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Detailed Site Investigation

2-4 Burleigh Street and 20-24 Railway Parade, Burwood NSW 2134

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EXECUTIVE SUMMARY

EI Australia (EI) was engaged by NSW Housing Corporation Pty Ltd to conduct a detailed environmental investigation of 2-4 Burleigh Street and 20-24 Railway Parade, Burwood in New South Wales ('the site').

The site is located approximately ten kilometres west of the Sydney central business district, within the local government area of Burwood Council. It covered a total area of 1,329m^2 and at the time of this investigation was occupied by commercial and residential structures.

The site was designated for mixed-use redevelopment and this detailed investigation was completed in support of the corresponding application to the New South Wales Department of Planning, Housing and Infrastructure. The aim was to assess the nature and extent of any contamination on the land. It enabled the developer to meet obligations under the *Contaminated Land Management Act 1997* and *State Environmental Planning Policy (Resilience and Hazards) 2021*.

Key Findings

The key findings of this detailed site investigation (DSI) were:

- The site had been occupied by triplex and duplex structures since 1943, at least. Commercial use of the premises had occurred since at least the 1960s, by way of printing, wholesale of electrical supplies and appliances, electrical contractors and health care clinics.
- The surrounding areas had been used for mixed residential, commercial and industrial purposes since 1943, at least.
- The site was free of statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997*. It was not included on the *List of NSW Contaminated Sites Notified to the EPA*.
- Excluding any concrete hardstand, the sub-surface of the site to 7.5 metres below ground level (m BGL) was comprised of:
  - (Dark) brown, low to high plasticity, silty clay fill with sub-angular and rounded gravels (0.3-0.7m thickness); overlying
  - Mottled, yellow / orange brown and grey, medium to high plasticity, natural (residual) silty clays (0.5-1.6m thickness); grading into
  - Pale brown, weathered shale bedrock (to 7.5m BGL, at least).
- The likelihood of acid sulphate soil presence on-site was considered to be low.
- Contaminant concentrations in the representative, *in situ* fill and natural soil samples were found to comply with the adopted investigation levels, except for:
  - Total lead in fill sample BH105_0.4-0.5 (4200 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (1200 mg/kg); and
  - The sum of carcinogenic polycyclic aromatic hydrocarbons (PAHs) in fill samples BH101_0.1-0.2 (8.4 mg/kg), BH102_0.2-0.3 (3.8 mg/kg) and BH107_0.3-0.4 (11 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (4 mg/kg).

- No groundwater (seepage) was encountered in any of the drilled bores, nor during the installation of the well at BH104M. The local groundwater table was expected to be >7.5m BGL. The inferred groundwater gradient was north westerly, towards Powells Creek (located 1.6 kilometre northwest of the site).
- Based on the completed monitoring event, local groundwater was deemed to be brackish (electrical conductivity 4,417 µS/cm) and reducing (low in dissolved oxygen). No light / dense non-aqueous phase liquid appeared to be present. The laboratory analytical results for the representative sample indicated that risks to the identified receptors from the contaminants of potential concer in groundwater were low.

Based on the findings from this DSI, and due with consideration of EI's *Statement of Limitations* (**Section 11**), only localised areas of heavy metal- (lead-) and PAH- impacted fill soils were present on the site. The contamination did not appear to be gross, nor widespread; rather it was probably limited to the vicinities of BH101, BH102, BH105 and BH107.

In accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*, the site was deemed suitable for the proposed (mixed commercial and residential) development and use, subject to the implementation of the recommendations made in **Section 10** of this report.

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1. INTRODUCTION

1.1 Background and Purpose

EI Australia (EI) was engaged by NSW Housing Corporation Pty Ltd ('the client') to conduct a detailed environmental investigation of 2-4 Burleigh Street and 20-24 Railway Parade, Burwood in New South Wales (henceforth referred to as 'the site').

