact scatter featuring milky quartz and fine-grained siliceous flakes in an area of shale exposure on a crest. One new site was identified through field survey, site LR1, which consisted of an isolated fine-grained siliceous artefact identified in a disturbed spoil heap on the eastern mid slopes of Lyneham Ridge. Both sites were assigned low archaeological significance, and a detailed salvage collection program was recommended for both sites prior to the proposed development work. CHMA undertook this salvage program in 2008, with all the known artefacts having been collected as per the recommendations of the AASC report (2008).

Umwelt (2014) was commissioned by Brown Consulting (ACT) to conduct a Heritage Assessment Report for the construction of a new hospital located at the University of Canberra, located 2.23 km

northwest of the current Study Areas. An isolated small volcanic flake (UCPH IF 1) was identified in a planted wood row adjacent to a vehicle track 40 m north of a minor drainage line. Site UCPH IF 1 was identified to not be in association with any areas of PAD and did not satisfy any of the heritage significance criteria outlined in the Heritage Act (2004). The project area was considered unsatisfactory for heritage significance criteria for historical heritage. This was on account the prevalence of land disturbance associated with agricultural and pastoral activity within the study area prior to the property having been leased to the University of Canberra.

Biosis (2015) were commissioned by Purdon Planning to conduct a CHA of undeveloped areas on the University of Canberra campus, in West Belconnen, located approximately 1.5 km west of the current Study Areas. Field survey identified 10 previously unrecorded sites within the study area, consisting of a scarred tree, six isolated finds, two artefact scatters, and an artefact scatter and PAD. No proposed developments existed at the time of the assessment. Proposed impacts to any site would require approval from ACT Heritage, and require a program of salvage collection, and/or subsurface testing to determine impacts for the area of PAD.

Umwelt (2016) was commissioned by Brown Consulting (ACT) to conduct an updated Statement of Heritage Effects (SHE) for the construction of a new hospital located at the University of Canberra with updated information provided by Biosis's (2015) assessment of the UC Campus area. The two newly identified sites in the study area, UC1 and UC2 (both isolated finds), were both recommended to be salvaged. Representatives of Aboriginal organisations expressed their wish for further survey, salvage, and monitoring for proposed works.

In 2019 ngh completed a detailed environmental constraints report for the whole of the AIS Brice campus. This report summarised several other assessment s that had been undertaken for the ASC holdings including the AIS precinct including Marshall and Pearson 2010, and the individual building assessments for the Basketball and Netball Centre, the Combat Centre and the Gymnastics Centre (Phillip Leeson Architects 2016a to c). The ngh report identified that there was a dead tree with t possible scar within the AIS precinct but gave no further detail on the location or description of this tree so it is unknown where this tree is or if it is still extant. No scarred tree recorded is on the ACT Heritage sites inventory. There are two trees identified as significant within the ngh report within the current project area, however these trees are trees *protected* under the ACT *Tree Protection Act 2005* (TP Act) but do not include scarred trees.

CHMA (2020) were commissioned by SMEC to conduct a CHA and SHE for the O'Connor Reservoir Upgrade, in the Bruce Ridge Nature Reserve located approximately 1.32 km south of the current Study Areas. Previously recorded sites ORF3, ORE2, and ORE3 were located within the proposed impact area but were not successfully relocated during the field surveys. Two newly recorded sites were identified during the field survey, an isolated find (O'Connor Ridge 2) and possible glass artefacts considered by the RAOs to be possible contact items. The latter of these sites were assessed as a modern glass shatter given their immediate proximity to the reservoir site in an area of high disturbance, resulting in their assessment of no heritage significance. O'Connor Ridge 2 consists of an isolated silcrete flake in a disturbed mound of 'push' created for soil mitigation along the alignment on a mid-slope. This site was determined to have low significance, given the disturbance in which it was identified, and salvage program was recommended prior to works impacting the site. A year later a proposed upgrade to the Reservoir required a revised CHA and SHE for the site, and no new sites were identified (CHMA, 2021).

On behalf of the ACT Heritage Advisory Services panel and the Friends of Aranda Bushland Group, GML (2022) was engaged to conduct a preliminary CHA for a proposed bushland walking track in Aranda, located approximately 3.8 km south of the current Study Area. Four new sites were identified during the field survey, AIA1 to AIA4, all isolated finds. Minimal impacts were proposed by the development as the maintenance of the proposed track would not involve raking or considerable ground disturbance. This resulted in no impacts proposed to any of the identified Aboriginal sites. Monitoring for further tree removal was recommended.

Past Traces (2024) were commissioned by PEET Bruce Pty Ltd to undertake a CHA and SHE for the proposed PEET Bruce Development on Part Block 11 and all of Blocks 12,13,14 Section 3, Bruce ACT, located approximately 1.76 km northwest of the current Study Areas. Fieldwork identified five previously unrecorded sites and two areas of PAD within the project area. Isolated finds UC2/4 and

UC2/5 were assessed as having low cultural and scientific significance on account of their provenance in an area of high disturbance with high previous impacts. As a result, a program of collection was recommended for these two sites. A detailed program of subsurface testing was recommended for proposed development impacts on areas of PAD (UCPAD1 and UCPAD2), with further mitigation measures recommended, including fencing. Fencing was recommended for artefact scatters UC2/1, UC2/2, and UC2/3, despite being located outside of the area of proposed impacts.

5.3 Previously recorded sites

There are four previously recorded Aboriginal sites within 800 m of the Study Areas.

Bruce IF1

208735, 607867

This site is located 198 m east of the Study Areas and was recorded in 2004 by Archaeological Heritage Surveys (AHS). The site consists of an isolated stone artefact located on a very gently inclined basal slope. The site is at the northern edge of an unformed vehicle track running east from a bicycle path, approximately 80 m east of an ephemeral drainage line. The artefact is a single grey chert flake measuring 30 x 24 x 5 mm.

Bruce IF2

208815. 607770

This site is located 320 m east of the Study Areas and was recorded in 2004 by Archaeological Heritage Surveys (AHS). This site costs of a single milky quartz flake (24 x 19 x 5 mm) located on the unformed vehicle track approximately 220 m southeast of the study area near the top of a gently inclined slope and approximately 180 m east of the ephemeral drainage line.

Bruce Ridge 4 (BR4)

208341, 607108

This site is located 738 m south of the Study Areas and was recorded by NOHC in 2004. The site consists of an open scatter of at least seven artefacts located on the crest of a low spurline between two shallow drainage gullies. The artefacts were exposed as a consequence of recent tree felling and associated mechanical vehicle disturbance. The approximate area in which surface artefacts occur is 60 x 50 m. The site was salvaged by NOHC in 2006 for the GDE heritage impact mitigation program and 18 artefacts were identified (NOHC, 2006).

Bruce Ridge 6 (BR6)

208764, 607206

208855, 607249

This site is located 705 m southeast of the Study Areas and was recorded by NOHC in 2005 The site consists of a scatter of at least 8 artefacts located in a highly disturbed context on either side of an excavated drainage line that cuts across the easement from the AIS carpark to the eastern side of the GDE easement. The recorded extent of the site is 80 x 30m with the potential to be larger. The site was salvaged by NOHC in 2006 for the GDE heritage impact mitigation program and 10 artefacts were recovered (NOHC, 2006).

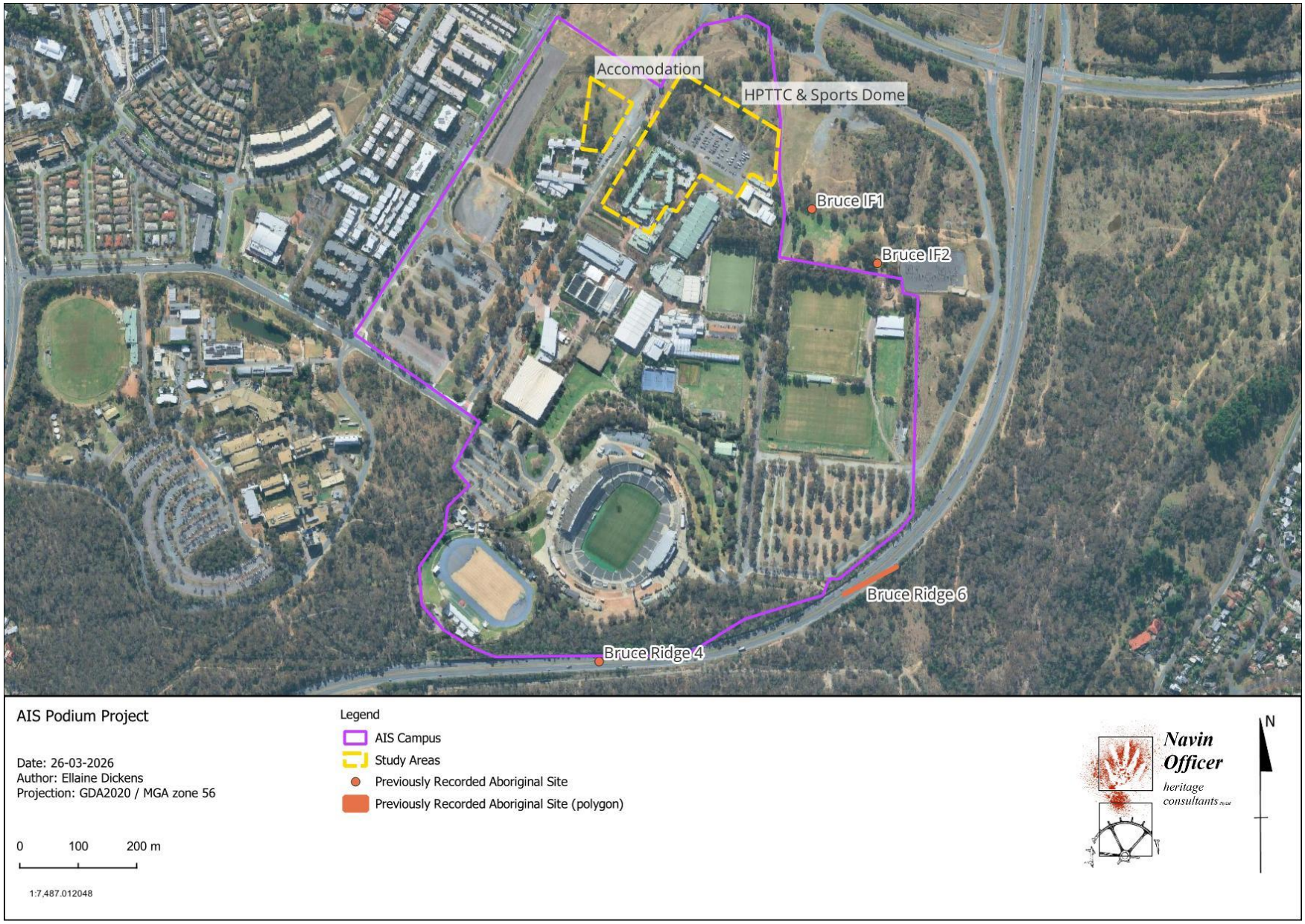


Figure 5-1 Previously recorded Aboriginal sites within the vicinity of the Study Areas

5.4 Predictive Archaeological Model – Aboriginal Heritage

As a result of the archaeological surveys undertaken to date in the local area and ethno-historical data from the local region and south-eastern Australia more broadly, qualitative observations regarding Aboriginal site location parameters may be summarised as follows:

- The most commonly recorded site types are surface and subsurface scatters of stone artefacts.
- Artefact densities in open artefact scatters may vary considerably.
- Open artefact scatters are most likely to occur on relatively level ground in locally well-drained contexts, either spur line crests, terraces or elevated creek banks in valley floor contexts, low gradient crests and streamline banks in mid valley slope contexts, and level crests, shoulders and saddles on major ridgelines and spurs.
- The majority of open artefact scatters, (particularly larger sites), are situated adjacent to, or in close proximity to, creek flats or valley bottom contexts, frequently on low gradient basal slopes adjacent to streams or wetlands.
- Open artefact scatters which contain relatively large artefact assemblages and densities occur most frequently and consistently within 100-150 m of major and relatively permanent drainage lines.
- Open artefact scatters which occur away from the valley basal slopes and major tributaries tend to be small and sparser. A preference for major confluences and valley constrictions may be indicated.
- Subsurface deposits of artefacts will not necessarily be associated with visible surface artefacts.
- Most sites located away from major water sources will consist of low-density scatters of artefacts and mostly contain less than ten visible surface artefacts.
- Artefacts may occur wherever surface exposures of exploitable rock occur, rock sources which are known to have been locally exploited include chalcedony, chert, quartz, and fine-grained igneous rocks such as fine-grained porphyry and fine grained intrusives within granodiorite. The occurrence of high-grade chert does not necessarily indicate Aboriginal exploitation (Officer and Navin, 1992).
- Aboriginal scarred trees may occur anywhere old-growth trees survive. It is estimated that in the Canberra/Queanbeyan region trees bearing Aboriginal scars would need to be in the order of 140 to 150 years old.

6 HISTORICAL CONTEXT

6.1 Regional Overview

The Canberra region has a history of European settlement dating back to the 1820s when the first settlers and squatters moved into the area in the wake of early exploratory undertakings in search of the Murrumbidgee River. From this time through to the mid-1830s most of the productive country was acquired by squatters and absentee landholders and by the 1850s substantial properties were being established by the likes of Joshua Moore and Robert Campbell (Williams and Barber, 1995: 7; Navin, Officer and Legge, 1996:13).

Large estates were established around the Hume area during the 1820s. This included Robert Campbell's 'Duntroon', which extended from the Molonglo to the Hume valley, and the 'Jerrabomberra' property, established by John Palmer who arrived with the First Fleet (Lea-Scarlett, 1968: 10). Land use over this period was focused upon grazing, although dairying is known to have been undertaken at Jerrabomberra by the early 1830s (Lea-Scarlett, 1968: 11).

Following the establishment of the large land grantees whose land covered the best grasslands on the river flats and basal valley slopes, the pattern of land selection was characterised by the purchase or selection of small parcels of forested land, following the Robertson Land Act of 1861. The land selectors who applied for land under the Robertson Land Acts were often people of limited financial resources or no government contacts, and often locals whose occupations and families were connected to the labour force of the larger estates. Their landholdings were often small and conditionally purchased, with freehold title only gained after completion of all payments. During the payment period, various conditions were often specified, including the completion of improvements such as fencing and clearing, and a period of residency on the block.

Compared to the original government grants, the land subject to selection was mostly more marginal and forested, and often poorly watered in upper creek catchments. In many cases the smallholdings proved uneconomic, and selectors could not support their payments and consequently lost or sold their holdings. The buyers were frequently the neighbouring large estate holders who retained the best land, the best water sources and could raise sufficient capital.

During the latter half of the nineteenth century, there was a continuing consolidation of settlement throughout the region. George Campbell, the fourth son of Robert Campbell, came to Duntroon in 1855 and added to the large holdings left to him by his father by purchasing land north of Canberra. George resided at Duntroon until 1876, when he went to England and lived until his death in 1881. Duntroon was managed by Campbell's nephew, Frederick, until the Commonwealth resumed the property (Gillespie, 1991).

The ACT was established from land ceded by New South Wales in 1911. Initial development of the ACT was slow, and management of the existing NSW infrastructure was continued by the Commonwealth with only gradual changes. The last 'freehold' properties were not resumed until the 1980s. Names already in use in 1911 such as natural features and locality names were retained. Although some localities have disappeared as a result of urban development, their names have usually been retained in some form.

6.2 The Study Areas

The Study Areas fall within the former Parish of Canberra, County of Murray. Portions 54 (80 acres) and 75 (40 acres) formed art of an estate comprising six portions totalling 400 ½ acres originally selected by P. Shumack Junior. Peter 'Big Pete' Shumack (Jr) was born in 1844 and was part of the Shumack family that settled at modern-day Lyneham (Figure 6-1). Peter's father John Schumack had landed in Sydney just three years prior (Schumack, 1967:1).

Peter married Elizabeth Jane Gillespie in 1869 and had two children. Elizabeth died in 1872, and Peter was remarried to Elizabeth 'Betsy' Williams a year later, with whom he had eleven children. Peter's brother Joseph and uncle Peter (Senior) bought blocks of land in Upper Canberra, and in 1876 Joseph

converted the house he had built on his block into one of the first hotels to be run in Canberra, the 'Canberra Inn' (Hall Heritage Centre, website) (now the Old Canberra Inn).

Peter's (Jr) first property was known as 'Fern Hill' (with the homestead located near the intersection of what is now Mackennal Street and Archibald Street, Lyneham) (Figure 6-2). Peter was an avid cricket player, and some of his paddocks were used for occasional cricket matches between his Canberra side and Ginninderra's (Hall Heritage Centre, website). Peter eventually sold some of his land to George Southwell, with his son Edward farming the remainder (Schumack, 1967:3).

In 1958 the Fern Hill Property was to be demolished for the development of the suburb of Lyneham. The Fern Hill Park and playground located 300 m west of the Study Areas is named after this property. At this time the Canberra Times reported that the original slab house built by Peter 100 years prior was intact when the homestead buildings were being demolished. The slab house was 30ft by 10ft, consisting of two rooms and was made entirely of red gum slabs (Hall Heritage Centre, website). Some of the land that was part of the Fern Hill property is now protected as the O'Connor Ridge Nature Reserve.

Peter Shumack died in 1912 and is buried in St Johns, Reid, where he had served as a Churchwarden (Hall Heritage Centre, website).



Figure 6-1 Peter 'Big Pete' Schumack, 1844-1912 (Gillespie Collection, Hall School Museum and Heritage Centre)



Figure 6-2 Peter Schumack and family at 'Fern Hill' (Hall Heritage Centre, website)

In 1981 the Australian Institute of Sports headquarters was officially opened, with the area housing the institute containing the current Study Areas. The AIS was opened by then Prime Minister Malcolm Fraser, who declared that its inception was a 'clear sign that we are no longer going to allow the world to pass us by' (Conde, 2021). In the following 45 years the institution has 'revolutionised' Australian sport, with 60 per cent of Australia's gold medals having followed the establishment of the institution (Conde, 2021).

6.3 Previously Recorded sites

There are two previously recorded non-Aboriginal historic sites in the vicinity of the Study Areas.

James Shanahan Hut site

This site was identified in 1984 by Canberra and District Historical Society (CDHS) and is noted as a point of interest. The location was identified as there is a "hut" marked on the portion plan for portion

92, Parish of Canberra. Portion 92 was applied for by James Shanahan and the block was surveyed in 1874. The location is not listed on the ACT Heritage Register. The site is located 367 m southwest of the Study Areas, in an area that has been completely disturbed through building and road construction.

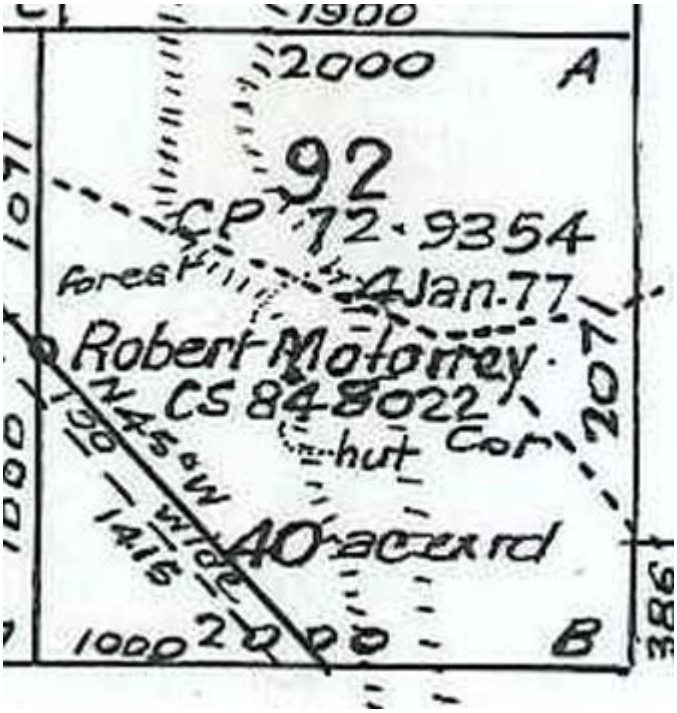


Figure 6-3 Extract of potion plan for Portion 92, Parish of Canberra showing "hut" location

Bruce Stadium and National Indoor Stadium Precinct

The two buildings were designed by the Sydney firm of Philip Cox & Partners; the Bruce Stadium in 1974 and the National Indoor Stadium in 1979, for the National Capital Development Commission. The construction of the Bruce Stadium was completed in 1977 and the National Indoor Stadium in 1981. The buildings are examples of the Late Twentieth-Century Structuralist Style (1960-) with their compression masts and cable stays (both buildings), the reinforced concrete supporting structure and cantilevered end of concrete beams of the Bruce Stadium, and the internal triangular steel supports to the roof of the National Indoor Stadium.

The precinct, which is located off Leverrier Crescent and the end of Battye Street in Bruce, includes the original structures of the two stadiums, the landscaped area between and adjacent to them and their natural setting. The buildings are well maintained, in good condition and intact apart from the lower seating of the grandstand and the ground floor office additions.

The Bruce Stadium and National Indoor Stadium Precinct is listed as 'R2 - Removed from the Provisional Register by expiration of interim effect – all located on 'National Land' managed by the National Capital Authority (NCA)'. The ACT Heritage Council has therefore decided not to enter the place in the ACT Heritage Register. The NCA manages Commonwealth and National Heritage listed places on behalf of the ACT Government. The Bruce Stadium and National Indoor Stadium Precinct is **not** listed on either the Commonwealth or National Heritage lists.

6.4 Predictive Archaeological Model – Historical Heritage

Unrecorded historic sites and features of heritage significance that may occur within the study area include:

- Old fence lines, such as post and rail fencing; these may occur along road easement boundaries and farmlands.

- Indications of field systems, such as drainage channels and ridge and furrow ploughlands; these are likely to survive in low lying agricultural ground, especially in areas that are now used for grazing, rather than cropping.

- Archaeological sites, such as the occupation remains of former dwellings including homesteads, houses and huts; these will be distributed in close association with land settlement patterns, and correlated with favourable agricultural lands, trading nodes and transport corridors.

- Sites associated with early roads; these will be closely associated with early cadastral road reserves, watershed ridgelines, and related to early river and creek crossing points.

- Transport and access routes, such as bridle paths and stock routes of varying forms and ages; these may survive as abandoned remnants adjacent to modern transport routes, or as alignments now followed by more modern or upgraded road and track infrastructure.

Structures of historical interest and heritage significance may be standing, ruined, buried, abandoned or still in use.

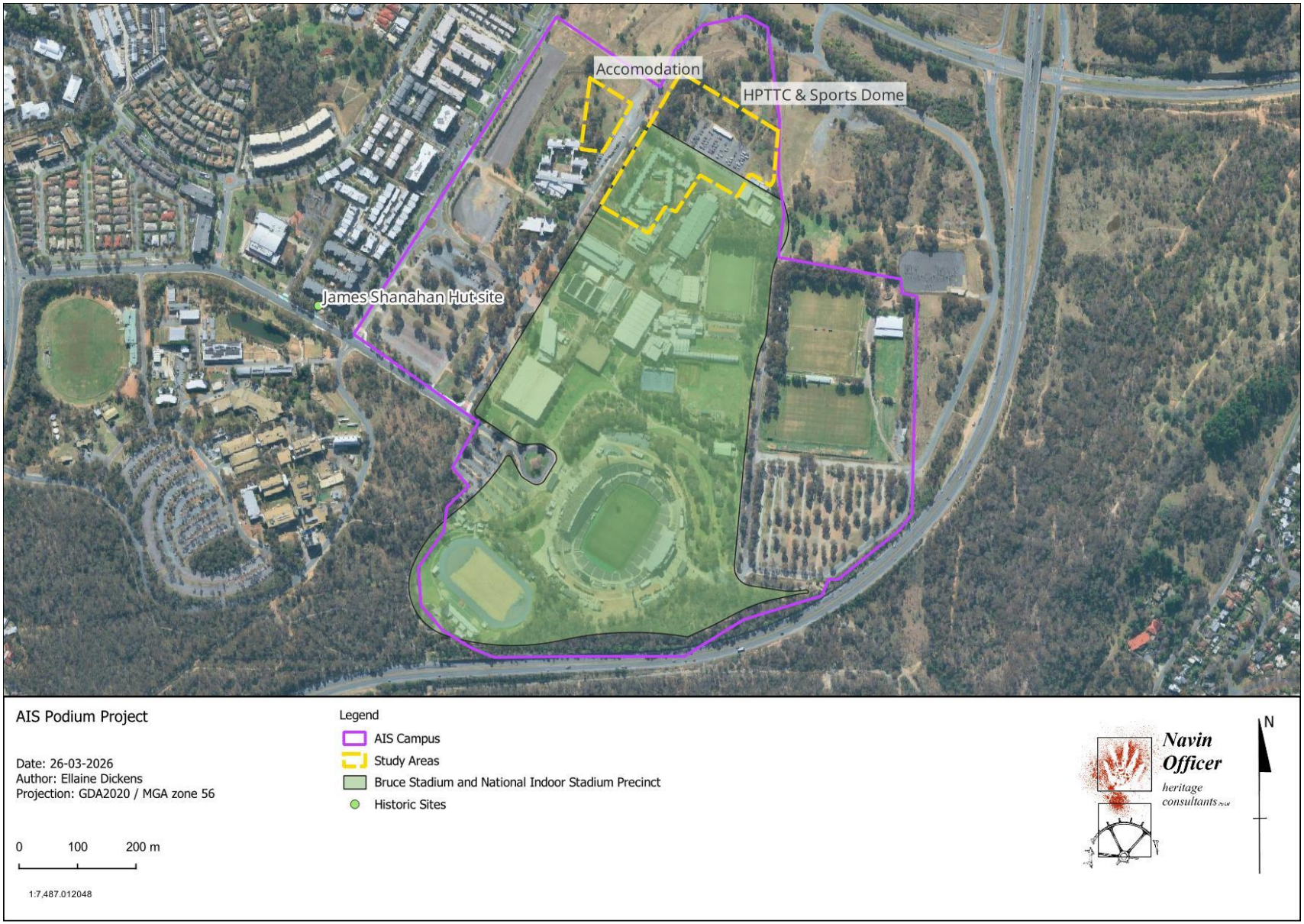


Figure 6-1 Previously recorded historic sites within the vicinity of the Study Areas

7 PHYSICAL INVESTIGATIONS

7.1 Results

- There are no previously recorded Aboriginal sites within the Study Areas.
- There is a possible scarred tree identified within the AIS precinct, but the location of this tree is unknown and is not one of the trees identified as a significant tree in ngh 2019.
- The project area overlaps with the Bruce Campus and National Indoor Stadium precinct, however this place is not listed on any heritage register
- No new Aboriginal or historic sites were recorded during the field survey.

During the field assessment Mr Adrian Brown (KBTG) requested that the project include either naming or signage that tells of the areas Aboriginal past and connections. Mr Brown indicated that the area was a meeting place for Ngunnawal peoples.

7.2 Survey Coverage and Visibility Variables

A site survey was undertaken by Navin Officer Heritage Consultants (NOHC) staff on the 19 March 2026 (Nicola Hayes and Garth Thompson). This involved a walk over of the area proposed to be impacted by the project. All areas subject to direct impact were traversed. Field participants walked 5-10 m apart to ensure full coverage of all impact areas. NOHC was accompanied by Adrian Brown from the Representative Aboriginal Organization King Brown Tribal Group.

The effectiveness of archaeological field survey is to a large degree related to the obtrusiveness of the sites being looked for and the incidence and quality of ground surface visibility. Ground surface visibility is a measure of the bare ground visible to the archaeologist during the survey. There are two main variables used to assess ground surface visibility, the frequency of exposure encountered by the surveyor and the quality of visibility within those exposures. The predominant factors affecting the quality of ground surface visibility within an exposure are the extent of vegetation and ground litter, the depth and origin of exposure, the extent of recent sedimentary deposition, and the level of visual interference from surface gravels. Visibility across the project area was low with some grass and leaf litter cover. It was evident from ground conditions that the whole area has been disturbed in the past.



Figure 7-1 Field photos of the Study Areas

8 STATUTORY CONTEXT[1]

8.1 Commonwealth

8.1.1 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The Act provides for the protection of areas and objects that are of significance to Aboriginal people in accordance with Aboriginal tradition. The Act allows Aborigines to apply to the Minister to seek protection for significant Aboriginal areas and objects. The Minister has broad powers to make such a declaration should the Minister be satisfied that the area or object is a significant Aboriginal area or object and is under immediate threat of injury or desecration. A duly processed declaration by the Minister can have effect for any specified time period. An 'emergency declaration' can remain in force for up to 30 days.

It is an offence under the Act to contravene a provision of a declaration. Provisions are made for penalties of up to $50,000 for a corporation found guilty of contravening the Act and up to $10,000 and imprisonment for a maximum of five years for a person found guilty of contravening the Act.

Under the Act, 'Aboriginal tradition' means:

> 'the body of traditions, observances, customs and beliefs of Aboriginals generally or of a particular community or group of Aboriginals, and includes such traditions, observances, customs or beliefs relating to particular persons, areas, objects or relationships' (s3).

A 'significant Aboriginal area' refers to:

> an area of land or water in Australia being of 'particular significance to Aboriginals in accordance with Aboriginal tradition' (s3).

A 'significant Aboriginal object' refers to:

> an object (including Aboriginal remains) of 'particular significance to Aboriginals in accordance with Aboriginal tradition' (s3).

For the purposes of the Act, an area or object is taken to be injured or desecrated if:

> a) in the case of an area it is used or treated in a manner inconsistent with Aboriginal tradition; the use or significance of the area in accordance with Aboriginal tradition is adversely affected by reason of anything done in or near the area; or passage through or over, or entry upon the area by any person occurs in a manner inconsistent with Aboriginal tradition;
>
> b) in the case of an object it is used or treated in a manner inconsistent with Aboriginal tradition (s3).

8.1.2 Environment Protection and Biodiversity Conservation Act 1999

This Act (EPBC Act) repeals the *Environment Protection (Impact of Proposals) Act 1974*, the *National Parks and Wildlife Conservation Act 1975*, the *Whale Protection Act 1980,* the *World Heritage Properties Conservation Act 1983*, and the *Endangered Species Protection Act 1992*. The scope and coverage of the Act is wide and far-reaching. The objectives of the Act include: the protection of the environment, especially those aspects of national significance; to promote the conservation of biodiversity and ecologically sustainable development; and to recognise the role of indigenous people and their knowledge in realising these aims.

[1] The following information is provided as a guide only. Readers are advised to seek qualified legal advice relative to legislative matters.

A person must not take an action that has, will have or is likely to have a significant impact on any of the matters of environmental significance without approval from the Australian Government Minister for Sustainability, Environment, Water, Population and Communities (the Minister).

Matters of national environmental significance (NES) including:

- world heritage properties
- national heritage places
- wetlands of international importance
- threatened species and ecological communities
- migratory species
- Commonwealth marine areas
- the Great Barrier Reef Marine Park, and
- nuclear actions (including uranium mines).

Other matters:

- the environment, where actions proposed are on, or will affect Commonwealth land, and
- the environment, where Commonwealth agencies are proposing to take an action.

The Act makes it a criminal offence to undertake actions having a ***significant*** impact on any matter of national environmental significance (NES) or on Commonwealth land without the approval of the Environment Minister. There are significant penalties, including fines and imprisonment, for taking such an action without approval. If it is to take an action that is likely to have a significant impact on a matter protected by the EPBC Act, it is important to make a referral to Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) as early as possible in the planning and development stages.

A ***significant*** impact is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. You should consider all of these factors when determining whether an action is likely to have a significant impact on the environment. There are published guidelines on assessing if an impact is ***significant***.

The Act adopts a broad definition of the environment that is inclusive of cultural heritage values. In particular, the 'environment' is defined to include the social, economic and cultural aspects of ecosystems, natural and physical resources, and the qualities and characteristics of locations; places and areas (s528).

The Act allows for several means by which a controlled action can be assessed, including an accredited assessment process, a public environment report, an environmental impact statement, and a public inquiry (Part 8).

Section 68 imposes an obligation on a proponent proposing to take an action that it considers to be a controlled action, to refer it to the Environment Minister for approval.

World heritage values are defined to be inclusive of natural and cultural heritage (s12(3)), and a declared World Heritage Property is one included on the World Heritage List, or is declared to be such by the Minister (s13 and s14). The Act defines various procedures, objectives and Commonwealth obligations relating to the nomination and management of World Heritage Properties (Part 15, division 1).

8.1.3 Environment and Heritage Legislation Amendment Act (No 1) 2003

***Australian Heritage Council Act 2003* and**
Australian Heritage Council (Consequential and Transitional Provisions) Act 2003

These three Acts replace the previous Commonwealth heritage regime instigated by the *Australian Heritage Commission Act 1975*. The Acts establish the following provisions:

The National Heritage List

The National Heritage List is a schedule of places which the Minister for the Environment and Heritage considers to have 'National Heritage Value' based on prescribed 'National Heritage Criteria'. The List many include places outside of Australia if agreed to by the Country concerned. There is a public nomination process and provision for public consultation on nominations. Expert advice regarding nominations is provided to the Minister by the Australian Heritage Council.

A nominated place considered to be at risk can be placed on an emergency list while its heritage value is assessed.

The listing of a place is defined as a 'matter of national environmental significance' under the EPBC Act. As a consequence, the Minister must grant approval prior to the conduct of any proposed actions which will, or are likely to have, a significant impact on the National Heritage values of a listed place.

The Minister is to ensure that there are approved management plans for most listed places owned or controlled by the Commonwealth or a Commonwealth agency, and that Commonwealths actions are in accord with such plans.

The Commonwealth or its agencies cannot sell or lease a listed place unless the protection of its National Heritage values is specified in a covenant, or such an action is found to be unnecessary, unreasonable or impractical. All Commonwealth agencies which own or control places which have or may have National Heritage values, must take all reasonable steps to assist the Minister and Australian Heritage Council to identify and assess those values.

The Commonwealth Heritage List

The Commonwealth Heritage List is a schedule of places owned or controlled by the Commonwealth, which the Minister for the Environment and Heritage considers to have 'Commonwealth Heritage Value'. The list may include places outside of Australia. The processes of nomination and assessment are similar to those for the National Heritage List. Like the National Heritage List, there is a provision for emergency listing.

The Act places a range of obligations on the Commonwealth Agencies with regard to places included on the Commonwealth Heritage List. These include:

- Development of a heritage strategy applicable to all listed places controlled by the agency;
- Preparation of a management plan for each listed place;
- Conduct of a program to identify Commonwealth Heritage values on lands controlled by the agency and maintaining a register of such values;
- Ensuring that no action is taken which has, will have, or is likely to have an adverse impact on the National Heritage values of a National Heritage Place, or the Commonwealth Heritage values of a Commonwealth Heritage Place, unless there is no feasible or prudent alternative and all reasonable measures to mitigate impact have been taken; and
- Including a covenant in any sale or lease contract for land which includes a Commonwealth Heritage place which stipulates the protection of the Commonwealth Heritage values of that place, unless such an action is found by the agency to be unnecessary, unreasonable or impractical.

The Australian Heritage Council

The Australian Heritage Council provides expert advice to the Minister on heritage issues and nominations for the listing of places on the National Heritage List and the Commonwealth Heritage List. The Council replaces the former Australian Heritage Commission.

8.2 ACT

8.2.1 Heritage Act 2004

This Act provides for the protection, management and conservation of heritage places and objects in the ACT. The Act establishes a Heritage Register of heritage places and objects and establishes procedures for both provisional and full listing to the Register. The Act establishes the ACT Heritage Council to function as the main advisory body to the Minister on heritage issues. The Council receives administrative support from the ACT Heritage, Environment ACT, Department of Territory and Municipal Services. The Council has the power to provisionally and fully register Heritage places and objects. Under the Act, the ACT Heritage Council is to be responsible for the Heritage Register and the heritage registration process.

An 'Aboriginal Place' and 'Aboriginal Object' are defined as 'a place/object of particular significance to Aboriginal people because of either or both:

(a) Aboriginal Tradition; and/or

(b) The history, including contemporary history, of Aboriginal people (s9).

Under s74 and s75 of the Act a person commits an offence if they engage in conduct that diminishes the heritage significance of a place or object, or engage in conduct that causes damage to an Aboriginal place or object. These offences are graduated according to whether an offender was reckless or negligent 'about whether the conduct would diminish the heritage significance' or 'cause damage' to an Aboriginal Object of Place. To 'cause damage' is inclusive of disturbing or destroying.

A person also commits an offence under the Act if they do not report an Aboriginal place to the Heritage Council, and has 5 working days to do so (s51).

The reporting and offence provisions of the Act apply irrespective of land status or whether registration to the Heritage Register occurs.

The Act provides for the development and application of Heritage Guidelines. These are to be formulated by the Heritage Council and will set the policy for how places and objects are to be conserved, including registered places and objects. The guidelines may control how development is to take place in an area which is a heritage place or contains a heritage object. They will be performance-based but may include mandatory provisions (Part 5). During the transitional phase of the Act a heritage or conservation requirement for a place is taken to be a heritage guideline under the Heritage Act (s129).

The only provisions for legally sanctioned disturbance to an Aboriginal place or object, or the diminution of the heritage value of a Heritage Place or Object is to conform to one of the exceptions listed in s76 of the Act. According to this section, the offence provisions of the Act (s74 and s75) do not apply if conduct is engaged in accordance with the following:

(i) a heritage guideline;

(ii) a heritage direction;

(iii) a heritage agreement;

(iv) a conservation management plan approved by the council;

(v) development approval under the Planning Act 2023;

(vi) an excavation permit;

(vii) a statement of heritage effect approved by the council.

Heritage recordings which occur on National Land under the National Land Ordinance 1989 (or subsequent amendments), or which occur in Designated Areas under the National Capital Plan are subject to development approval processes which may be in addition to, or instead of requirements identified as management requirements under the *Planning Act 2023.*

Development approval processes within the ACT can be summarised as follows:

- Work carried out on National Land in Designated Areas is subject to the approval of the National Capital Authority (NCA);
- Work carried out on Territory Land in Designated Areas is generally subject to approval by the NCA but Territory requirements may also apply to development where the Territory is the approving Authority;
- Work carried out on National Land outside of Designated Areas must be in accordance with a Development Control Plan agreed by the NCA that reflects the requirements of the Territory Plan; and
- Work carried out on Territory Land outside Designated Areas is subject to the Territory Plan and Territory Approval processes.

8.3 Implications for the AIS Podium Project

The AIS precinct is located on land managed by the National Capital Authority. There are no heritage items within the project area therefore there are no further heritage assessment or approval requirements.

9 RECOMMENDATIONS

There are no Aboriginal or historic sites within the Study Areas therefore there is no impact to heritage from the proposed project.

It is recommended that:

1. The project includes either naming or signage that tells of the area's Aboriginal past and connections.

2. A copy of this report should be provided to the ACT Heritage.

3. One copy of this report should be provided to each of the ACT RAOs.

4. The unanticipated discovery protocols in Appendix 1 should be implemented for this project.

10 LIST OF REFERENCES

Australia ICOMOS, 2013 *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013.* Burwood, Victoria.

Australian Archaeological Survey Consultants (AAS) 2008. 3GIS Lyneham Mobile Phone Facility West Lyneham, ACT Cultural Heritage Assessment. Report to Daly International.

Archaeological Heritage Surveys (AHS) 2004 Feasibility Study for a Multi-Purpose Cycling and Wheeled-Sports Facility in the ACT. Report to Young Consulting Engineers Pty Ltd.

Beesley, J., 1989 The Scarred Tree. Unpublished report to the Victoria Archaeological Survey, Melbourne.

Biosis 2015. University of Canberra ACT: Aboriginal Cultural Heritage Assessment. Final report to Purdon Planning.

Butlin, N., 1983 *Our Original Aggression: Aboriginal populations of southeastern Australia 1788-1850.* Allen & Unwin, Sydney.

Chalklen, A. Keen, E. Rowland, P. Wasteneys, G. 1997 Appropriate Planning for O'Connor and Bruce Ridges. Report to ACT Planning and Environment Committee, Canberra.

Cultural Heritage Management Australia (CHMA) 2008. 3GIS Lyneham Ridge Heritage Assessment Salvage of Surface Sites NLAS1 and LR1. Report for Daly International.

CHMA 2020. O'Connor Reservoir Upgrade – Cultural Heritage Assessment and Statement of Heritage Effect. Report for SMEC.

CHMA 2021. O'Connor Reservoir Upgrade – Revised Cultural Heritage Assessment and Statement of Heritage Effect. Report for SMEC.

Conde, P. 2021, *AIS turns 40, still inspiring future of Australian sport, Australian Sports Commission*, viewed 6 Feb 2026, https://www.ausport.gov.au/media-centre/news/ais-still-inspiring-future-of-australian-sport

Department of Environment, Climate Change and Water (DECCW). 2017. Landuse Mapping for NSW 2017 – v1.5. Department of Climate Change, Energy, the Environment and Water, Sydney.

DCCEEW. 2012. Australian Soil Classification (ASC) soil type map of NSW 2012. - v4.5. Department of Climate Change, Energy, the Environment and Water, Sydney.

Eades, D.K., 1976. *The Dharawal and Dhurga Languages of the New South Wales South Coast*, Australian Aboriginal Studies, Research and Regional Studies No 8, Australian Institute of Aboriginal Studies, Canberra, ACT.

Flenniken, J. & White, P. 1985. "Australian flaked stone tools: a technological perspective". Records of the Australian Museum 36(3): 131–151.

Flood, J., 1980 *The Moth Hunters: Aboriginal Prehistory of the Australian Alps*. Australian Institute of Aboriginal Studies, Canberra, ACT.

Gillespie, L. 1991 Canberra 1820 – 1913. AGPS Canberra.

GML 2022. Aranda Woodland Walk, Block 1550 Belconnen, Australian Capital Territory – Preliminary Cultural Heritage Assessment. Report for ACT Heritage Advisory Services & Friends of Aranda Bushland Group.

Gott, B. 2008. "Indigenous use of plants in south-eastern Australia". *Telopea* 12(2). 215-26.

Hall Heritage Centre, Rediscovering Ginninderra: Peter 'Big Pete' Shumack. Website accessed 24/09/2025 from <https://heritage.hall.act.au/display/1939/person/2127/peter-big-pete-shumack.html>.

Horton, D.R., 1999 Map of Aboriginal Australia - part of *The Encyclopaedia of Aboriginal Australia*. AIATSIS.

Huys, S.F., 1993 Prehistoric Gungahlin. A Model of Human Occupation. Unpublished BA Hons thesis, Department of Archaeology and Anthropology, Australian National University, Canberra.

Jackson-Nakano, A., 2001. *The Kamberri: a history from the records of Aboriginal families in the Canberra-Queanbeyan district and surrounds 1820-1927, and historical overview 1928-2001.* Weereewaa History Series Volume 1, Aboriginal History Monograph 8, Aboriginal History Inc., Canberra, ACT

Kaibala, P. R. 1997. *Belconnen's Aboriginal past : a glimpse into the archaeology of the Australian Capital Territory*. Canberra : Black Mountain Projects

Langton, M. 2006. "Earth, wind, fire and water: the social spiritual construction of water in Aboriginal societies". In McNiven, I. David, B. Barker, B. (Eds.) *The Social Archaeology of Australian Indigenous Societies*. Aboriginal Studies Press: Canberra: 139-160.

Lea-Scarlett, E. J. 1968 Queanbeyan: district and people, Queanbeyan Municipal Council, Queanbeyan, N.S.W.

Long, A., 2005 *Aboriginal Scarred Trees in New South Wales: A Field Manual*. Department of Environment and Conservation (NSW).

Marshall, D. and Pearson, M (2010) Heritage Assessment of Australian Sports Commission Property. Report to Australian Sports Commission.

Mathews, R.H., & Everitt, M.M., 1900. 'The Organisation, Language, and Initiation Ceremonies of the Aborigines of the South-East Coast of N. S. Wales', *Journal and Proceedings of the Royal Society of New South Wales*, Vol 34:262-281 (& refer to sub-section 'The Gundungurra Grammar', 265-276).

Mathews, R.H., 1901. 'The Gundungurra Language', *Proceedings of the American Philosophical Society*, 40(167):140-148.

Mathews, R.H., 1904. 'The Wiradyuri and Other Languages of New South Wales', *The Journal of the Anthropological Institute of Great Britain and Ireland*, Vol 34: 284-305 (& refer to sub-section 'The Ngunawal Language', 294-299).

Navin, K. & Officer, K. 1994. Cultural Heritage Assessment, Block 9, Section 35, Bruce ACT. Report to Lend Lease Pty Ltd.

Navin, K., Officer, K. & Legge, K. 1996. Proposed Duplication of the Federal Highway, Stirling Avenue To Sutton Interchange EIS - Cultural Heritage Component. Report to Ove Arup & Partners.

Navin, K. 1995. Cultural Heritage Assessment Section 2 Bruce, ACT. Report to Ron Bell & Associates.

Navin Officer Heritage Consultants (NOHC). 2000. Archaeological Assessment of a Section of Bruce Precinct, ACT. Report to Purdon Associates Pty Ltd.

Ngh 2019 Detailed Environmental Constraints Assessment Australian Institute of Sport, Bruce. Prepared for Ontoit on behalf of the Australian Sport Commission (ASC)

NOHC 2001a. Aranda Residents Group Caswell Drive Options Study Preliminary Cultural Heritage Assessment. Report to WP Brown & Partners Pty Ltd.

NOHC 2001b. Caswell Drive and Belconnen Way Intersection, Belconnen, ACT Cultural Heritage Assessment. Report to WP Brown & Partners Pty Ltd.

NOHC 2001c. Inventory of Artefacts Collected from a Section of Bruce Precinct ACT. Report to Purdon Associates Pty Ltd.

NOHC 2002. Gungahlin Drive Extension Project Glenloch Interchange, ACT, Archaeological Assessment Summary Report. Report to Department of Urban Services – Territory Planning Branch.

NOHC 2003a. Gungahlin Drive Extension Caswell Drive – Belconnen Way Intersection Options, Cultural Heritage Assessment. Report to WP Brown & Partners for the ACT Department of Urban Services.

NOHC 2003b. Gungahlin Drive Extension Eastern Alignment (AIS Precinct) Cultural Heritage Assessment. Report to WP Brown & Partners for the ACT Department of Urban Services.

NOHC. 2003c. Gungahlin Drive Extension Aranda Precinct Comparison of Intersection Options Cultural Heritage Assessment. Report to WP Brown & Partners for the ACT Department of Urban Services.

NOHC 2004. New Aboriginal Heritage Recordings within the Gungahlin Drive Extension Development Area. Report to Roads ACT.

NOHC 2006. Belconnen to City Transit Way Cultural Heritage Assessment. Report to Brown Consulting Pty Ltd.

Officer, K.L.C., 1989 Namadgi Pictures: The Aboriginal rock art sites within the Namadgi National Park, ACT. Report to ACT Administration, Heritage Unit, and the ACT Parks and Conservation Service.

Officer, K. 1995 Aboriginal Archaeological Survey Proposed Nursery and Depot Complex, Australian National Botanic Gardens, Canberra, ACT. Report to National Botanic Gardens.

Officer, K. 1997. Cultural Heritage Assessment Proposed John Dedman Drive and Alternative Options. Report to Maunsell Pty Ltd.

Past Traces 2024. PEET Bruce Development – Aboriginal Cultural Heritage Assessment and Statement of Heritage Effect. Report for PEET Bruce Pty Ltd.

Philip Leeson Architects 2016a ASC Building 12 Final Heritage Assessment.

Philip Leeson Architects 2016b ASC Building 13 Final Heritage Assessment.

Philip Leeson Architects 2016c ASC Building 14 Final Heritage Assessment.

Pryor, L. 1938. *The botany, forestry and zoology of the Australian Capital Territory on an ecological basis*, in Handbook for Canberra, ed, K Burns, ANZAAS Meeting, Canberra, January 1939, Canberra: Commonwealth Government Printer.

Saunders, P. 2003. AIS Redevelopment, Bruce, ACT, Cultural Heritage Survey. Report to Capital Planners ACT Pty Ltd.

Saunders, P. 2004a. Calvary Hospital, Bruce, ACT Proposed Additional Parking Areas Cultural Heritage Assessment. Report for Capital Planners Pty Ltd.

Saunders, P. 2004b. Feasibility Study for a Multi-Purpose Cycling and Wheeled-Sports Facility in the ACT, Cultural Heritage Assessment of Diddams Close Park, Belconnen and Block 8 Section 28, Bruce. Report for Young Consulting Engineers Pty Ltd.

Saunders, P. 2005. Proposed Early Learning Centre and Future Junior School, Radford College, Bruce, ACT Heritage Impact Assessment. Report for Redbox Design Group Pty Ltd.

Saunders, P. 2007. University of Canberra, Bruce, ACT Proposed New Student Accommodation Area, Aboriginal Heritage Assessment. Report for Campus Living Villages Pty Ltd.

Shumack, S. 1967 *An Autobiography or Tales and Legends of Canberra Pioneers*. ANU Press, Canberra.

Simmons, S., 1977 Hume Freeway - Seymour to Avenel Section; Archaeological Survey Report. Victoria Archaeological Survey, Ministry of Conservation, Melbourne.

Tindale, N.B., 1974 *Aboriginal Tribes of Australia*. ANU Press, Canberra.

Umwelt 2014. University of Canberra Public Hospital Heritage Assessment. Report for Brown Consulting (ACT) Pty Ltd.

Umwelt 2016. University of Canberra Public Hospital, Bruce; Statement of Heritage Effect. Report to Brookfield Multiplex Australasia.

Williams, D. and M. Barber 1995. A preliminary cultural resource survey of the Mulligans Flat Nature Reserve, Stage 2. Williams Barber Archaeological Services Report to Canberra Nature Park. May 1998.

Newspaper Articles

'The Last of His Tribe', 1872. *The Queanbeyan Age,* 7 November p.2., https://trove.nla.gov.au/newspaper/page/4534107 accessed on 27 July 2023.

~ o0o ~

APPENDIX 1

UNANTICIPATED DISCOVERY PROTOCOLS

Protocol to be followed in the event that previously unrecorded or unanticipated Aboriginal or non Aboriginal archaeological material (objects, artefacts, deposits or relics) are encountered

1. All ground surface disturbance in the area of the finds should cease immediately the finds are uncovered.

    a. The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be halted; and

    b. The site supervisor and the development proponent will be informed of the find(s).

2. If there is substantial doubt regarding a human or Aboriginal or historical European origin for the finds, then consider if it is possible to gain a qualified opinion (such as from the project archaeologist) within a short period of time. If feasible, gain a qualified opinion (this can circumvent proceeding further along the protocol for remains which turn out not to be archaeological). If a quick opinion cannot be gained, or the identification is positive, then proceed to the next step.

3. Immediately notify the following authorities or personnel of the discovery:

    a. The ACT Heritage, the discovery of Aboriginal places and objects must be reported to the Council as soon as possible and within five working days;

    b. Representatives from the Representative Aboriginal Organisations (RAOs) (where appropriate); and

    c. The project archaeologist (if not already present).

4. Facilitate, in co-operation with the appropriate authorities and stakeholders:

    a. The recording and assessment of the finds by a suitably qualified heritage professional (either the project archaeologist or a member of the ACT Heritage). This will include determining if the find(s) are from a new or previously recorded site, and lodgement of site information for all new recordings with the Heritage Unit;

    b. Fulfilling any legal constraints arising from the finds. This will include complying with Heritage Council advice, any Statement of Heritage Effects (SHE) requirements in the case of a previously recorded site; and

    c. The development and conduct of appropriate management strategies. Strategies will depend on stakeholder requirements and the assessed significance of the find(s).

5. Where the management of find(s) involves the salvage excavation or collection of artefacts, this material will be curated according to the provisions of any relevant SHE, or as directed by the Heritage Council.

6. Where the find(s) are determined to have cultural heritage value according to the criteria specified in the *Heritage Act 2004*, any re-commencement of construction related ground surface disturbance may only resume in the area of the find(s) following compliance with any consequential legal requirements and gaining written approval from the ACT Heritage Council. All Aboriginal objects and places are protected under the *Heritage Act 2004* and do not need to meet significance criteria in order for protection to be applied.



Protocol to be followed in the event that suspected human remains are encountered

1. All ground surface disturbance in the area of the finds should cease immediately the finds are uncovered.

    a. The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be temporarily halted; and

    b. The site supervisor and the development proponent will be informed of the find(s).

2. If there is substantial doubt regarding a human origin for the remains, then consider if it is possible to gain a qualified opinion within a short period of time. If feasible, gain a qualified opinion (this can circumvent proceeding further along the protocol for remains which turn out to be non-human). If conducted, this opinion must be gained without further disturbance to any remaining skeletal material and its context as possible (Be aware that the site may be considered a crime scene containing forensic). If a quick opinion cannot be gained, or the identification is positive, then proceed to the next step.

3. Immediately notify the following people of the discovery:

    a) The local Police (this is required by law);

    b) The ACT Heritage, the discovery of Aboriginal places and objects must be reported to the Council as soon as possible and within five working days;

    c) Representatives from the Representative Aboriginal Organisations (RAOs) (where appropriate); and

    d) The project archaeologist (if not already present).

4. Facilitate the evaluation of the find(s) by the statutory authorities and comply with any stated requirements. Depending on the evaluation of the find(s), the management of the find(s) and their location may become a matter for the Police and/or Coroner.

5. Construction related works in the area of the find(s) may not resume until the development proponent receives written approval from the relevant statutory authority: from the Police or Coroner in the event of an investigation; and from the ACT Heritage Council in the case of human remains outside of the jurisdiction of the Police or Coroner.

6. In the event that the proponent continues an active role in the evaluation and/or management of the find(s), via a direction or advice from the Police, Coroner and/or Heritage Council, then all or some of the following steps may be conducted:

7. Facilitate, in co-operation with the appropriate authorities, the definitive identification of the skeletal material by a specialist (if not already completed). This must be done with as little further disturbance to any remaining skeletal material and its context as possible.

8. If the specialist identifies the bone as non-human then, where appropriate, the protocol for the discovery of historical or Aboriginal artefacts (above) should be followed.

9. If the specialist determines that the bone material is human, then the proceeding course of action may be of three types:

    a. The bone(s) are of an Aboriginal and non-Aboriginal person who died less than 100 years ago and where traumatic death is suspected. Such remains come under the jurisdiction of the *ACT Coroner's Act* 1997. All further decisions and responsibilities regarding the remains and find location rest with the ACT Police, and/or the ACT Coroner.

b. The bone(s) are of a non-Aboriginal person who died more than 100 years ago. In this case, and where the Police have indicated that they have no interest in the find(s), the following steps may be followed:

   i. Ascertain the requirements of the ACT Heritage Council, the development proponent, the project archaeologist, and the views of any relevant community stakeholders;

   ii. Based on the above, determine and conduct an appropriate course of action. Possible strategies could include one or more of the following:

      1. Avoiding further disturbance to the find and conserving the remains *in situ* (this option may require relocating the development and this may not be possible in some contexts);

      2. Conducting (or continuing) archaeological salvage of the finds following receipt of any required statutory approvals;

      3. Scientific description (including excavation where necessary), and possibly also analysis of the remains prior to reburial;

      4. Recovering samples for dating and other analyses; and/or

      5. Subsequent reburial at another place and in an appropriate manner determined by the Heritage Council and in consultation with other relevant stakeholders.

c. The bone(s) are of an Aboriginal person who died more than 100 years ago. In this case the following steps may be followed:

   i. Ascertain the requirements of the local RAOs, the ACT Heritage Council, the development proponent, and the project archaeologist;

   ii. Based on the above, determine and conduct an appropriate course of action. Possible strategies could include one or more of the following:

      1. Avoiding further disturbance to the find and conserving the remains *in situ*, (this option may require relocating the development and this may not be possible in some contexts);

      2. Conducting (or continuing) archaeological salvage of the finds following receipt of any required statutory approvals;

      3. Scientific description (including excavation where necessary), and possibly also analysis of the remains prior to reburial;

      4. Recovering samples for dating and other analyses; and/or

      5. Subsequent reburial at another place and in an appropriate manner determined by the RAOs and the Heritage Council.

~ o0o ~

Preliminary Site Investigation

Australian Institute of Sport
Multiple Blocks
Bruce, Belconnen, ACT



Prepared for:	Populous
Date:	20 March 2026
Reference:	JE25.0754
Version:	01

Agon Environmental Pty Ltd

Address
Level 3, 95 Northbourne Avenue, Canberra, ACT 2612

Phone
+61 2 5104 2177

Email
enquiries@agonenviro.com.au

A.B.N.
29 167 746 063

TABLE OF CONTENTS

AGON DOCUMENT CONTROL iii

EXECUTIVE SUMMARY iv

1.0 INTRODUCTION 1

1.1 Background 1

1.2 Objective 1

1.3 Scope of Work 1

1.4 Legislative Framework 1

1.5 Site Location 2

1.6 Reporting Compliance Checklist 2

2.0 SITE DETAILS 4

2.1 Site Identification 4

2.2 Physical Setting 4

2.3 Site Zoning 4

2.4 Surrounding Land Use 5

2.5 Site Geology 5

2.6 Regional Hydrology 5

2.7 Regional Hydrogeology 6

2.8 Site Inspection 6

3.0 HISTORICAL INFORMATION 8

3.1 Historical Aerial Imagery 8

3.2 Historical Ownership 9

3.3 Public Records 9

3.4 ACT EPA Contaminated Land Search 9

3.5 Office of Regulatory Services – Dangerous Goods Search 10

3.6 Historical Building Plans and Heating Method 11

3.7 Leaseholder Interview 11

3.8 Previous Environmental Assessment Reports 11

3.9 Potentially Contaminating Activities 11

4.0 LIMITED ASSESSMENT OF PCA 13

4.1 Data Quality Objectives 13

4.2 Sampling Plan and Rationale 14

4.3 Field Methodology 16

4.4 Results 16
4.4.1 Observations and Soil Conditions 16
4.4.2 Soil Analysis Results 17
4.5 Revised CSM 17
5.0 CONCLUSION & RECOMMENDATIONS 19
6.0 LIMITATIONS OF THIS REPORT 21
7.0 REFERENCES 22
APPENDIX A: PHOTOGRAPHS ..... A
APPENDIX B: AERIAL IMAGERY ..... B
APPENDIX C: HISTORICAL TITLES C
APPENDIX D: GOVERNMENT SEARCHES ..... D
APPENDIX E: LOGS ..... E
APPENDIX F: QUALITY ASSURANCE / QUALITY CONTROL ..... F
APPENDIX G: TABLES ..... G
APPENDIX H: LABORATORY CERTIFICATES ..... H

TABLES

Table 1: Site Identification 4
Table 2: Surrounding Land Use 5
Table 3: Historical Aerial Imagery Review 8
Table 4: PCAs 11
Table 5: Data Quality Objectives 13
Table 6: Sampling Plan 14
Table 7: Field Methodologies 16
Table 8: CSM 17

AGON DOCUMENT CONTROL

Report Title	Project Reference
Environmental Site Suitability Report Australian Institute of Sport Multiple Blocks, Bruce, Belconnen, ACT	JE25.0754.00 - PSI
Written	**Approved**
Mitchell Cunningham Environmental Scientist **Michael Carbone** Principal Environmental Scientist	 **John O'Brien** ACT Manager | Principal Environmental Scientist

Rev No	Status	Date	Author	Reviewer
01	Issue	20/03/2026	M.C	J.O and M.C

Rev No	Copies	Recipient
01	1 electronic	Populous

EXECUTIVE SUMMARY

Agon Environmental Pty Ltd (Agon) was engaged by Populous to prepare a Preliminary Site Investigation (PSI) report for a portion of the Australian Institute of Sport (AIS) campus in Bruce, Belconnen, ACT (the site). This PSI was expanded to include an opportunistic limited soil assessment which was undertaken as part of a geotechnical investigation also undertaken at the site.

Agon understands the proponent intends to construct three new facilities utilised for athlete accommodation, high performance testing and training centre and multi sports dome. Specifically, Agon have been engaged to comply with the Statement of Requirement (RFT no: 2025/748) of the AIS Podium Project which will requires a '*Site Contamination Report*'.

The PSI data indicates the site and it surrounds were vacant and undeveloped until the mid-1970s to early 1980's when construction of the AIS campus began. Land surrounding the site continued to be developed throughout the 1990's, much to its current extent. The site itself remained undeveloped until the early 2000's when a carpark was constructed across most of the site area on Block 26, Section 8. The carpark remains on site today. Throughout the early 2000's two small buildings were constructed to the west of the carpark and were subsequently demolished and/or removed prior to 2015. Throughout the 2010's construction began on the shed that is currently on the northern boundary of the carpark. For the rest of the area that comprises the site across parts of Block 6 and 7, Section 46 this has remained vacant and undeveloped until the present day.

Three PCAs were identified, being:

- PCA01: Construction and Demolition Stockpiles.
- PCA02: Storage of Fuels and Chemicals.
- PCA03: Uncontrolled Fill.

These PCA's have been subject to a limited soil assessment which has allowed the quantitative appraisal via a CSM and did not identify any complete contaminant source pathway receptor linkages. Based on the data presented in this PSI, Agon conclude the site suitable for the proposed use of athlete accommodation, high performance testing and training centre and a multi sports dome, as well as the following permitted land uses under the Australian Institute of Sport Precinct Code:

- Daily training environment for high performance sport.
- Research and Innovation.
- Scientific capability and support services.
- Learning.
- Residential accommodation
- Commercialisation including events.
- Administration.
- Site infrastructure.
- Support services.
- Community activities – Excluding childcare.

This conclusion is subject to the following recommendations:

- This PSI report only presents a limited soil assessment which was completed in conjunction with the geotechnical investigation. The degree of contamination assessment is not adequate to constitute a Detailed Site Investigation (DSI) in accordance with the National Environment Management

(Assessment of Site Contamination) Measure 1999 (amended 2013) (the NEPM) and the ACT EPA (2017) Contaminated Sites Environment Protection Policy.

Whilst the PSI data does not indicate a high contamination risk from the identified PCAs however given the site is proposed to include residential land uses, the completion of a DSI is recommended considered to add confidence to this risk rating.

In addition, the following conditions are required during development works:

- The stockpiled construction and demolition materials (PCA01) near the carpark on part of Block 26 are to be removed in accordance with the ACT EPA (2021) Environmental Standards: Assessment and Classification of Liquid and Non-Liquid Wastes. Any soils found to be within the stockpiles will require a separate assessment in accordance with ACT EPA Information Sheet 4: Requirements for The Reuse and Disposal of Contaminated Soil in the ACT.

- Any soils proposed to be removed from the site as part of development works must first be assessed in accordance with ACT EPA Information Sheet 4: Requirements for The Reuse and Disposal of Contaminated Soil in the ACT. No soil is the leave the site without ACT EPA approval.

- All civil excavation works must be supported by an Unexpected Finds Protocol (UFP) which details a standard process in the event that materials suspected to be contaminated are encountered during excavation works and provides guidance to workers at the site in recognising potentially contaminated material.

This report must be read taking into consideration the “Limitations of this Report” presented in **Section 6**.

1.0 INTRODUCTION

1.1 Background

Agon Environmental Pty Ltd (Agon) was engaged by Populous to prepare a Preliminary Site Investigation (PSI) report for a portion of the Australian Institute of Sport (AIS) campus in Bruce, Belconnen, ACT (the site). This PSI was expanded to include an opportunistic limited soil assessment which was undertaken as part of a geotechnical investigation also undertaken at the site.

Agon understands the proponent intends to construct three new facilities utilised for athlete accommodation, high performance testing and training centre and multi sports dome. Specifically, Agon have been engaged to comply with the Statement of Requirement (RFT no: 2025/748) of the AIS Podium Project which will requires a '*Site Contamination Report*'.

This PSI has been prepared to provide an environmental assessment of the site and to assess the suitability of the site (from a contaminated land perspective) for the proposed development. In addition, this PSI will also provide a suitability statement for the additional permitted land uses under the National Capital Authorities Australian Institute of Sport Precinct Code.

1.2 Objective

The objective of this PSI is to identify potentially contaminating activities (PCAs) which may have occurred/ are occurring at the site and provide an initial assessment of potential risks to human health and the environment associated with these PCAs. The PSI will also provide a conclusion as to the suitability of the site (with respect to site contamination) for the proposed development and the other additional permitted uses under the sites zoning.

1.3 Scope of Work

The scope of work for this investigation comprised:

- The current zoning and land use on and surrounding the site.
- An inspection of the site.
- A review of historical aerial photographs of the site and surrounding area.
- A review of historical land titles ownership.
- A search of the Contaminated Sites Database and Geographic Information System maintained by ACT EPA.
- Completion of an in-situ soil assessment.
- Comparison of all analytical laboratory results with applicable guidelines to provide a preliminary indication of risks to human health and/or the environment.
- Compilation of this information presented in this PSI report.

1.4 Legislative Framework

The PSI has been prepared in general accordance with the guidelines endorsed by the ACT EPA (2017) Contaminated Sites Environment Protection Policy (CSEPP), including but not limited to:

- National Environment Management (Assessment of Site Contamination) Measure 1999 (amended 2013) (the NEPM).

- ACT EPA Information Sheet 7 - Guidance for undertaking preliminary contamination investigations for development/lease variation purposes.
- ACT EPA Information Sheet 11 - Environment Protection Authority Report Submission Requirements.
- NSW EPA (2020) Consultants Reporting on Contaminated Land. Contaminated Land Guidelines.

1.5 Site Location

The location of the site is presented below in **Figure 1**:

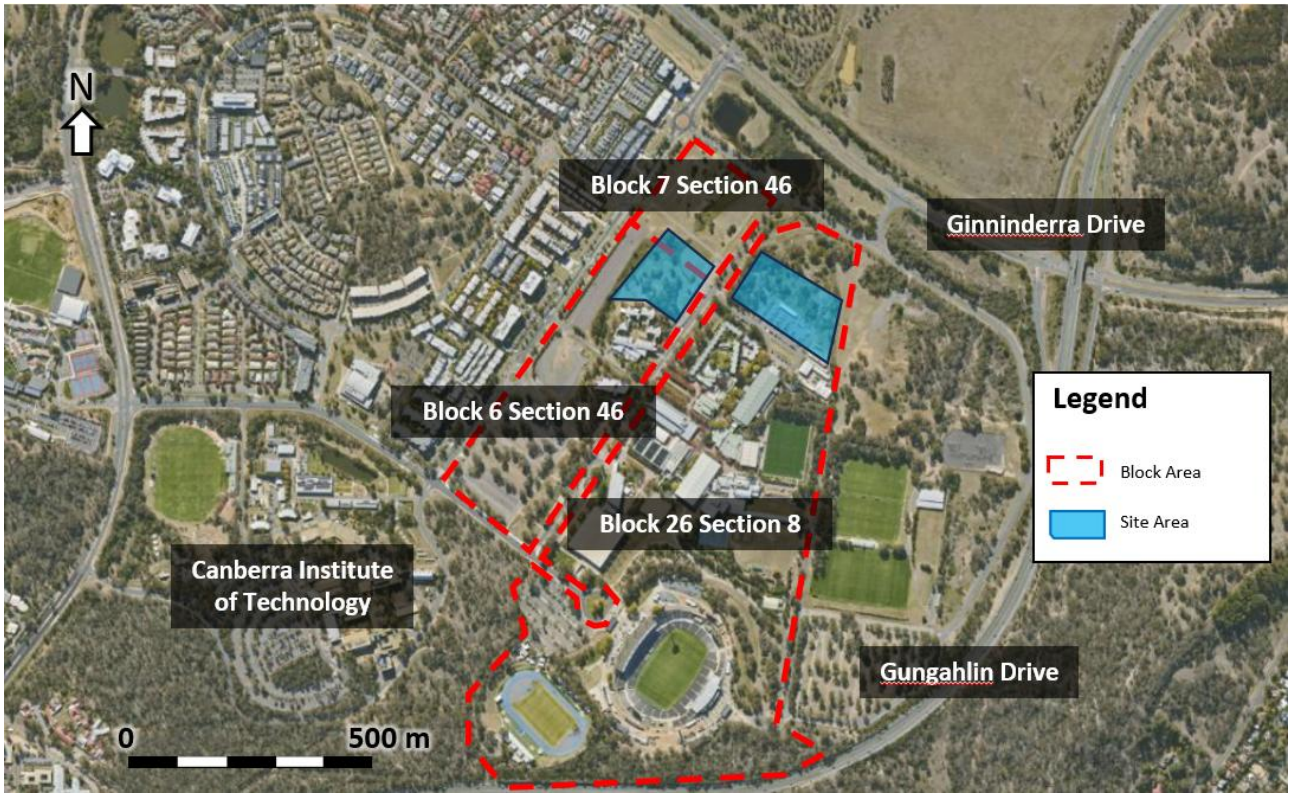


Figure 1: Site Location
Source: ACTMapi (2025)

1.6 Reporting Compliance Checklist

A reporting compliance checklist has been against the following guidance documents endorsed by the ACT EPA:

- ACT EPA Information Sheet 11 – Environment Protection Authority Report Submission Requirements.
- NSW EPA (2020) Consultants Reporting on Contaminated Land. Contaminated Land Guidelines.

Elements	Comment	Compliant
ACT EPA Information Sheet 11		
Guidelines	PSI prepared in accordance with the appropriate guidance documents, refer **Section 1.4**	Yes
Site Definition	Site defined in **Section 2**	Yes
Site Suitability Statement	Provided in **Section 5**	Yes
Site Management Plan	N/A	N/A
Site Suitability Reports	Submitted in digital copy	Yes

Elements	Comment	Compliant
NSW EPA (2020) DSI Checklist		
Document Control	Completed	Yes
Executive Summary	Completed	Yes
Objectives	Stated, refer **Section 1**	Yes
Scope of Work	Stated, refer **Section 1**	Yes
Site Identification	Completed, refer **Section 2**	Yes
Site History	Completed, refer **Section 3**	Yes
Site Condition **Surrounding Environment**	Completed, refer **Section 2**	Yes
Conceptual Site Model	Completed, refer **Section 4**	Yes
Data Quality Objectives	Completed, refer **Section 4**	Yes
Sampling, Analysis Plan + Sampling Methodology **(If sampling is undertaken)**	Completed, **Section 4**. In summary: • Tabulated analysis results compared against the appropriate assessment criteria. • Summary of results. • Description of all sampled media. • Site plan showing sample locations.	Yes
QA/QC	Completed, refer **Section 4 and Appendix F**	Yes
Field and Analytical Results	Completed, refer **Section 4**	Yes
Conclusions **Recommendations**	Completed, refer **Section 5**	Yes

2.0 SITE DETAILS

2.1 Site Identification

Table 1: Site Identification

Site Identification	Details ^
Site Address	25 & 26 Leverrier Street, Bruce, ACT
Block & Section	Part of Blocks 6 and 7, Section 46 & Part of Block 26, Section 8, Bruce ACT
Site Area	Shown in **Figure 1**
Land Zoning	DES: Designated – Australian Institute of Sport Precinct Code
Current Land Use	Mostly vacant (across parts of Blocks 6 and 7), with a sealed at grade open air carpark (parts of Block 26) in portion of the site
Proposed Land Use	Athlete accommodation, high-performance indoor sports facility and sports dome
Total Area	Total Area Approx. 24,000 m^2.

Notes: ^ title and zoning details from ACTmapi 2026

2.2 Physical Setting

The site is situated in the suburb of Bruce and is utilised as part of the AIS campus. The AIS campus has a range of land uses including high-density housing, indoor and outdoor sporting facilities and mess facilities. The site has frontages on Leverrier Street, Battye Street and Braybrooke Street. The portion of the site on Blocks 6 and 7 Section 46 is vacant open space grassed and vegetated areas whilst the portions of the site on Block 26 Section 8 has an asphalted carpark and shed with heavily vegetated portions. The site area spans across three Blocks and two Sections as presented in **Table 1** and **Figures 1** & **2**.

2.3 Site Zoning

The site is currently zoned as "DES: Designated" / National land use as per Territory Plan 2023, Therefore the Commonwealth via the National Capital Authority manages all planning provisions for this land. The site is within the Australian Institute of Sport Precinct Code. The outcomes of the Australian Institute Precinct Code are as follows:

1. Provide a major outdoor stadium to accommodate large sporting and spectator events.
2. Provide the main outdoor training and competition venue for AIS track and fields sports.
3. Accommodate related public assembly, crowd control, transport and parking facilities.
4. Allow for expanded spectator capacity to house exceptional demands from unique events.
5. Allow for progressive upgrading of athlete, spectator and media facilities.

Permitted land uses are centred around supporting the AIS's sporting intent and include

- Daily training environment for high performance sport
- Research and Innovation
- Scientific capability and support services
- Learning
- Residential accommodation

- Commercialisation including events
- Administration
- Site infrastructure
- Support services
- Community activities.

A review of permitted uses under the zoning with respect to the land use and an assessment of the site suitability from a contamination perspective is discussed in **Section 5**.

2.4 Surrounding Land Use

The immediate surrounding land uses to the site are summarised below in **Table 2**.

Table 2: Surrounding Land Use

Direction	Land Use
North	The north of the site is bordered by Masterman Street. To the north of Masterman Street the land is predominantly undeveloped and vacant open grassland and followed by the major roadway of Ginninderra Drive.
South	Immediately south of the site are other AIS campus buildings including residences, Australian sports commission offices, indoor basketball courts and swimming pools. Further to the southwest there is the Canberra Institute of Technology Bruce Campus (approx. 100m) and North Canberra Hospital (approx. 800m). To the far south and southeast is Gungahlin Drive and Bruce Ridge Nature Reserve.
West	The west of the site is bordered by Braybrooke Street. To the west of Braybrooke Street the land use is predominantly medium to high density residential, including 2-3 level townhouses and multistorey apartments with basement carparking.
East	The east of the site is bordered other blocks which are within the Australian Institute of Sport Precinct Code zoning. These block from north to south are vacant, grass sports fields, and the East Car Park for GIO Stadium. To the east of the vacant block there is a power station currently operated by Evo Energy. There is a small amount of vacant land to the east of these blocks which is then bordered by Gungahlin Drive.

No immediate current surrounding land usages have been identified as likely to have caused significant contamination to the site. However, there exists the likelihood that there is bulk chemical storage within the AIS campus for its various facilities. (i.e. pool chemicals, fuels for machinery, gardening chemicals etc.). It is expected that these chemicals are suitably stored in appropriate facilities (outside the site area shown in **Figure 1**).

2.5 Site Geology

A review of the Canberra 1:100,000 Geological Map indicates that the northwest of the site is likely to comprise of Early Silurian aged mudstone, siltstone, minor sandstone, limestone, hornfels, dacitic ignimbrite, and volcaniclastic sediments of the Canberra Formation. This source also indicates that the southeast of the site is likely to comprise of middle-late Ordovician interbedded sandstone, siltstone, shale and minor black shale chert and impure calcareous sandstone (distal quartz turbidites) of the Pittman Formation.

2.6 Regional Hydrology

Surface water in the vicinity of the site is expected to infiltrate directly into the exposed soil on the site or drain to local stormwater infrastructure. This stormwater is expected to be discharged to the nearest surface water body, Lake Ginninderra (located about 2.8km to the west of the site). Given the artificial nature of Lake Ginninderra, it is considered highly disturbed and does not warrant further environmental consideration for this investigation.

2.7 Regional Hydrogeology

Review of the 1:100,000 Hydrology of the Australian Capital Territory and Environs (Evans 1984) indicates that groundwater beneath the site is present in fractured or fissured extensive aquifers of low productivity, and that wells in the area typically yield less than 0.5 L/s. The quality of groundwater abstracted from these wells is generally of good quality with Total Dissolved Solids (TDS) below 500 mg/l, noting potable drinking water quality is also less than 500 mg/l.

The site is on the Bruce Hydrogeological Landscape (HGL) which is characterised by moderate land salinity, moderate salt store and high salt mobility.

2.8 Site Inspection

An inspection of the site was undertaken by Agon on 15th of October 2025. A photolog of the inspection is presented in **Appendix A.** Key observations are as follows:

- The portion of the site located on Blocks 6 and 7 Section 46 is undeveloped and predominantly covered by maintained grass and native trees.
- The portion of the site located on Block 26 is predominantly covered by an open-air, asphalt sealed, at grade carpark. There is a Colourbond shed within the site area on Block 26 which are used to store gardening equipment (i.e. ride on mowers) and minor amounts of fuels/oils. The shed was constructed on a concrete hardstand.
- The asphalted surface in the carpark on Block 26 is generally in good working condition with minor amounts of cracking identified. Groundcover throughout the undeveloped sections of the sites is predominantly grass, some of which is maintained, with some patches of exposed soil identified on Blocks 6 and 7.
- Multiple stormwater drainage channels were identified along the roadways surrounding the site, throughout Block 6 and throughout the asphalted carpark on Block 26.
- The grass throughout the majority of Block 6 appears in generally good health with some browning patches and exposed soil, particularly below overstorey vegetation. Remaining sections of the site areas were covered with a variety of unmaintained invasive and native vegetation including grasses, shrubs and trees.
- An open stormwater drainage line is present throughout Blocks 6 and 7. The drainage line enters the block from under Leverrier Street and continues out the north of the block.
- There are no buildings constructed within the site area on Blocks 6 and 7.
- Evidence of former infrastructure included the debris of former buildings stockpiled within the site area of Block 26. These materials are located to the north of the asphalt carpark. Waste materials identified included concrete, gravel and steel and may have been sourced from former site buildings.
- Onsite services identified include stormwater and electricity throughout the carpark area of the site and sewerage (identified by manhole covers) in the vegetated areas.

Site features are shown in **Figure 2**.



Figure 2: Site Layout Plan
(Image source: ACTMapi 2025)

3.0 HISTORICAL INFORMATION

3.1 Historical Aerial Imagery

Historical aerial imagery was reviewed from 1951 to 2025 to investigate the former land uses at the site. Selected aerial extracts are provided in **Appendix B**, with approximate site locations outlined in Red.

Table 3: Historical Aerial Imagery Review

Year	Description
1951	**Site:** The site is cleared of vegetation but is undeveloped rural land. Possibly used for agriculture. **Surrounds:** Land is largely cleared of vegetation but remains undeveloped. Possible earthworks occurring to the far east.
1968	**Site:** No significant changes. **Surrounds:** No significant changes.
1975	**Site**: Earthworks are evident within the site area. **Surrounds:** To the far east, residential development in the suburb of O'Connor has occurred. To the north, earthworks for the construction of Ginninderra Drive have begun. To the west, earthworks for an unknown road have occurred. To the south there is no significant development, however, some small structures such as farm sheds have been constructed.
1985	**Site**: Minor earthworks have occurred on both sites as part of surrounding AIS campus development. Construction materials appear to be stored on the southern site area of Block 26. **Surrounds:** To the immediate south and east substantial development of the AIS campus has been completed and appears to be continuing. This includes the development of large buildings, carparks and outdoor sporting facilities. To the north, construction of Ginninderra Drive has been completed. To the west, earthworks for residential development in Bruce have begun. To the southwest, the Canberra Institute of Technology Campus has been constructed with an accompanying grass oval.
1995	**Site**: Continued minor earthworks occurring. Evidence of filling is evident particularly on the western Block and mature trees present across both site areas. **Surrounds:** A carpark has been developed adjacent to the south of the western block. Whilst the remaining areas surrounding the site remain relatively unchanged. To the south to southeast of the eastern block there continues to be significant development of the AIS campus inclusive of ovals, sheds, buildings and carparks.
2006	**Site**: The western block remains relatively unchanged and appears to be used as a recreational open space, inclusive of grassed areas and tree coverage. The eastern block has been developed. The western side of this block has been developed into two housing style buildings whilst portions of the western side have been developed into a carpark with evidence of earthworks in the remaining areas of the eastern block. **Surrounds:** Commencement of development to the south of the western block but no other significant development immediately surrounding the sites.
2015	**Site**: The two buildings on the eastern site block have been demolished and removed from the site. Small sheds on asphalt carpark noted. No other significant changes were identified on either site. **Surrounds:** No significant changes within the AIS facility. Residential development has occurred to the west of the site across Braybrooke Street.
2025	**Site**: Small sheds on asphalt carpark expanded to current layout. No other significant changes. **Surrounds:** No significant changes.

In summary, the site remained undeveloped until the mid-1970s when early earthworks are evident for the AIS campus. Continued development is apparent up until the mid-2010's when the AIS campus and its facilities were constructed. Whilst the portion of the site on Blocks 6 & 7 has remained relatively undeveloped and unchanged, the site area on the portion of Block 26 has undergone significant development inclusive of buildings, a shed and a carpark and other general earthworks. In the 2010s the two building on the western part of this site area were demolished. Other than establishment of sheds at the northern end of the carpark, no other developments have occurred since. The surrounding areas remained largely undeveloped up until the 1980's when residential dwellings were built to the west of the site and the AIS campus was constructed to the south to southeast. The AIS campus has remained relatively unchanged since its initial construction in the 1980s through to the 2000s.

3.2 Historical Ownership

A search of historical titles was undertaken using the Australian Capital Territory Land Information System (ACTLIS) under the original titles of Volume 3012 Folio 121 Bruce and Volume 3012 Folio 124 Bruce. Historical titles are available from 1992 to 2025 and show subleases and crown lease applications. Throughout 2006 easements for access, drainage, utility services and infrastructure were registered. In general, it appears that the sites have been owned and operated by the ACT since development and release of the blocks. Details of these transactions are recorded in the Historical Titles search provided in **Appendix C**.

3.3 Public Records

National Library of Australia records (NLA, accessed via https://trove.nla.gov.au/) and the ACT Heritage Register were reviewed by Agon as supplementary site history information. No records relating potential contaminating activities at the site were found.