The site is located approximately ten kilometres west of the Sydney central business district (CBD), within the local government area (LGA) of Burwood Council (**Figure 1, Appendix A**). It covers a total area of 1,329m^2 and at the time of this investigation was occupied by commercial and residential structures (**Figure 2, Appendix A**).

The site was designated for mixed-use redevelopment and this detailed investigation was completed in support of the corresponding application to the New South Wales Department of Planning, Housing and Infrastructure. The aim was to assess the nature and extent of any contamination on the land. It enables the developer to meet obligations under the *Contaminated Land Management Act 1997* and *State Environmental Planning Policy (Resilience and Hazards) 2021*.

1.2 Proposed Development

The site plan provided (presented in **Appendix B**) indicated that site redevelopment involved demolition of all existing structures, followed by the construction of a thirty eight storey, mixed-use building, containing a hotel, commercial offices and residential apartments, overlying a five level basement facility.

The finished level of the lowest basement was to be at 10.5m Australia Height Datum (AHD), requiring bulk excavation to a depth of 15.6 metres below ground level (m BGL), with locally deeper excavations required for footings, lift overrun pits and service trenches.

1.3 Project Objectives

The objectives of this investigation were to:

- Determine the nature and degree of any site contamination, by means of soil sampling and laboratory analyses for the contaminants of potential concern (COPC);
- Provide a conclusion about the suitability of the site for its proposed (commercial) use; and
- Provide recommendations for the appropriate management of any contaminated soils, if these were identified.

1.4 Scope of Work

To achieve the above objectives, the following scope of work was completed:

- Review of relevant geological and soil landscape maps for the project area;
- Review of the previous (preliminary) contamination report relating to the site;
- A site inspection, including location of existing underground services, utilising *Before-You-Dig* plans and ground penetrating radar (GPR) scanning;
- Presentation of a conceptual site model (CSM);

- Construction of test boreholes at eight locations (identified as BH101, BH102, BH103, BH104M, BH105, BH106, BH107 and BH108), distributed in a systematic (triangular grid) pattern across accessible parts of the site;
- Multiple level sampling of fill and natural soils at each of the test bores;
- In-field screening of soil headspace samples for volatile organic compounds (VOC) using a portable photoionisation detector (PID);
- Installation of a groundwater monitoring well at BH104M;
- Completion of a groundwater monitoring event (GME), utilising an existing on-site well (UNK-GW) and BH104M;
- Laboratory analysis of selected soil and groundwater samples for the COPC; and
- Data interpretation and reporting.

Data Analysis and Reporting

This report documents the desk study findings, the conceptual site model, data quality objectives, sampling methodologies and laboratory analytical results. It also provides a record of observations made during the site walkover inspection, borehole drilling logs and a discussion of the results in regards to potential risks to human health and the environment. It concludes with a statement concerning the suitability of the site for the proposed (mixed commercial and residential) development.

1.5 Regulatory Framework

The following regulatory instruments and guidelines provided the framework for this DSI:

- *Contaminated Land Management Act 1997* (the CLM Act 1997);
- *Protection of the Environment Operations Act 1997* (the POEO Act 1997);
- *Environmental Planning and Assessment Act 1979* (the EPandA Act 1979);
- *State Environment Protection Policy (Resilience and Hazards) 2021*;
- *Burwood Local Environmental Plan 2012*;
- EPA (2017) *Guidelines for the NSW Site Auditor Scheme*;
- EPA (2020) *Guidelines for Consultants Reporting on Contaminated Land*;
- EPA (2022a) *Sampling Design Part 1 - Application*; and
- NEPC (2013) *National Environmental Protection (Assessment of Site Contamination) Amendment Measure 1999*.

2. SITE DESCRIPTION

2.1 Property Identification, Location and Physical Setting

The site identification details and associated information are presented in **Table 2-1**. The site locality and assessment area are shown in **Figures 1** and **2**, **Appendix A**.