3.4 ACT EPA Contaminated Land Search

A search of the Register of Contaminated Sites maintained by the ACT EPA, under the Environment Protection Act 1997, was undertaken to identify any site contamination notifications or reports. In summary, the site and nearby properties are not recorded on the Register of Contaminated Sites. A summary of the search is provided below:

Block 26 Section 8 Bruce, Belconnen

> *The block is recorded on the EPA's contaminated sites management database and geographic information system.*
>
> *The site contains a maintenance depot which reportedly includes fuel storage and chemical storage facilities. Details of the current operational status of the Depot are not recorded by the EPA.*
>
> *The site also contains a number of commercial complexes. Commercial complexes, prior to the introduction of natural gas to the ACT in the 1980's, utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.*
>
> *Part of the site is currently occupied by playing fields. Whilst there is no recorded information on potential site contamination playing fields have been associated in the past with site contamination due to the application of certain chemicals for the control of weeds and pests and the placement of uncontrolled fill during the establishment of the fields. The storage of herbicides/pesticides may also have been undertaken at the site for the above purpose.*
>
> *The ACT EPA 2017 Contaminated Sites Environment Protection Policy lists fuel and chemical storage and landfilling as activities associated with land contamination which may pose a risk to human health and the environment.*
>
> *The block is located within Designated/National (i.e. Commonwealth) land use area and with planning provisions managed by the National Capital Authority (NCA), the Commonwealth planning authority and not by the ACT Government. For further information on the site history and any activities which may have resulted in contamination of the block you or your client should contact the NCA on (02) 6271 2888.*
>
> *The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection*

Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

Block 6 Section 46 Bruce Belconnen

The block is not recorded on the EPA's contaminated sites management database or geographic information system.

The site is currently occupied by commercial complexes. Commercial complexes, prior to the introduction of natural gas to the ACT in the 1980's, utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

The Contaminated Sites Environment Protection Policy 2017 list fuel storage as an activity associated with land contamination.

The block is also located within Designated/National (i.e. Commonwealth) land use area and with planning provisions managed by the National Capital Authority (NCA), the Commonwealth planning authority and not by the ACT Government. For further information on the site history and any activities which may have resulted in contamination of the block you or your client should contact the NCA on (02) 6271 2888.

The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act.

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

A copy of the EPA's response to this request, is presented in **Appendix D**.

3.5 Office of Regulatory Services – Dangerous Goods Search

The Dangerous Substances Register; Dangerous Goods Database and the Manifest Quantity Notifications search has been removed from the WorkSafe ACT website. However, sufficient information is available to rule out the current storage of bulk dangerous goods at the site for the purpose of this investigation.

3.6 Historical Building Plans and Heating Method

Given the areas of the proposed development are not currently developed, and have had limited development (small buildings removed, carparking and a shed), no building plans and not likely to have any heating infrastructure on the site.

3.7 Leaseholder Interview

A leaseholder interview was unable to be completed as part of this PSI however, given the comprehensive assessment of the site and known activities taken place, this is not considered a significant omission from this report.

3.8 Previous Environmental Assessment Reports

No previous environmental assessment reports have been identified or provided to Agon to review.

3.9 Potentially Contaminating Activities

Based on the site history and site inspection, the following PCAs have been identified as applicable to the site:

Table 4: PCAs

PCA	CoCs[Note 1]	Description
PCA01 Construction and Demolition Stockpiles	TRH BTEX PAHs PCBs OCP/OPPs Metals Asbestos [Note 2]	Stockpiles of construction and demolition waste and soil of unknown origin are stored around the rear of the shed on Block 26. Where this material has come from is unknown, however it may have been derived from the demolition of two small buildings on the western side of the eastern block area and development of the carpark throughout the 2000's. No previous environmental assessments have been provided and therefore the waste stockpile composition is largely unknown. Also, the western and eastern blocks /site areas have been used to varying degrees as staging compounds for adjacent construction and it is uncertain if inadvertent contamination may have occurred to the soils by machinery spills leaks, poor waste practices and/or importation of uncontrolled fill. The development of two buildings to the west of the current asphalt carpark may have introduced contaminants during the construction and then demolition. It is expected this identified PCA likely presents a low risk.
PCA02 Storage of fuels and chemicals	TRH BTEX PAHs OCP/OPPs Herbicides Metals	The shed within the site located on Block 26 was observed to contain a ride on lawn mower with minor amounts of fuels and oils, whilst not observed it would be reasonable to assume the shed may (or may have) been used to store other minor quantities of chemicals associated with ground keeping (i.e. such as contemporary pesticides). The shed appears to be well maintained, had a concrete floor and it is expected that any potentially hazardous materials are stored appropriately by staff. As such, this identified PCA likely presents a low risk.
PCA03 Uncontrolled Fill	TRH BTEX PAHs PCBs OCP/OPPs Metals Asbestos	Historical aerial imagery and topography of the carpark adjacent to the site area on Blocks 6 and 7 and underneath the carpark on Block 26 suggest uncontrolled fill may have been placed on, or nearby, the site. No environmental assessments have investigated or classified the fill material. As such their composition is largely unknown. It is expected this identified PCA likely presents a low to moderate risk.

Note 1 - Agon have also adopted a broad analytical suite typical for the broader environmental assessment of the site.

Note 2 – The assessment of asbestos is to be determined should evidence of building and/or demolition wastes observed.

Agon do not consider it likely that the identified PCAs pose a significant risk to the current and/or proposed land use of the site. However, an opportunity to complete a limited soil assessment was identified during the geotechnical investigation. This limited soil assessment is detailed in **Section 4**.

4.0 LIMITED ASSESSMENT OF PCA

4.1 Data Quality Objectives

The Data Quality Objective (DQO) process is a seven-step process that assists in the development of sampling programs to optimise the relevance and quality of the data collected. The DQO process described in the ASC NEPM 2013. The NEPM guidelines pertaining to the DQO process are used to establish field and laboratory quality control, assurance and methodologies and are used to measure the performance of field and laboratory data. Relevant DQO steps are summarised in **Table 5**.

Table 5: Data Quality Objectives

Step	Description
Step 1: State the Problem	
It is unknown if the site is suitable for its intended use from a contaminated land perspective. If contamination is present, as a result of the identified PCAs, what remedial or management measures are required to render the site suitable.	
Step 2: Identify the Decision	
The purpose of this step is to define the decision statement that the sampling undertaken in conjunction as part of the limited soil assessment will attempt to resolve, based on the problem stated above in Step 1. The decision statement can be summarised as follows: *To assess whether the site is suitable for the proposed use from a contaminated land perspective.* *If unsuitable, to provide sufficient information to develop remediation or management strategy to render the site suitable for the proposed land uses, from a contamination perspective.*	
Step 3: Decision Inputs	
The primary inputs required to meet the Decision include: • Soil sampling to obtain samples representative of the relevant media (i.e. the PCAs). • Compare concentrations of contaminants against the adopted site assessment criteria. • Assess, to the extent permitted by the scope of work, the presence, nature and extent of contamination as a result of the identified PCAs.	
Step 4: Define Boundaries	
The legal boundaries (part of Blocks and Sections) have been identified by the Territory Plan. A summary of the target population, temporal and geographic boundaries including constraints is provided below: • **Target Populations**: The target population for this study comprises the environmental samples from the site area. • **Temporal Boundaries**: The temporal boundaries included in the decision-making process are based on the current environmental condition of the site at the time of investigation.	
Step 5: Decision Rules	
The following outlines the key drivers and relevant decision rules that will be applied in the decision-making process: • Assess the need for further investigation, more detailed assessment of risk, management controls and/ or remediation if chemical concentrations are found to exceed adopted assessment criteria. • The safety of current and future users of the site. The analytical and field data generated through the assessment process will be compared to the adopted site assessment criteria, and the decision rules become: • If contaminant concentrations are greater than the adopted criteria (which will be the NEPM HILs and HSLs), further assessment may be required, comprising one or more of the following: o Further assessment of soils to determine nature and extent of detected contaminants. o Further consideration of potential for groundwater impacts. o Development of remediation plans; and/ or management plans. o If contaminant concentrations in soil are less than the adopted NEPM Tier 1 risk assessment criteria, then further characterisation is unlikely to be required.	
Step 6: Decision Errors	
The Tolerable Limits on Decision Errors are considered during the sampling and analysis planning stage of the project. Data Quality Indicators (DQIs) are used to establish the acceptance criteria of the field and laboratory	

Step	Description
	components of the assessment. They are defined in terms of Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC). The assessment of the DQIs is a means to determine the useability of the data and includes an evaluation of the data's PARCC. The potential for significant decisions errors (sampling and/or measurement errors) is limited by: • The implementation of a sampling plan, field methods and laboratory methods that describe sampling density, sample collection, contaminants of concern and laboratory analysis. • The implementation of a Field and Laboratory QA/QC program. • Review of the Field and Laboratory QA/QC program.
Step 7: Optimisation	
	The sampling design has been developed based on the identified PCAs (discussed in **Section 4.2**) and to broadly assess the natural contamination status of the site. Steps 1 to 6 of the DQO process were used where possible to refine the sampling design and field/laboratory methodologies described in this section. The sampling design has therefore been developed to optimise the collection of data needed to meet the project objective and DQOs. It is noted that variability in site conditions and contaminant concentrations may have an effect on the sampling design. Field screening methodologies and observations will be used to assist in the collection of representative data.

4.2 Sampling Plan and Rationale

The soil assessment was opportunistically undertaken in conjunction with the geotechnical investigation for the project. The borehole locations and depths were designed by the geotechnical program and provide a broad scale assessment of the overall project site. 14 boreholes (BH01-BH14) were advanced across the site at the locations on **Figure 3**.

Table 6 includes a summary of the sample locations completed as part of the PSI.

Table 6: Sampling Plan

AECs/Sources	COC	Extent	Rationale
PCA01 Construction and Demolition Stockpiles	TRH BTEX PAHs PCBs OCP/OPPs Metals Asbestos	Northern area of site on Block 26 surrounding the shed	Not sampled as a part of this investigation as the stockpiles primarily included construction, bricks, pavers, steel demolition wastes. These stockpiles may need to be assessed for hazardous materials (by a licenced asbestos assessor) prior to disposal or can likely be disposed of as building waste (subject to appropriate guidelines).
PCA02 Storage of fuels and chemicals	TRH BTEX PAHs OCP/OPPs Herbicides Metals	Surrounding shed on northern boundary of site on Block 26	**Boreholes:** Boreholes (BH11-BH12) surrounding the shed in the north of the site were advanced into natural soils to broadly assess the soils surrounding the sheds. **Sample Depths** – Soil samples were collected at regular intervals (i.e. 0.1, 0.5, 1 m below ground level (bgl) and each metre thereafter) and/or where visual or olfactory changes in the soil was identified. A mechanical auger was advanced into natural soils or to where refusal (caused by the underlying rock) was encountered in each investigation location.
PCA03 Uncontrolled Fill	TRH BTEX PAHs PCBs OCP/OPPs Metals Asbestos	Across whole site	**Boreholes:** All boreholes (BH01-BH14) across the site were advanced into natural soils to broadly assess fill and natural soils across the site. **Sample Depths** – Soil samples were collected at regular intervals (i.e. 0.1, 0.5, 1 mbgl and each metre thereafter) and/or where visual or olfactory changes in the soil was identified. Mechanical auger was advanced into natural soils or where refusal (caused by the underlying rock) was encountered in each investigation location.



Figure 3: Sample Location Plan
Image source: Act Mapi (2025)

4.3 Field Methodology

The adopted soil assessment methodologies are summarised below. A review of the investigation QA/QC included as **Appendix F** is also presented in the table below.

Table 7: Field Methodologies

Task	Description
Boreholes Soil Sample Method	The investigation locations were advanced by a 4-tonne drill rig with a 100 mm auger to refusal for all locations. At auger refusal, the auger was exchanged for a rock core drill rods and advanced to 10 mbgl for the geotechnical investigation. At BH13 and BH14 the asphalted surfaced was broken with the auger, asphalt chunks were then cleared from the area, then the borehole was further advanced into the underlying soils/rock. Soil samples were collected by hand using nitrile gloves (changed between each sample), with deeper soil samples collected from the drill rig auger, ensuring the samples were collected not in direct contact with the auger itself. Samples of the rock cuttings were not collected for laboratory testing although samples were logged and recorded on the bore logs. Soil samples were placed in clean laboratory provided jars. Samples were immediately placed on ice in a cooler prior to transport to the primary laboratory (Eurofins). Field duplicate samples were collected at a minimum rate of 1 duplicate per 10 primary samples. Upon completion, boreholes were backfilled with the surplus soil cuttings and clean quarry gravel to surface and compacted (by track roll methods). The asphalted areas were repaired with asphalt cold mix. Soils were logged in general accordance with the Australian Standard AS1726-1993 and the Unified Soil Classification System (USCS) including observations for potential contamination (i.e. olfactory, anthropogenic material). Borehole logs are included in **Appendix E**.
QA/QC[1]	Agon reviewed the QA/QC aspects of the project works which is presented in detail in **Appendix F**. The achievement of the project DQOs was demonstrated by reference to the Data Quality Indicators (DQIs) which include precision, accuracy, representativeness, completeness and comparability. Details of the QA/QC data validation are presented in Appendix F. Agon considers that the QAQC program meets the requirements of the DQO and DQI. On the basis of the QA/QC employed during the assessment, the accuracy and precision of the soil analysis data is adequate to support the findings of this report.
Adopted Assessment Criteria	The site is mostly vacant at present except for the carpark and shed on part of Block 26. The proposed future development is planned to cover most of the site with multistorey athlete accommodation (part of Block 6), a high-performance testing and training centre (part Blocks 6 & &7) and a multisport dome (part of Block 26). Based on the athlete accommodation part of the development a conservative approach has been adopted and the medium density residential land use and public open space criteria adopted. The following assessment criteria has been nominated for these investigations: **Soil** • ASC (2013) NEPM - National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013). Table 1A(1). Health-based investigation levels mg/kg (HILs) Residential B • ASC (2013) NEPM - National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013). Table 1A(1). Health-based investigation levels mg/kg (HILSs) Recreational C • ASC (2013) NEPM - National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013). Table 1A(3). Soil HSLs for vapour intrusion (mg/kg) HSL A & HSL B. Low – high density residential.
Laboratory Method	All primary and QA/QC samples were submitted to Eurofins Laboratories (NATA accreditation No. 1261) and Envirolab Services (NATA accreditation No. 2901). Laboratory analysis was conducted in accordance with the requirements of the ASC NEPM (2013) and are referenced to USEPA and APHA methods.

4.4 Results

4.4.1 Observations and Soil Conditions

In -situ conditions were logged as follows:

- Asphalt from the carpark over boreholes BH13 and BH14 was approximately 50mm in thickness.
- **Fill** – Part of Blocks 6/7, fill throughout most of the site (BH01-BH09) generally comprised of light to medium brown gravelly, sandy, silt ranging from fine to coarse gained, angular-to sub angular, with red clays. Fill was found up to depths of 1.5 mbgl across this western part of the site. In general, the fill at the site was free of anthropogenic inclusions. The auger generally refused on rock between 2.5 and 3.0mbgl.
- **Fill** – Part of Block 26, fill within and surrounding the carpark generally comprised of gravelly sandy clay. Gravels and sands ranged from fine to coarse and were generally angular. Colour ranged from grey road base at the top of the borehole to orange/brown. Fill was found up to depths of 2.4 mbgl across this eastern part of the site. Fill was generally free of anthropogenic inclusions with the exception of BH11 where traces of red brick were found at 1 mbgl. Auger refusal generally occurred between 3.0 and 4.0 mbgl.
- **Natural Soils** - Logged to comprise Sandy Clay with depth occurring from approximately 0.5 m to the maximum investigation depth (10.0 mbgl). These clays were generally pale orange/brown to yellow. No staining or odours were observed in the logged soils.
- **Observations** – In general, soils at the sample locations in fill and natural soils were free of visual and olfactory indicators of contamination across the site. Some small amounts of red brick were found at a depth of 1mbgl in BH08, the source of these bricks is unknown. This type of anthropogenics within the upper fill soils are expected to have occurred through mixing with surficial materials/ road base during the historical demolition works and are not necessarily indicative of widespread uncontrolled fill.
- Groundwater was not observed during the borehole investigation works to auger refusal depth. Although we note that for the deeper geotechnical drilling (i.e. up to 10mbgl) the rock coring method uses water and an indicative groundwater water encountering observation would not be seen.

4.4.2 Soil Analysis Results

Tabulated soil analysis results from the borehole investigation are provided in Table 1, **Appendix G** along with the corresponding laboratory certificates provided in **Appendix H**.

In summary, all analysed soil samples were below the laboratory limit of reporting (LOR) or less than the adopted assessment criteria.

4.5 Revised CSM

A Conceptual Site Model (CSM) provides the framework for evaluating contaminant source-pathway-receptor linkages as a result of PCAs which may have occurred at the site. Any linkages may be presented as complete or incomplete thereby establishing a potential exposure pathway that may, depending on the nature of the proposed land use, warrant further assessment.

On the basis of site history and the soil analysis data, Agon has evaluated the PCAs through a CSM to determine if there are any complete contaminant source-pathway-receptor linkages.

Table 8: CSM

PCA	Source/CoCs	Receptor	Pathway
PCA01 Construction and Demolition Stockpiles	TRH BTEX PAHs PCBs OCP/OPPs	Soil Groundwater Occupants Workers	Migration and Exposure Pathway likely **incomplete**. Pathway negated by: • Stockpile observation noted it was primarily composed of large concrete pieces, brick, pavers, steel and minimal fines/soil

PCA	Source/CoCs	Receptor	Pathway
	Metals Asbestos		• Stockpiled materials will be removed as part of development.
PCA02 **Storage of fuels and chemicals**	TRH BTEX PAHs Herbicides OCP/OPPs Metals	Soil Groundwater Occupants Workers	Migration and Exposure Pathway **incomplete**. Pathway negated by: • All soil analysis results near the shed /carpark were less than the adopted assessment criteria for the proposed land use. • Inspection of inside the shed on part of Block 26 revealed no bulk storage of chemicals or fuel. Small amounts of fuel, oil, etc. (i.e. mainly 1 to 10L containers) and are appropriately stored for equipment maintenance. Concrete slab flooring with no evidence of spills / staining.
PCA03 **Uncontrolled Fill**	TRH BTEX PAHs PCBs OCP/OPPs Metals Asbestos	Soil Groundwater Occupants Workers	Migration and Exposure Pathway **incomplete**. Pathway negated by: • All soil analysis results were less than the adopted assessment criteria for the proposed land use. • No visual or olfactory evidence of contamination was observed amongst any of the soils encountered at the site. • Anthropogenic materials were only observed at one borehole (BH11-1.0m) in the northeastern part of the carpark

Overall, the limited soil assessment did not identify significant and/or widespread contamination that would preclude a land use suitability statement to be made.

5.0 CONCLUSION & RECOMMENDATIONS

In summary, the site and it surrounds were vacant and undeveloped until the mid-1970s to early 1980's when construction of the AIS campus began. Land surrounding the site continued to be developed throughout the 1990's, much to its current extent. The site itself remained undeveloped until the early 2000's when a carpark was constructed across most of the site area on Block 26, Section 8. The carpark remains on site today. Throughout the early 2000's two small buildings were constructed to the west of the carpark and were subsequently demolished and/or removed prior to 2015. Throughout the 2010's construction began on the shed that is currently on the northern boundary of the carpark. For the rest of the area that comprises the site across parts of Block 6 and 7, Section 46 this has remained vacant and undeveloped until the present day.

Three PCAs were identified, being:

- PCA01: Construction and Demolition Stockpiles.
- PCA02: Storage of Fuels and Chemicals.
- PCA03: Uncontrolled Fill.

These PCA's have been subject to a limited soil assessment which has allowed the quantitative appraisal via a CSM and did not identify any complete contaminant source pathway receptor linkages. Based on the data presented in this PSI, Agon conclude the site suitable for the proposed use of athlete accommodation, high performance testing and training centre and a multi sports dome, as well as the following permitted land uses under the Australian Institute of Sport Precinct Code:

- Daily training environment for high performance sport.
- Research and Innovation.
- Scientific capability and support services.
- Learning.
- Residential accommodation
- Commercialisation including events.
- Administration.
- Site infrastructure.
- Support services.
- Community activities – Excluding childcare.

This conclusion is subject to the following recommendations/conditions:

- This PSI report only presents a limited soil assessment which was completed in conjunction with the geotechnical investigation. The degree of contamination assessment is not adequate to constitute a Detailed Site Investigation (DSI) in accordance with the National Environment Management (Assessment of Site Contamination) Measure 1999 (amended 2013) (the NEPM) and the ACT EPA (2017) Contaminated Sites Environment Protection Policy.

  Whilst the PSI data does not indicate a high contamination risk from the identified PCAs however given the site is proposed to include residential land uses, the completion of a DSI is recommended considered to add confidence to this risk rating.

In addition, the following conditions are required during development works:

- The stockpiled construction and demolition materials (PCA01) near the carpark on part of Block 26 are to be removed in accordance with the ACT EPA (2021) Environmental Standards: Assessment and Classification of Liquid and Non-Liquid Wastes. Any soils found to be within the stockpiles will require

a separate assessment in accordance with ACT EPA Information Sheet 4: Requirements for The Reuse and Disposal of Contaminated Soil in the ACT.

- Any soils proposed to be removed from the site as part of development works must first be assessed in accordance with ACT EPA Information Sheet 4: Requirements for The Reuse and Disposal of Contaminated Soil in the ACT. No soil is the leave the site without ACT EPA approval.
- All civil excavation works must be supported by an Unexpected Finds Protocol (UFP) which details a standard process in the event that materials suspected to be contaminated are encountered during excavation works and provides guidance to workers at the site in recognising potentially contaminated material.

This report must be read taking into consideration the “Limitations of this Report” presented in **Section 6**.

6.0 LIMITATIONS OF THIS REPORT

All and any Services proposed by Agon to the Client were subject to the Terms and Conditions listed in Agon's **QFB-008 Consultancy Agreement** (accessible at https:/ / agonenviro.com.au/ documents/). Unless otherwise expressly agreed to in writing and signed by Agon, Agon does not agree to any alternative terms or variation of these terms if subsequently proposed by the Client. The Services were carried out in accordance with the current and relevant industry standards of testing, interpretation and analysis. The Services were carried out in accordance with Commonwealth, State, Territory or Government legislation, regulations and/ or guidelines. The Client was deemed to have accepted these Terms when the Client signed the Proposal (where indicated) or when the Company commenced the Services at the request (written or otherwise) of the Client.

The Services were carried out for the Specific Purpose, outlined in the body of the Proposal. To the fullest extent permitted by law, Agon, its related bodies corporate, its officers, consultants, employees and agents assume no liability, and will not be liable to any person, or in relation to, any losses, damages, costs or expenses, and whether arising in contract, tort including negligence, under statute, in equity or otherwise, arising out of, or in connection with, any matter outside the Specific Purpose.

The Client acknowledged and agreed that proposed investigations were to rely on information provided to Agon by the Client or other third parties. Agon made no representation or warranty regarding the completeness or accuracy of any descriptions or conclusions based on information supplied to it by the Client, its employees or other third parties during provision of the Services. Under no circumstances shall Agon have any liability for, or in relation to, any work, reports, information, plans, designs, or specifications supplied or prepared by any third party, including any third party recommended by Agon. The Client releases and indemnifies Agon from and against all Claims arising from errors, omissions or inaccuracies in documents or other information provided to Agon by the Client, its employees or other third parties.

The Client was to ensure that Agon had access to all information, sites and buildings as required by or necessary for Agon to undertake the Services. Notwithstanding any other provision in these Terms, Agon will have no liability to the Client or any third party to the extent that the performance of the Services was not able to be undertaken (in whole or in part) due to access to any relevant sites or buildings being prevented or delayed due to the Client or their respective employees or contractors expressing safety or health concerns associated with such access.

Unless otherwise expressly agreed to in writing and signed by Agon, Agon, its related bodies corporate, its officers, employees and agents assume no liability and will not be liable for lost profit, revenue, production, contract, opportunity, loss arising from business interruption or delay, indirect or consequential loss or loss to the extent caused or contributed to by the Client or third parties, suffered or incurred arising out of or in connection with our Proposals, Reports, Deliverables, the Project or the Agreement. In the event Agon is found by a Court or Tribunal to be liable to the Client for any loss or damage arising in connection with the Services, the Client's entitlement to recover damages from Agon shall be reduced by such amount as reflects the extent to which any act, default, omission or negligence of the Client, or any third party, caused or contributed to such loss or damage. Unless otherwise agreed in writing and signed by both parties, Agon's total aggregate liability will not exceed the total consulting fees paid by the client in relation to this Proposal. For further detail, see Agon's Terms and Conditions listed in Agon's **QFB-008 Consultancy Agreement** (accessible at https:/ / agonenviro.com.au/ documents/).

The Report/ Document/ Deliverables are provided for the exclusive use of the Client and for this Project only, in accordance with the Scope and Specific Purpose as outlined in the Agreement, and only those third parties who have been authorised in writing by Agon. It should not be used for other purposes, other projects or by a third party unless otherwise agreed and authorised in writing by Agon. Any person relying upon this Report/ Document/ Deliverables beyond its exclusive use and Specific Purpose, and without the express written consent of Agon, does so entirely at their own risk and without recourse to Agon for any loss, liability or damage. To the extent permitted by law, Agon assumes no responsibility for any loss, liability, damage, costs or expenses arising from interpretations or conclusions made by others, or use of the Report by a third party. Except as specifically agreed by Agon in writing, it does not authorise the use of this Report by any third party. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

The conclusions, or data referred to in this Report/ Document/ Deliverable, should not be used as part of a specification for a project without review and written agreement by Agon. This Report/ Document/ Deliverable has been written as advice and opinion, rather than with the purpose of specifying instructions for design or redevelopment. Agon does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in relation to the site(s) it investigated or general management plan it proposed.

This Report/ Document/ Deliverable should be read in whole and should not be copied in part or altered. The Report/ Document/ Deliverable as a whole set outs the findings of the investigations. No responsibility is accepted by Agon for use of parts of the Report/ Document/ Deliverable in the absence (or out of context) of the balance of the Report/ Document/ Deliverable.

7.0 REFERENCES

ACT EPA. 2022. Information Sheet 7 - Guidance for undertaking preliminary contamination investigations for development/lease variation purposes. [Online] 2022.

Abell. 1992. *Canberra New South Wales and Australian Capital Territory 1:000 000 Map Sheet 8727.* Canberra : Bureau of Mineral Resources, 1992.

ACT EPA. 2022. Information Sheet 11 - Environment Protection Authority Report Submission Requirements. [Online] 2020.

ACT Government 2025, Territory Plan 2023, effective 15 Aug 2025.

ACT Government. 2025. ACTmapi. [Online] 2025. http://www.actmapi.act.gov.au/.

ACT, EPA. 2017. Contaminated Sites Environment Protection Policy. [Online] 2017.

Evans, W, R. 1984. Hydrogeology of the Australian Capital Territory and Environs. Canberra : Bureau of Mineral Resources, Geology and Geophysics, 1984.

Evans, W, R, et al. 2004. *Sustainable Groundwater Yield Assessment: Weston Sub-Catchment, ACT.* Canberra : Intergrated Catchment, assessment and Management Centre (iACM) Australian National University, 2004.

HEPA (2025) PFAS National Environmental Management Plan 3.0, Jan 2025.

Muller, R, et al. 2016. Hydrological Landscapes of the Australian Capital Territory. Wagga Wagga, NSW : Office of Environment and Heritage, 2016.

NEPC - National Environment Protection Council. 2013. Amended National Environment Protection Measures Schedule B series. Canberra : Department of Sustainability, Environment, Water, Population and Communities, 2013.

APPENDIX A: PHOTOGRAPHS



Photograph 1: Gravel carpark on Block 6. Multistorey residences on the western side of Braybrooke Street can be seen in background. Taken facing southwest.



Photograph 2: Undeveloped land on Block 6. Current AIS dining hall and residences can be seen in background. Taken facing from the gravel carpark facing east.



Photograph 3: Undeveloped land on Block 6. Gravel carpark is on the raised land can be seen in background. Taken facing north.



Photograph 4: Undeveloped land on Block 6. Carpark for current dining hall and residence can be seen in background. Taken facing northeast.



Photograph 5: Lined stormwater drain which enters Block 6 from under Leverrier Street and flows north-westerly through the block. Taken facing west.



Photograph 6: Entry from Leverrier Street to asphalt lined carpark on Block 26. Left of picture is current AIS residences that are not part of site area. Right of picture is undeveloped land within the site area. Photo taken facing west.



Photograph 7: Asphalt carpark on Block 26. Storage sheds can be seen in background. Taken facing northeast.



Photograph 8: Northwestern corner of asphalt carpark. Service box to the right of picture. Taken facing north.



Photograph 9: Stockpiled materials including concrete, steel, and gravel in the undeveloped section of Block 26 that it within the site area. Surrounding vegetation includes a mixture of healthy native and invasive vegetation. Taken facing north.



Photograph 10: Northern boundary of asphalt carpark. Undeveloped section of site area to left of picture predominantly covered in invasive vegetation with some native trees. Vegetation appears to be in good condition.



Photograph 11: Stormwater infrastructure entry point on the northern boundary of the asphalt carpark.



Photograph 12: Northeastern section of the site area on Block 26. Right of picture is a colourbond/steel storage shed. Left of picture remains undeveloped land. Taken facing east.



Photograph 13: Various types of construction and demolition waste stockpiled adjacent to the previously pictured storage shed amongst the vegetation on the undeveloped land on Block 26. Concrete, brick and gravel were identified in the stockpiles. Taken facing northeast.



Photograph 14: Construction and demolition waste stockpiled in same location as previous photograph. Taken facing north.

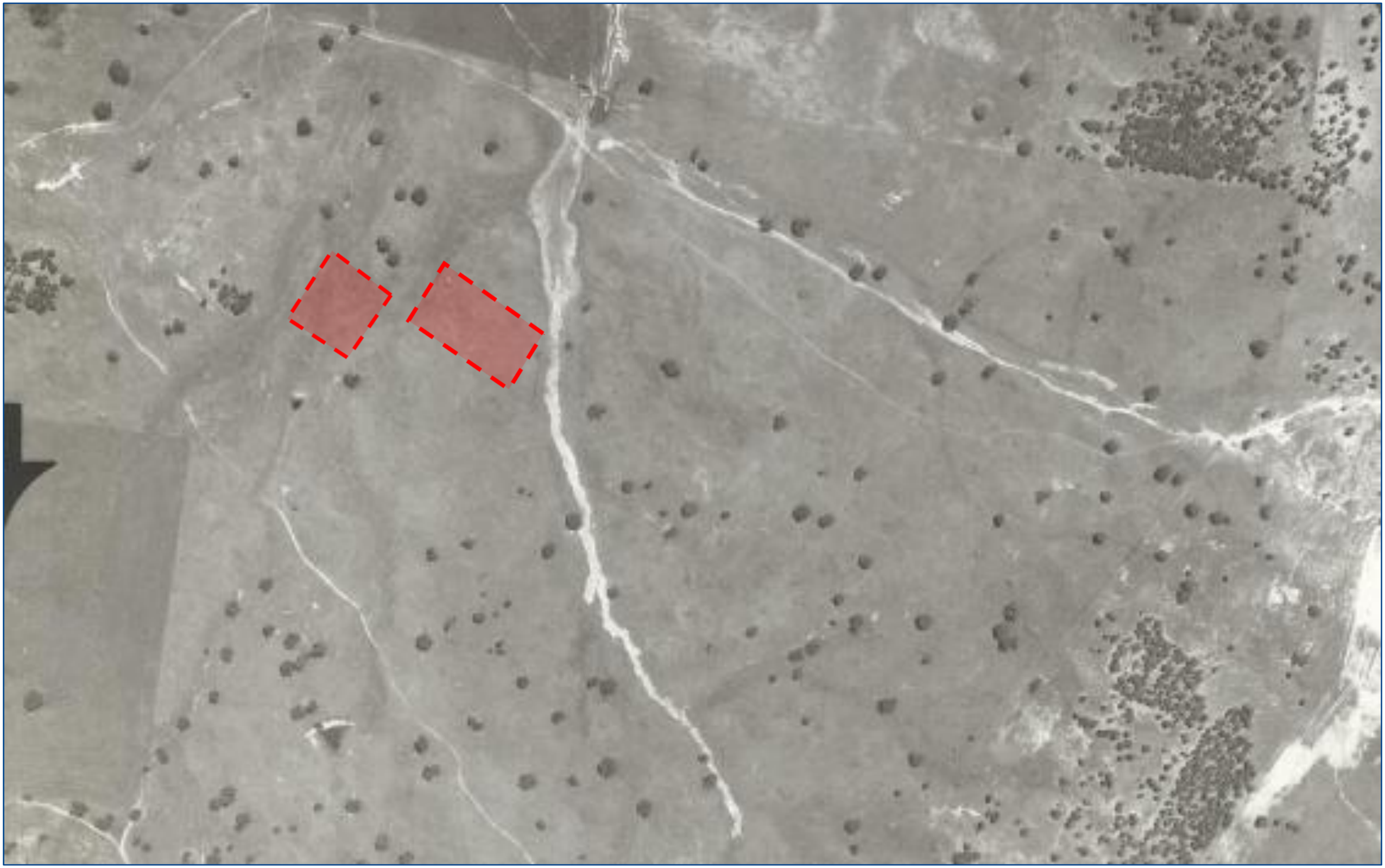


Photograph 15: Taken from northeastern corner of asphalt carpark. Storage shed right of picture. Taken facing west.



Photograph 16: Eastern boundary of asphalt carpark. Further storage sheds and shipping containers can be seen left of picture. AIS indoor sporting facility can be seen in background. Evidence of cracking pavement foreground. Taken facing south.

APPENDIX B: AERIAL IMAGERY



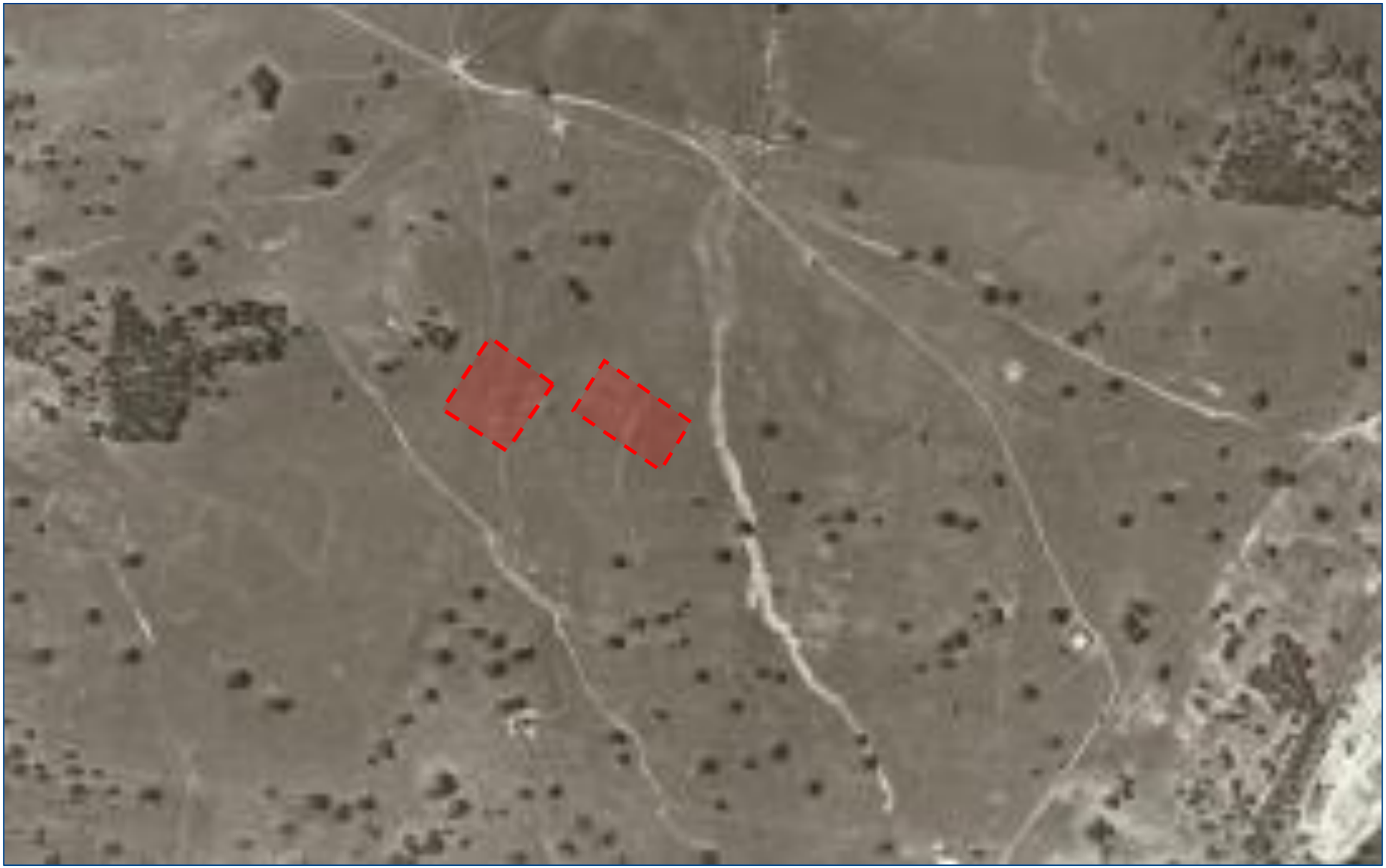
Aerial Image: 1951

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 1968

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 1975

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 1985

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au

Aerial Image: 1995

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 2006

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 2015

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au



Aerial Image: 2025

Legend:

Approximate Site Location

Client:	**Populous**
Site:	Multiple Blocks and Sections, Bruce
Ref:	JE25.0754.00
Rev:	A
Drafter:	MC
Date:	15/10/2025
Source:	ACT Mapi, 2025

agon ENVIRONMENTAL

Agon Environmental Pty Ltd
Unit 6/95 Northbourne Ave, Turner ACT 2612
www.agonenviro.com.au

APPENDIX C: HISTORICAL TITLES

Product	Historical Search
Date/Time	20/10/2025 11:27AM
Customer Reference	JE25.0754
Order ID	20251020000565
Cost	$35.00

Volume 3012 **Folio** 121 **Edition** All

AUSTRALIAN CAPITAL TERRITORY

HISTORICAL TITLE SEARCH

LAND

Bruce Section 8 Block 26 on Deposited Plan 7622

Area is 38.7 hectares or thereabouts

Original title is **Volume** 3012 **Folio** 121

Registered Date	Dealing Number	Description
08/04/1992	779410	Variation of Crown Lease (refer instrument) - lodged on 02/04/1992
18/11/1992	809244	Application-general - lodged on 17/09/1992
25/11/1992	820353	Lease to AUSTRALIAN CAPITAL TERRITORY (THE ACT) of BRUCE STADIUM on SL Plan 2986 Exp 31/12/2009 - lodged on 24/11/1992
11/12/2001	1236963	Application for Certificate of Title - lodged on 30/11/2001
19/02/2002	1248228	Surrender of Sublease (L820353) - lodged on 13/02/2002
15/03/2002	1248229	Lease to AUSTRALIAN CAPITAL TERRITORY of Bruce Stadium on SL Plan 2986 Exp 31/12/2024 continued by S.91A/91B/91C Land Titles Act 1925 - lodged on 13/02/2002
01/06/2005	1421474	Underlease to Australian Capital Territory of Bruce Stadium on SL Plan 2986 Exp 30/12/2024 (1248229) - lodged on 17/05/2005
21/06/2022	3169133	Surrender and Regrant of Crown Lease - lodged on 15/06/2022
11/10/2022	3199530	Vesting of 1421474 in Australian Capital Territory - lodged on 11/10/2022
11/10/2022	3199556	Discharge of Sublease 1421474 - lodged on 11/10/2022

End of interests

ADMINISTRATIVE INTERESTS

Administrative interests information is **not** guaranteed by the Registrar-General, and the Registrar-General nor an authorised entity incurs liability for any omission, misstatement or inaccuracy in the information.

Territory Planning Authority - For further information concerning the following administrative interests, please refer to decided development application information available at https://www.planning.act.gov.au/ or on the DA Finder App, available for download on iOS and Android mobile devices. Alternatively, please contact Access Canberra Land, Planning and Building Services at ACEPDcustomerservices@act.gov.au or 6207 1923. The Territory Planning Authority's administrative interest information has been provided to the Registrar-General since 1 February 2010.

Reference Number	Type	Lodgement Date	Assessment Track	Status	Status Date
201323975	Development Application	22/07/2013	MERIT TRACK - MAJOR NOTIFICATION	APPROVAL CONDITIONAL	11/10/2013

Description
COMMUNITY FACILITY-CANBERRA STADIUM-DEMOLTION. Proposed demolition of existing ticket booths and replaced with new booths in similar position at the East and West entry points.

This data (excluding administrative interests) is certified correct by the Registrar-General at 11:28:53 on 20/10/2025

Unregistered dealings have not been formally recorded in the register.

Territory Planning Authority - For further information concerning the following administrative interests, please refer to decided development application information available at https://www.planning.act.gov.au/ or on the DA Finder App, available for download on iOS and Android mobile devices. Alternatively, please contact Access Canberra Land, Planning and Building Services at ACEPDcustomerservices@act.gov.au or 6207 1923. The Territory Planning Authority's administrative interest information has been provided to the Registrar-General since 1 February 2010.

Reference Number	Type	Lodgement Date	Assessment Track	Status	Status Date
201527238	Development Application	02/04/2015	MERIT TRACK - MINOR NOTIFICATION	APPROVAL CONDITIONAL	02/06/2015

Description
COMMUNITY FACILITY-AIS. Proposed extension to the existing amenities building to include shower facilities at the Australian Institute of Sport.

Territory Planning Authority - For further information concerning the following administrative interests, please refer to decided development application information available at https://www.planning.act.gov.au/ or on the DA Finder App, available for download on iOS and Android mobile devices. Alternatively, please contact Access Canberra Land, Planning and Building Services at ACEPDcustomerservices@act.gov.au or 6207 1923. The Territory Planning Authority's administrative interest information has been provided to the Registrar-General since 1 February 2010.

Reference Number	Type	Lodgement Date	Assessment Track	Status	Status Date
201629059	Development Application	08/04/2016	MERIT TRACK - MAJOR NOTIFICATION	APPROVAL CONDITIONAL	11/05/2016

Description
COMMUNITY FACILITY-STORAGE SHED. Proposed construction of a storage shed.

This data (excluding administrative interests) is certified correct by the Registrar-General at 11:28:53 on 20/10/2025

Unregistered dealings have not been formally recorded in the register.

Product	Historical Search
Date/Time	20/10/2025 11:24AM
Customer Reference	
Order ID	20251020000552
Cost	$35.00

Volume 3012 **Folio** 124 **Edition** All

AUSTRALIAN CAPITAL TERRITORY

HISTORICAL TITLE SEARCH

LAND

Bruce Section 46 Block 6 on Deposited Plan 11221

Area is 104500 square metres or thereabouts

Original title is **Volume** 3012 **Folio** 124

Registered Date	Dealing Number	Description
15/03/2006	1463738	Easement for water supply continued by S.91A/91B/91C Land Titles Act 1925 - lodged on 10/03/2006
02/07/2014	1925718	Application to Register Deposited Plan removing parcels BRUC Section:46 Block:5 - lodged on 30/06/2014
03/07/2014	1925719	Application to Register a Crown Lease (WA1925717) - lodged on 30/06/2014
03/07/2014	1926303	Correction to Register - Restriction updated from (Type=EIN, Auth/Lots=CRTG 1463738, Priv/Gross=, Dominance=) to (Type=EIN, Auth/Lots=GROSS CREATED BY TG 1463738, Priv/Gross=, Dominance=) - lodged on 03/07/2014
03/07/2014	1926302	Registrar's Dealing - Refer Instrument - lodged on 03/07/2014
20/05/2015	1972761	Registrar-General's Dealing for Safe Custody - lodged on 18/05/2015
22/06/2022	3169135	Surrender and Regrant of Crown Lease - lodged on 15/06/2022
22/02/2023	3228574	Title Repair requested by Party - Refer Instrument - lodged on 22/02/2023

End of interests

This data (excluding administrative interests) is certified correct by the Registrar-General at 11:25:41 on 20/10/2025

Unregistered dealings have not been formally recorded in the register.

APPENDIX D: GOVERNMENT SEARCHES

Mitchell Cunningham

From: Contaminated Sites <ContaminatedSites@act.gov.au>
Sent: Monday, October 20, 2025 2:00 PM
To: Mitchell Cunningham
Subject: RE: Contaminated Land Search - Application-WST379W7, Block 26 Section 8 & Block 6 Section 46 Bruce, Belconnen Mitchell Cunningham [SEC=UNCLASSIFIED, DLM=Sensitive: Personal]

Follow Up Flag: Follow up
Flag Status: Flagged

OFFICIAL

Dear Mr Cunningham,

RE: Contaminated Land Search – Reference: WST379W7

Thank you for your search form request of 20/10/2025 enquiring about:
Block 26 Section 8 Bruce Belconnen
Block 6 Section 46 Bruce Belconnen

Records held by the Environment Protection Authority (EPA) for the above block(s) indicate the following:

BRUCE SECTION 8 BLOCK 26

The block is recorded on the EPA's contaminated sites management database and geographic information system.

The site contains a maintenance depot which reportedly includes fuel storage and chemical storage facilities. Details of the current operational status of the Depot are not recorded by the EPA.

The site also contains a number of commercial complexes. Commercial complexes, prior to the introduction of natural gas to the ACT in the 1980's, utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

Part of the site is currently occupied by playing fields. Whilst there is no recorded information on potential site contamination playing fields have been associated in the past with site contamination due to the application of certain chemicals for the control of weeds and pests and the placement of uncontrolled fill during the establishment of the fields. The storage of herbicides/pesticides may also have been undertaken at the site for the above purpose.

The ACT EPA 2017 Contaminated Sites Environment Protection Policy lists fuel and chemical storage and landfilling as activities associated with land contamination which may pose a risk to human health and the environment.

The block is located within Designated/National (i.e. Commonwealth) land use area and with planning provisions managed by the National Capital Authority (NCA), the Commonwealth planning authority and not by the ACT Government. For further information on the site history and any activities which may have resulted in contamination of the block you or your client should contact the NCA on (02) 6271 2888.

The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

BRUCE SECTION 46 BLOCK 6

The block is not recorded on the EPA's contaminated sites management database or geographic information system.

The site is currently occupied by commercial complexes. Commercial complexes, prior to the introduction of natural gas to the ACT in the 1980's, utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

The Contaminated Sites Environment Protection Policy 2017 list fuel storage as an activity associated with land contamination.

The block is also located within Designated/National (i.e. Commonwealth) land use area and with planning provisions managed by the National Capital Authority (NCA), the Commonwealth planning authority and not by the ACT Government. For further information on the site history and any activities which may have resulted in contamination of the block you or your client should contact the NCA on (02) 6271 2888.

The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act.

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

Yours sincerely

Arif Mirza | Environment Protection Officer | Office of the Environment Protection Authority
Phone: 02 6207 2157 | Email: arif.mirza@act.gov.au
Access Canberra | City and Environment Directorate | ACT Government
GPO Box 158, Canberra City, ACT 2601 | www.act.gov.au

We acknowledge the traditional custodians of the ACT, the Ngunnawal people. We acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.

Please consider the environment before printing this email.

Disclaimer: The content of this message is confidential. If you have received it by mistake, please inform us and then delete the message. It is forbidden to copy, forward, or in any way reveal the contents of this message to anyone.

From: smartforms@act.gov.au <smartforms@act.gov.au>
Sent: Monday, 20 October 2025 11:20 AM
To: Contaminated Sites <ContaminatedSites@act.gov.au>
Subject: Contaminated Land Search - Application, WST379W7, Mitchell Cunningham [SEC=UNCLASSIFIED, DLM=Sensitive: Personal]

Caution: This email originated from outside of the ACT Government. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Contaminated Land Search - Application

Form data summary

Customer details	Mitchell Cunningham
Reference code	WST379W7

For issues or questions relating to SmartForms please contact the Payment Services Integration Team on *5 4607 or email smartforms.admin@act.gov.au.

This email, and any attachments, may be confidential and also privileged. If you are not the intended recipient, please notify the sender and delete all copies of this transmission along with any attachments immediately. You should not copy or use it for any purpose, nor disclose its contents to any other person.

APPENDIX E: LOGS

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH01
DRILLING DATE 04/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH01-0.1 QC01		D	FILL; gravelly silt, soft, low to medium plasticity, medium brown, poorly graded fine to medium, angular gravels.	
0.5	BH01-0.5			Sandy CLAY, soft to firm, low to medium plasticity, pale orange and red with brown, well graded fine to coarse, sub-angular sands.	
1	BH01-1.0				
1.5	BH01-1.5			Clayey SILT, soft, low plasticity, light grey to yellow.	
2	BH01-2.0				Extremely weathered rock. Siltstone.
2.5	BH01-2.5				
3	BH01-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH02
DRILLING DATE 04/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH02-0.1		D	FILL; gravelly silt, soft, low to medium plasticity, medium brown, poorly graded fine to medium, angular gravels.	
0.5	BH02-0.5 QC02			Sandy CLAY, soft to firm, low to medium plasticity, pale orange and red with brown, well graded fine to coarse, sub-angular sands.	
1	BH02-1.0				
1.5	BH02-1.5				
2	BH02-2.0			Clayey SILT, soft, low plasticity, light grey to yellow.	Extremely weathered rock. Siltstone.
2.5	BH02-2.5				
3	BH02-3.0				
3.5					
4	BH02-4.0				Auger refusal on bedrock at 4.0m.
4.5					Coring from 4.0m to 10.0m for geotechnical investigation.
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH03
DRILLING DATE 04/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH03-0.1		D	FILL; sandy silt, soft, low plasticity, light brown, well graded fine to coarse, sub-angular sands.	
0.5	BH03-0.5				
1	BH03-1.0 QC03				
1.5	BH03-1.5			Gravelly sandy CLAY, soft to firm, low to medium plasticity, orange and red with brown, well graded fine to coarse, sub-angular sands and gravels.	
2	BH03-2.0				
2.5	BH03-2.5				
3	BH03-3.0				
3.5	BH03-3.5			Sandy SILT, soft, low plasticity, light grey to yellow.	Extremely weathered rock. Siltstone.
4	BH03-4.0				
4.5					
5	BH03-5.0				
5.5					
6	BH03-6.0				
6.5					
7	BH03-7.0				
7.5					
8	BH03-8.0				
8.5					
9	BH03-9.0				
9.5					
10	BH03-10.0			End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH04
DRILLING DATE 05/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0.5	BH04-0.1 BH04-0.5 QC05		D	FILL; gravelly sandy silt, soft, low to medium plasticity, light brown, well graded fine to coarse, sub-angular sand, poorly graded medium to coarse gravels.	
1	BH04-1.0				
1.5	BH04-1.5			Clayey SAND, well graded fine to coarse, sub-angular sands, red and brown, soft, medium plasticity clay, trace medium blue gravels.	
2	BH04-2.0				
2.5					Weathered rock. Mudstone.
3	BH04-3.0			Gravelly clayey SAND, poorly graded fine to medium grain, sub-rounded sands, medium brown, soft to firm, low to medium plasticity.	Auger refusal on bedrock at 3.2m.
3.5					Coring from 3.2m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH05
DRILLING DATE 05/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH05-0.1 QC04		D	FILL; gravelly silt, soft, low to medium plasticity, medium brown, poorly graded fine to medium, angular gravels.	
0.5	BH05-0.5			Sandy CLAY, soft to firm, low to medium plasticity, pale orange and red with brown, well graded fine to coarse, sub-angular sands.	
1	BH05-1.0				
1.5				Clayey SILT, soft, low plasticity, light grey to yellow.	
2	BH05-2.0				Weathered rock. Siltstone.
2.5					Auger refusal on bedrock at 2.5m.
3					Coring from 2.5m to 10.0m for geotechnical investigation.
3.5					
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH06
DRILLING DATE 06/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH06-0.1		D	FILL; sandy silt, soft, low to medium plasticity, medium brown with slight red, uniformly coarse, angular sands.	
0.5	BH06-0.5				
1	BH06-1.0			Gravelly sandy CLAY, soft to firm, medium plasticity, pale red with brown, well graded fine to coarse, sub-angular sands.	
1.5				Clayey SILT, soft, low plasticity, light grey to yellow.	
2	BH06-2.0				Weathered rock. Siltstone.
2.5					
3	BH06-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH07
DRILLING DATE 06/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0.5	BH07-0.1 BH07-0.5 QC06		D	FILL; gravelly sand, well graded, fine to coarse grained, sub-rounded to sub-angular, medium brown with slight red.	
1	BH07-1.0			Silty CLAY, soft, medium plasticity, red with medium brown.	
1.5				Sandy SILT, soft, low plasticity, yellow, well graded fine to coarse, sub-angular sands.	Weathered rock. Siltstone.
2	BH07-2.0				
2.5					
3	BH07-3.0				Auger refusal on bedrock at 3.3m.
3.5					Coring from 3.3m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH08
DRILLING DATE 09/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH08-0.1		M	FILL; sandy SILT, soft, low plasticity, dark to medium brown, uniformly fine sands.	
0.5	BH08-0.5				
1	BH08-1.0 QC07		D	Gravelly sandy CLAY, firm, low to medium plasticity, red with medium brown, well graded, angular sands and gravels.	
1.5					
2	BH08-2.0				
2.5				Sandy SILT, soft, low plasticity, white to yellow, uniformly fine sands.	Weathered rock. Siltstone.
3	BH08-3.0				Auger refusal on bedrock at 3.1m.
3.5					Coring from 3.1m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH09
DRILLING DATE 09/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH09-0.1		M	FILL; gravelly sand, poorly graded fine to medium, dark to medium brown.	
0.5	BH09-0.5		D	Sandy SILT, soft, low plasticity, light brown.	
1	BH09-1.0		D-M	Gravelly sandy CLAY, firm, low to medium plasticity, light to medium brown with slight brown, well graded, angular sands and gravels.	
1.5					
2	BH09-2.0				
2.5			D	Sandy SILT, soft, low plasticity, white to yellow, uniformly fine sands.	Weathered rock. Siltstone.
3	BH09-3.0				Auger refusal on bedrock at 3.2m.
3.5					Coring from 3.2m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH10
DRILLING DATE 10/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH10-0.1		M	FILL; clayey sand, poorly graded fine to medium, sub-angular, dark to medium brown with pale orange, soft to firm, medium to low plasticity.	
0.5	BH10-0.5				
1	BH10-1.0		D-M	Sandy CLAY, soft to firm, low to medium plasticity, light to medium brown with orange, poorly graded fine to medium, sub-angular sands.	
1.5					
2	BH10-2.0				
2.5			D	CLAY, firm, low to medium plasticity, mottled yellow, orange, red, brown.	Weathered rock. Mudstone.
3	BH10-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH11
DRILLING DATE 10/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH11-0.1		M	FILL; sandy GRAVEL, well graded, angular, grey.	Roadbase
0.5	BH11-0.5		D	FILL; clayey sandy gravel, well graded, angular, medium brown with orange, firm, low plasticity.	
1	BH11-1.0		M	FILL; silty sand, well graded, angular, dark brown, soft, low plasticity.	Traces of red brick
1.5			D	FILL; sandy gravelly clay, firm, medium plasticity, red with multi coloured gravel, well graded, angular.	
2	BH11-2.0				
2.5				Clayey SAND, uniformly fine, round, yellow, soft, low plasticity.	Weathered rock. Sandstone.
3	BH11-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH12
DRILLING DATE 10/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH12-0.1		W	FILL; sandy clay, soft to firm, medium plasticity, brown with grey mottling, well graded, sub-angular.	
0.5	BH12-0.5		D-M	FILL; silty sandy clay, firm, low plasticity, yellow to orange, poorly graded fine to medium grain, sub-angular.	
1	BH12-1.0				
1.5					
2	BH12-2.0				
2.5					
3	BH12-3.0 QC08		M	Clayey SAND, poorly graded fine to medium, angular, light brown to yellow, soft, low plasticity.	Weathered rock. Sandstone.
3.5					
4	BH12-4.0				Auger refusal on bedrock at 4.0m.
4.5					Coring from 4.0m to 10.0m for geotechnical investigation.
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH13
DRILLING DATE 11/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH13-0.1		M	Asphalt	Road base
				FILL; sandy gravel, well graded, angular, grey.	
0.5	BH13-0.5			FILL; sandy clay, soft, medium plasticity, medium brown, poorly graded fine to medium, sub-angular sands.	
1	BH13-1.0				
1.5				FILL; gravelly sandy clay, soft to firm, low to medium plasticity, orange grey and brown, well graded, angular sands.	
2	BH13-2.0				
2.5				Sandy CLAY, soft to firm, low to medium plasticity, orange and brown, poorly graded fine to medium, sub-rounded.	Weathered rock. Sandstone.
3	BH13-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 11 Mar 2026

ENVIRONMENTAL BOREHOLE LOG

PROJECT NUMBER JE25.0754.00
PROJECT NAME AIS
CLIENT Populus
ADDRESS Leverrier Street, Bruce

DRILL MODEL 4 Tonne Drill Rig
DRILL METHOD Auger
TOTAL DEPTH 3.0 m
DIAMETER 150mm
DRILLING COMPANY Sea to Summit Drilling

BOREHOLE NUMBER BH14
DRILLING DATE 11/02/2026

COMMENTS

LOGGED BY AT
CHECKED BY JOB

Depth (m)	Samples	Graphic Log	Moisture	Material Description	Additional Observations
0	BH14-0.1		M	Asphalt	Road base
				FILL; sandy gravel, well graded, angular, grey.	
0.5	BH14-0.5			FILL; gravelly sandy clay, soft to firm, low to medium plasticity, orange grey and brown, well graded, angular sands.	
1	BH14-1.0				
1.5					
2	BH14-2.0				
2.5				Sandy CLAY, soft to firm, low to medium plasticity, orange and brown, poorly graded fine to medium, sub-rounded.	Weathered rock. Sandstone.
3	BH14-3.0				Auger refusal on bedrock at 3.0m.
3.5					Coring from 3.0m to 10.0m for geotechnical investigation.
4					
4.5					
5					
5.5					
6					
6.5					
7					
7.5					
8					
8.5					
9					
9.5					
10				End of Borehole 10.0m as planned for geotechnical investigation.	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 11 Mar 2026

APPENDIX F: QUALITY ASSURANCE / QUALITY CONTROL

QA/ QC REVIEW

The Quality Assurance/Quality Control (QA/QC) program implemented for the ESSR was generated as the outcome of the seven-step DQO process.

The achievement of the project DQOs was demonstrated by reference to the Data Quality Indicators (DQIs) which include precision, accuracy, representativeness, completeness and comparability. Details of the QA/QC data validation are presented below.

Soil Sampling Procedures

The investigation program at the site consisted of the following:

- In-situ soil sampling program was implemented across the site including fourteen (14) boreholes at accessible locations.

Soil samples were collected in accordance with methods described within the proposed scope, including:

- Sterile laboratory-prepared soil jars bottles were used as sample containers,
- Soil samples were immediately stored in ice-filled coolers prior to transport to the selected NATA accredited laboratory for analysis under chain of custody (COC) protocol;
- Disposable nitrile gloves were used in transferring soil to the sample jars and were changed between each soil sample,
- Reusable sampling equipment was decontaminated between sample locations;
- Every sample jar was clearly labelled and cross-referenced to a COC form prior to submission to Agon's nominated laboratories;
- Soil samples collected during the investigation were delivered to the laboratories within prescribed holding times; and
- All soil intra-laboratory replicate (duplicate) sample analysis was undertaken by Eurofins Environment Testing Australia (Eurofins). Eurofins are accredited by the National Association of Testing Authorities (NATA) for all requested analyses.

Soil Field Replicate Sampling

To establish the reliability of primary soil sampling, intra-laboratory replicate samples were collected and analysed as part of the soil assessment program.

The field soil replicate samples collected and the respective analytical schedule for each are summarised in Table R 1. The analytical results between primary and replicate samples pairs are presented in the tabulated analytical results provided in Table 2, Appendix G.

Table R 1: Soil duplicate samples

Sample Date	Primary Sample	Intra laboratory Sample*	Inter laboratory Sample**	Analytical Schedule
04/02/2026	BH02-0.5	QC02	-	Metals, PAHs, BTEXN, TRH, OCP, PCB, Phenols
04/02/2026	BH03-1.0	QC03	-	Metals, PAHs, BTEXN, TRH, OCP, PCB, Phenols

All samples were analysed by Eurofins MGT

Precision of analytical techniques is measured by the relative percent difference (RPD) between replicate results. However, for field replicates there is no universally accepted method for comparing results. This is mainly due to the high likelihood for heterogeneous analyte distribution within samples; hence, results can only be reviewed qualitatively.

The calculated RPDs between primary and replicate samples were all within the acceptable range.

Frequency of Replicate Samples

The recommended frequency of analysing:

- Duplicate (intra laboratory) samples will be analysed at a rate of 1 in 20 primary samples.

The actual frequency of replicate analysis against the primary soil sampling schedule is summarised in Table R 3 below.

Table R 3: Frequency of replicate analysis

Analyte	Primary samples	Total QAQC Samples analysed	Intra laboratory samples analysed	Inter laboratory samples analysed
SOIL				
Metals	20	2	2	0
PAH	20	2	2	0
TRH	20	2	2	0
BTEX	20	2	2	0
OCPs	20	2	2	0
Phenols	20	2	2	0
PCBs	20	2	2	0
TOTAL				

Agon have analysed sufficient intra-laboratory duplicates for the purpose of the report.

Laboratory Program

Agon have reviewed laboratory internal QC testing results provided by Eurofins. Results of the internal laboratory QC programs have been found to be within acceptable limits, as detailed in the following sections.

Internal Laboratory QAQC Results

The quality control program implemented by Eurofins included the preparation of laboratory blanks, duplicates prepared in the laboratory and the analysis of samples spiked with a known quantity of the analyte or an appropriate surrogate. Results of the program indicated the following:

- Sufficient agreement between the results of the original and duplicate analyses were generally obtained within data quality objectives. Although, elevated duplicate recoveries were reported for the following analytes:
    - Ref R26-No0033953 – Chromium (34%).
    - Ref R26-No0033974 – Toluene (200%).
    - Ref R26-No0034001 – Arsenic (58%).
    - Ref R26-No0034001 – Lead (31%).
- No contamination was detected in the method blanks (results were below laboratory level of reporting).

Internal quality control results provided by Eurofins are, therefore, considered satisfactory.

Holding Times

All soil samples were received by the primary laboratory within prescribed holding times.

QAQC Conclusions

A quality assurance and quality control (QA/QC) program was implemented as part of the ESSR undertaken to support the investigation findings. The results of the QA/QC program indicated the following:

- Field soil QC sampling programs are considered sufficient to demonstrate the reliability of primary soil / groundwater sampling; and
- Internal laboratory QC results provided by Eurofins are considered satisfactory.

Agon considers that the QAQC program meets the requirements of the DQO and DQI.

APPENDIX G: TABLES

Table 1
Soil Analytical Results

	Metals								Inorganics	TRH							TPH			
	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	Moisture Content (dried @ 103°C)	C6-C10 Fraction (F1)	C6-C10 (F1) minus BTEX	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	2	0.4	5	5	5	0.1	5	5	1	20	20	50	50	100	100	100	20	20	50	50
NEPM 2013 Table 1A(1) HILs Rec C Soil	300	90	300 #	17,000	600	80	1,200	30,000												
NEPM 2013 Table 1A(1) HILs Res B Soil	500	150	500 #	30,000	1,200	120	1,200	60,000												
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand											45 | 70 | 110 | 200		110 | 240 | 440							
>=0m, <1m											45		110							
>=1m, <2m											70		240							
>=2m, <4m											110		440							
>=4m											200		NL							
Field ID	**Date**	**Lab Report Number**																		
BH01 - 0.5	**04 Feb 2026**	**1322508**	8.3	<0.4	68	11	16	<0.1	7.9	9.5	4.8	-	-	-	-	-	-	-	-	-	-
BH02 - 0.5	**04 Feb 2026**	**1322508**	7.5	<0.4	48	12	19	<0.1	7.7	11	6.1	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH03 - 0.5	**04 Feb 2026**	**1322508**	7.3	<0.4	46	14	17	<0.1	12	18	11	-	-	-	-	-	-	-	-	-	-	-
BH03 - 1.0	**04 Feb 2026**	**1322508**	9.5	<0.4	65	24	23	<0.1	22	30	16	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH04 - 1.0	**05 Feb 2026**	**1322508**	12	<0.4	36	16	14	<0.1	10	21	7.2	-	-	-	-	-	-	-	-	-	-	-
BH05 - 1.0	**05 Feb 2026**	**1322508**	13	<0.4	51	22	21	<0.1	18	27	10	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH06 - 0.5	**06 Feb 2026**	**1322508**	10	<0.4	66	17	19	<0.1	17	18	10	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH06 - 1.0	**06 Feb 2026**	**1322508**	7.1	<0.4	48	17	14	<0.1	34	17	16	-	-	-	-	-	-	-	-	-	-	-
BH07 - 1.0	**06 Feb 2026**	**1322508**	3.5	<0.4	28	20	11	<0.1	30	12	20	-	-	-	-	-	-	-	-	-	-	-
BH08 - 0.5	**09 Feb 2026**	**1322508**	3.2	<0.4	35	<5	9.8	<0.1	<5	<5	5.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH09 - 0.5	**09 Feb 2026**	**1322508**	3.5	<0.4	30	<5	9.2	<0.1	<5	5.0	2.4	-	-	-	-	-	-	-	-	-	-	-
BH10 - 0.5	**10 Feb 2026**	**1322508**	14	<0.4	40	15	24	<0.1	17	35	9.9	-	-	-	-	-	-	-	-	-	-	-
BH11 - 1.0	**10 Feb 2026**	**1322508**	5.9	<0.4	23	11	48	<0.1	9.0	56	9.8	-	-	-	-	-	-	-	-	-	-	-
BH12 - 1.0	**10 Feb 2026**	**1322508**	8.7	<0.4	30	14	11	<0.1	28	30	12	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH13 - 0.5	**11 Feb 2026**	**1322508**	7.1	<0.4	30	21	56	<0.1	31	45	15	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH13 - 1.0	**11 Feb 2026**	**1322508**	8.4	<0.4	28	15	12	<0.1	17	21	12	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH13 - 2.0	**11 Feb 2026**	**1322508**	9.6	<0.4	28	14	8.3	<0.1	22	15	14	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH14 - 0.5	**11 Feb 2026**	**1322508**	16	<0.4	43	17	25	<0.1	20	26	14	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH14 - 1.0	**11 Feb 2026**	**1322508**	8.2	<0.4	27	14	15	<0.1	16	25	14	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
BH14 - 2.0	**11 Feb 2026**	**1322508**	11	<0.4	52	18	20	<0.1	17	30	13	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
QC02	**04 Feb 2026**	**1322508**	7.6	<0.4	56	11	16	<0.1	7.7	11	5.7	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50
QC03	**04 Feb 2026**	**1322508**	11	<0.4	50	25	20	<0.1	18	21	16	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50

 # - Cr(vi) investigation level applied as an indicative criteria

Table 1
Soil Analytical Results

		BTEX							Halogenated Benzenes	PA									
	C10-C36 Fraction (Sum)	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Hexachlorobenzene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	0.5	0.1	0.1	0.1	0.2	0.1	0.3	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013 Table 1A(1) HILs Rec C Soil									10										
NEPM 2013 Table 1A(1) HILs Res B Soil									15										
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand			0.5 | 0.5 | 0.5 | 0.5	160 | 220 | 310 | 540	55			40 | 60 | 95 | 170										
>=0m, <1m			0.5	160	55			40											
>=1m, <2m			0.5	220				60											
>=2m, <4m			0.5	310				95											
>=4m			0.5	540				170											
Field ID	**Date**	**Lab Report Number**																		
BH01 - 0.5	**04 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02 - 0.5	**04 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH03 - 0.5	**04 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03 - 1.0	**04 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH04 - 1.0	**05 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05 - 1.0	**05 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 - 0.5	**06 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH06 - 1.0	**06 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07 - 1.0	**06 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08 - 0.5	**09 Feb 2026**	**1322508**	<50	<0.5	<0.1	0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH09 - 0.5	**09 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10 - 0.5	**10 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11 - 1.0	**10 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12 - 1.0	**10 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH13 - 0.5	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH13 - 1.0	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH13 - 2.0	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH14 - 0.5	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH14 - 1.0	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH14 - 2.0	**11 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC02	**04 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC03	**04 Feb 2026**	**1322508**	<50	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

 # - Cr(vI) investigation level applied as an indicative criteria

Table 1
Soil Analytical Results

																						Phenols
			Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	1	1	0.5	0.5	5	0.5	0.5	0.2	1	5
NEPM 2013 Table 1A(1) HILs Rec C Soil									3	3	3	300											
NEPM 2013 Table 1A(1) HILs Res B Soil									4	4	4	400											
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand						3																	
>=0m, <1m						3																	
>=1m, <2m																							
>=2m, <4m																							
>=4m																							
Field ID	**Date**	**Lab Report Number**																					
BH01 - 0.5	**04 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02 - 0.5	**04 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH03 - 0.5	**04 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03 - 1.0	**04 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH04 - 1.0	**05 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05 - 1.0	**05 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH06 - 0.5	**06 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH06 - 1.0	**06 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07 - 1.0	**06 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08 - 0.5	**09 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH09 - 0.5	**09 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10 - 0.5	**10 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11 - 1.0	**10 Feb 2026**	**1322508**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12 - 1.0	**10 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH13 - 0.5	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH13 - 1.0	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH13 - 2.0	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH14 - 0.5	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH14 - 1.0	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
BH14 - 2.0	**11 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
QC02	**04 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5
QC03	**04 Feb 2026**	**1322508**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5

 # - Cr(vl) investigation level applied as an indicative criteria

Table 1
Soil Analytical Results

																						Organochlori
	4,6-Dinitro-o-cyclohexylphenol	4-chloro-3-methylphenol	4-Nitrophenol	Cresol Total	Pentachlorophenol	Tetrachlorophenols	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	1	5	0.5	1	10	0.5	1	20	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05
NEPM 2013 Table 1A(1) HILs Rec C Soil				4,000	120		40,000								10		70					400
NEPM 2013 Table 1A(1) HILs Res B Soil				4,700	130		45,000								10		90					600
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand																						
>=0m, <1m																						
>=1m, <2m																						
>=2m, <4m																						
>=4m																						

Field ID	Date	Lab Report Number																				
BH01 - 0.5	04 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02 - 0.5	04 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH03 - 0.5	04 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03 - 1.0	04 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH04 - 1.0	05 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05 - 1.0	05 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH06 - 0.5	06 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH06 - 1.0	06 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07 - 1.0	06 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08 - 0.5	09 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH09 - 0.5	09 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10 - 0.5	10 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11 - 1.0	10 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12 - 1.0	10 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH13 - 0.5	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH13 - 1.0	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH13 - 2.0	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH14 - 0.5	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH14 - 1.0	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
BH14 - 2.0	11 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
QC02	04 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
QC03	04 Feb 2026	1322508	<20	<1	<5	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05

 # - Cr(vi) investigation level applied as an indicative criteria

Table 1
Soil Analytical Results

	ne Pesticides												Herbicides	PCBs								
	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Dinoseb	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	20	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs Rec C Soil					20				10		400	30									1
NEPM 2013 Table 1A(1) HILs Res B Soil					20				10		500	30									1
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand																					
>=0m, <1m																					
>=1m, <2m																					
>=2m, <4m																					
>=4m																					

Field ID	Date	Lab Report Number																				
BH01 - 0.5	04 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH02 - 0.5	04 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH03 - 0.5	04 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH03 - 1.0	04 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH04 - 1.0	05 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH05 - 1.0	05 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH06 - 0.5	06 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH06 - 1.0	06 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH07 - 1.0	06 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH08 - 0.5	09 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH09 - 0.5	09 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH10 - 0.5	10 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH11 - 1.0	10 Feb 2026	1322508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH12 - 1.0	10 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH13 - 0.5	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH13 - 1.0	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH13 - 2.0	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH14 - 0.5	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH14 - 1.0	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BH14 - 2.0	11 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QC02	04 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QC03	04 Feb 2026	1322508	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

 # - Cr(vi) investigation level applied as an indicative criteria

Table 2 - RPDs

				Metals								Inorganics	TRH							TPH				
				Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	Moisture Content (dried @ 103°C)	C6-C10 Fraction (F1)	C6-C10 (F1) minus BTEX	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				2	0.4	5	5	5	0.1	5	5	1	20	20	50	50	100	100	100	20	20	50	50	50
Field ID	**Lab Report Number**	**Lab Name**	**Sample Type**																					
BH02 - 0.5	**1322508**	**Eurofins**	**Normal**	7.5	<0.4	48	12	19	<0.1	7.7	11	6.1	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
QC02	**1322508**	**Eurofins**	**Field_D**	7.6	<0.4	56	11	16	<0.1	7.7	11	5.7	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
RPD				1	0	15	9	17	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
BH03 - 1.0	**1322508**	**Eurofins**	**Normal**	9.5	<0.4	65	24	23	<0.1	22	30	16	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
QC03	**1322508**	**Eurofins**	**Field_D**	11	<0.4	50	25	20	<0.1	18	21	16	<20	<20	<50	<50	<100	<100	<100	<20	<20	<50	<50	<50
RPD				15	0	26	4	14	0	20	35	0	0	0	0	0	0	0	0	0	0	0	0	0

***RPDs have only been considered where a concentration is greater than 1 times the EQL.**

****Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))**

*****Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory**

Table 2 - RPDs

				BTEX							Halogenated Benzenes	PAH												
				Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Hexachlorobenzene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.1	0.1	0.1	0.2	0.1	0.3	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Field ID	**Lab Report Number**	**Lab Name**	**Sample Type**																					
BH02 - 0.5	**1322508**	**Eurofins**	**Normal**	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC02	**1322508**	**Eurofins**	**Field_D**	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BH03 - 1.0	**1322508**	**Eurofins**	**Normal**	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
QC03	**1322508**	**Eurofins**	**Field_D**	<0.5	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

***RPDs have only been considered where a concentration is great**

****Elevated RPDs are highlighted as per QAQC Profile settings (Ac**

*****Interlab Duplicates are matched on a per compound basis as**

Table 2 - RPDs

																				Phenols				
				Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	3&4-Methylphenol (m&p-cresol)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexylphenol	4-chloro-3-methylphenol	4-Nitrophenol
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	1	1	0.5	0.5	5	0.5	0.5	0.2	1	5	20	1	5
Field ID	**Lab Report Number**	**Lab Name**	**Sample Type**																					
BH02 - 0.5	**1322508**	**Eurofins**	**Normal**	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5
QC02	**1322508**	**Eurofins**	**Field_D**	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BH03 - 1.0	**1322508**	**Eurofins**	**Normal**	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5
QC03	**1322508**	**Eurofins**	**Field_D**	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.4	<1	<1	<0.5	<0.5	<5	<0.5	<0.5	<0.2	<1	<5	<20	<1	<5
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

***RPDs have only been considered where a concentration is great**

****Elevated RPDs are highlighted as per QAQC Profile settings (Ac**

*****Interlab Duplicates are matched on a per compound basis as r**

Table 2 - RPDs

																				Organochlorine Pesticides			
				Cresol Total	Pentachlorophenol	Tetrachlorophenols	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan I	Endosulfan II
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	1	10	0.5	1	20	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Field ID	**Lab Report Number**	**Lab Name**	**Sample Type**																					
BH02 - 0.5	**1322508**	**Eurofins**	**Normal**	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
QC02	**1322508**	**Eurofins**	**Field_D**	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BH03 - 1.0	**1322508**	**Eurofins**	**Normal**	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
QC03	**1322508**	**Eurofins**	**Field_D**	<0.5	<1	<10	<0.5	<1	<20	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

***RPDs have only been considered where a concentration is great**

****Elevated RPDs are highlighted as per QAQC Profile settings (Ac**

*****Interlab Duplicates are matched on a per compound basis as r**

Table 2 - RPDs

											Herbicides	PCBs							
				Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Dinoseb	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5	20	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Field ID	**Lab Report Number**	**Lab Name**	**Sample Type**																		
BH02 - 0.5	**1322508**	**Eurofins**	**Normal**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QC02	**1322508**	**Eurofins**	**Field_D**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BH03 - 1.0	**1322508**	**Eurofins**	**Normal**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QC03	**1322508**	**Eurofins**	**Field_D**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
RPD				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

***RPDs have only been considered where a concentration is great**

****Elevated RPDs are highlighted as per QAQC Profile settings (Ac**

*****Interlab Duplicates are matched on a per compound basis as r**

APPENDIX H: LABORATORY CERTIFICATES

Agon Environmental Pty Ltd - ACT
68 Northbourne Ave
Canberra
ACT 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **-John O Brien - ACT Manager**

Report **1322508-S**
Project name JE25.0754.00
Project ID JE25.0754.00
Received Date Feb 11, 2026

Client Sample ID			**BH01 - 0.5**	**BH02 - 0.5**	**BH03 - 0.5**	**BH03 - 1.0**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**R26-Fe0033923**	**R26-Fe0033930**	**R26-Fe0033938**	**R26-Fe0033939**
Date Sampled			**Feb 04, 2026**	**Feb 04, 2026**	**Feb 04, 2026**	**Feb 04, 2026**
Test/Reference	LOR	Unit				
Metals M8						
Arsenic	2	mg/kg	8.3	7.5	7.3	9.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	68	48	46	65
Copper	5	mg/kg	11	12	14	24
Lead	5	mg/kg	16	19	17	23
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	7.9	7.7	12	22
Zinc	5	mg/kg	9.5	11	18	30
Sample Properties						
% Moisture	1	%	4.8	6.1	11	16
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	-	< 20
TRH C10-C14	20	mg/kg	-	< 20	-	< 20
TRH C15-C28	50	mg/kg	-	< 50	-	< 50
TRH C29-C36	50	mg/kg	-	< 50	-	< 50
TRH C10-C36 (Total)	50	mg/kg	-	< 50	-	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	-	< 0.1
Xylenes - Total*	0.3	mg/kg	-	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	107	-	107
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	-	< 0.5
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	-	< 50	-	< 50
TRH C6-C10	20	mg/kg	-	< 20	-	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	-	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	< 0.5

Client Sample ID			BH01 - 0.5	BH02 - 0.5	BH03 - 0.5	BH03 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033923	R26-Fe0033930	R26-Fe0033938	R26-Fe0033939
Date Sampled			Feb 04, 2026	Feb 04, 2026	Feb 04, 2026	Feb 04, 2026
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	INT	-	INT
p-Terphenyl-d14 (surr.)	1	%	-	94	-	109
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-HCH	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-HCH	0.05	mg/kg	-	< 0.05	-	< 0.05
d-HCH	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Toxaphene	0.5	mg/kg	-	< 0.5	-	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	91	-	105
Tetrachloro-m-xylene (surr.)	1	%	-	INT	-	INT

Client Sample ID			BH01 - 0.5	BH02 - 0.5	BH03 - 0.5	BH03 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033923	R26-Fe0033930	R26-Fe0033938	R26-Fe0033939
Date Sampled			Feb 04, 2026	Feb 04, 2026	Feb 04, 2026	Feb 04, 2026
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	< 0.1
Total PCB*	0.1	mg/kg	-	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	91	-	105
Tetrachloro-m-xylene (surr.)	1	%	-	INT	-	INT
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	-	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	-	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	-	< 1
Pentachlorophenol	1	mg/kg	-	< 1	-	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10	-	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	-	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	-	< 5
2-Nitrophenol	1	mg/kg	-	< 1	-	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5	-	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	< 0.4
Total cresols*	0.5	mg/kg	-	< 0.5	-	< 0.5
4-Nitrophenol	5	mg/kg	-	< 5	-	< 5
Dinoseb	20	mg/kg	-	< 20	-	< 20
Phenol	0.5	mg/kg	-	< 0.5	-	< 0.5
Phenol-d6 (surr.)	1	%	-	83	-	86
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	< 20
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	-	< 50
TRH >C16-C34	100	mg/kg	-	< 100	-	< 100
TRH >C34-C40	100	mg/kg	-	< 100	-	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	-	< 100

Client Sample ID			BH04 - 1.0	BH05 - 1.0	BH06 - 0.5	BH06 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033953	R26-Fe0033959	R26-Fe0033964	R26-Fe0033965
Date Sampled			Feb 05, 2026	Feb 05, 2026	Feb 06, 2026	Feb 06, 2026
Test/Reference	LOR	Unit				
Metals M8						
Arsenic	2	mg/kg	12	13	10	7.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	36	51	66	48
Copper	5	mg/kg	16	22	17	17
Lead	5	mg/kg	14	21	19	14
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	10	18	17	34
Zinc	5	mg/kg	21	27	18	17
Sample Properties						
% Moisture	1	%	7.2	10	10	16
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	-
TRH C10-C14	20	mg/kg	-	< 20	< 20	-
TRH C15-C28	50	mg/kg	-	< 50	< 50	-
TRH C29-C36	50	mg/kg	-	< 50	< 50	-
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	-
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	-
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	-
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	-
Xylenes - Total*	0.3	mg/kg	-	< 0.3	< 0.3	-
4-Bromofluorobenzene (surr.)	1	%	-	130	71	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	< 0.5	-
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	-	< 50	< 50	-
TRH C6-C10	20	mg/kg	-	< 20	< 20	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	< 20	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	-
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	-

Client Sample ID			BH04 - 1.0	BH05 - 1.0	BH06 - 0.5	BH06 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033953	R26-Fe0033959	R26-Fe0033964	R26-Fe0033965
Date Sampled			Feb 05, 2026	Feb 05, 2026	Feb 06, 2026	Feb 06, 2026
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	-	129	108	-
p-Terphenyl-d14 (surr.)	1	%	-	136	115	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	-
a-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
b-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
d-HCH	0.05	mg/kg	-	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	-
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	-
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Toxaphene	0.5	mg/kg	-	< 0.5	< 0.5	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Dibutylchlorendate (surr.)	1	%	-	106	88	-
Tetrachloro-m-xylene (surr.)	1	%	-	INT	144	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	< 0.1	-
Total PCB*	0.1	mg/kg	-	< 0.1	< 0.1	-
Dibutylchlorendate (surr.)	1	%	-	106	88	-
Tetrachloro-m-xylene (surr.)	1	%	-	INT	144	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	-
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	-
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	< 1	-
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	< 1	-
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	< 1	-