Table 2-1 Site Identification

Attribute	Description
Street Address	2-4 Burleigh Street and 20-24 Railway Parade, Burwood NSW
Location and Description	The site is located approximately ten kilometres west of the Sydney CBD, within the LGA of Burwood Council.
Geographical Coordinates	Northern-western corner of site (GDA2020-MGA56): ▪ Easting: 324720.51 ▪ Northing: 6249795.624 (Source: https://maps.six.nsw.gov.au/)
Area	1,329m^2
Cadastral Identification	Lots A to E in Deposited Plan (DP) 438222
State Survey Mark	The closest state survey mark is SS122526, located 5m to the north of the north-western site corner
LGA	Burwood Council
Current Zoning	MU1: Mixed Use (*Burwood Local Environmental Plan 2012*)

2.2 Local Land Use

The site is situated within an area of mixed uses. The local sensitive receptors within close proximity (<250m) of the site are identified in **Table 2-2**.

Table 2-2 Local Land Use

Direction	Land Use Description	Sensitive Receptors (and distance from site)
North	Railway easement, followed by commercial and residential properties	Residents (approximately 140m)
South	Commercial and residential properties	Residents (approximately 50m)
East	Residential properties	Residents (immediately adjacent)
West	Burleigh Street, followed by commercial and residential properties	Residents (approximately 20m)

2.3 Regional Setting

The topography, (hydro)geology and soil landscape information is summarised in **Table 2-3**.

Table 2-3 Regional Setting

Attribute	Description
Topography	With reference to the site survey plan (**Appendix B**), the site has north-western dipping topography, with an elevation of 27.25 m AHD in the south-eastern corner and 26.15m AHD in the north-western corner.
Site Drainage	Expected to be consistent with the general slope of the site. Stormwater runoff is assumed to flow north-west and discharge into the municipal stormwater system.
Regional Geology	The 1:100 000 scale *Penrith Geological Series Sheet 9030* (DMR, 1991) indicated the site is underlain by Ashfield Shale of the Wianamatta Group, consisting of dark grey to black claystone-siltstone and fine sandstone-siltstone laminite.
Soil Landscape	The Soil Conservation Service of NSW *Soil Landscapes of the Sydney 1:100,000 Sheet* (Chapman and Murphy, 1989) indicates that the site lies in a Blacktown residual landscape. According to Chapman and Murphy (1989), this landscape type is characterised by local relief to 30m and slopes usually <5%, broad rounded crests and ridges with gently inclined slopes. Soils are shallow to moderately deep (<100 cm) hard setting mottled texture contrast soils, red and brown podzolic soils on crests grading to yellow podzolic soils on lower slopes and in drainage lines.
Acid Sulfate Soil (ASS) Risk	The *Burwood Local Environmental Plan 2012 - Acid Sulfate Soils Map* shows the site to be within a *Class 5* area. With reference to the *Botany Bay Acid Sulfate Soil Risk Map* (1:25,000 scale; Murphy, 1997), the site lies within an area having '*No Known Occurrence*'. In such cases, ASSs are not known or expected to occur and "land management activities are not likely to be affected by ASS materials." Based on the map and elevation (>>5m AHD) information, the potential for ASS presence on-site was considered to be low and further consideration was unwarranted.
Nearest Surface Water Feature	Powells Creek (located 1.6 kilometre north-west) and Iron Cove Creek (located 1.5 kilometre east). Both systems ultimately discharge into Canada Bay (Parramatta River), approximately 2 kilometres north of the site.
Groundwater Flow Direction	Inferred to be north westerly, towards Powells Creek.
Local Groundwater Usage	There are no WaterNSW registered groundwater bores within a 500m radius of the site, indicating no beneficial uses of this resource in the area.

2.4 Site Inspection

Observations were recorded during a walkover inspection of the site conducted on 24 March 2025. These observations are summarised below and photographs taken during the inspection are presented in **Appendix C**.

- The site was situated in a mixed residential and commercial area, adjacent to Burwood Train Station.
- The site was comprised of a triplex (20-24 Railway Parade) and a duplex (2-4 Burleigh Street) separated by a concrete-sealed parking area. The reminder of the site was generally covered by hardstand pavements. A metal carport was located at the eastern end of the parking area.
- The asphalt and concrete pavements in the central portion of the site were in poor condition, with cracks identified, exposing sub-surface fill soil.