Client Sample ID			BH04 - 1.0	BH05 - 1.0	BH06 - 0.5	BH06 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033953	R26-Fe0033959	R26-Fe0033964	R26-Fe0033965
Date Sampled			Feb 05, 2026	Feb 05, 2026	Feb 06, 2026	Feb 06, 2026
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
Pentachlorophenol	1	mg/kg	-	< 1	< 1	-
Tetrachlorophenols - Total	10	mg/kg	-	< 10	< 10	-
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	< 20	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	< 5	-
2-Nitrophenol	1	mg/kg	-	< 1	< 1	-
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	-
2.4-Dinitrophenol	5	mg/kg	-	< 5	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	-
Total cresols*	0.5	mg/kg	-	< 0.5	< 0.5	-
4-Nitrophenol	5	mg/kg	-	< 5	< 5	-
Dinoseb	20	mg/kg	-	< 20	< 20	-
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	-
Phenol-d6 (surr.)	1	%	-	71	83	-
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	< 50	-
TRH >C16-C34	100	mg/kg	-	< 100	< 100	-
TRH >C34-C40	100	mg/kg	-	< 100	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	-

Client Sample ID			BH07 - 1.0	BH08 - 0.5	BH09 - 0.5	BH10 - 0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033970	R26-Fe0033974	R26-Fe0033979	R26-Fe0033984
Date Sampled			Feb 06, 2026	Feb 09, 2026	Feb 09, 2026	Feb 10, 2026
Test/Reference	LOR	Unit				
Metals M8						
Arsenic	2	mg/kg	3.5	3.2	3.5	14
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	28	35	30	40
Copper	5	mg/kg	20	< 5	< 5	15
Lead	5	mg/kg	11	9.8	9.2	24
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	30	< 5	< 5	17
Zinc	5	mg/kg	12	< 5	5.0	35
Sample Properties						
% Moisture	1	%	20	5.3	2.4	9.9
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	-	-
TRH C10-C14	20	mg/kg	-	< 20	-	-
TRH C15-C28	50	mg/kg	-	< 50	-	-
TRH C29-C36	50	mg/kg	-	< 50	-	-
TRH C10-C36 (Total)	50	mg/kg	-	< 50	-	-

Client Sample ID			BH07 - 1.0	BH08 - 0.5	BH09 - 0.5	BH10 - 0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033970	R26-Fe0033974	R26-Fe0033979	R26-Fe0033984
Date Sampled			Feb 06, 2026	Feb 09, 2026	Feb 09, 2026	Feb 10, 2026
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	-
Toluene	0.1	mg/kg	-	0.1	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Xylenes - Total*	0.3	mg/kg	-	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	-	90	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	-	-
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	-	< 50	-	-
TRH C6-C10	20	mg/kg	-	< 20	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	-
Acenaphthene	0.5	mg/kg	-	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	-
Anthracene	0.5	mg/kg	-	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Chrysene	0.5	mg/kg	-	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	-
Fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Fluorene	0.5	mg/kg	-	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	-
Naphthalene	0.5	mg/kg	-	< 0.5	-	-
Phenanthrene	0.5	mg/kg	-	< 0.5	-	-
Pyrene	0.5	mg/kg	-	< 0.5	-	-
Total PAH*	0.5	mg/kg	-	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	-	INT	-	-
p-Terphenyl-d14 (surr.)	1	%	-	110	-	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	-
a-HCH	0.05	mg/kg	-	< 0.05	-	-
Aldrin	0.05	mg/kg	-	< 0.05	-	-
b-HCH	0.05	mg/kg	-	< 0.05	-	-
d-HCH	0.05	mg/kg	-	< 0.05	-	-
Dieldrin	0.05	mg/kg	-	< 0.05	-	-
Endosulfan I	0.05	mg/kg	-	< 0.05	-	-
Endosulfan II	0.05	mg/kg	-	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	-
Endrin	0.05	mg/kg	-	< 0.05	-	-

Client Sample ID			BH07 - 1.0	BH08 - 0.5	BH09 - 0.5	BH10 - 0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033970	R26-Fe0033974	R26-Fe0033979	R26-Fe0033984
Date Sampled			Feb 06, 2026	Feb 09, 2026	Feb 09, 2026	Feb 10, 2026
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	-
Endrin ketone	0.05	mg/kg	-	< 0.05	-	-
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	-	-
Heptachlor	0.05	mg/kg	-	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	-
Methoxychlor	0.05	mg/kg	-	< 0.05	-	-
Toxaphene	0.5	mg/kg	-	< 0.5	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	-	88	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	INT	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1232	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1242	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1248	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1254	0.1	mg/kg	-	< 0.1	-	-
Aroclor-1260	0.1	mg/kg	-	< 0.1	-	-
Total PCB*	0.1	mg/kg	-	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	-	88	-	-
Tetrachloro-m-xylene (surr.)	1	%	-	INT	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	-	-
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	-	-
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	-	-
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	-	-
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	-	-
Pentachlorophenol	1	mg/kg	-	< 1	-	-
Tetrachlorophenols - Total	10	mg/kg	-	< 10	-	-
Total Halogenated Phenol*	1	mg/kg	-	< 1	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	-	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	-	-
2-Nitrophenol	1	mg/kg	-	< 1	-	-
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	-	-
2.4-Dinitrophenol	5	mg/kg	-	< 5	-	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	-	-
Total cresols*	0.5	mg/kg	-	< 0.5	-	-
4-Nitrophenol	5	mg/kg	-	< 5	-	-
Dinoseb	20	mg/kg	-	< 20	-	-
Phenol	0.5	mg/kg	-	< 0.5	-	-
Phenol-d6 (surr.)	1	%	-	101	-	-
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	-	-

Client Sample ID			BH07 - 1.0	BH08 - 0.5	BH09 - 0.5	BH10 - 0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033970	R26-Fe0033974	R26-Fe0033979	R26-Fe0033984
Date Sampled			Feb 06, 2026	Feb 09, 2026	Feb 09, 2026	Feb 10, 2026
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	-	-
TRH >C16-C34	100	mg/kg	-	< 100	-	-
TRH >C34-C40	100	mg/kg	-	< 100	-	-
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	-	-

Client Sample ID			BH11 - 1.0	BH12 - 1.0	BH13 - 0.5	BH13 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033990	R26-Fe0033995	R26-Fe0034000	R26-Fe0034001
Date Sampled			Feb 10, 2026	Feb 10, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Metals M8						
Arsenic	2	mg/kg	5.9	8.7	7.1	8.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	23	30	30	28
Copper	5	mg/kg	11	14	21	15
Lead	5	mg/kg	48	11	56	12
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	9.0	28	31	17
Zinc	5	mg/kg	56	30	45	21
Sample Properties						
% Moisture	1	%	9.8	12	15	12
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	-	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	108	110	104
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	-	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	< 20	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5

Client Sample ID			BH11 - 1.0	BH12 - 1.0	BH13 - 0.5	BH13 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033990	R26-Fe0033995	R26-Fe0034000	R26-Fe0034001
Date Sampled			Feb 10, 2026	Feb 10, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	113	138	100
p-Terphenyl-d14 (surr.)	1	%	-	88	132	124
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	-	109	134	90
Tetrachloro-m-xylene (surr.)	1	%	-	137	INT	144
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1

Client Sample ID			BH11 - 1.0	BH12 - 1.0	BH13 - 0.5	BH13 - 1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0033990	R26-Fe0033995	R26-Fe0034000	R26-Fe0034001
Date Sampled			Feb 10, 2026	Feb 10, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1248	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	-	109	134	90
Tetrachloro-m-xylene (surr.)	1	%	-	137	INT	144
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	-	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Nitrophenol	1	mg/kg	-	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	-	< 5	< 5	< 5
Dinoseb	20	mg/kg	-	< 20	< 20	< 20
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	-	68	97	69
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	< 20
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	< 100

Client Sample ID			BH13 - 2.0	BH14 - 0.5	BH14 - 1.0	BH14 - 2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0034002	R26-Fe0034005	R26-Fe0034006	R26-Fe0034007
Date Sampled			Feb 11, 2026	Feb 11, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Metals M8						
Arsenic	2	mg/kg	9.6	16	8.2	11
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	28	43	27	52
Copper	5	mg/kg	14	17	14	18
Lead	5	mg/kg	8.3	25	15	20
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			BH13 - 2.0	BH14 - 0.5	BH14 - 1.0	BH14 - 2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0034002	R26-Fe0034005	R26-Fe0034006	R26-Fe0034007
Date Sampled			Feb 11, 2026	Feb 11, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Metals M8						
Nickel	5	mg/kg	22	20	16	17
Zinc	5	mg/kg	15	26	25	30
Sample Properties						
% Moisture	1	%	14	14	14	13
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	143	137	100	100
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	86	122	70	107
p-Terphenyl-d14 (surr.)	1	%	109	120	78	92

Client Sample ID			BH13 - 2.0	BH14 - 0.5	BH14 - 1.0	BH14 - 2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0034002	R26-Fe0034005	R26-Fe0034006	R26-Fe0034007
Date Sampled			Feb 11, 2026	Feb 11, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	118	85	85	99
Tetrachloro-m-xylene (surr.)	1	%	131	138	113	144
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	118	85	85	99
Tetrachloro-m-xylene (surr.)	1	%	131	138	113	144
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			BH13 - 2.0	BH14 - 0.5	BH14 - 1.0	BH14 - 2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			R26-Fe0034002	R26-Fe0034005	R26-Fe0034006	R26-Fe0034007
Date Sampled			Feb 11, 2026	Feb 11, 2026	Feb 11, 2026	Feb 11, 2026
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	66	78	59	73
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			QC02	QC03
Sample Matrix			Soil	Soil
Eurofins Sample No.			R26-Fe0034010	R26-Fe0034011
Date Sampled			Feb 04, 2026	Feb 04, 2026
Test/Reference	LOR	Unit		
Metals M8				
Arsenic	2	mg/kg	7.6	11
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	56	50
Copper	5	mg/kg	11	25
Lead	5	mg/kg	16	20
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	7.7	18
Zinc	5	mg/kg	11	21
Sample Properties				
% Moisture	1	%	5.7	16
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	76	107

Client Sample ID			QC02	QC03
Sample Matrix			Soil	Soil
Eurofins Sample No.			R26-Fe0034010	R26-Fe0034011
Date Sampled			Feb 04, 2026	Feb 04, 2026
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH >C10-C16 less Naphthalene (F2)*[N01]	50	mg/kg	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	120	124
p-Terphenyl-d14 (surr.)	1	%	105	114
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			QC02	QC03
Sample Matrix			Soil	Soil
Eurofins Sample No.			R26-Fe0034010	R26-Fe0034011
Date Sampled			Feb 04, 2026	Feb 04, 2026
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	107	88
Tetrachloro-m-xylene (surr.)	1	%	150	INT
Polychlorinated Biphenyls				
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	107	88
Tetrachloro-m-xylene (surr.)	1	%	150	INT
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	80	70
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Metals M8	Sydney	Feb 16, 2026	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
% Moisture	Sydney	Feb 12, 2026	14 Days
- Method: LTM-GEN-7080 Moisture			
Organochlorine Pesticides	Sydney	Feb 16, 2026	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Polychlorinated Biphenyls	Sydney	Feb 16, 2026	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	BH01 - 0.1	Feb 04, 2026		Soil	R26-Fe0033922		X				
2	BH01 - 0.5	Feb 04, 2026		Soil	R26-Fe0033923			X		X	
3	BH01 - 1.0	Feb 04, 2026		Soil	R26-Fe0033924		X				
4	BH01 - 1.5	Feb 04, 2026		Soil	R26-Fe0033925		X				
5	BH01 - 2.0	Feb 04, 2026		Soil	R26-Fe0033926		X				
6	BH01 - 2.5	Feb 04, 2026		Soil	R26-Fe0033927		X				
7	BH01 - 3.0	Feb 04, 2026		Soil	R26-Fe0033928		X				
8	BH02 - 0.1	Feb 04, 2026		Soil	R26-Fe0033929		X				
9	BH02 - 0.5	Feb 04, 2026		Soil	R26-Fe0033930				X	X	X
10	BH02 - 1.0	Feb 04, 2026		Soil	R26-Fe0033931		X				
11	BH02 - 1.5	Feb 04, 2026		Soil	R26-Fe0033932		X				
12	BH02 - 2.0	Feb 04, 2026		Soil	R26-Fe0033933		X				
13	BH02 - 2.5	Feb 04, 2026		Soil	R26-Fe0033934		X				
14	BH02 - 3.0	Feb 04, 2026		Soil	R26-Fe0033935		X				

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
15	BH02 - 4.0	Feb 04, 2026		Soil	R26-Fe0033936		X				
16	BH03 - 0.1	Feb 04, 2026		Soil	R26-Fe0033937		X				
17	BH03 - 0.5	Feb 04, 2026		Soil	R26-Fe0033938			X		X	
18	BH03 - 1.0	Feb 04, 2026		Soil	R26-Fe0033939				X	X	X
19	BH03 - 1.5	Feb 04, 2026		Soil	R26-Fe0033940		X				
20	BH03 - 2.0	Feb 04, 2026		Soil	R26-Fe0033941		X				
21	BH03 - 2.5	Feb 04, 2026		Soil	R26-Fe0033942		X				
22	BH03 - 3.0	Feb 04, 2026		Soil	R26-Fe0033943		X				
23	BH03 - 3.5	Feb 04, 2026		Soil	R26-Fe0033944		X				
24	BH03 - 4.0	Feb 04, 2026		Soil	R26-Fe0033945		X				
25	BH03 - 6.0	Feb 04, 2026		Soil	R26-Fe0033946		X				
26	BH03 - 7.0	Feb 04, 2026		Soil	R26-Fe0033947		X				
27	BH03 - 8.0	Feb 04, 2026		Soil	R26-Fe0033948		X				
28	BH03 - 9.0	Feb 04, 2026		Soil	R26-Fe0033949		X				
29	BH03 - 10.0	Feb 04, 2026		Soil	R26-Fe0033950		X				
30	BH04 - 0.1	Feb 04, 2026		Soil	R26-Fe0033951		X				
31	BH04 - 0.5	Feb 05, 2026		Soil	R26-Fe0033952		X				

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
32	BH04 - 1.0	Feb 05, 2026		Soil	R26-Fe0033953			X		X	
33	BH04 - 1.5	Feb 05, 2026		Soil	R26-Fe0033954		X				
34	BH04 - 2.0	Feb 05, 2026		Soil	R26-Fe0033955		X				
35	BH04 - 3.0	Feb 05, 2026		Soil	R26-Fe0033956		X				
36	BH05 - 0.1	Feb 05, 2026		Soil	R26-Fe0033957		X				
37	BH05 - 0.5	Feb 05, 2026		Soil	R26-Fe0033958		X				
38	BH05 - 1.0	Feb 05, 2026		Soil	R26-Fe0033959				X	X	X
39	BH05 - 1.5	Feb 05, 2026		Soil	R26-Fe0033960	X					
40	BH05 - 2.0	Feb 05, 2026		Soil	R26-Fe0033961		X				
41	BH05 - 2.5	Feb 05, 2026		Soil	R26-Fe0033962		X				
42	BH06 - 0.1	Feb 06, 2026		Soil	R26-Fe0033963		X				
43	BH06 - 0.5	Feb 06, 2026		Soil	R26-Fe0033964				X	X	X
44	BH06 - 1.0	Feb 06, 2026		Soil	R26-Fe0033965			X		X	
45	BH06 - 2.0	Feb 06, 2026		Soil	R26-Fe0033966		X				
46	BH06 - 3.0	Feb 06, 2026		Soil	R26-Fe0033967		X				
47	BH07 - 0.1	Feb 06, 2026		Soil	R26-Fe0033968		X				
48	BH07- 0.5	Feb 06, 2026		Soil	R26-Fe0033969		X				

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
49	BH07 - 1.0	Feb 06, 2026		Soil	R26-Fe0033970			X		X	
50	BH07 - 2.0	Feb 06, 2026		Soil	R26-Fe0033971		X				
51	BH07 - 3.0	Feb 06, 2026		Soil	R26-Fe0033972		X				
52	BH08 - 0.1	Feb 09, 2026		Soil	R26-Fe0033973		X				
53	BH08 - 0.5	Feb 09, 2026		Soil	R26-Fe0033974				X	X	X
54	BH08 - 1.0	Feb 09, 2026		Soil	R26-Fe0033975		X				
55	BH08 - 2.0	Feb 09, 2026		Soil	R26-Fe0033976		X				
56	BH08 - 3.0	Feb 09, 2026		Soil	R26-Fe0033977		X				
57	BH09 - 0.1	Feb 09, 2026		Soil	R26-Fe0033978		X				
58	BH09 - 0.5	Feb 09, 2026		Soil	R26-Fe0033979			X		X	
59	BH09 - 1.0	Feb 09, 2026		Soil	R26-Fe0033980		X				
60	BH09 - 2.0	Feb 09, 2026		Soil	R26-Fe0033981		X				
61	BH09 - 3.0	Feb 09, 2026		Soil	R26-Fe0033982		X				
62	BH10 - 0.1	Feb 10, 2026		Soil	R26-Fe0033983		X				
63	BH10 - 0.5	Feb 10, 2026		Soil	R26-Fe0033984			X		X	
64	BH10 - 1.0	Feb 10, 2026		Soil	R26-Fe0033985		X				
65	BH10 - 2.0	Feb 10, 2026		Soil	R26-Fe0033986		X				

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
66	BH10 - 3.0	Feb 10, 2026		Soil	R26-Fe0033987		X				
67	BH11 - 0.1	Feb 10, 2026		Soil	R26-Fe0033988		X				
68	BH11 - 0.5	Feb 10, 2026		Soil	R26-Fe0033989		X				
69	BH11 - 1.0	Feb 10, 2026		Soil	R26-Fe0033990			X		X	
70	BH11 - 2.0	Feb 10, 2026		Soil	R26-Fe0033991		X				
71	BH11 - 3.0	Feb 10, 2026		Soil	R26-Fe0033992		X				
72	BH12 - 0.1	Feb 10, 2026		Soil	R26-Fe0033993		X				
73	BH12 - 0.5	Feb 10, 2026		Soil	R26-Fe0033994		X				
74	BH12 - 1.0	Feb 10, 2026		Soil	R26-Fe0033995				X	X	X
75	BH12 - 2.0	Feb 10, 2026		Soil	R26-Fe0033996		X				
76	BH12 - 3.0	Feb 10, 2026		Soil	R26-Fe0033997		X				
77	BH12 - 4.0	Feb 10, 2026		Soil	R26-Fe0033998		X				
78	BH13 - 0.1	Feb 11, 2026		Soil	R26-Fe0033999		X				
79	BH13 - 0.5	Feb 11, 2026		Soil	R26-Fe0034000				X	X	X
80	BH13 - 1.0	Feb 11, 2026		Soil	R26-Fe0034001				X	X	X
81	BH13 - 2.0	Feb 11, 2026		Soil	R26-Fe0034002				X	X	X
82	BH112 3.0	Feb 11, 2026		Soil	R26-Fe0034003		X				

eurofins

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South
VIC 3175
+61 3 8564 5000
NATA# 1261
Site# 1254

Geelong
19/8 Lewalan Street
Grovedale
VIC 3216
+61 3 8564 5000
NATA# 1261
Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
+61 2 9900 8400
NATA# 1261
Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
+61 2 6113 8091
NATA# 1261
Site# 25466

Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
+61 7 3902 4600
NATA# 1261
Site# 20794 & 2780

Newcastle
1/2 Frost Drive
Mayfield West
NSW 2304
+61 2 4968 8448
NATA# 1261
Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Company Name: Agon Environmental Pty Ltd - ACT
Address: 68 Northbourne Ave
Canberra
ACT 2060

Project Name: JE25.0754.00
Project ID: JE25.0754.00

Order No.:
Report #: 1322508
Phone: 0419 170 791
Fax:

Received: Feb 11, 2026 3:08 PM
Due: Feb 18, 2026
Priority: 5 Day
Contact Name: -John O Brien - ACT Manager

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						CANCELLED*	HOLD*	Metals M8	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7A
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X	X
83	BH14 - 0.1	Feb 11, 2026		Soil	R26-Fe0034004		X				
84	BH14 - 0.5	Feb 11, 2026		Soil	R26-Fe0034005				X	X	X
85	BH14 - 1.0	Feb 11, 2026		Soil	R26-Fe0034006				X	X	X
86	BH14 - 2.0	Feb 11, 2026		Soil	R26-Fe0034007				X	X	X
87	BH14 - 3.0	Feb 11, 2026		Soil	R26-Fe0034008		X				
88	QC01	Feb 04, 2026		Soil	R26-Fe0034009		X				
89	QC02	Feb 04, 2026		Soil	R26-Fe0034010				X	X	X
90	QC03	Feb 04, 2026		Soil	R26-Fe0034011				X	X	X
91	QC04	Feb 05, 2026		Soil	R26-Fe0034012		X				
92	QC05	Feb 05, 2026		Soil	R26-Fe0034013		X				
93	QC06	Feb 06, 2026		Soil	R26-Fe0034014		X				
94	QC07	Feb 06, 2026		Soil	R26-Fe0034015		X				
95	QC08	Feb 10, 2026		Soil	R26-Fe0034016		X				
96	BH03 - 5.0	Feb 04, 2026		Soil	R26-Fe0034170		X				
Test Counts						1	73	8	14	22	14

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Metals M8							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Metals M8							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
LCS - % Recovery							
Metals M8							
Arsenic	%	103			80-120	Pass	
Cadmium	%	104			80-120	Pass	
Chromium	%	105			80-120	Pass	
Copper	%	104			80-120	Pass	
Lead	%	99			80-120	Pass	
Mercury	%	97			80-120	Pass	
Nickel	%	105			80-120	Pass	
Zinc	%	109			80-120	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	94			70-130	Pass	
Anthracene	%	107			70-130	Pass	
Benz(a)anthracene	%	99			70-130	Pass	
Benzo(a)pyrene	%	82			70-130	Pass	
Benzo(b&j)fluoranthene	%	85			70-130	Pass	
Benzo(k)fluoranthene	%	90			70-130	Pass	
Chrysene	%	99			70-130	Pass	
Dibenz(a.h)anthracene	%	98			70-130	Pass	
Fluoranthene	%	110			70-130	Pass	
Fluorene	%	111			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	100			70-130	Pass	
Phenanthrene	%	110			70-130	Pass	
Pyrene	%	121			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chlordanes - Total	%	90			70-130	Pass	
4.4'-DDE	%	72			70-130	Pass	
4.4'-DDT	%	111			70-130	Pass	
Aldrin	%	74			70-130	Pass	
Dieldrin	%	71			70-130	Pass	
Endosulfan sulphate	%	86			70-130	Pass	
Endrin	%	89			70-130	Pass	
Endrin ketone	%	98			70-130	Pass	
Heptachlor	%	105			70-130	Pass	
Heptachlor epoxide	%	84			70-130	Pass	
Hexachlorobenzene	%	76			70-130	Pass	
Methoxychlor	%	109			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	130			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	129			25-140	Pass	
2.4-Dichlorophenol	%	121			25-140	Pass	
2.4.6-Trichlorophenol	%	123			25-140	Pass	
2.6-Dichlorophenol	%	123			25-140	Pass	
4-Chloro-3-methylphenol	%	100			25-140	Pass	
Tetrachlorophenols - Total	%	119			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2.4-Dimethylphenol	%	99			25-140	Pass	
2-Methylphenol (o-Cresol)	%	93			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	101			25-140	Pass	
4-Nitrophenol	%	122			25-140	Pass	
Phenol	%	104			25-140	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	74			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	103			70-130	Pass	
Toluene	%	92			70-130	Pass	
Ethylbenzene	%	95			70-130	Pass	
m&p-Xylenes	%	95			70-130	Pass	
o-Xylene	%	98			70-130	Pass	
Xylenes - Total*	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	117			70-130	Pass	
TRH C6-C10	%	74			70-130	Pass	
LCS - % Recovery							
Metals M8							
Arsenic	%	113			80-120	Pass	
Cadmium	%	117			80-120	Pass	
Chromium	%	114			80-120	Pass	
Copper	%	112			80-120	Pass	
Lead	%	104			80-120	Pass	
Mercury	%	94			80-120	Pass	
Nickel	%	114			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	%	117			80-120	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	81			70-130	Pass	
TRH C10-C14	%	74			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	105			70-130	Pass	
Toluene	%	92			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	102			70-130	Pass	
Xylenes - Total*	%	100			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	124			70-130	Pass	
TRH C6-C10	%	81			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Benzo(g.h.i)perylene	%	94			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
4.4'-DDD	%	77			70-130	Pass	
Endosulfan I	%	92			70-130	Pass	
Endosulfan II	%	77			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	93			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	74			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	R26-Fe0033959	CP	%	98			75-125	Pass	
Cadmium	R26-Fe0033959	CP	%	106			75-125	Pass	
Chromium	R26-Fe0033959	CP	%	91			75-125	Pass	
Copper	R26-Fe0033959	CP	%	95			75-125	Pass	
Lead	R26-Fe0033959	CP	%	94			75-125	Pass	
Mercury	R26-Fe0033959	CP	%	96			75-125	Pass	
Nickel	R26-Fe0033959	CP	%	101			75-125	Pass	
Zinc	R26-Fe0033959	CP	%	92			75-125	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	W26-Fe0038922	NCP	%	105			75-125	Pass	
Cadmium	W26-Fe0038922	NCP	%	111			75-125	Pass	
Chromium	W26-Fe0038922	NCP	%	106			75-125	Pass	
Copper	W26-Fe0038922	NCP	%	107			75-125	Pass	
Lead	W26-Fe0038922	NCP	%	102			75-125	Pass	
Mercury	W26-Fe0038922	NCP	%	99			75-125	Pass	
Nickel	W26-Fe0038922	NCP	%	108			75-125	Pass	
Zinc	W26-Fe0038922	NCP	%	116			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C6-C9	X26-Fe0037582	NCP	%	76			70-130	Pass	
TRH C10-C14	S26-Fe0032938	NCP	%	84			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	X26-Fe0037582	NCP	%	88			70-130	Pass	
Toluene	X26-Fe0037582	NCP	%	95			70-130	Pass	
Ethylbenzene	X26-Fe0037582	NCP	%	78			70-130	Pass	
m&p-Xylenes	X26-Fe0037582	NCP	%	87			70-130	Pass	
o-Xylene	X26-Fe0037582	NCP	%	91			70-130	Pass	
Xylenes - Total*	X26-Fe0037582	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	X26-Fe0037582	NCP	%	83			70-130	Pass	
TRH C6-C10	X26-Fe0037582	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Benzo(k)fluoranthene	W26-Fe0034055	NCP	%	111			70-130	Pass	
Dibenz(a.h)anthracene	W26-Fe0034055	NCP	%	116			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	W26-Fe0034055	NCP	%	97			70-130	Pass	
4.4'-DDD	W26-Fe0034055	NCP	%	73			70-130	Pass	
4.4'-DDE	W26-Fe0034055	NCP	%	78			70-130	Pass	
4.4'-DDT	W26-Fe0034055	NCP	%	107			70-130	Pass	
a-HCH	S26-Fe0026593	NCP	%	96			70-130	Pass	
Aldrin	W26-Fe0034055	NCP	%	74			70-130	Pass	
b-HCH	S26-Fe0026593	NCP	%	88			70-130	Pass	
d-HCH	S26-Fe0026593	NCP	%	90			70-130	Pass	
Dieldrin	W26-Fe0034055	NCP	%	80			70-130	Pass	
Endosulfan I	X26-Fe0026159	NCP	%	94			70-130	Pass	
Endosulfan II	S26-Fe0026593	NCP	%	100			70-130	Pass	
Endosulfan sulphate	W26-Fe0034055	NCP	%	83			70-130	Pass	
Endrin	W26-Fe0034055	NCP	%	101			70-130	Pass	
Endrin aldehyde	S26-Fe0026593	NCP	%	76			70-130	Pass	
Endrin ketone	W26-Fe0034055	NCP	%	101			70-130	Pass	
g-HCH (Lindane)	S26-Fe0026593	NCP	%	93			70-130	Pass	
Heptachlor	W26-Fe0034055	NCP	%	107			70-130	Pass	
Heptachlor epoxide	W26-Fe0034055	NCP	%	99			70-130	Pass	
Hexachlorobenzene	W26-Fe0034055	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2.4-Dichlorophenol	W26-Fe0034055	NCP	%	105			30-130	Pass	
2.4.6-Trichlorophenol	W26-Fe0034055	NCP	%	123			30-130	Pass	
2.6-Dichlorophenol	W26-Fe0034055	NCP	%	111			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Nitrophenol	W26-Fe0034055	NCP	%	108			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S26-Fe0032938	NCP	%	80			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	R26-Fe0034007	CP	%	95			70-130	Pass	
Acenaphthylene	R26-Fe0034007	CP	%	96			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Anthracene	R26-Fe0034007	CP	%	124			70-130	Pass	
Benz(a)anthracene	R26-Fe0034007	CP	%	100			70-130	Pass	
Benzo(a)pyrene	R26-Fe0034007	CP	%	103			70-130	Pass	
Benzo(b&j)fluoranthene	R26-Fe0034007	CP	%	111			70-130	Pass	
Benzo(g.h.i)perylene	R26-Fe0034007	CP	%	76			70-130	Pass	
Chrysene	R26-Fe0034007	CP	%	91			70-130	Pass	
Fluoranthene	R26-Fe0034007	CP	%	106			70-130	Pass	
Fluorene	R26-Fe0034007	CP	%	114			70-130	Pass	
Indeno(1.2.3-cd)pyrene	R26-Fe0034007	CP	%	113			70-130	Pass	
Naphthalene	R26-Fe0034007	CP	%	106			70-130	Pass	
Phenanthrene	R26-Fe0034007	CP	%	121			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Methoxychlor	R26-Fe0034007	CP	%	70			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	R26-Fe0034007	CP	%	115			70-130	Pass	
Aroclor-1260	R26-Fe0034007	CP	%	122			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	R26-Fe0034007	CP	%	108			30-130	Pass	
4-Chloro-3-methylphenol	R26-Fe0034007	CP	%	97			30-130	Pass	
Pentachlorophenol	R26-Fe0034007	CP	%	98			30-130	Pass	
Tetrachlorophenols - Total	R26-Fe0034007	CP	%	106			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2.4-Dimethylphenol	R26-Fe0034007	CP	%	118			30-130	Pass	
2-Methylphenol (o-Cresol)	R26-Fe0034007	CP	%	85			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	R26-Fe0034007	CP	%	93			30-130	Pass	
4-Nitrophenol	R26-Fe0034007	CP	%	123			30-130	Pass	
Phenol	R26-Fe0034007	CP	%	94			30-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	R26-Fe0033938	CP	%	11	12	5.0	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	R26-Fe0033953	CP	mg/kg	12	16	28	30%	Pass	
Cadmium	R26-Fe0033953	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	R26-Fe0033953	CP	mg/kg	36	50	34	30%	Fail	Q15
Copper	R26-Fe0033953	CP	mg/kg	16	15	7.0	30%	Pass	
Lead	R26-Fe0033953	CP	mg/kg	14	15	11	30%	Pass	
Mercury	R26-Fe0033953	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	R26-Fe0033953	CP	mg/kg	10	8.6	17	30%	Pass	
Zinc	R26-Fe0033953	CP	mg/kg	21	16	27	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	R26-Fe0033964	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S26-Fe0032937	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S26-Fe0032937	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S26-Fe0032937	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	R26-Fe0033964	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	R26-Fe0033964	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	R26-Fe0033964	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	R26-Fe0033964	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	R26-Fe0033964	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	R26-Fe0033964	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	R26-Fe0033964	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	R26-Fe0033964	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S26-Fe0032937	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S26-Fe0032937	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S26-Fe0032937	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	R26-Fe0033974	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	R26-Fe0033974	CP	mg/kg	0.1	< 0.1	200	30%	Fail	Q15
Ethylbenzene	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	R26-Fe0033974	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	R26-Fe0033974	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	R26-Fe0033974	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
a-HCH	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	R26-Fe0033974	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	R26-Fe0033974	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	R26-Fe0033974	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	R26-Fe0033974	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	R26-Fe0033974	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	R26-Fe0033974	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	R26-Fe0033974	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	R26-Fe0033974	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	R26-Fe0033974	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	R26-Fe0033974	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	R26-Fe0033974	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	R26-Fe0033974	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	R26-Fe0033974	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	R26-Fe0033974	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	R26-Fe0033974	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	R26-Fe0033974	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	R26-Fe0033990	CP	%	9.8	12	20	30%	Pass	

Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	R26-Fe0034001	CP	mg/kg	8.4	15	58	30%	Fail	Q15
Cadmium	R26-Fe0034001	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	R26-Fe0034001	CP	mg/kg	28	30	7.0	30%	Pass	
Copper	R26-Fe0034001	CP	mg/kg	15	16	8.0	30%	Pass	
Lead	R26-Fe0034001	CP	mg/kg	12	17	31	30%	Fail	Q15
Mercury	R26-Fe0034001	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	R26-Fe0034001	CP	mg/kg	17	17	4.0	30%	Pass	
Zinc	R26-Fe0034001	CP	mg/kg	21	24	13	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	S26-Fe0043596	NCP	mg/kg	17	16	6.0	30%	Pass	
Cadmium	S26-Fe0043596	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S26-Fe0043596	NCP	mg/kg	19	16	14	30%	Pass	
Copper	S26-Fe0043596	NCP	mg/kg	21	24	16	30%	Pass	
Lead	S26-Fe0043596	NCP	mg/kg	15	16	4.0	30%	Pass	
Mercury	S26-Fe0043596	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S26-Fe0043596	NCP	mg/kg	19	20	8.0	30%	Pass	
Zinc	S26-Fe0043596	NCP	mg/kg	55	65	16	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	X26-Fe0037579	NCP	%	6.5	7.3	11	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S26-Fe0032772	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S26-Fe0032772	NCP	mg/kg	120	120	2.0	30%	Pass	
TRH C29-C36	S26-Fe0032772	NCP	mg/kg	90	89	2.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S26-Fe0032772	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S26-Fe0032772	NCP	mg/kg	190	190	1.0	30%	Pass	
TRH >C34-C40	S26-Fe0032772	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	R26-Fe0034005	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	R26-Fe0034005	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	R26-Fe0034005	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	R26-Fe0034005	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	R26-Fe0034005	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	R26-Fe0034005	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	R26-Fe0034005	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	R26-Fe0034005	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	R26-Fe0034005	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	R26-Fe0034005	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	R26-Fe0034005	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	R26-Fe0034005	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	R26-Fe0034005	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	R26-Fe0034005	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	R26-Fe0034005	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	R26-Fe0034005	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Nileshni Goundar	Analytical Services Manager
Mickael Ros	Senior Analyst-Metal
Raymond Siu	Senior Analyst-Volatile
Roopesh Rangarajan	Senior Analyst-Organic
Ryan Phillips	Senior Analyst-Sample Properties



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CONSTRUCTION MANAGEMENT PLAN

AIS PODIUM PROJECT
PROJECT# 1379

11 AUGUST 2026

RICHARD CROOKES
CONSTRUCTIONS



INTRODUCTION

To realise the design aspirations of the Australian Sports Commission and deliver game changing infrastructure which will support Australia's continued sporting success requires a considered approach to construction management. Our approach is driven by quality, safety, sustainability, program efficiency and value optimisation with a clear focus on minimising impacts to the operations of the AIS Campus.

The key elements to be delivered include:

- A New High Performance Testing and Training Centre (HPTTC)
- A Multi-Sports Dome
- New accessible Athlete Accommodation and a housekeeping building to support its operations.

This returnable schedule outlines our approach post design finalisation.

The promise of RCC as a delivery partner throughout Construction		
A home away from home	'Winning well' together	a catalyst for success
Our approach is framed so as to minimise the impact on Campus operations particularly in relation to noise, vibration and traffic. Our team recognise their place as a visitor in the home of the AIS and will prioritise segregation of the works accompanied by clear,	Working collaboratively with ASC and key stakeholders to ensure the final product delivers on its high-performance requirements. Drawing on market intelligence from across our consultant and supply chain partners to meet quality outcomes safely and in line with our stated program.	Setting the benchmark for the ongoing development of the AIS Campus by creating a new, welcoming entrance for future Paralympians and Olympians. Deploying proven quality management processes and procures to meet the world class standards this new construction requires.

consistent communications along the construction journey		

In section 9.1.1 we detail our approach to construction sequencing, site establishment, logistics management and staging. The animation linked below and provided as a separate file illustrates our approach and is supported by Staging Plans provided in section 9.1.4 of this schedule.

As a key enabler to our program, approvals play an essential role in the timely completion of the AIS Podium Project. In Section 9.1.3 we provide our understanding of the status and processes to be undertaken to facilitate efficient delivery.

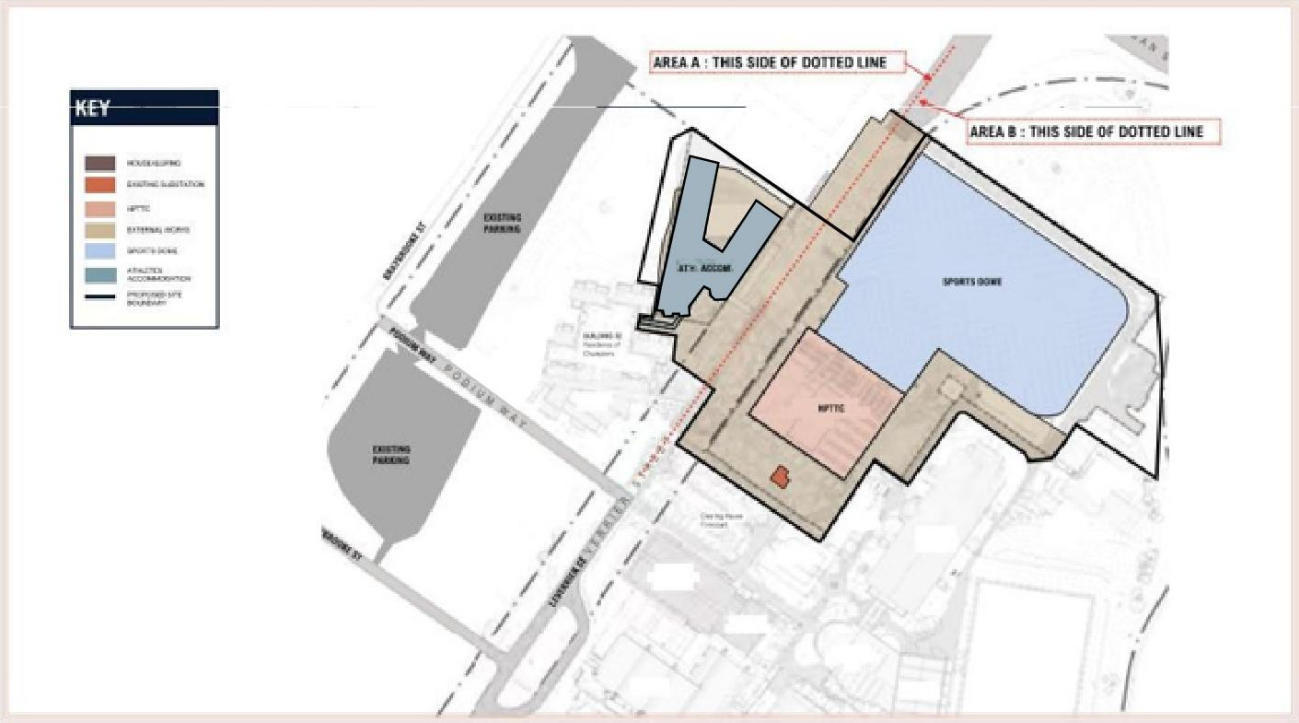
Creating an inviting environment that will allow future Paralympians and Olympians to thrive is founded on embedding sustainable practices throughout the design and construction process. In consultation with our subject matter experts, LCI and the RCC ESG team, we have detailed our strategy in section 9.1.4 of to address the project's sustainability objectives during delivery.

9.1.1. CONSTRUCTION MANAGEMENT

STAGING

Construction activities have been staged to maintain the ongoing, safe operations of the AIS campus.

Staging aligns with site access constraints, existing infrastructure interfaces and our current understanding of AIS operations. Construction operations have been split into two discreet areas (A and B) as shown below.



Construction staging commences with establishment of site access, services isolation, asset protection, and segregation of construction zones from operational areas in compliance with the Early Works handover and Site Access Schedule.

Works will be sequenced to manage interfaces between buildings, structure, services, and specialist systems, including the Sports Dome and HPTTC integration. Staging will incorporate controlled delivery zones, defined work fronts, and progressive completion of areas to support testing, commissioning, and handover in accordance with the Contract.

CONSTRUCTION HOURS

Construction activities are assumed to occur from Monday to Friday: 7:00 am to 6:00 pm, Saturday: 8:00 am to 1:00 pm. No construction work will be permitted on Sundays or Public Holidays. High-impact activities, including excavation, piling, concrete pours, crane operations, and deliveries, are restricted to those noted above and will require consultation with ASC stakeholders for optimal coordination, Any works required outside these hours must be subject to prior approval from ASC and the relevant authority and will only proceed where approval has been granted and specific controls are implemented. Construction scheduling will be planned to comply with these hours and to minimise impacts on the surrounding precinct, adjacent projects, and sensitive receivers.

We respect the importance of allowing the resident athletes on campus and AIS staff to function at their best and acknowledge our obligation to preserve their ability to enjoy complete respite and relaxation outside working hours.

PROTECTING THE PRECINCT

Protection of the existing AIS campus including safeguarding buildings, services, and operational areas will be in place throughout construction. Protection measures include identification and isolation of existing services, installation of physical barriers, and implementation of controls to prevent damage from construction activities. All protection measures will be documented and submitted prior to commencement of works, with ongoing monitoring to ensure existing infrastructure and facilities remain operational and unaffected.

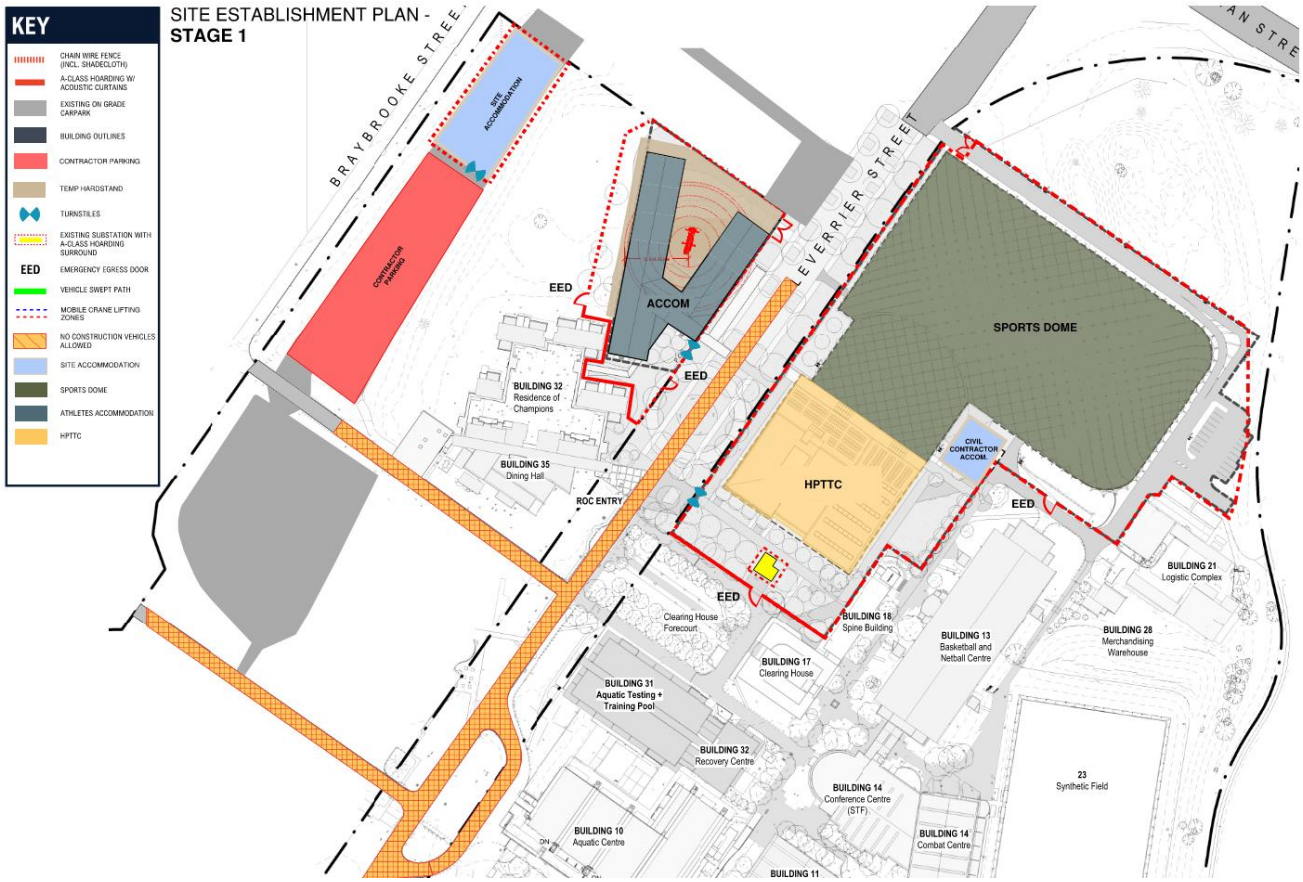
STAKEHOLDER AND CAMPUS ENGAGEMENT

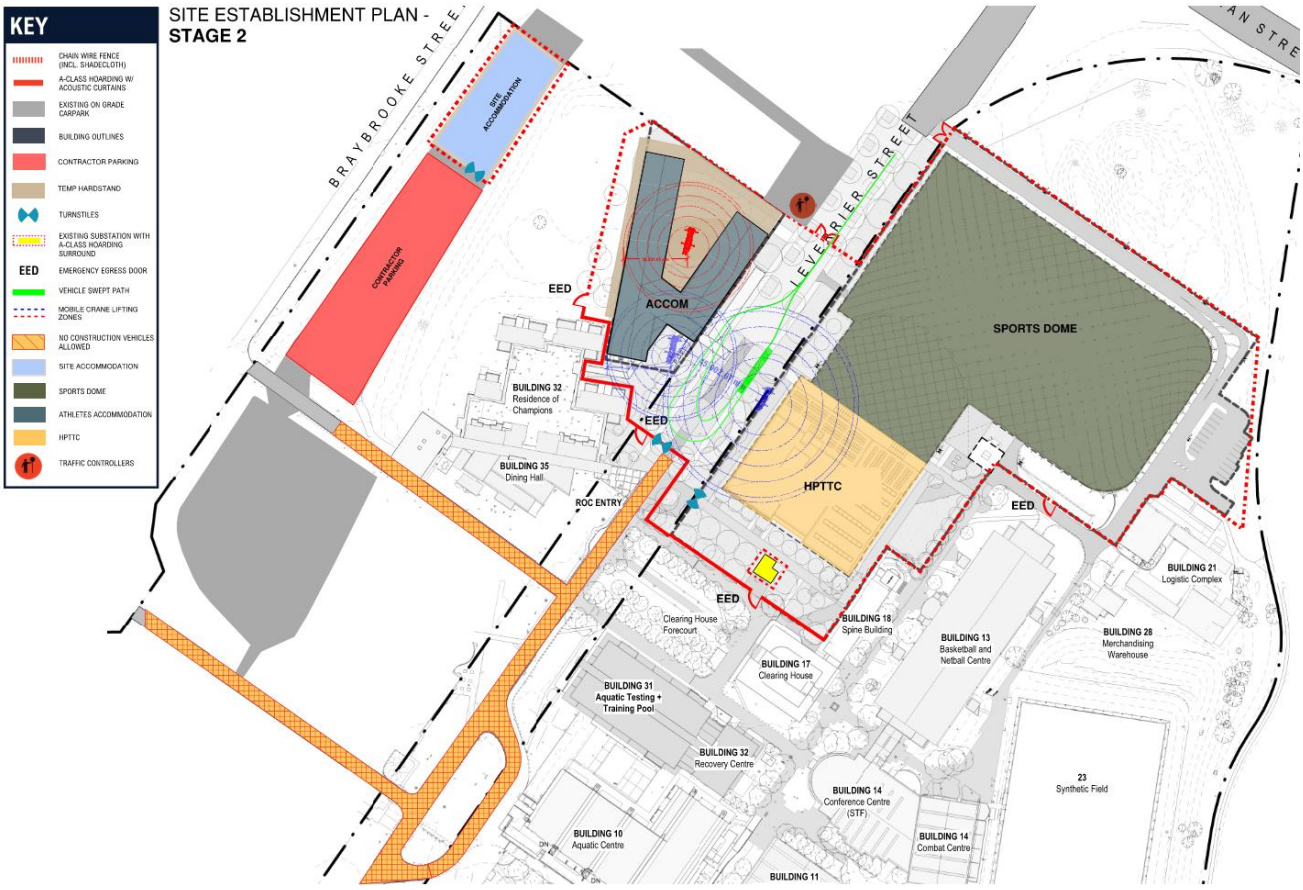
Stakeholder and campus engagement will be coordinated to maintain ongoing AIS operations throughout construction. The Community Relations and Workforce Development Manager, or their delegate, will act as the key conduit of information flow. Works will be planned to maintain safe access, minimise disruption to athletes and staff, and to coordinate with existing facilities and activities. Communication protocols, access arrangements, and interface controls will be established and maintained in line with the project's *Stakeholder Management and Community Engagement Plan*, with regular coordination to manage impacts to campus operations and stakeholder requirements.

SITE PLAN AND ESTABLISHMENT

As shown in the image below, site establishment will be delivered in two stages and configured to suit the defined work areas, with primary access from Leverrier Street. The arrangement provides clear separation between construction activities and the operational AIS campus. Initial establishment works will include site fencing, temporary services and access routes, coordinated to protect existing infrastructure and maintain safe campus operations throughout the Works.

The site compound will include contractor parking, site offices, amenities, storage and laydown areas, together with the Principal's site office established in accordance with the Contract. Its location provides direct access from Podium Way and Leverrier Street, while remaining segregated from campus operations. The compound layout will be coordinated with the construction staging and adjusted as work fronts progress to maintain efficient site operations.





CLEAR SEGREGATION FROM THE AIS CAMPUS

Site hoardings will define construction boundaries while minimising potential impacts to adjacent operational areas, especially the Residence of Champions (ROC). The installation of A-class hoarding with acoustic blankets at key interface locations helps reduce noise transmission from construction activities so as to allow resting athletes to continue their training and rest without disruption. Chainwire fencing with shade cloth will provide secure segregation and visual screening for the remaining site perimeter. Hoardings will be coordinated and maintained throughout the Works. Adjustments will be made to suit staging and changing work fronts. Refer above Establishment Plans for extent of hoarding.

SITE SECURITY & ACCESS

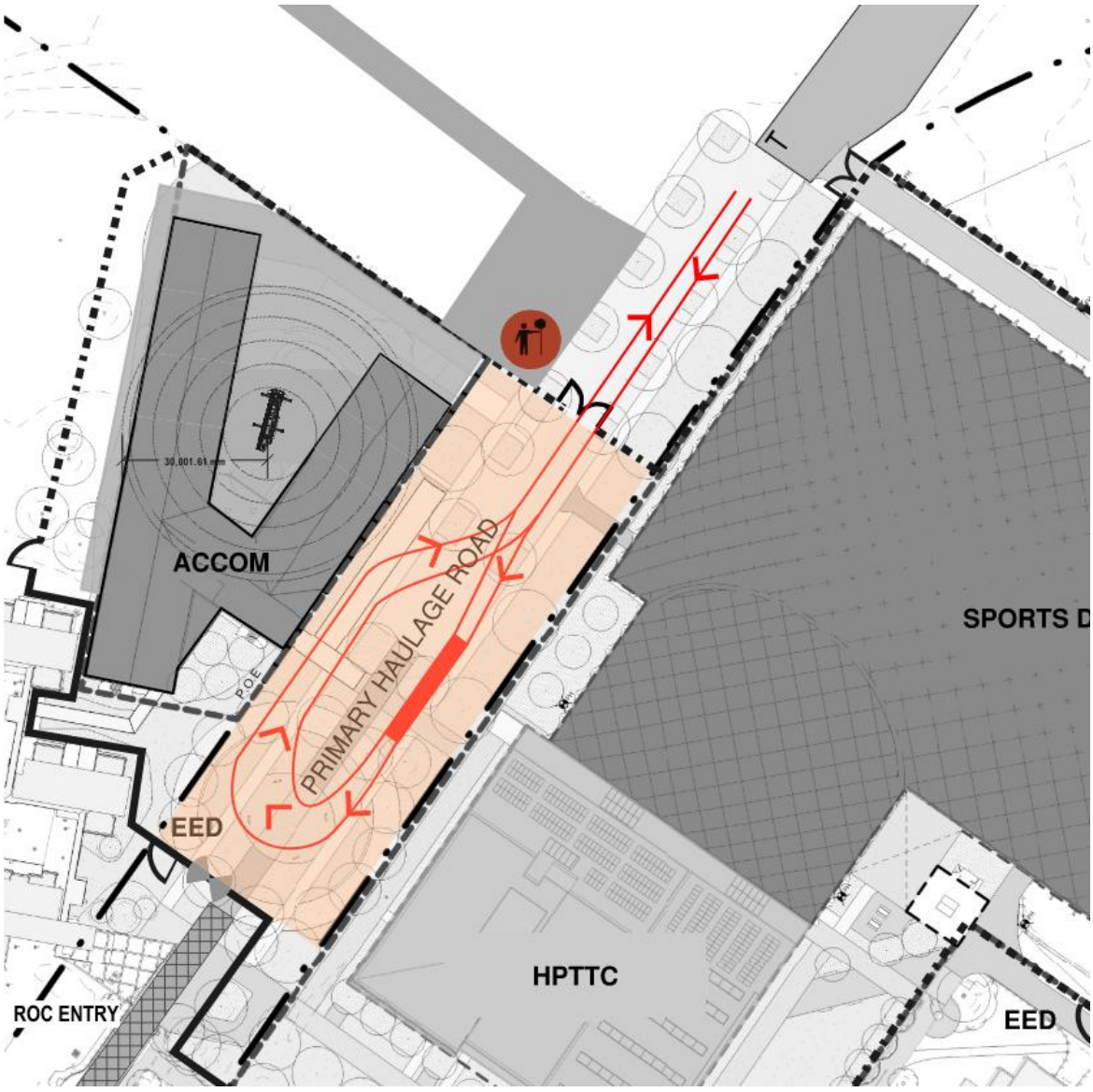
Site security protocols will control access and maintain separation between construction activities and the operational campus. Access to the site will be restricted to authorised personnel entering through controlled entry points (secure turnstiles) using Hammertech sign on technology. All workers will be inducted and registered prior to entry. Security fencing, hoardings, and signage prevent unauthorised access. Construction personnel and visitor access will be managed per RCC project protocols and coordinated with AIS operations to maintain safe and secure campus conditions.

THE APPROACH TO LABOUR AND MATERIALS HANDLING

Recognising our role as a visitor within the AIS Campus, our approach to site amenity location, traffic movements and construction progression reflects a consistent approach of impact minimisation.

A. HAULAGE ROADS

Construction haulage will be managed via Leverrier Street, with all construction vehicles accessing the site through the Northern entry gate. Vehicles will enter, perform a controlled U-turn within the site, and exit via the same Northern gate. This arrangement removes construction traffic from the Southern portion of the AIS campus. Haulage routes will be defined and controlled to maintain safe operations, minimise disruption to campus users, and protect existing infrastructure.



1.1 NOISE, DUST AND VIBRATION MANAGEMENT

Noise, dust, and vibration controls will be implemented to minimise the impact of construction on the operational campus and adjacent facilities. Measures include the use of acoustic hoardings at key interfaces, dust suppression during earthworks, and monitoring of high-impact activities. Construction activities will be planned and sequenced to limit disturbance to sensitive areas such as athlete accommodation and training facilities. Controls will be regularly reviewed and adjusted to maintain compliance with project requirements and confirm their efficacy.

1.2 EARTHWORKS

Earthworks for the Athlete Accommodation, Housekeeping, HPTTC and Multi-Sports dome footprints will take place concurrently across the site.

These works will include bulk excavation, cut and fill, and preparation of subgrade to achieve design levels in accordance with the civil and geotechnical conditions. Earthworks will be sequenced to maintain access, manage material movements, and coordinate with subsequent foundation and in-ground services installation. The implementation of controls to manage stability, drainage, and protect surrounding areas will be an essential element of these works.

1.3 STRUCTURE

Structural systems vary across the facilities. From light gauge steel framing for the Housekeeping building, to reinforced concrete with post-tensioning for the Athlete Accommodation, and a reinforced concrete and structural steel frame for the HPTTC. Construction will be in accordance with the approved design and coordinated across key building systems. Mobile cranage and telescopic handlers will be used for material handling. Leverrier Street will operate as the primary access to service all areas of the Works. Conventional methods will be adopted for edge protection, worker access and egress.

1.4 FAÇADE AND ROOFING

Façade installation will use conventional methods in accordance with the design documentation. Access to elevations will be via elevated work platforms enabling installation of façade systems, glazing, and external elements. Roofing works will be carried out from the top slabs using elevated work platforms to complete installation of roof systems and interfaces. Works will be sequenced to coordinate with structure completion and ensure integration with building services and waterproofing systems.

1.5 FITOUT AND FINISHES

Fitout and finishes will take place following completion of the building envelope and internal services rough-in. Works will include installation of partitions, ceilings, floor finishes, joinery, and internal linings in accordance with the approved design. Sequencing will be coordinated with services installation to ensure integration of mechanical, electrical, and hydraulic systems. Finished areas will be progressively protected to prevent damage from follow-on trades and maintain the quality of completed works.

1.6 HPTTC CONSTRUCTION SEQUENCE

Construction of the HPTTC commences with the installation of pad footings at structural support locations. Structural steel will then be erected progressively from east to west. This installation sequence maintains stability and access for crane operations. Following completion of the steel frame, the ground floor slab will be poured, allowing unobstructed access during steel erection and coordination of in-ground services prior to slab construction.



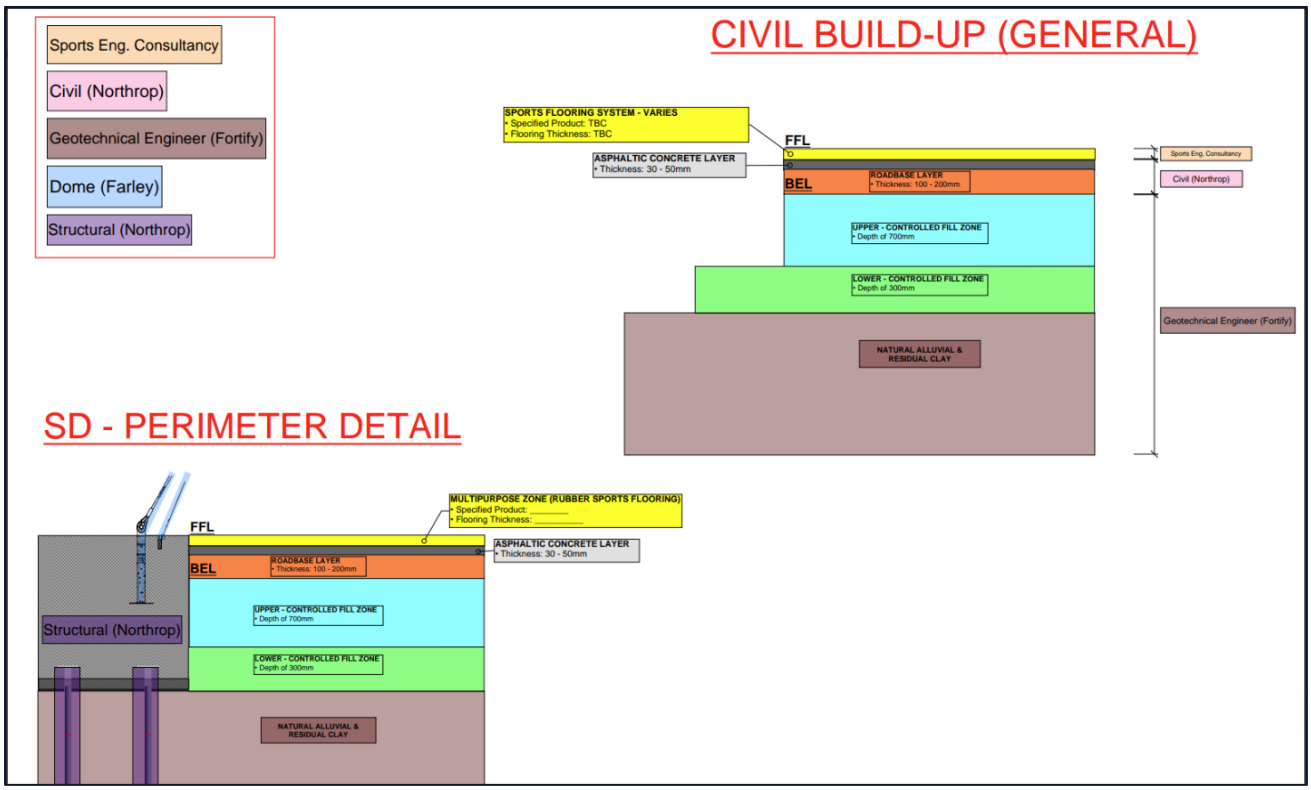
1.7 MULTI-SPORTS DOME CONSTRUCTION

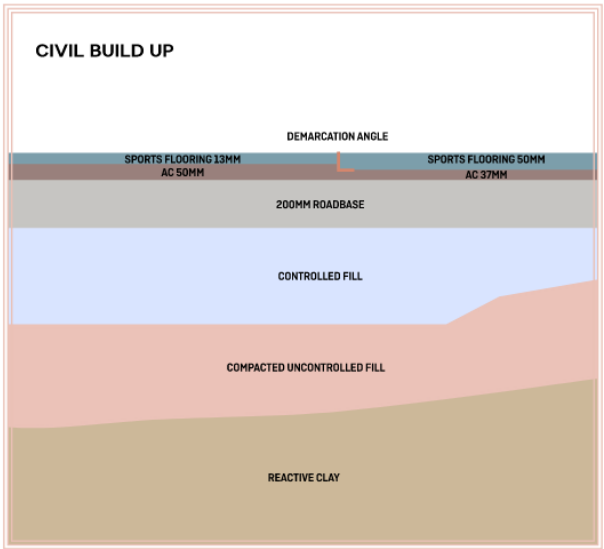
Construction of the Multi-Sports Dome will follow a = defined sequence to achieve subgrade stability, structural support, and system integration. Works commence with excavation of uncontrolled fill, removal of unsuitable materials, proof rolling of reactive clay, and processing of site-won material. Fill will be placed, mixed, and compacted in layers to achieve consistent levels. Imported engineered fill will be used, where required, to complete formation. Following placement of the compacted DGB, detailed excavation will begin for the perimeter ring beam. FRP perimeter ring beam and AHU pads. The wall separating the Multi-Sports dome from the HPTTC and vehicle airlocks will also be installed. Once these works are complete the dome membrane can be rolled out. Once cables and inflation units are installed, the dome membrane can be inflated. Subsequent interior works take place inside the inflated dome and will include the sports flooring build-up, followed by internal fitout.



1.8 SPORTS FLOORING AND CIVIL BUILD UP

Delivering world-class high-performance athletic facilities requires a focus on quality that begins from the ground up. Sports flooring installation will use a civil build-up to achieve the required levels and performance outcomes. Works include preparation of subgrade, placement of base layers, and controlled filling to suit the specified geotechnical requirements. To rectify floor finish height differences and transitions the use of variable asphalt depths with a stainless-steel demarcation angle will define interfaces between surface systems. The RCC approach provides greater delivery certainty for the high-performance functionality of the sports flooring.


Sports Eng. Consultancy
Civil (Northrop)
Geotechnical Engineer (Fortify)
Dome (Farley)
Structural (Northrop)
CIVIL BUILD-UP (GENERAL)
SPORTS FLOORING SYSTEM - VARIES
• Specified Product: TBC
• Flooring Thickness: TBC
ASPHALTIC CONCRETE LAYER
• Thickness: 30 - 50mm
FFL
BEL
ROADBASE LAYER
• Thickness: 100 - 200mm
UPPER - CONTROLLED FILL ZONE
• Depth of 700mm
LOWER - CONTROLLED FILL ZONE
• Depth of 300mm
NATURAL ALLUVIAL & RESIDUAL CLAY
Sports Eng. Consultancy
Civil (Northrop)
Geotechnical Engineer (Fortify)
SD - PERIMETER DETAIL
MULTIPURPOSE ZONE (RUBBER SPORTS FLOORING)
• Specified Product: _____
• Flooring Thickness: _____
FFL
ASPHALTIC CONCRETE LAYER
• Thickness: 30 - 50mm
BEL
ROADBASE LAYER
• Thickness: 100 - 200mm
Structural (Northrop)
UPPER - CONTROLLED FILL ZONE
• Depth of 700mm
LOWER - CONTROLLED FILL ZONE
• Depth of 300mm
NATURAL ALLUVIAL & RESIDUAL CLAY


CIVIL BUILD UP
DEMARCATION ANGLE
SPORTS FLOORING 13MM
AC 50MM
SPORTS FLOORING 50MM
AC 37MM
200MM ROADBASE
CONTROLLED FILL
COMPACTED UNCONTROLLED FILL
REACTIVE CLAY

1.9 COMPLETION MANAGEMENT PLAN

Completion will be managed via a structured plan detailing construction completion, commissioning, and handover activities. Works will progress to achieve Practical Completion in accordance with the Contract. This will include rectification of defects and completion of all required documentation. Completion activities will be coordinated with testing, commissioning, and stakeholder inspections to ensure systems are fully operational and compliant with design requirements. A close-out program will track completion status, outstanding works, and readiness for handover.

1.10 HANDOVER DOCUMENTATION

Handover documentation will be progressively compiled and submitted to support completion and operational readiness. Documentation will include work-as-executed drawings, operation and maintenance manuals, asset information, and certification of completed works. As-built information will be prepared during construction and submitted within the required timeframes following completion of each work element. All documentation will be verified for accuracy and completeness prior to handover.

1.11 POST OCCUPANCY REVIEW

A post occupancy review will assess building performance against design intent and operational requirements. This will include coordination with the Principal and facility operators to review system performance, functionality, and user outcomes. Any identified defects or performance issues will be captured and rectified in accordance with the Contract requirements. Outcomes of the review will be used to inform final close-out and ensure the facilities operate as intended.

1.12 CLIENT INSPECTIONS

Client inspections will be coordinated during the Works to verify progress, quality, and compliance with the Contract. Inspection activities will align with hold points and witness points defined in Inspection and Test Plans, and required notice provided prior to inspection. Works will not proceed beyond nominated

hold points without inspection and approval. Inspections will also be undertaken at completion to confirm readiness for handover and compliance with project requirements.

1.13 TRAINING

Training will be provided to the Principal's approved personnel to enable your team to 'hit the ground running' and support the operation and maintenance of the completed facilities. Training will cover building systems, plant, and equipment, including mechanical, electrical, and specialist systems, aligned with operation and maintenance documentation. Training sessions will be coordinated with commissioning and handover to ensure personnel are familiar with system operation. Records of training, including attendance and materials, will be provided as part of the handover documentation.

1.14 COMMISSIONING & TESTING

Commissioning and testing will be coordinated to verify that all systems operate in accordance with the design documentation and Contract requirements. Systems will be installed to enable commissioning, and testing will be in accordance with the approved relevant specifications. Sequencing of commissioning activities will align with completion and inspections to confirm system performance prior to handover. Results will be recorded and included within handover documentation as evidence of compliance.

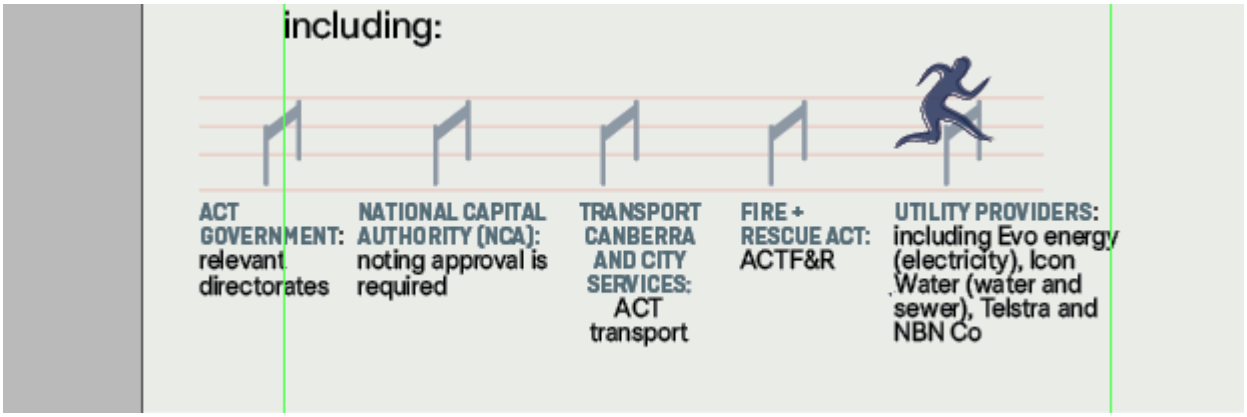
9.1.3. APPROVALS PROCESSES

Demonstration of a thorough understanding of the approvals processes relevant to the Project.

Intro

The RCC approach to effectively managing the approvals processes for the AIS Podium Project was developed based upon, local experience, expert advice and supply chain engagement.

External approvals will be required from a range of ACT and Commonwealth authorities, including:



- **ACT Government** (relevant Directorates)
- **National Capital Authority (**NCA) (noting approval is required)
- **Transport Canberra and City Services /** ACT Transport
- **Fire and Rescue ACT** (ACTF&R)
- **Utility providers,** incl Evo energy (electricity), Icon Water (water and sewer), Telstra and NBN Co.

Our engagement approach with each authority will be tailored to their specific statutory, technical and approval requirements. However, our overarching approach for the AIS Podium will be to:

- Undertake early and proactive coordination with the client and key stakeholder partners to ensure all engagement pathways, responsibilities and approval strategies are fully aligned;
- Establish early contact with each authority to identify approval pathways, technical requirements and potential risks, enabling timely mitigation of issues that could otherwise impact program or scope; and
- Nominate and maintain consistent primary points of contact within each authority to support continuity, clarity and efficiency throughout the design, approval and delivery phases of the project.

This approach is intended to support a streamlined approvals process, minimise interface risk, and ensure the AIS Podium project progresses in a coordinated and well governed manner.

Key milestones within our program reflect the critical nature of obtaining these approvals without objections.

1. Client Approvals

Client approval is required at all formal project gateways prior to statutory submissions and commencement of works. Pre-construction client approvals are set out in our outline Design Management Plan.

- Endorsement of scope, budget and program
- Sign-off of design packages prior to authority and certifier lodgement
- Approval to proceed with NCA Works Approval submission
- Approval to commence early works and main works once all pre-start conditions are satisfied

Client approvals act as the primary governance gate for all downstream approvals.

RCC will work collaboratively with the Australian Sports Commission (ASC), the **Australian Institute of Sport (AIS)**, relevant **ACT Government agencies**, approval authorities, consultants and subcontractors to coordinate and manage the authority approvals required for the AIS Podium Project.

RCC will provide the Client with visibility of approval pathways and key submission timeframes and will keep the Client appropriately informed of authority engagement where relevant to project governance and program.

RCC will coordinate the preparation and submission of approval documentation in collaboration with the design team and specialist consultants, with roles and any authority specific exceptions to be clearly defined and agreed as part of the project governance framework.

2 User Group Consultation and Endorsement

User Group engagement has been undertaken to date to confirm functional, operational and performance requirements of the AIS Podium facility. Governance of this interface is described within our outline Design Management Plan as in Returnable Schedule 8.4.1.

3. Utility and Service Authority Clearances

Utility and service authority clearances are required to confirm that the proposed works do not compromise existing assets and that services can be connected or adjusted as designed.

Authorities include electricity, water, sewer, and telecommunications. These clearances are typically issued as No Objection Certificates (NOCs) and will be a precondition to issue of the Building Approval by the registered certifier of the project.

4. Statutory Approvals – NCA and Building Certification

National Capital Authority (NCA) Works Approval

The Australian Institute of Sport (AIS) precinct is registered under the National Capital Plan as a Designated Area, reflecting its status as a national institution of special significance. As a result, all construction, alteration, demolition, excavation and associated works within the AIS precinct require Works Approval from the National Capital Authority (NCA).

RCC recognise the remit of the NCA as one of planning control and national interest. The NCA does not notify or manage interactions with other departments or organisations. However, the NCA can seek a compliance prompt via evidence of engagement.

Works Approvals are required for both Early Works and Main Works prior to commencement of any works on site. ASC and Populous have advised that initial consultation with the National Capital Authority has commenced, with the design issued for tender informed by NCA requirements:

Works Approval Assessment documentation will be prepared by the Contractor and lodged by the ASC.

The assessment is against the National Capital Plan and AIS Precinct Code, with review period stated as 15 days.

Building Approval cannot be issued prior to the NCA providing their Works Approval.



Building Approval

A Building Approval is required prior to commencement of construction works.

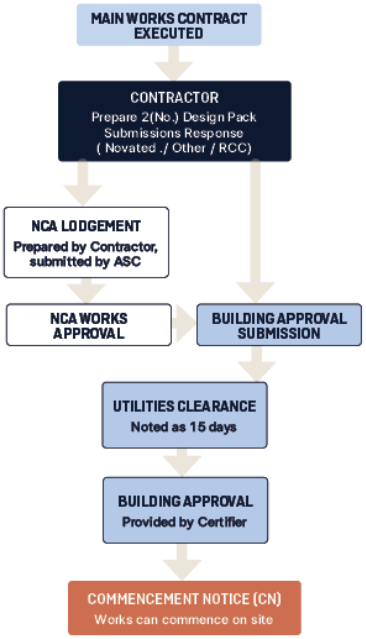
This includes assessment for compliance with the National Construction Code (NCC), structural, fire and life safety approval, accessibility and egress compliance, coordination with utility clearances and NCA approval conditions. The Building Approval is issued by the registered building certifier once all required documentation and preconditions are satisfied. Following this approval, a Commencement Notice (CN) is issued by the Certifier in recognition that all requirements have been met and construction may commence.

Building (Works) Completion

The Certifier is the primary approval authority at project completion and is responsible for the issuing of Certificate of Occupancy and Use (COU). Typically, the Certifiers role at completion includes:

- Conducts the final inspection confirming compliance to
    - Conditions stated within the Building Approval
    - The National Construction Code (NCC)
    - The Fire, life safety, access and services requirements noted within the FER.
- Verifies completion of all testing and commissioning activities and documentation.

The Contractor will maintain proactive engagement with the NCA throughout construction and assist the ASC in preparing a final package of photographic and as-built information for submission to the NCA. This approach supports the close-out of Works Approval conditions and anticipates a future completion process where both the NCA and the Building Certifier provide sign-off prior to occupation.



9.1.4. SUSTAINABILITY AND BENEFITS

Introduction

Sustainability objectives for the AIS Podium Project are defined within the PPR and include the mandated achievement of 5-Star Green Star Buildings certification, compliance with NCC Section J energy efficiency requirements, and delivery of whole-of-life performance outcomes.

Delivery under a Green Star framework enables the project to demonstrate and measure its sustainability efforts against a recognised and rigorously vetted tool. The preliminary Green Star Buildings pathway suggests a 6-Star rating for each building could potentially be achieved via implementation of additional initiatives and enhanced performance measures. Our approach for project reflects the current targeting of a 5-Star Green Star Rating Tool Version 1 rating in line with our tender offer.

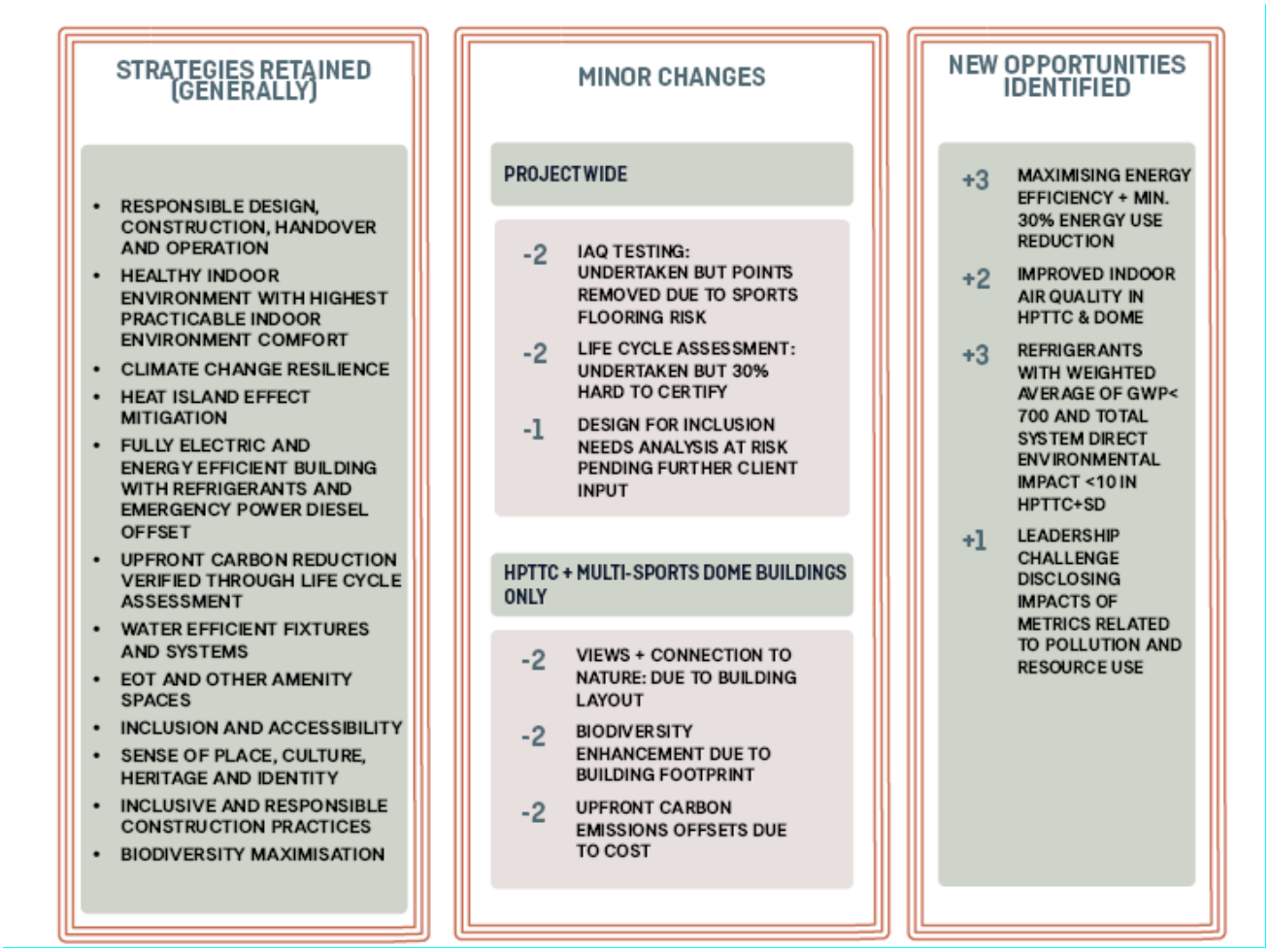
Project brief requirement

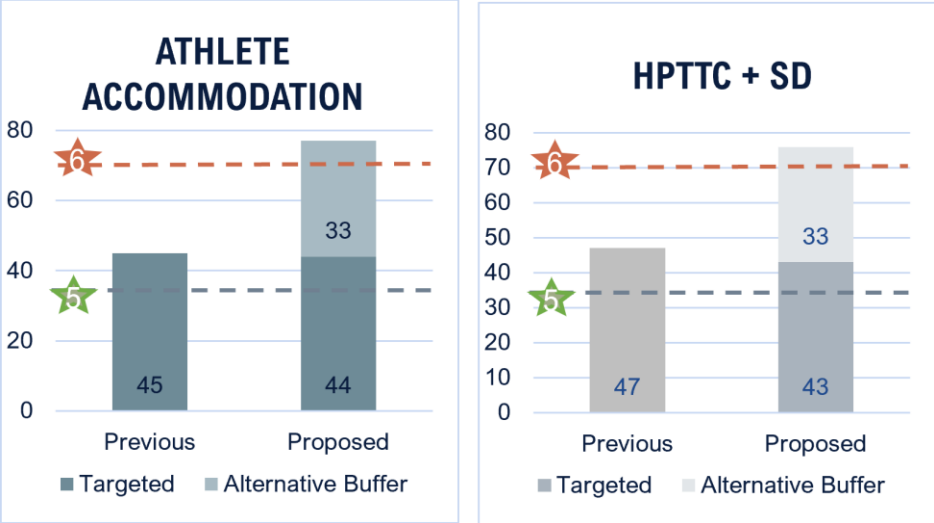
The section below outlines the relevant scope, minimum expectations, preferred 5-star pathway and optional credits to be considered for the project.

The Podium project will pursue one 5-star Green Star Buildings certification per facility—one for the Athlete Accommodation building and one for the HPTTC combined with the Sport Dome building. While certification for both facilities will be pursued concurrently, they will remain separate submissions to ensure maximum impact and recognition for each distinct facility..

Our preferred Green Star pathways (for each facility) are provided as attachments to our offer in section 8.1 of our tender response. Key strategies aligned to ASC priorities have been retained with minor changes to reflect mitigation of risk and newly identified opportunities, while adding a more generous buffer to embed greater delivery certainty.

The graphic overleaf provides a high-level indication of movements in targeted strategies.





RCC Sustainability approach and management

Sustainability is embedded into RCC project planning, design, delivery and verification processes so that the new facilities that form the AIS Podium project deliver enduring environmental performance, positive social outcomes and long-term operational value. In accordance with the Principal's Project Requirements (PPR) and the RCC Environmental, Social and Governance (ESG) framework, sustainability is treated as a core project requirement and integrated with project governance, quality management, risk control and commissioning activities.

Our approach supports the translation of sustainability objectives defined within the PPR, including achievement of 5 Star Green Star Buildings certification, compliance with NCC Section J energy efficiency requirements and delivery of whole of life performance outcomes into design development, procurement, construction and handover.

Governance framework

Sustainability will be managed using an integrated governance framework aligning design intent, construction delivery and operational outcomes. Clear accountability for sustainability delivery will be maintained within the project team to ensure requirements are actively managed, monitored, and protected throughout design evolution and construction activities.