- The northern portion of the site was occupied by a single-storey, brick triplex residential building, with metal roof. The structure was generally in fair condition. The triplex consisted of three units, identified as 20, 22 and 24 Railway Parade. Each unit had a front yard with accessible soils and a carport attached to the southern external wall. The external signage indicated the building was used as a health care clinic. No internal access was granted during the site inspection.
- The southern portion of the site was occupied by a single-storey, brick duplex residential building, with tiled roof. The structure was generally in fair condition. The duplex consisted of two units, identified as 2 and 4 Burleigh Street. The backyard of 4 Burleigh Street was fenced and had a fibre cement sheeting (FCS) shed. Accessible soil and vegetation were covered by plastic sheeting. The external signage indicated the building was used as a health care clinic. No internal access was granted during the site inspection.
- No unusual odour was detected on the site at the time of the inspection. No visual signs of contamination were identified, including fragments of FCS on the available surfaces.
- No evidence of an underground petroleum storage system (UPSS) was encountered on the site. No aboveground storage tank (AST) was present.
- Scattered patches of exposed soils were present, some being covered in grass and weeds.
- An existing groundwater well, identified as UNK-GW, was found on-site, within an exposed soil area.

3. Previous Investigation

The following environmental report provided information that was relevant to this DSI:

- EI (2025) *Preliminary Site Investigation; 2-4 Burleigh Street and 20-24 Railway Parade, Burwood, NSW* (EI Australia Reference E26516.E01_Rev2, dated 19 February 2025).

Objectives

The main objective of this preliminary site investigation (PSI) was to evaluate the potential for contamination to exist on the land, based on historical land uses and documentary evidence of possible pollutant sources. A secondary objective, should site contamination be confirmed, was to make recommendations for further (detailed) investigation and the management of any contaminated soils and/or groundwater.

Scope

The scope of the PSI involved:

- A review of relevant topographical, geological and soil landscape maps for the project area;
- A site walkover inspection;
- A search for WaterNSW registered groundwater bores within a 500 metre radius of the site;
- Review of site history, based on historical aerial photographs (dating from 1943) and a Lotsearch *Enviro Lite Report*;
- A search of SafeWork NSW records for information relating to possible dangerous goods licencing, including underground tank approvals and locations;
- Searches of databases maintained by the Environment Protection Authority of New South Wales (EPA) for statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997*;
- A search of the *List of NSW Contaminated Sites Notified to the EPA*;
- Presentation of a conceptual site model; and
- Data interpretation and reporting.

Key Findings

The key findings of the PSI were as follows:

- The site had been occupied by the current (existing triplex and duplex) structures since 1943, at least.
- Commercial use of the site had occurred since at least the 1960s, by way of printing, wholesale of electrical supplies and appliances, electrical contractors and health care clinics.
- The surrounding areas had been used for mixed residential, commercial and industrial purposes since 1943, at least. Two properties located up-gradient of the site (within 100m distance) had been used for dry cleaning and motor garaging.
- The site was free of statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997*. No part was included on the *List of NSW Contaminated Sites Notified to the EPA.*
- There was no evidence that a UPSS had been installed on the site. No AST was present.
- A search of the *Stored Chemical Information Database* maintained by SafeWork NSW did not reveal any recodes relating to on-site storage of hazardous chemicals.

- The CSM established there was moderate potential for contamination to be present on the site, and that the risks posed to human and environmental receptors by the identified contaminant sources warranted further (stage 2 / detailed) investigation.

Conclusion

Based on the findings of this PSI, EI concluded that there was potential for contamination to exist on the site. In accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*, further (detailed) investigation was warranted.