ESG FRAMEWORK – A CULTURE OF POSITIVE IMPACT

PEOPLE	PARTNERS	PLANET
		
• Diversity, equity and inclusion • Health, safety and wellbeing • High performing teams	• Social impact • Supply chain management • First Nations relationships and opportunity	• Climate response • Sustainable resources • Environment and nature

Sustainability considerations will be embedded within project governance, reporting structures, design coordination, technical reviews, procurement and supply chain evaluation, site management quality assurance processes, commissioning and handover procedures.

Multidisciplinary and Collaborative Design Process

The Project benefits from the strong sustainability foundation established to date. RCC will build on this framework adopting a collaborative and multidisciplinary design process which involves architecture, structure, building services, façade, landscape, sustainability specialists and construction teams.

Sustainability initiatives will be assessed holistically alongside functionality, buildability, cost, safety and long-term performance. Design tradeoffs will be made transparently, so that initiatives will be compatible across disciplines and not compromise durability, resilience or operational efficiency. Additional sustainability opportunities will be identified and tested where they demonstrably add value and align with the PPR.

Materials and Embodied Carbon Management

Resource efficiency and embodied carbon reduction are key project objectives. In alignment with the Green Star Buildings Climate Positive Pathway, the Project targets a minimum 20% reduction in upfront carbon, with opportunities for higher reductions explored for major elements including the HPTTC and Multi-Sports Dome.

Achieving this target requires close coordination with designers to implement efficient structural solutions, dematerialisation, low-carbon materials and prefabrication where feasible. Early and ongoing engagement with suppliers will be undertaken to understand material availability and sourcing constraints, to support delivery of cost-effective and carbon-optimised outcomes .

Responsible Procurement

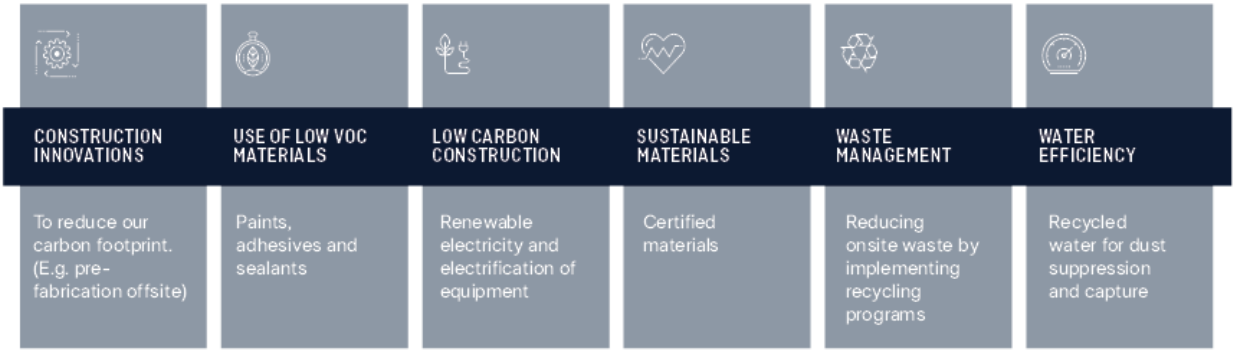
Sustainability outcomes will be supported through responsible procurement practices aligned with the PPR and applicable Commonwealth procurement-connected policies. Procurement decisions will consider durability, embodied carbon, ethical sourcing and whole-of-life value in addition to cost and compliance.

Sustainability requirements will be clearly communicated through subcontractor and supplier engagement processes, to realise alignment across the supply chain and consistent delivery of sustainability outcomes.

Construction Phase Sustainability Delivery

During construction, sustainability objectives will be delivered using robust environmental and site management practices consistent with the RCC ISO-certified Environmental Management System. Site-specific Environmental Management Plans will address noise, dust, erosion and runoff, with controls implemented to minimise environmental impact and protect long-term asset performance.

Construction-phase initiatives include waste management systems to maximise recycling and diversion from landfill, sustainability training incorporated into site inductions, inclusive work practices, wellbeing initiatives, and strict control of approved products including low-emissions and low-carbon materials. Key sustainability metrics such as upfront carbon, responsible procurement and waste diversion will be actively tracked and reported.



Performance Verification, Testing and Commissioning

Environmental and building performance outcomes will be verified through structured testing, commissioning and independent validation processes. Air-tightness testing will be undertaken to confirm building envelope performance, reducing energy demand, improving thermal comfort and supporting long-term operational efficiency.

Independent acoustic testing will verify compliance with Functional Brief requirements for building fabric, services noise, vibration and acoustic separation. Acoustic risks will be managed early through design detailing and materials selection so that spaces will be fit for purpose and support occupant wellbeing.

An Independent Commissioning Agent (ICA) will provide objective oversight of building services commissioning and performance validation. The ICA will confirm that systems are installed, tested and operating in accordance with the design intent and PPR, reducing operational risk and confirming the achievement of services-related sustainability outcomes at handover.

Ecology and Environmental Stewardship

Where required, a qualified ecologist will be engaged to support ecologically responsible delivery and compliance with planning and statutory approvals. Ecological advice will inform site planning, construction staging and environmental controls to protect biodiversity and minimise impacts on sensitive habitats.

Whole-of-Life Benefits and Conclusion

By integrating sustainability governance, technical design coordination, responsible procurement, construction controls and verified commissioning, the Project will deliver measurable environmental, social and economic benefits. These include reduced operational costs, improved occupant comfort, enhanced asset resilience and reduced long-term risk.

This integrated and evidence-based approach allows the AIS Podium Project to meet the Functional Brief and PPR requirements while delivering a durable, efficient and high-performing asset that provides long-term value for the Australian Sports Commission, users and the broader AIS community.

Visual Tree Assessment
and
Tree Management Plan

Australian Institute of Sport

25 and 26 Leverrier Street Bruce Belconnen ACT

Block 26 Section 8 and Block 6 Section 46 Bruce Belconnen ACT



28 July 2026

Updated with Supplementary Data 13 October 2026

Prepared by Duncan MacLennan

Canopy Tree Experts Pty Ltd

Project Details

Site Address	26 Leverrier Street, Bruce, ACT.
Client	Ms Tracy Wilcox, Australian Sports Commission
Contact	0400 344 354
Email	Tracy.Wilcox@ausport.gov.au
Canopy contacts	Kate Ross Tel: 02-6161 1800 trees@canopygroup.com.au
	Duncan MacLennan (Dip. Arboriculture, Assoc. Dip. Horticulture, Dip. Agriculture, MPA) Tel: 0410 481 262 consulting@canopygroup.com.au
Version	1.1 - 28/07/2026

Important Notice

This document can only be used for the stated purpose in this report unless written agreement is provided by Canopy Tree Experts in advance.

There is no obligation to maintain the confidentiality of any such information which was known to you without restriction prior to receipt of this document as evidenced by written business records; which becomes publicly known through no fault of yours; or which is rightfully received by you from a third party without restriction.

If there are any concerns, questions, or issues regarding this notice, please contact Duncan MacLennan.

© Copyright Canopy Tree Experts Pty. Ltd. 2026 ABN 99 688 545 673 | ACN 688 545 673

Contents

Summary 4
Tree data and assessments 4
Tree assessment table 2.1 5
Tree Protection Plan 11
Protective fencing 12
Activities prohibited in tree protection zones of trees to be retained 12
Limitations 12
Appendix A – Plans used in this report 14
Appendix B - Glossary 18

Copyright Canopy Tree Experts Pty. Ltd

Summary

Canopy Tree Experts has been engaged by the Australian Sports Commission (ASC) to prepare a Tree Management Plan (TMP) for the trees on Block 6 Section 46 and Block 26 Section 8, Bruce, ACT. This TMP supports the initial assessment and is being used for a second NCA application related to Site Preparation and Clearing activities.

This report uses information from the visual tree assessment of all 198 trees conducted in May 2026 in the area identified as the development site (see plan at **Appendix A**). The report adds to the April 2026 assessment of 89 trees around the existing accommodation which will also be within the development area.

The trees were assessed on 27, 28 and 29 May 2026, at which time all the data was collected and photographs taken. The trees have been numbered in accordance with the numbers allocated to them in the Steger survey of August 2024.

Of the 198 trees assessed it is proposed most of them be removed to accommodate the new structures and buildings that comprise the new development. However, the ASC has made a commitment to retain as many trees as possible to reduce the impact on the landscape.

Tree data and assessments

The table below details all the data collected on site as well as the assessment of each tree's health and structural integrity. The overhead image at **Appendix A** shows the entire development area and the plans, also in **Appendix A**, show the number allocated to each tree. Part of the area is covered by the visual tree assessment and tree management plan of 9 April 2026 (updated 12 June 2026). The remaining trees within and immediately beside the development area are all covered by this report.

Copyright Canopy Tree Experts Pty. Ltd

Tree assessment table 2.1

Tree Data Collection Table	Australian Institute of Sport							DATE	27 to 29 May 2026				
TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m) N	S	E	W	HEALTH	STRUCTURE	ULE (years)	COMMENTS
695	*Eucalyptus melliodora*	Yellow Box	0.23 / 0.35 / 0.37	0.63	6.72	10	5.5	7.0	6.5	5.5	Good	Good	20+	None.
394	*Eucalyptus mannifera*	Brittle Gum	0.24	0.29	2.88	10.5	3.0	3.0	3.0	3.5	Good	Fair	15-20	Minor damage at 1.4m above ground.
479	*Eucalyptus mannifera*	Brittle Gum	0.12 / 0.19	0.3	2.64	6.5	2.0	3.0	3.0	3.0	Fair	Good	5-10	Sparse canopy. Major scale infestation.
486	*Eucalyptus mannifera*	Brittle Gum	0.5	0.64	6	11	5.0	5.0	5.5	4.0	Good	Fair	20+	Included bark at one large trunk union.
489	*Eucalyptus mannifera*	Brittle Gum	0.41	0.49	4.92	8	4.5	4.5	4.0	4.0	Good	Good	20+	None.
493	*Eucalyptus mannifera*	Brittle Gum	0.38	0.46	4.56	9	3.5	4.0	3.0	3.0	Good	Fair	20+	None.
503	*Eucalyptus mannifera*	Brittle Gum	0.35	0.5	4.2	10.5	4.5	4.5	5.5	3.0	Good	Good	20+	None.
645	*Eucalyptus melliodora*	Yellow Box	0.34	0.39	4.08	14	3.5	3.0	2.0	4.0	Good	Good	20+	Minor dead wood to 100mm diameter.
680	*Eucalyptus mannifera*	Brittle Gum	0.16 / 0.12	0.27	2.4	12	2.0	1.0	2.5	3.0	Poor	Fair	0-2	Most leaves lost. Epicormic growth present.
707	*Eucalyptus polyanthemos*	Red Box	0.25	0.36	3	12	2.5	3.0	3.5	3.0	Good	Good	20+	None.
720	*Eucalyptus mannifera*	Brittle Gum	0.33	0.44	3.96	12	4.0	4.5	4.5	3.5	Good	Good	20+	None.
722	*Eucalyptus mannifera*	Brittle Gum	0.3	0.4	3.6	12	4.0	3.0	3.0	3.0	Good	Good	20+	None.
724	*Acacia dealbata*	Silver Wattle	0.13 / 0.19 / 0.21 / 0.22	0.5	4.56	8	2.0	2.0	2.0	2.0	Dead	Failed	0-2	Dead.
730	*Eucalyptus mannifera*	Brittle Gum	0.34	0.47	4.08	11.5	3.0	6.5	4.0	5.0	Good	Good	20+	None.
731	*Eucalyptus blakelyi*	Blakely's Red Gum	0.34	0.43	4.08	12	4.0	3.0	4.0	1.5	Good	Good	20+	None.
732	*Casuarina cunninghamiana*	River She-oak	0.33	0.48	3.96	14	3.5	4.5	4.0	3.5	Good	Good	20+	None.
733	*Casuarina cunninghamiana*	River She-oak	0.31	0.35	3.72	14	5.0	2.0	7.0	1.5	Good	Fair	20+	None.
735	*Eucalyptus blakelyi*	Blakely's Red Gum	0.25 / 0.61	0.9	7.92	15	5.0	6.5	7.5	4.0	Good	Fair	15-20	Fungal fruiting body in trunk union.
752	*Acacia dealbata*	Silver Wattle	0.12 / 0.15	0.3	2.28	4	4.0	4.0	2.0	1.0	Very poor	Poor	0-2	Almost dead.
769	Dead lying on the ground. Small tree.				0									
785	*Eucalyptus mannifera*	Brittle Gum	0.42	0.56	5.04	13	4.5	6.0	5.0	6.0	Good	Good	20+	None.
788	*Eucalyptus mannifera*	Brittle Gum	0.21	0.29	2.52	10.5	3.0	3.0	1.5	3.0	Good	Good	20+	None.
796	*Eucalyptus mannifera*	Brittle Gum	0.24	0.34	2.88	9	2.0	1.0	2.0	2.0	Good	Good	20+	None.
799	*Eucalyptus mannifera*	Brittle Gum	0.22	0.29	2.64	9	2.5	3.0	5.0	2.0	Good	Good	20+	None.
802	*Eucalyptus polyanthemos*	Red Box	0.26 / 0.36 / 0.38	0.81	6.96	12	9.5	8.0	7.0	3.0	Fair	Fair	15-20	Moderate dead wood to 50mm diameter.
803	*Eucalyptus mannifera*	Brittle Gum	0.65	0.79	7.8	15	10.0	6.5	8.0	6.5	Good	Good	20+	Minor dead wood to 80mm diameter.
804	*Eucalyptus mannifera*	Brittle Gum	0.27 / 0.43 / 0.43	0.84	8.04	14	5.5	10.0	5.5	6.0	Good	Good	20+	None.
805	*Eucalyptus mannifera*	Brittle Gum	0.38	0.49	4.56	12	2.5	3.0	2.5	6.0	Fair	Good	10-15	Moderate dead wood to 80mm diameter.
807	*Eucalyptus mannifera*	Brittle Gum	0.46	0.55	5.52	13	3.0	8.0	6.0	5.0	Good	Good	20+	Minor dead wood to 50mm.
808	*Acacia dealbata*	Silver Wattle	0.12 / 0.12	0.2	2.76	4	1.0	3.5	4.0	2.5	Fair	Poor	2-5	Moderate dead wood to 70mm.
809	*Eucalyptus polyanthemos*	Red Box	0.3 / 0.38	0.68	5.76	13.5	5.5	5.0	8.0	4.5	Good	Good	20+	Minor dead wood to 40mm.
810	*Eucalyptus mannifera*	Brittle Gum	0.23	0.4	2.76	10	4.0	1.0	0.0	4.0	Good	Fair	20+	None.
814	*Eucalyptus blakelyi*	Blakely's Red Gum	0.26 / 0.29 / 0.39	0.6	6.6	15	5.0	5.5	6.0	3.5	Good	Good	20+	Possible remnant tree.
815	*Eucalyptus mannifera*	Brittle Gum	0.38	0.49	4.56	13	3.0	3.0	3.0	3.0	Good	Good	20+	None.
816	*Eucalyptus mannifera*	Brittle Gum	0.14	0.2	1.68	10	1.0	1.0	1.0	1.0	Fair	Fair	15-20	None.
820	*Eucalyptus mannifera*	Brittle Gum	0.18	0.24	2.16	10	2.0	2.5	1.5	3.0	Good	Good	20+	None.

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
827	*Eucalyptus blakelyi*	Blakely's Red Gum	0.38	0.48	4.56	14	4.5	1.0	7.0	6.0	Good	Fair	20+	None.
831	Tree not there				0									
835	*Eucalyptus mannifera*	Brittle Gum	0.33 / 0.35	1	5.76	12	5.0	5.5	6.5	5.0	Good	Good	20+	Minor dead wood to 80mm.
840	*Eucalyptus mannifera*	Brittle Gum	0.27	0.35	3.24	13	4.0	2.5	5.0	4.0	Good	Good	20+	None.
866	*Eucalyptus polyanthemos*	Red Box	0.36	0.47	4.32	12	3.0	4.0	3.5	4.0	Good	Good	20+	None.
888	*Eucalyptus cinerea*	Argyle Apple	0.52 / 0.53	0.88	8.88	12.5	8.0	4.5	4.0	4.5	Good	Good	20+	None.
916	*Eucalyptus blakelyi*	Blakely's Red Gum	0.57	0.67	6.84	11.5	5.5	6.5	5.5	5.0	Good	Good	20+	None.
920	*Eucalyptus mannifera*	Brittle Gum	0.42	0.54	5.04	14	6.5	3.0	2.0	8.0	Good	Good	20+	None.
924	*Eucalyptus polyanthemos*	Red Box	0.26	0.35	3.12	13	2.5	4.0	3.0	2.0	Good	Good	20+	None.
928	*Eucalyptus mannifera*	Brittle Gum	0.7	0.94	8.4	14	8.5	5.0	6.0	8.0	Fair	Good	20+	Moderate dead wood to 100mm diameter. Possible remnant tree.
932	*Eucalyptus polyanthemos*	Red Box	0.2 / 0.4	0.56	5.4	13	4.0	3.5	5.0	3.0	Good	Good	20+	None.
942	*Eucalyptus melliodora*	Yellow Box	1	1.2	12	23	12.0	5.0	5.0	9.0	Poor	Fair	10-15	Remnant tree. Major dead wood to 300mm diameter.
959	*Eucalyptus mannifera*	Brittle Gum	0.43	0.55	5.16	14	5.0	4.5	5.0	4.5	Good	Good	20+	Minor dead wood to 50mm diameter.
989	*Eucalyptus blakelyi*	Blakely's Red Gum	0.3 / 0.39	0.65	5.88	14	6.5	3.0	6.0	5.0	Fair	Fair	20+	Moderate epicormic growth.
1033	*Eucalyptus mannifera*	Brittle Gum	0.29	0.36	3.48	11	6.0	3.0	5.5	4.0	Good	Good	20+	None.
1065	*Eucalyptus mannifera*	Brittle Gum	0.25	0.33	3	10	2.5	3.0	4.0	2.0	Poor	Fair	5-10	Moderate dead wood to 50mm. Major epicormic growth present.
1339	*Eucalyptus polyanthemos*	Red Box	0.39	0.5	4.68	14	2.5	3.5	3.5	3.0	Good	Good	20+	Old damage at 8m.
1384	*Eucalyptus polyanthemos*	Red Box	0.34 / 0.68	12	9.12	5.5	7.5	7.0	7.0	7.5	Good	Good	20+	None.
1385	*Eucalyptus polyanthemos*	Red Box	0.43	0.56	5.16	16	4.0	8.5	6.0	6.5	Good	Good	20+	None.
1386	*Eucalyptus melliodora*	Yellow Box	0.18	0.22	2.16	13	0.0	2.0	1.0	3.5	Good	Fair	20+	None.
1387	*Eucalyptus polyanthemos*	Red Box	0.27	0.34	3.24	14	4.5	3.0	2.0	4.0	Good	Good	20+	None.
1388	*Eucalyptus polyanthemos*	Red Box	0.42	0.55	5.04	14	7.0	5.0	4.5	5.5	Fair	Good	15-20	Moderate dead wood 100mm.
1389	*Eucalyptus polyanthemos*	Red Box	0.49	0.54	5.88	14	5.5	5.0	4.0	4.0	Good	Good	20+	Major wound from 0.5m to 1.8m.
1390	*Eucalyptus melliodora*	Yellow Box	0.28	0.41	3.36	14	4.0	4.0	2.0	4.5	Good	Good	20+	None.
1391	*Eucalyptus melliodora*	Yellow Box	0.17	0.22	2.04	6	1.0	3.5	1.0	2.0	Fair	Fair	2-5	Moderate dead wood to 40mm.
1392	*Eucalyptus melliodora*	Yellow Box	0.27	0.4	3.24	13	3.5	2.0	3.0	3.0	Fair	Good	10-15	Moderate dead wood to 50mm.
1393	*Eucalyptus melliodora*	Yellow Box	0.25 / 0.16 / 0.35	0.52	5.52	12	4.5	5.5	2.5	7.5	Good	Good	20+	None.
1395	*Eucalyptus melliodora*	Yellow Box	0.26 / 0.44	0.59	6.12	15.5	5.0	4.0	3.0	4.5	Good	Good	20+	None.
1396	*Eucalyptus melliodora*	Yellow Box	0.34 / 0.38	0.53	6.12	15	4.0	4.5	5.5	4.0	Good	Good	20+	None.
1397	*Eucalyptus polyanthemos*	Red Box	0.35	0.44	4.2	14	4.5	5.0	3.0	3.5	Good	Good	20+	None.
1398	*Eucalyptus polyanthemos*	Red Box	0.6	0.84	7.2	16	6.5	5.5	5.5	5.0	Good	Good	20+	Damage near base healing.
1400	*Eucalyptus melliodora*	Yellow Box	0.31	0.49	3.72	13	6.0	4.0	3.5	6.0	Good	Good	20+	None.
1401	*Eucalyptus polyanthemos*	Red Box	0.33 / 0.36	0.59	5.88	15	5.5	3.5	6.0	4.0	Good	Good	20+	Minor damage to one trunk at 2m above ground.
1402	*Eucalyptus polyanthemos*	Red Box	0.19	0.3	2.28	7	3.0	3.5	4.0	2.0	Good	Good	20+	None.
1403	*Eucalyptus melliodora*	Yellow Box	0.33	0.45	3.96	14	3.0	3.0	3.0	3.0	Good	Good	20+	None.
1404	*Eucalyptus polyanthemos*	Red Box	0.18 / 0.48	0.54	6.12	14	4.0	4.5	3.5	5.0	Fair	Fair	10-15	Moderate dead wood to 50mm.
1406	*Eucalyptus polyanthemos*	Red Box	0.18	0.27	2.16	13	2.0	1.0	3.0	2.0	Fair	Fair	10-15	None.
1407	*Eucalyptus polyanthemos*	Red Box	0.24 / 0.3	0.52	4.56	14	5.0	4.5	3.0	4.0	Good	Good	20+	None.
1408	*Eucalyptus polyanthemos*	Red Box	0.44	0.52	5.28	14.5	6.0	6.0	5.5	3.0	Good	Good	20+	None.

Copyright Canopy Tree Experts Pty. Ltd

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
1409	*Eucalyptus melliodora*	Yellow Box	0.32	0.41	3.84	14	3.0	4.0	3.5	5.0	Good	Good	20+	None.
1410	*Eucalyptus polyanthemos*	Red Box	0.29	0.39	3.48	10	4.0	3.5	5.0	3.0	Good	Good	20+	None.
1411	*Eucalyptus polyanthemos*	Red Box	0.5	0.59	6	12	5.5	3.5	5.5	5.5	Good	Good	20+	None.
1412	*Eucalyptus polyanthemos*	Red Box	0.41 / 0.44	0.71	7.2	14	6.0	4.0	6.0	6.5	Good	Good	20+	None.
1413	*Eucalyptus polyanthemos*	Red Box	0.21	0.31	2.52	12.5	3.5	2.0	3.0	1.0	Good	Good	20+	None.
1414	*Eucalyptus polyanthemos*	Red Box	0.42 / 0.45	1.1	7.44	15	6.0	8.0	8.0	9.0	Good	Good	20+	None.
1415	*Eucalyptus blakelyi*	Blakely's Red Gum	0.25	0.34	3	10	3.0	3.0	3.0	3.0	Poor	Fair	5-10	Suppressed by surrounding trees.
1416	*Eucalyptus melliodora*	Yellow Box	0.26 / 0.34	0.51	5.16	16	3.0	5.5	5.0	3.5	Good	Good	20+	None.
1417	*Eucalyptus polyanthemos*	Red Box	0.42 / 0.42	0.75	7.08	18	7.5	6.0	5.5	7.0	Good	Good	20+	None.
1418	*Eucalyptus blakelyi*	Blakely's Red Gum	0.13	0.19	1.56	6	1.0	1.5	2.0	1.0	Good	Good	20+	None.
1419	*Eucalyptus viminalis*	Ribbon Gum	0.35 / 0.56	0.94	7.92	18	6.5	9.0	6.0	8.0	Good	Good	20+	Old damage at base.
1420	*Eucalyptus blakelyi*	Blakely's Red Gum	0.12 / 0.18 / 0.19	0.5	3.48	10	3.5	3.0	1.5	3.0	Good	Good	20+	None.
1421	*Eucalyptus polyanthemos*	Red Box	0.49	0.62	5.88	15	4.5	10.5	11.0	5.5	Good	Good	20+	Sub species longior. Nest present.
1422	*Eucalyptus blakelyi*	Blakely's Red Gum	0.24	0.33	2.88	10	4.0	1.0	3.0	1.0	Fair	Fair	15-20	Moderate dead wood to 60mm.
1423	Tree not there				0									
1424	Tree not there				0									
1425	*Eucalyptus polyanthemos*	Red Box	0.46	0.47	5.52	9	4.0	4.0	4.5	3.0	Fair	Fair	10-15	Moderate dead wood to 50mm.
1427	Tree not there				0									
1443	*Eucalyptus sp.*	Gum	0.3 / 0.34	0.51	5.4	12.5	4.0	6.0	3.5	6.0	Good	Good	20+	None.
1444	*Eucalyptus mannifera*	Brittle Gum	0.39	0.5	4.68	13	3.0	5.5	2.5	6.5	Fair	Fair	15-20	Has had major uplift. Several small areas of damage on trunk repairing.
1445	*Eucalyptus mannifera*	Brittle Gum	0.26	0.35	3.12	13	4.0	1.5	3.0	3.5	Good	Good	20+	None.
1446	*Eucalyptus mannifera*	Brittle Gum	0.26	0.33	3.12	12	3.5	2.0	4.0	3.5	Good	Good	20+	None.
1468	*Eucalyptus leucoxylon*	South Australian Blue Gum	0.19	0.22	2.28	7	3.0	3.5	3.0	4.0	Fair	Fair	15-20	None.
1471	*Eucalyptus mannifera*	Brittle Gum	0.32	0.43	3.84	12.5	4.0	5.0	3.5	5.0	Good	Good	20+	None.
1473	*Eucalyptus blakelyi*	Blakely's Red Gum	0.18 / 0.22 / 0.32	0.56	5.16	10	3.0	4.0	3.0	5.0	Good	Good	20+	None.
1475	*Eucalyptus mannifera*	Brittle Gum	0.24	0.3	2.88	10	3.0	1.5	2.0	2.0	Fair	Good	15-20	Minor dead wood to 30mm.
1477	*Eucalyptus mannifera*	Brittle Gum	0.4	0.51	4.8	12.5	5.5	3.5	8.0	6.0	Good	Good	20+	None.
1479	*Eucalyptus mannifera*	Brittle Gum	0.45	0.56	5.4	13	5.0	5.0	7.0	4.0	Good	Good	20+	None.
1533	*Malus sp.*	Apple	0.13 / 0.17 / 0.19 / 0.21	0.7	3	6.5	5.0	5.5	4.5	4.0	Fair	Poor	15-20	Two dead trunks 0.18m in diameter.
1534	*Prunus cerasifera*	Flowering Plum	6 x 0.15	0.5	4.08	6	3.0	3.5	5.0	3.0	Good	Fair	15-20	None.
1535	*Eucalyptus melliodora*	Yellow Box	0.4 / .52	0.75	7.92	12.5	7.5	6.0	7.0	3.5	Good	Fair	10-15	Armillaria fruiting bodies at base. Included bark at trunk unions.
1536	*Eucalyptus melliodora*	Yellow Box	0.33 / 0.37 / 0.28	0.68	6.84	10	5.0	5.0	5.0	5.0	Good	Good	20+	None.
1537	*Eucalyptus melliodora*	Yellow Box	0.64	0.7	7.68	11	7.0	5.0	4.0	6.0	Fair	Good	15-20	Moderate dead wood to 60mm diameter.
1538	*Eucalyptus blakelyi*	Blakely's Red Gum	0.36	0.43	4.32	12	6.0	1.0	4.0	1.5	Good	Good	20+	Minor dead wood to 100mm.
1539	*Eucalyptus melliodora*	Yellow Box	0.25	0.27	3	10	3.0	1.0	2.0	2.5	Good	Fair	15-20	Regrowth from stump. Raised root crown.
1540	*Eucalyptus melliodora*	Yellow Box	0.26 / 0.26 / 0.29 / 0.41	0.62	7.44	10	6.0	6.5	5.0	6.5	Good	Good	20+	None.
1542	*Eucalyptus blakelyi*	Blakely's Red Gum	0.32	0.43	3.84	13	5.0	4.0	4.0	4.0	Good	Good	20+	None.
1543	*Eucalyptus melliodora*	Yellow Box	0.19 / 0.31	0.8	4.32	10	4.0	5.5	5.0	3.0	Good	Good	20+	None.
1544	*Eucalyptus melliodora*	Yellow Box	0.13	0.21	1.56	4	1.0	1.0	2.5	2.0	Fair	Fair	5-10	Damage at base.

Copyright Canopy Tree Experts Pty. Ltd

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
1546	*Eucalyptus melliodora*	Yellow Box	0.44	0.51	5.28	12	6.0	5.0	5.0	5.0	Good	Good	20+	None.
1547	*Eucalyptus melliodora*	Yellow Box	0.2 / 0.25 / 0.3	0.54	5.28	8	4.5	9.5	2.5	6.5	Good	Good	20+	None.
1548	*Eucalyptus melliodora*	Yellow Box	0.18 / 0.19 / 0.28	0.46	4.56	8	4.0	2.5	3.5	2.0	Good	Good	20+	None.
1548	Tree not there				0									
1549	*Eucalyptus blakelyi*	Blakely's Red Gum	0.22 / 0.27	0.35	4.56	11	3.0	3.0	0.5	2.0	Poor	Fair	2-5	Major dead wood to 50mm diameter. Major epicormic growth present.
1550	*Eucalyptus polyanthemos*	Red Box	0.47 / 0.48	0.76	8.04	15	5.5	6.0	6.0	5.0	Good	Good	20+	None.
1551	*Eucalyptus blakelyi*	Blakely's Red Gum	0.21	0.25	2.52	8	2.0	2.0	2.0	1.0	Good	Good	20+	None.
1554	*Acacia mearnsii*	Black Wattle	0.28	0.45	3.36	6	6.0	7.0	6.0	2.0	Fair	Fair	10-15	None.
1556	*Acacia mearnsii*	Black Wattle	0.3	0.4	3.6	7	3.0	3.0	3.0	3.0	Poor	Poor	0-2	None.
1559	*Eucalyptus melliodora*	Yellow Box	0.17	0.24	2.04	6	2.0	3.0	2.0	2.0	Good	Good	20+	None.
1560	*Acacia melanoxylon*	Blackwood	0.18 / 0.21	0.25	3.36	5	3.0	3.0	3.0	3.0	Good	Good	20+	None.
1562	*Acacia mearnsii*	Black Wattle	0.16 x 6	0.3	4.32	5	6.0	6.0	6.0	6.0	Good	Failed	2-5	Estimates due to blackberries and no access.
1568	*Eucalyptus melliodora*	Yellow Box	0.33 / 0.33 / 0.35	0.9	6.96	10	6.0	6.0	6.0	6.0	Dead	Fair	0-2	None.
1576	*Eucalyptus sp.*	Gum	-	0.25	-	1.2	-	-	-	-	Dead	Failed	0-2	Part of dead tree lying on the ground.
1609	*Eucalyptus blakelyi*	Blakely's Red Gum	0.3 / 0.3	0.62	5.04	13.5	4.0	3.0	6.0	4.0	Good	Good	20+	None.
1611	*Eucalyptus blakelyi*	Blakely's Red Gum	0.1	0.15	1.2	2.5	0.5	0.5	0.5	0.5	Fair	Poor	2-5	Suppressed by tree 827.
1613	*Eucalyptus melliodora*	Yellow Box	0.2	0.3	2.4	10	3.5	2.5	1.5	2.0	Good	Good	20+	None.
1615	*Eucalyptus blakelyi*	Blakely's Red Gum	0.11 / 0.2	0.4	2.76	9.5	5.0	2.5	3.0	2.5	Good	Good	20+	None.
1617	Dead lying on the ground. Small tree.				0									
1619	*Eucalyptus mannifera*	Brittle Gum	0.19	0.26	2.28	8	3.0	2.0	2.0	1.0	Good	Good	20+	None.
1621	*Eucalyptus mannifera*	Brittle Gum	0.25	0.34	3	9	3.0	2.0	3.0	2.0	Good	Good	20+	None.
1625	*Eucalyptus mannifera*	Brittle Gum	0.27	0.32	3.24	12.5	3.5	3.5	2.5	2.0	Good	Good	20+	None.
1627	*Eucalyptus blakelyi*	Blakely's Red Gum	0.24	0.28	2.88	9.5	3.0	4.0	4.0	2.0	Good	Good	20+	None.
1629	*Eucalyptus mannifera*	Brittle Gum	0.19	0.3	2.28	10	3.0	3.0	3.0	3.0	Good	Good	20+	None.
1631	*Eucalyptus mannifera*	Brittle Gum	0.3	0.38	3.6	9	4.0	5.0	4.0	4.5	Good	Good	20+	None.
1633	*Eucalyptus mannifera*	Brittle Gum	0.27	0.35	3.24	10	3.0	3.0	1.0	3.0	Good	Good	20+	None.
1643	*Eucalyptus mannifera*	Brittle Gum	0.35	0.45	4.2	16	5.5	6.0	5.5	5.0	Good	Good	20+	None.
1644	*Eucalyptus mannifera*	Brittle Gum	0.37 / 0.39	0.9	6.48	12	6.0	8.0	1.5	8.5	Good	Poor	15-20	Half of canopy lost due trunk split off.
1645	*Eucalyptus mannifera*	Brittle Gum	0.31	0.4	3.72	14	4.0	4.0	3.5	6.0	Good	Good	20+	None.
1646	*Eucalyptus mannifera*	Brittle Gum	0.49	0.62	5.88	16	6.0	6.5	8.0	8.0	Good	Good	20+	Minor dead wood to 60mm diameter.
1647	*Eucalyptus viminalis*	Ribbon Gum	0.57	0.71	6.84	10	5.0	7.0	6.5	6.5	Good	Good	20+	None.
1647	*Ulmus procera*	English Elm	0.15 / 0.15	0.28		4	2.0	2.0	2.0	2.0	Good	Good	20+	None.
1648	Eucalyptus mannifera	Brittle Gum	0.33 / 0.39	0.59	6.12	10	4.0	3.5	6.5	6.0	Good	Fair	20+	Included bark and wound at trunk union.
1651	*Eucalyptus mannifera*	Brittle Gum	0.32	0.39	3.84	12	6.0	4.5	6.0	5.0	Good	Good	20+	None.
1652	*Eucalyptus mannifera*	Brittle Gum	0.25	0.31	3	12	5.0	2.5	3.5	3.0	Good	Good	20+	None.
1653	*Eucalyptus viminalis*	Ribbon Gum	0.5	0.56	6	12	5.0	3.0	3.0	7.0	Fair	Fair	15-20	Moderate dead wood to 200mm diameter.
1654	Eucalyptus viminalis	Ribbon Gum	0.25 / 0.33	0.9	4.92	12	7.5	4.5	2.5	7.5	Fair	Good	20+	None.
1655	*Eucalyptus mannifera*	Brittle Gum	0.36	0.44	4.32	11	3.5	5.0	4.0	5.5	Good	Good	20+	One mistletoe present in canopy.
1656	*Eucalyptus mannifera*	Brittle Gum	0.33	0.43	3.96	13	6.0	2.0	4.0	6.0	Good	Good	20+	Minor dead wood to 50mm.
1657	*Eucalyptus mannifera*	Brittle Gum	0.18	0.25	2.16	9	4.0	1.0	0.0	4.0	Good	Fair	20+	None.

Copyright Canopy Tree Experts Pty. Ltd

Trees approved for removal in WA-002-066

Trees applied for removal in WA-002-250

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
1659	*Eucalyptus mannifera*	Brittle Gum	0.35	0.47	4.2	12	4.5	4.5	0.0	9.0	Good	Good	20+	None.
1660	*Eucalyptus viminalis*	Ribbon Gum	0.4 / 0.56	1.1	8.28	13	12.0	6.5	9.0	11.0	Good	Good	20+	None.
1661	*Acacia mearnsii*	Black Wattle	0.25	0.3	3	10	3.0	3.0	2.0	3.0	Good	Good	15-20	None.
1662	*Acacia mearnsii*	Black Wattle	0.25 / 0.25 / 0.3 / 0.35	0.8	6.96	8.5	7.0	6.0	6.0	6.0	Good	Good	20+	None.
1663	*Eucalyptus blakelyi*	Blakely's Red Gum	0.35	0.42	4.2	12	3.5	0.0	2.0	4.0	Good	Fair	20+	None.
1666	*Eucalyptus sp.*	Gum	0	0.25	0	-	-	-	-	-	Dead	Failed	0-2	Lying on ground.
1677	*Eucalyptus mannifera*	Brittle Gum	0.16	0.22	1.92	8	2.0	2.0	2.0	2.0	Good	Good	20+	None.
1678	*Eucalyptus mannifera*	Brittle Gum	0.52	0.72	6.24	12	6.5	5.0	6.0	6.5	Good	Good	20+	Included bark at 4m above ground.
1679	*Acacia dealbata*	Silver Wattle	-	-	-	-	-	-	-	-	Dead	Failed	0-2	Dead Acacia covered with blackberries.
1680	*Eucalyptus blakelyi*	Blakely's Red Gum	0.4	0.45	4.8	11	5.5	3.0	3.0	5.0	Good	Poor	10-15	Two large branches split out with half canopy lost.
1684	*Acacia mearnsii*	Black Wattle	0.19 / 0.43	0.48	5.64	7	6.0	6.0	2.5	6.0	Good	Good	15-20	None.
2559	*Eucalyptus sp.*	Gum	0.11	0.16	1.32	4	1.0	1.0	1.0	1.0	Good	Good	20+	None.
2560	*Eucalyptus mannifera*	Brittle Gum	0.15	0.2	1.8	8	2.0	1.0	1.0	1.0	Good	Good	20+	None.
2561	*Eucalyptus blakelyi*	Blakely's Red Gum	0.32	0.42	3.84	13	4.5	3.0	3.5	3.0	Good	Good	20+	None.
2562	*Eucalyptus blakelyi*	Blakely's Red Gum	0.11	0.13	1.32	6	1.0	1.0	1.0	1.0	Fair	Fair	5-10	Suppressed by 720.
2563	*Casuarina cunninghamiana*	River She-oak	0.15	0.23	1.8	8	1.5	1.5	1.5	1.5	Good	Good	20+	None.
2565	*Eucalyptus mannifera*	Brittle Gum	0.15	0.2	1.8	10	0.5	2.0	2.0	2.0	Good	Good	20+	None.
2566	Tree not there				0									
2567	*Eucalyptus mannifera*	Brittle Gum	0.12 / 0.16 / 0.21	0.5	3.48	12.5	3.0	3.0	3.0	2.0	Good	Good	20+	None.
2568	*Casuarina cunninghamiana*	River She-oak	0.05	0.16	0.6	4	1.0	1.0	1.0	1.0	Good	Good	20+	None.
2569	*Eucalyptus mannifera*	Brittle Gum	0.25	0.32	3	13	3.5	3.5	3.0	2.5	Good	Good	20+	None.
2570	*Eucalyptus mannifera*	Brittle Gum	0.09	0.12	1.08	7.5	1.0	1.0	1.0	1.0	Fair	Good	15-20	Suppressed by surrounding trees.
2571	*Casuarina cunninghamiana*	River She-oak	0.13	0.18	1.56	7	1.5	1.5	1.5	1.5	Good	Good	20+	None.
2572	*Eucalyptus mannifera*	Brittle Gum	0.3	0.39	3.6	13	3.0	3.0	3.0	3.0	Poor	Fair	2-5	Major epicormic growth present. Canopy dying back.
2573	*Eucalyptus blakelyi*	Blakely's Red Gum	0.24	0.29	2.88	7	4.0	0.5	2.5	1.0	Good	Fair	20+	None.
2574	*Eucalyptus mannifera*	Brittle Gum	0.13	0.23	1.56	11	1.5	2.0	1.0	1.0	Good	Good	20+	None.
2575	*Eucalyptus mannifera*	Brittle Gum	0.16	0.22	1.92	10.5	1.0	1.5	1.0	1.0	Good	Good	20+	None.
2576	*Eucalyptus blakelyi*	Blakely's Red Gum	0.42	0.59	5.04	15	3.0	6.0	8.0	5.5	Good	Good	20+	None.
2577	*Eucalyptus polyanthemos*	Red Box	0.19	0.24	2.28	11	1.5	1.5	1.5	1.5	Good	Good	20+	None.
2578	*Eucalyptus mannifera*	Brittle Gum	0.35	0.5	4.2	12	4.5	3.0	3.0	4.0	Good	Fair	20+	None.
2579	*Robinia pseudoacacia*	Black Locust	0.18 / 5 x 0.1	0.3	3.24	9	3.0	3.0	3.0	3.0	Good	Fair	20+	None.
2580	*Robinia pseudoacacia*	Black Locust	0.18 / 0.16	0.25	2.88	10	3.0	3.0	3.0	3.0	Good	Fair	20+	None.
2584	*Eucalyptus melliodora*	Yellow Box	0.26	0.31	3.12	11	3.0	3.0	3.0	3.0	Good	Good	20+	None.
2592	*Acacia baileyana*	Cootamundra Wattle	0.12 / 0.2	0.25	2.76	4.5	3.0	3.0	3.0	3.0	Good	Good	15-20	Weed species.
2593	*Acacia mearnsii*	Black Wattle	0.1 / 0.15 / 0.17 / 0.2	0.45	3.84	7	5.0	5.0	5.0	5.0	Good	Good	15-20	None.
2595	*Eucalyptus melliodora*	Yellow Box	0.28	0.28	3.36	10	3.0	2.5	2.5	2.5	Good	Good	20+	None.
2598	*Acacia mearnsii*	Black Wattle	0.19	0.28	2.28	6	4.5	4.0	4.0	4.0	Good	Good	10-15	Some borer activity.
2599	*Eucalyptus melliodora*	Yellow Box	0.19 / 0.17 / 0.17 / 0.22	0.5	4.56	10	5.5	2.5	1.0	3.0	Good	Failed	20+	None.

Copyright Canopy Tree Experts Pty. Ltd

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
2600	*Eucalyptus melliodora*	Yellow Box	0.25	0.28	3	11	1.5	1.0	2.5	1.0	Good	Good	20+	None.
2601	*Eucalyptus melliodora*	Yellow Box	0.19 / 0.22	0.4	3.48	10	3.0	2.0	3.0	2.0	Good	Failed	20+	None.
2602	*Eucalyptus melliodora*	Yellow Box	0.15 / 0.16	0.3	2.64	8	1.0	1.0	1.5	1.0	Fair	Fair	10-15	Moderate dead wood to 150mm diameter.
2627	*Acacia mearnsii*	Black Wattle	0.2	0.27	2.4	6	3.5	3.5	3.5	3.5	Good	Good	5-10	Major borer activity.
2628	*Eucalyptus melliodora*	Yellow Box	0.21 / 0.36	0.48	5.04	10	5.5	3.0	1.0	5.5	Fair	Fair	10-15	Moderate dead wood to 50mm.
2629	*Eucalyptus melliodora*	Yellow Box	0.17	0.22	2.04	7.5	2.0	2.0	2.0	2.0	Good	Good	20+	None.

Copyright Canopy Tree Experts Pty. Ltd

Trees approved for removal in WA-002-066

Trees applied for removal in WA-002-250

Canopy Tree Experts Pty Ltd

Australian Institute of Sport **Supplementary Tree Assessments** **DATE 13 October 2026**

TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ	HEIGHT	CANOPY SPREAD (m)				HEALTH	STRUCTURE	ULE (years)	COMMENTS
174	*Eucalyptus melliodora*	Yellow Box	0.83	0.84	9.96	13.5	5.0	7.0	4.0	6.5	Good	Poor	20+	None.
194	Eucalyptus melliodora	Yellow Box	0.57	0.72	6.84	12	5	4	6	3.5	Fair	Poor	15-20	Major trunk removed at 2.5m above ground.
217	*Eucalyptus melliodora*	Yellow Box	0.82	0.96	9.84	16	9.0	5.5	4.0	7.0	Good	Fair	20+	None.
227	*Eucalyptus melliodora*	Yellow Box	0.83	0.92	9.96	15.5	7.0	5.5	6.5	8.0	Good	Good	20+	None.
246	*Eucalyptus melliodora*	Yellow Box	0.47	0.55	5.64	13	6.5	2.0	2.5	6.5	Fair	Fair	15-20	Minor dead wood to 30mm.
334	*Pyrus calleryana*	Callery Pear	0.27	0.29	3.24	8	4.0	3.5	5.0	5.0	Good	Fair	20+	None.
352	*Pyrus calleryana*	Callery Pear	0.21	0.24	2.52	8	3.0	2.5	4.0	3.0	Good	Good	20+	None.
358	*Pyrus calleryana*	Callery Pear	0.26	0.27	3.12	8.5	3.0	4.0	5.0	2.0	Good	Poor	15-20	None.
381	*Pyrus calleryana*	Callery Pear	0.3	0.33	3.6	8.5	4.5	2.0	6.0	0.0	Good	Poor	10-15	No canopy on west side.
275	*Pyrus calleryana*	Callery Pear	0.27	0.31	3.24	11	5.0	4.0	4.0	2.0	Good	Fair	20+	None.
292	*Pyrus calleryana*	Callery Pear	0.28	0.31	3.36	10	6.0	4.0	6.5	3.0	Good	Good	20+	None.
317	*Pyrus calleryana*	Callery Pear	0.21	0.24	2.52	8	3.0	3.5	3.5	3.5	Good	Fair	20+	None.

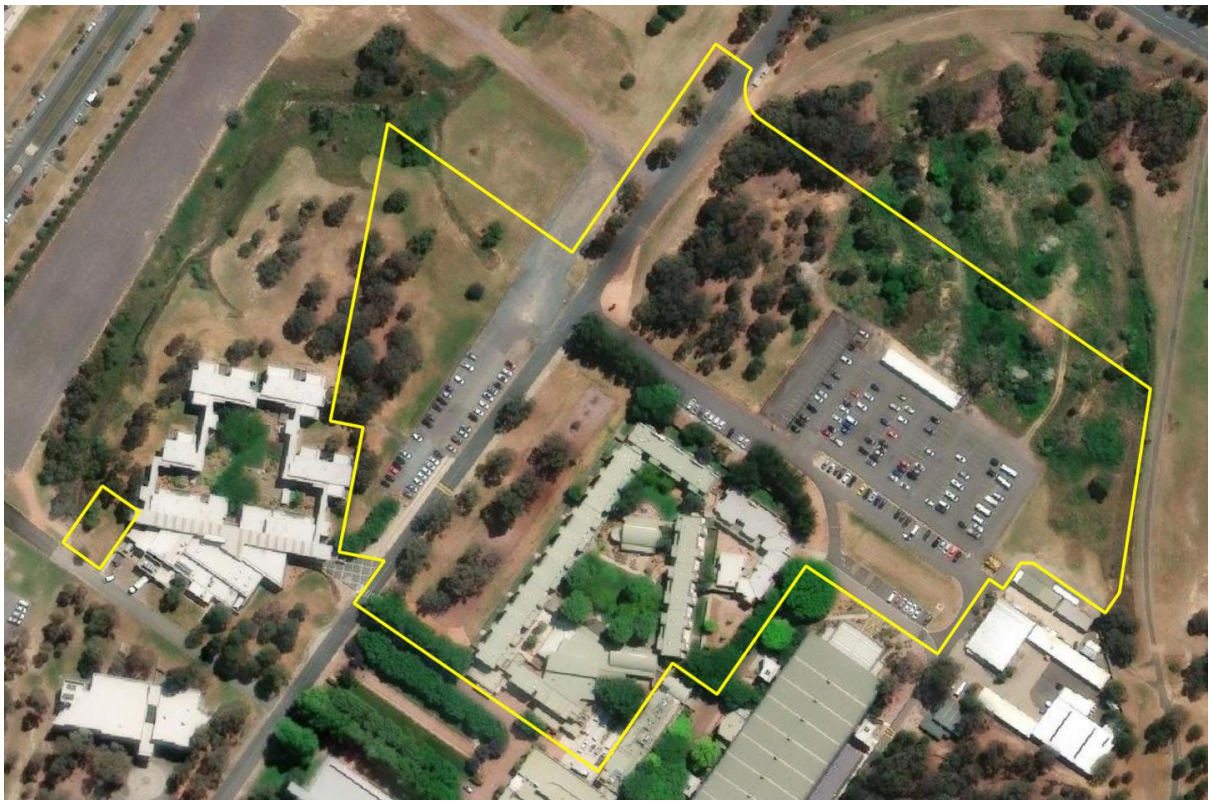
Tree Protection Plan

The development area shown below at Figure 1 has been identified as the perimeter of the work site. Most of the trees within this perimeter will be remove to enable all of the construction works.

Where possible trees will be retained where they do not compromise the design of the new facilities.

Measures to protect the trees to be retained will be consistent with the Australian Standard 'AS 4970-2025 Protection of trees on development sites'. This standard details a range of measures including fencing and the use of temporary paths to prevent physical damage of the trees and/or compaction of trees TPZ.

Figure 1. Development area



It is recommended a project arborist be appointed to oversee the implementation of the Tree Management Plan and provide on-going advice and compliance checks throughout the project. A project arborist can also assist the works contractor and respond to tree related issues promptly thereby helping to reduce stoppages.

Access to the development site should be from formal sealed roads. Where access to the site crosses the soft landscape and is in the vicinity of trees the project arborist must be involved to assess whether any specific tree protection measures are required.

Protective fencing

The perimeter of the development site as shown above must be fenced before any earthworks or demolition commences. The trees to be retained should be identified as soon as the final design for the new facilities has been completed. These trees should then be protected in accordance with the measures detailed in AS 4970-2026.
Vehicles and equipment must not park or travel over the TPZs of any tree to be retained irrespective of whether they are within or outside the development area. If site workers are parking on the soft landscape all trees TPZ in that area must be fenced to prevent compaction of their TPZ.

Activities prohibited in tree protection zones of trees to be retained

Where a tree is to be retained these activities are **not permitted**:

- Storage of materials, equipment or machinery,
- Placement of waste bin and onsite toilets,
- Any activity that might compact the soil,
- At no time should chemicals or fuel be stored or disposed of in the TPZ of a tree.
- Soil levels around trees must not be lowered and only a maximum of 50mm can be scraped off by hand. Where the levels around trees are raised the material should be more porous/coarser than the soil below and should not exceed 150mm in depth.

Limitations

The majority of trees have defects that may or may not be detectable without invasive diagnostic tooling methods. These defects could be from environmental, human or genetic factors and may be hazardous to people and property.

The client acknowledges:

- That Canopy has not conducted any invasive procedure or ultrasound test on the trees, nor inspected them at crown level or below surface level;
- This report does not and cannot make comment upon, determine or assess defects that may exist in the trees internally. Whether arising from decay, disease, effect of drought, insect infestation or any other inherent condition that may exist.

No Warranty for Non-Discernible Defects or Damage

This report cannot and does not warrant that defects or damage do not exist within the trees that may not be discernible to a competent arborist making an inspection at ground level.

Reliance Period

The client acknowledges that no reliance may be placed on this report after 12 months following the date of inspection.

Copyright Canopy Tree Experts Pty. Ltd

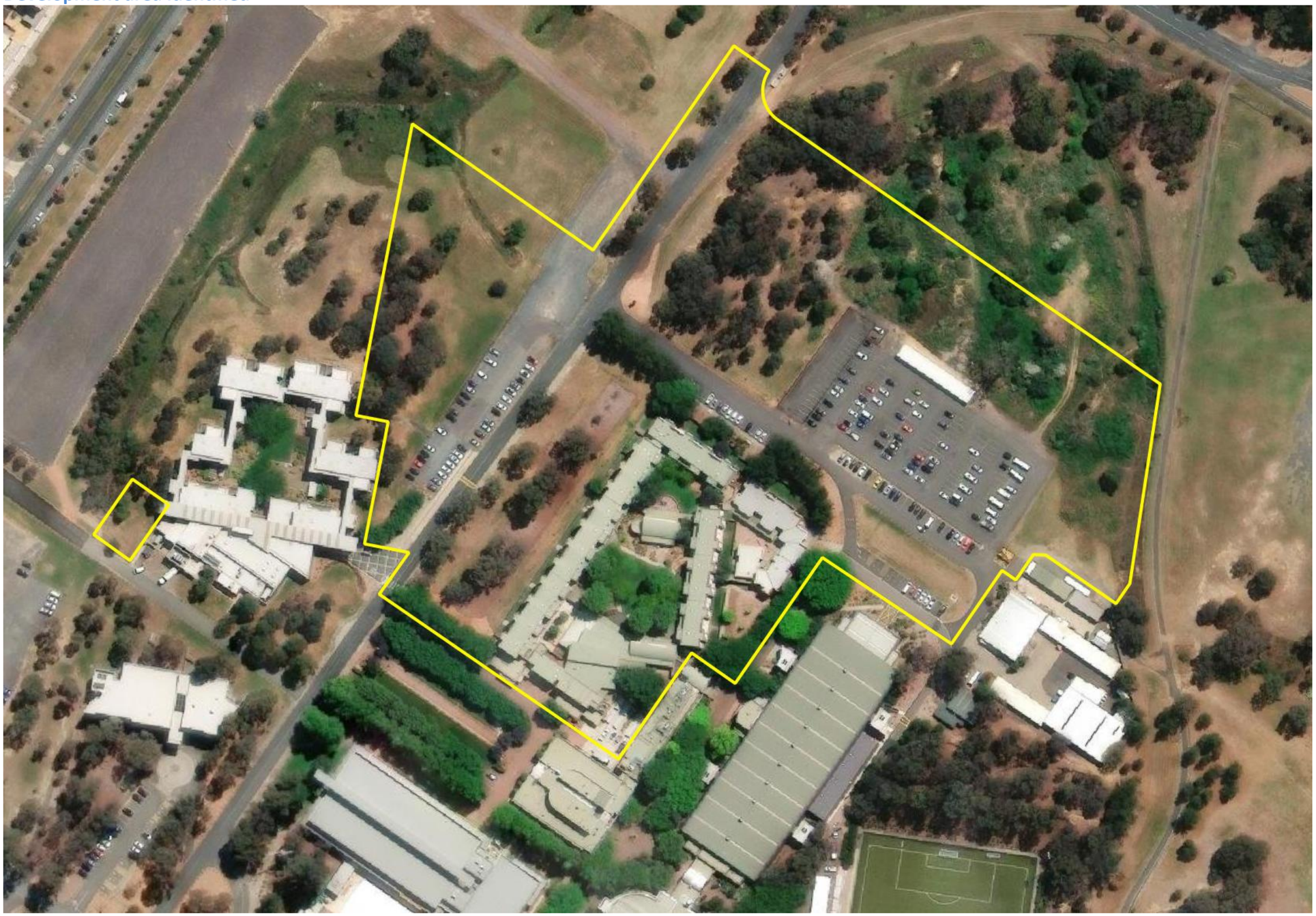
Disclaimer of Liability to Third Parties

To the extent permissible by law, Canopy, is not liable for any loss, damage, personal injury, costs or expenses suffered by any person or persons other than the recipient of this report.

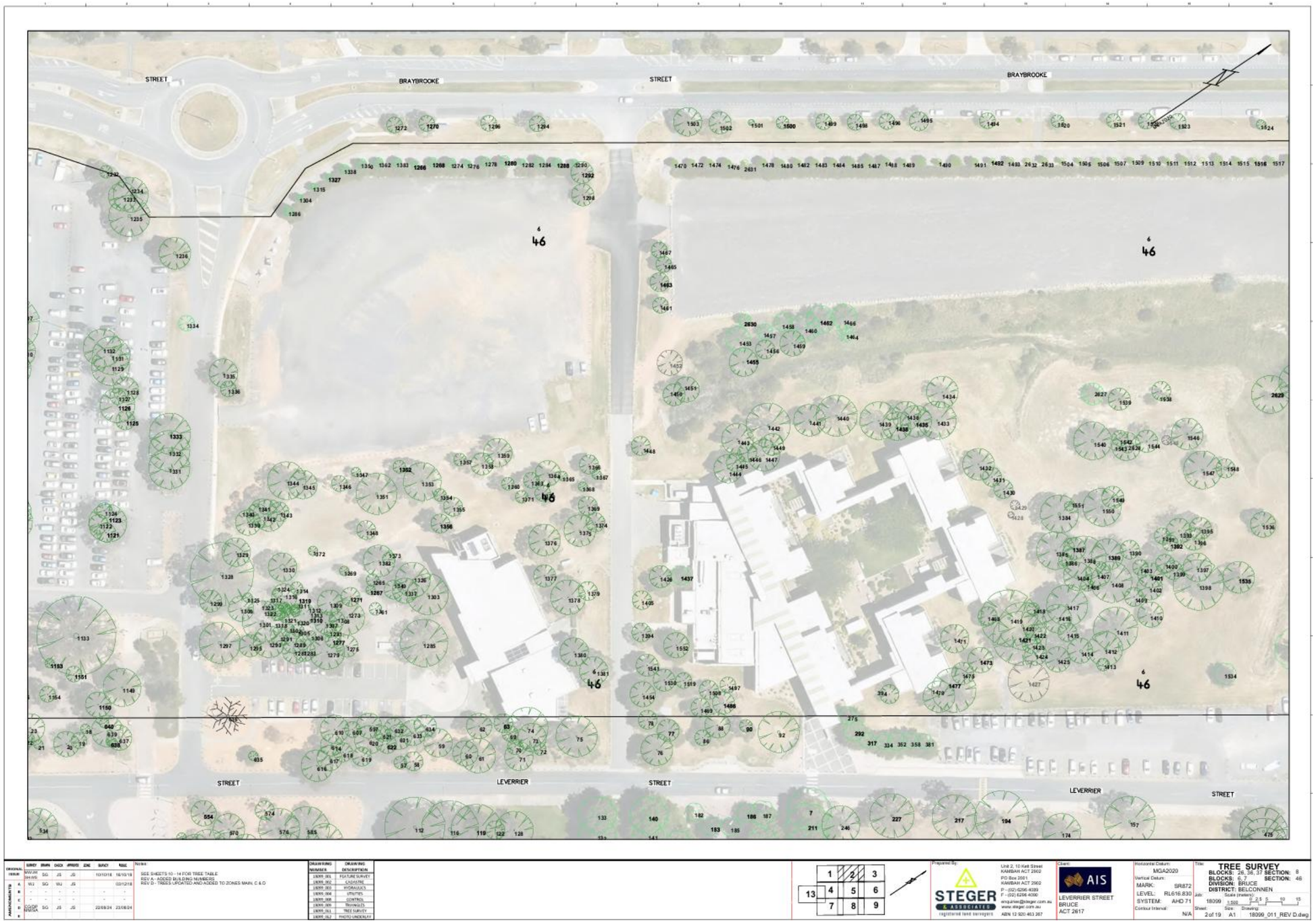
Copyright Canopy Tree Experts Pty. Ltd

Appendix A – Plans used in this report

Development area identified



Survey of trees and allocated numbers



Copyright Canopy Tree Experts Pty. Ltd



ORIGINAL ISSUE		SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
		MAGNI SANAS	SG	JS	JS		10/10/18	16/10/18
AMENDMENTS	A	WJ	SG	WJ	JS	-	-	03/12/18
	B	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-
	D	CHECK MGA	SG	JS	JS	-	22/08/24	23/08/24
	E							

Notes:
SEE SHEETS 10 - 14 FOR TREE TABLE
REV A - ADDED BUILDING NUMBERS
REV D - TREES UPDATED AND ADDED TO ZONES MAIN, C & D

DRAWING NUMBER	DRAWING DESCRIPTION
18099_001	FEATURE SURVEY
18099_002	CADASTRE
18099_003	HYDRAULICS
18099_004	UTILITIES
18099_005	CONTROL
18099_006	TRIANGLES
18099_011	TREE SURVEY
18099_012	PHOTO UNDERLAY

1 2 3
13 4 5 6
7 8 9

Prepared By:
STEGER & ASSOCIATES registered land surveyors
Unit 2, 10 Kett Street
KAMBAH ACT 2902
PO Box 2001
KAMBAH ACT 2902
P - (02) 6296 4089
F - (02) 6296 4090
enquiries@steger.com.au
www.steger.com.au
ABN 12 920 463 267

Client:
AIS
LEVERRIER STREET
BRUCE
ACT 2617

Horizontal Datum: MGA2020
Vertical Datum:
MARK: SR872
LEVEL: RL616.830
SYSTEM: AHD 71
Contour Interval: N/A

Title: **TREE SURVEY**
BLOCKS: 26, 36, 37 **SECTION:** 8
BLOCKS: 8, 7 **SECTION:** 46
DIVISION: BRUCE
DISTRICT: BELCONNEN
Job: 18099
Scale (metres): 1:200 0 2.5 5 10 15
Sheet: 6 of 19
Size: A1
Drawing: 18099_011_REV D.dwg

Copyright Canopy Tree Experts Pty. Ltd



ORIGINAL ISSUE	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
	MW/JW SH/WS	SG	JS	JS		10/10/18	16/10/18

AMENDMENTS	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
A	WJ	SG	WJ	JS			03/12/18
B	-	-	-	-	-	-	-
C	-	-	-	-	-	-	-
D	CC/DF MW/SH	SG	JS	JS		22/08/24	23/08/24
E							

Notes:
SEE SHEETS 10 - 14 FOR TREE TABLE
REV A - ADDED BUILDING NUMBERS
REV D - TREES UPDATED AND ADDED TO ZONES MAIN, C &D

DRAWING NUMBER	DRAWING DESCRIPTION
18099.001	FEATURE SURVEY
18099.002	CADASTRE
18099.003	HYDRAULICS
18099.004	UTILITIES
18099.005	CONTROL
18099.006	TRIANGLES
18099.011	TREE SURVEY
18099.012	PHOTO UNDERLAY

1 2 3
13 4 5 6
7 8 9

Prepared By:
STEGER & ASSOCIATES
registered land surveyors
Unit 2, 10 Kett Street
KAMBAH ACT 2902
PO Box 2001
KAMBAH ACT 2902
P - (02) 6290 4089
F - (02) 6290 4090
enquiries@stegar.com.au
www.steger.com.au
ABN 12 920 463 267

Client:
AIS
LEVERRIER STREET
BRUCE
ACT 2617

Horizontal Datum: MGA2020
Vertical Datum:
MARK: SR872
LEVEL: RL616.830
SYSTEM: AHD 71
Contour Interval: N/A

Title:
TREE SURVEY
BLOCKS: 26, 36, 37 SECTION: 8
BLOCKS: 6, 7 SECTION: 46
DIVISION: BRUCE
DISTRICT: BELCONNEN
Job: 18099
Scale (metres): 1:500 0 2.5 5 10 15
Sheet: 3 of 19 Size: A1 Drawing: 18099_011_REV D.dwg

Copyright Canopy Tree Experts Pty. Ltd

Appendix B - Glossary

Term	Description
Age Class	Sapling, juvenile, semi-mature, mature and over mature (veteran).
Botanical Name	Botanical name is the formal scientific name which conforms to the International Code of Nomenclature.
Canopy Spread	Diameter of the dripline of the tree's canopy - north, south, east & west from trunk.
Common Name	The common layman's name for a tree.
Diameter at Standard Height (DSH)	Diameter of the trunk or trunks at 1.4m above ground.
Diameter of Root Crown (DRC)	The diameter of the lowest point of the trunk just above the root buttress flare.
Health	General health of the tree – very good, good, fair, poor, failed.
Height	Estimated height of a tree, give or take 5% accuracy.
Live Foliage %	The percentage of noticeable live leaves in a tree's canopy.
SRZ	Structural root zone is an important area that must not be interfered with; containing zone of rapid growth and major transportation root area.
Structural Integrity	The ability of the tree to hold together under a load, in regard to weight, wind throw, weakened unions and diseases, without breaking excessively (measuring the tree's structural strength by means of visual bio-mechanics).
Total Root Zone in M^2	The total root zone area of the tree in square metres.
Total Root Zone Incursion Allowed	The area that is allowed to be safely removed from the total tree root zone, providing the tree is in a fair or better condition.
TPF	Tree Protection Fencing.
TPZ	Tree Protection Zone is the area of the root zone of the tree's radius from the central trunk. Tree Protection Zone (DBH x12= TPZ radius).
Tree #	The tree's number, as shown on the diagrams and Site Plan.
Tree Status	Details whether the tree is protected, regulated or unregulated.
ULE	Useful Life Expectancy shows how many good years are left in the tree under normal circumstances. It is also an indicator of health and vigour of the tree.
Value Status	Recommendation whether to keep or remove the tree.
VTA	Visual Tree Assessment. **VTA Level 1 -** Limited on-ground inspection – typically used for a large number of trees with the assessment being confined to the most severe factor and a limited range of targets. **VTA Level 2 –** Thorough ground-based assessment. Identification of structural defects while on the ground using simple equipment such as acoustic mallets, probes and binoculars. Well documented record of the assessment of each tree. **VTA Level 3 -** Aerial and/or invasive testing where a tree is climbed to get a better observation of the tree. Where drilling or coring may be required, often a very small drill is used.

Visual Tree Assessment

Australian Institute of Sport
26 Leverrier Street Bruce Belconnen ACT
Block 26 Section 8 Belconnen ACT



9 April 2026 (updated 12 June 2026)
Prepared by Duncan MacLennan

© Canopy Tree Experts Pty Ltd

Project Details

Site Address	26 Leverrier Street, Bruce, Belconnen, ACT.
Client	Ms Tracy Wilcox, Australian Sports Commission
Contact	0400 344 354
Email	Tracy.Wilcox@ausport.gov.au
Canopy contacts	Kate Ross Tel: 02-6161 1800 trees@canopygroup.com.au
	Duncan MacLennan (Dip. Arboriculture, Assoc. Dip. Horticulture, Dip. Agriculture, MPA) Tel: 0410 481 262 consulting@canopygroup.com.au
Version	1.2 - 12/06/2026

Important Notice

This document can only be used for the stated purpose in this report unless written agreement is provided by Canopy Tree Experts in advance.

There is no obligation to maintain the confidentiality of any such information which was known to you without restriction prior to receipt of this document as evidenced by written business records; which becomes publicly known through no fault of yours; or which is rightfully received by you from a third party without restriction.

If there are any concerns, questions, or issues regarding this notice, please contact Duncan MacLennan.

© Copyright Canopy Tree Experts Pty. Ltd. 2026 ABN 99 688 545 673 | ACN 688 545 673

Contents

1 Summary 4
2 Methodology 4
3 Tree data and assessments 4
3.1 Tree assessment table. 5

© Copyright Canopy Tree Experts Pty. Ltd

1 Summary

Canopy Tree Experts has been engaged by the Australian Sports Commission (ASC) to prepare a visual tree report for 86 trees on Block 26 Section 8, Bruce, Belconnen as part of its works application for the demolition phase of the ASC Podium Project. This report includes a tree management plan for trees to be retained and documents how they will be protected during the demolition phase of the project.

The trees were assessed on 24 and 25 March 2026 at which time all of the data was collected.

2 Methodology

The trees detailed in this report were assessed by Duncan MacLennan (AQF level 5 consulting arborist).

A visual tree assessment is a systematic inspection of a tree for indicators of structural defects that may pose a risk due to failure. The visual tree assessment level 2 (Arboriculture Australia MIS 501) conducted at the AIS is a thorough ground based assessment. No invasive testing or aerial inspection was conducted.

The report documents and assess each tree including the following information:

1. Common name
2. Genus and species
3. Health including useful life expectancy
4. Structural integrity (excluding a risk assessment)
5. Size including height, canopy, trunk and tree protection zone
6. Any other relevant observations (e.g. heritage status).

3 Tree data and assessments

The table below details all of the data collected on site as well as the assessment of each tree's health and structural integrity.

© Copyright Canopy Tree Experts Pty. Ltd

Trees approved for removal in WA-002-066

Trees applied for removal in WA-002-250

3.1 Tree assessment table.

Australian Institute of Sport	Assessment of trees	DATE: 24 and 25 March 2026											
TREE NUMBER	BOTANICAL NAME	COMMON NAME	DSH (m)	DRC (m)	TPZ (m)	HEIGHT (m)	CANOPY SPREAD (m) N	S	E	W	HEALTH	STRUCTURE	ULE (years)	COMMENTS
254	*Pyrus calleryana*	Callery Pear	0.2	0.25	2.4	10	2.5	3.0	3.0	3.0	Good	Good	20+	
252	*Pyrus calleryana*	Callery Pear	0.18	0.2	2.16	10	2.0	2.5	2.5	3.0	Good	Good	20+	
1	*Ulmus minor* 'Variegata'	Silver Elm	0.68	0.77	8.16	15	6.0	7.0	6.0	7.0	Good	Good	20+	
2	*Gleditsia triacanthos*	Honey Locust	0.34	0.38	4.08	12	3.0	5.0	8.0	4.0	Fair	Fair	10-15	Minor dead wood to 50mm.
3	*Ulmus minor 'Variegata'*	Silver Elm	0.52	0.56	6.24	15	5.0	5.0	6.0	7.0	Good	Good	20+	
362	*Gleditsia triacanthos*	Honey Locust	0.24	0.28	2.88	9	5.0	4.0	5.0	4.0	Good	Good	20+	
363	*Gleditsia triacanthos*	Honey Locust	0.31	0.35	3.72	9	7.0	4.0	7.0	2.5	Good	Fair	20+	Suppressed on west side.
364	*Lagerstromia indica*	Crepe Myrtle	0.17 / 0.16	0.3	2.76	9	4.0	3.5	3.5	3.5	Good	Good	20+	
365	*Ulmus minor 'Variegata'*	Silver Elm	0.65	0.71	7.8	14	5.0	6.0	6.0	5.0	Good	Good	20+	
146	*Gleditsia triacanthos*	Honey Locust	0.4	0.41	4.8	13	8.0	8.0	8.0	5.0	Good	Fair	15-20	Accute trunk union at 2m above ground.
148	*Ulmus minor 'Variegata'*	Silver Elm	0.56	0.63	6.72	14	6.0	6.0	6.0	6.0	Good	Good	20+	
150	*Gleditsia triacanthos*	Honey Locust	0.31	0.34	3.72	12	5.0	1.0	4.0	2.0	Fair	Failed	10-15	Competing with trees around it and suppressed on south and west.
152	*Ulmus minor 'Variegata'*	Silver Elm	0.61	0.72	7.32	14	5.0	5.0	5.0	5.0	Good	Good	20+	
115	*Lagerstromia indica*	Crepe Myrtle	0.08	0.1	0.96	3.5	1.5	1.5	1.5	1.5	Good	Good	20+	
118	*Lagerstromia indica*	Crepe Myrtle	0.08	0.1	0.96	3.5	1.5	2.0	2.0	1.5	Good	Good	20+	
121	*Lagerstromia indica*	Crepe Myrtle	0.1	0.14	1.2	3	1.0	1.0	1.0	1.0	Good	Good	20+	
124	Tree not there.				0									Tree not there.
127	*Lagerstromia indica*	Crepe Myrtle	0.1	0.15	1.2	3	1.5	1.0	1.5	1.5	Good	Good	20+	
739	*Betula pendula*	Silver Birch	0.13	0.2	1.56	10	2.0	3.0	3.5	1.0	Good	Good	20+	
740	*Betula pendula*	Silver Birch	0.22	0.33	2.64	11	2.0	3.5	3.5	3.0	Good	Good	20+	Slight lean to south.
864	*Betula pendula*	Silver Birch	0.27	0.37	3.24	12.5	3.0	4.0	2.5	3.0	Good	Good	20+	
862	*Betula pendula*	Silver Birch	0.19	0.28	2.28	12.5	3.0	1.5	2.0	3.0	Good	Good	20+	
860	*Gleditsia triacanthos*	Honey Locust	0.18	0.25	2.16	8	3.0	3.0	2.0	3.0	Good	Good	20+	
853	*Betula pendula*	Silver Birch	0.31	0.44	3.72	12	3.0	4.0	2.0	3.5	Good	Good	20+	
854	*Betula pendula*	Silver Birch	0.3	0.42	3.6	13	3.5	4.0	4.0	2.5	Good	Good	20+	
857	*Betula pendula*	Silver Birch	0.31	0.43	3.72	12	2.0	5.0	4.0	3.0	Good	Good	20+	
858	*Gleditsia triacanthos*	Honey Locust	0.28	0.32	3.36	11	4.0	6.0	4.0	6.0	Good	Good	20+	
987	Tree not found													
996	*Hakea salisifolia*	Willow Hakea	0.35/0.36	0.71		9	2.0	3.0	4.5	0.0	Fair	Fair	5-10	Rot in trunk at base.
766	*Casuarina cunninghamiana*	River She-oak	0.22	0.29	2.64	9	1.0	3.5	3.0	2.0	Fair	Fair	10-15	Suppressed by Tree 763.
763	*Casuarina cunninghamiana*	River She-oak	0.64	0.85	7.68	13	6.0	6.0	7.0	6.0	Good	Good	20+	
334	*Fraxinus oxycarpa 'Raywood'*	Claret Ash	0.35	0.44	4.2	10	5.0	0.0	4.0	3.0	Good	Fair	20+	
184	*Magnolia grandiflora*	Southern Magnolia	0.14	0.2	1.68	8.5	2.5	2.5	2.0	2.0	Fair	Good	20+	
341	*Fraxinus oxycarpa 'Raywood'*	Claret Ash	0.9	0.98	10.8	14	9.0	9.0	9.0	9.0	Good	Good	20+	Minor dead wood to 250mm.
453	*Fraxinus oxycarpa 'Raywood'*	Claret Ash	0.74	0.88	8.88	14	7.5	5.0	7.5	5.0	Good	Good	20+	
452	*Ulmus procera*	English Elm	0.46	0.5	5.52	10.5	4.0	5.0	2.0	5.0	Good	Good	20+	
450	*Ulmus procera*	English Elm	0.55	0.63	6.6	11	6.0	4.0	4.0	4.0	Good	Good	20+	Minor elm leaf beetle damage.
447	*Ulmus procera*	English Elm	0.49	0.52	5.88	10.5	4.0	5.0	4.0	4.0	Good	Good	20+	Minor elm leaf beetle damage.
441	*Ulmus procera*	English Elm	0.4	0.47	4.8	11	4.5	4.0	4.0	4.0	Good	Good	20+	
398	Tree not there.													Tree not there.
399	*Ulmus glabra* 'Lutescens'	Golden Elm	0.07	0.12	0.84	3	1.0	1.0	1.0	1.0	Good	Good	20+	
400	*Ulmus glabra* 'Lutescens'	Golden Elm	0.08	0.13	0.96	3	1.0	1.0	1.0	1.0	Good	Good	20+	
401	*Ulmus glabra* 'Lutescens'	Golden Elm	0.1	0.12	1.2	4.5	1.5	1.5	1.5	1.5	Good	Good	20+	
402	*Ulmus glabra* 'Lutescens'	Golden Elm	0.18	0.22	2.16	6	3.0	3.0	3.0	3.0	Good	Good	20+	Moderate elm leaf beetle damage.

© Canopy Tree Experts Pty Ltd

449	*Ulmus procera*	English Elm	0.29/0.33	0.53	5.28	10	4.0	4.0	4.0	4.0	Good	Good	20+	
947	*Ulmus procera*	English Elm	0.29/0.27	0.44	4.8	12	4.0	5.0	4.0	4.0	Good	Good	20+	
946	*Ulmus procera*	English Elm	0.41	0.53	4.92	12.5	3.0	5.0	4.0	4.0	Good	Good	20+	Minor elm leaf beetle damage.
945	*Ulmus procera*	English Elm	0.44	0.52	5.28	13.5	3.0	3.0	6.0	5.0	Good	Good	20+	
878	*Casuarina cunninghamiana*	River She-oak	0.6	0.76	7.2	13.5	6.0	6.0	6.0	4.0	Good	Good	20+	
877	*Casuarina cunninghamiana*	River She-oak	0.35	0.45	4.2	13.5	3.0	3.0	2.0	2.0	Good	Good	20+	
876	*Casuarina cunninghamiana*	River She-oak	0.35	0.48	4.2	13	5.0	4.0	3.0	3.0	Good	Good	20+	
875	*Casuarina cunninghamiana*	River She-oak	0.32	0.45	3.84	11	-	-	-	-	Dead	Failed	0-2	Tree dead.
784	*Casuarina cunninghamiana*	River She-oak	0.36	0.46	4.32	14.5	7.0	3.0	3.0	2.0	Good	Good	20+	
781	*Casuarina cunninghamiana*	River She-oak	0.35	0.51	4.2	13	7.0	4.0	2.0	5.0	Good	Good	20+	
778	*Casuarina cunninghamiana*	River She-oak	0.32	0.45	3.84	14	5.5	4.0	3.0	3.0	Good	Fair	15-20	
775	*Casuarina cunninghamiana*	River She-oak	0.42	0.55	5.04	14	7.0	6.0	3.0	5.0	Good	Fair	20+	
772	*Casuarina cunninghamiana*	River She-oak	0.64	0.75	7.68	14	7.0	6.0	3.0	7.5	Good	Good	20+	
1022	*Stump of tree removed.*				0									
1018	*Stump of tree removed.*													
1014	*Callistemon viminalis*	Weeping Bottlebrush	0.11/0.2/0.2/0.15	0.36	4.08	3.5	2.5	2.5	2.5	2.5	Good	Good	20+	
4	*Callistemon viminalis*	Weeping Bottlebrush	0.16/0.17	0.38	2.76	5	2.5	4.0	3.0	1.0	Good	Good	20+	
5	*Callistemon viminalis*	Weeping Bottlebrush	0.12/0.14/0.15	0.4	2.88	5	3.0	3.5	3.0	3.0	Good	Good	20+	
6	*Callistemon viminalis*	Weeping Bottlebrush	0.15/0.16/0.2	0.6	3.6	6	4.0	4.0	4.0	4.0	Good	Good	20+	
7	*Callistemon viminalis*	Weeping Bottlebrush	0.06/0.07	0.18	2	2.5	1.0	0.5	0.0	1.0	Fair	Poor	2-5	Suppressed by Tree 6.
825	*Casuarina cunninghamiana*	River She-oak	0.51	0.71	6.12	16	6.0	6.0	3.0	3.0	Good	Good	20+	
824	*Ulmus parvifolia*	Chinese Elm	0.58	0.71	6.96	14.5	9.0	9.5	7.5	10.0	Good	Good	20+	
8/415	*Casuarina cunninghamiana*	River She-oak	0.55	0.76	6.6	14	6.0	6.0	7.0	3.0	Good	Good	20+	Minor dead wood to 50mm.
9/420	*Casuarina cunninghamiana*	River She-oak	0.38	0.55	4.56	14	5.0	4.0	5.0	3.0	Good	Good	20+	Small hanging branch in canopy.
10/429	*Casuarina cunninghamiana*	River She-oak	0.45	0.6	5.4	14	4.0	5.0	5.0	3.0	Good	Good	20+	
11/435	*Casuarina cunninghamiana*	River She-oak	0.51	0.68	6.12	14.5	5.0	6.5	4.5	3.0	Fair	Good	15-20	Minor dead wood to 60mm. Loss of cambium on both east and west side of tree amounting to 20% loss.
12443	*Casuarina cunninghamiana*	River She-oak	0.41	0.57	4.92	13	5.0	5.5	5.0	3.0	Good	Good	20+	
13/455	*Casuarina cunninghamiana*	River She-oak	0.38	0.59	4.56	16	6.0	4.0	3.5	3.0	Good	Good	20+	
14/467	*Casuarina cunninghamiana*	River She-oak	0.37/0.35/0.37	0.75	7.56	16	5.0	6.0	6.0	3.0	Good	Good	20+	
15/471	*Casuarina cunninghamiana*	River She-oak	0.42	0.55	5.04	16	5.0	7.5	3.0	3.0	Good	Good	20+	
16/475	*Casuarina cunninghamiana*	River She-oak	0.77	0.97	9.24	16	8.5	8.0	3.0	6.5	Good	Good	20+	
157	*Eucalyptus melliodora*	Yellow Box	0.37/0.45/0.46	0.84	8.88	14	9.0	4.0	6.0	9.5	Good	Fair	20+	
137	*Eucalypt* sp.	Gum Tree	0.74	0.93	8.88	17	10.0	8.0	6.0	9.0	Good	Good	20+	
17	*Eucalyptus melliodora*	Yellow Box	0.23	0.26	2.76	6	2.0	2.0	2.0	2.0	Good	Fair	20+	
108	*Eucalyptus sideroxylon*	Red Ironbark	0.92	1	11.04	19	6.5	10.0	8.5	6.0	Good	Fair	20+	Dual trunk from 1.7m.
82	*Eucalyptus melliodora*	Yellow Box	0.48/0.64	1.05	9.6	20	8.0	8.0	8.0	9.0	Good	Good	20+	
50	*Eucalyptus melliodora*	Yellow Box	0.45/0.7	0.92	9.96	15	6.5	9.5	8.0	8.0	Good	Good	20+	
18/66	*Eucalyptus sideroxylon*	Red Ironbark	0.56	0.75	6.72	13	7.0	3.0	7.0	3.0	Good	Fair	20+	Main leader removed in the past.
32	*Eucalyptus sideroxylon*	Red Ironbark	0.78	0.79	9.36	15	8.0	8.0	7.5	6.0	Good	Good	20+	Dual trunk from 1.5m.
13	*Eucalyptus melliodora*	Yellow Box	0.4	0.58	4.8	10	7.0	5.0	3.0	6.5	Good	Good	20+	
461	*Quercus palustris*	Pin Oak	0.38	0.49	4.56	14	3.0	3.0	4.0	3.5	Good	Good	20+	
626	*Eucalyptus melliodora*	Yellow Box	0.02	0.3	1.5	1.8	0.4	0.4	0.4	0.4	Good	Good	20+	
511	*Quercus palustris*	Pin Oak	0.43	0.55	5.16	14	3.0	3.0	7.0	7.0	Good	Good	20+	
547	*Quercus palustris*	Pin Oak	0.43	0.52	5.16	14	3.0	3.0	6.0	8.0	Good	Good	20+	Possum in tree.
580	*Quercus palustris*	Pin Oak	0.39	0.5	4.68	14	4.0	3.0	6.0	8.0	Good	Good	20+	
603	*Quercus palustris*	Pin Oak	0.58	0.73	6.96	14	4.0	6.0	8.0	8.0	Good	Good	20+	

© Copyright Canopy Tree Experts Pty. Ltd