4. CONCEPTUAL SITE MODEL

In accordance with the NEPC (2013) *Schedule B2 – Guideline on Site Characterisation*, EI developed a CSM as part of the contamination appraisal phase, assessing plausible linkages between potential contamination sources, migration pathways and receptors. It is hereby revised, taking into account initial PSI findings, and provides a framework for identifying additional findings in the existing site characterisation.

4.1 Site History Summary

The history review (**Section 3**) indicated that the site had been occupied by the current (existing triplex and duplex) structures since 1943, at least. Commercial use of the premises had occurred since at least the 1960s, by way of printing, wholesale of electrical supplies and appliances, electrical contractors and health care clinics. The surrounding areas had been used for mixed residential, commercial and industrial purposes since 1943, at least.

4.2 Predicted Subsurface Conditions

The subsurface was likely to comprise (excluding any hardstand):

- Gravelly sand and clay filling materials (<1m thickness); overlying
- Natural (residual) silty clays; grading into
- (Weathered) shale, from 2-3m BGL onwards.

The potential for acid sulfate soils to be present on-site was considered to be very low. The groundwater table was expected to be deep (>3m BGL), with the inferred hydraulic gradient being north westerly, towards Powells Creek.

4.3 Potential Contamination Sources

The potential contamination sources relating to the site were as follows:

- Former and current on-site commercial activities, including wholesale of electrical supplies and appliances, electrical contractors and health care clinics;
- Imported fill materials of unknown origin and quality, used to grade and level the site;
- Surface deposition of hazardous materials, such as asbestos-containing materials (ACM), lead-based paints and metallic objects, due to weathering of exposed building fabrics;
- Application of pesticides around building (footing) perimeters;
- Leaks from vehicles in the parking areas; and
- Off-site migration from neighbouring (up-gradient) commercial / industrial properties.

4.4 Contaminants of Potential Concern

The COPC for the site were considered to be:

- Priority Metals (PM) - arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc;
- Total Recoverable Hydrocarbons (TRH);
- Volatile Organic Compounds (VOC); including
- The monocyclic aromatic hydrocarbons Benzene, Toluene, Ethylbenzene, Xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAH);
- Organochlorine and Organophosphorus Pesticides (OCP / OPP);
- Polychlorinated Biphenyls (PCB);

- Per- and Poly- Fluoroalkyl Substances (PFAS); and
- Asbestos.

Note: The potential for any other emerging chemical of concern to be present on-site, such as dioxins and organotin compounds, was considered to be very low.

4.5 Risk Assessment

An assessment of the potential contamination risks for the site is outlined in **Table 4-1**.

Table 4-1 Assessment of Potential Contamination Risk

Potential Source	Impacted Medium	COPC	Risk of Contamination
On-site commercial activities	Soil	PM, TRH, VOC (BTEX), PAH, PCB, PFAS, asbestos	**Low to Moderate** The historical business activities included printing, wholesale of electrical supplies / appliances, electrical contractors and health clinics. No heavy industries were identified.
Importation of fill of unknown origin and quality	Soil	PM, TRH, BTEX, PAH, OCP, OPP, PCB, PFAS, asbestos	**Moderate** Shallow filling was expected on the site.
Hazardous building materials	Building fabrics Near surface soil	PM (lead in particular), PCB, asbestos	**Moderate** Given the age of structures, hazardous building materials may present in the site structures.
Application of pesticides	Near surface soil (building footing areas)	PM (arsenic and copper), OCP, OPP	**Low** If present, pesticides are expected to be limited to shallow, building footprint soils.
Leaks from vehicles	Near surface soil (parking and storage areas)	PM (lead in particular), TRH, VOC (BTEX)	**Low** Based on the site inspection, the surface pavements were in poor condition, though not heavily stained by hydrocarbons or salts.
Migration from off-site sources	Soil Groundwater	PM, TRH, VOC (BTEX), PAH, PFAS	**Moderate** Given the long-term commercial / industrial use of the area, the migration risk must be considered. Also, two properties up-gradient of the site had been used for dry cleaning and motor garaging.

4.6 Identified Receptors

The following potential receptors of site contamination were identified:

- Current and future site users;
- Demolition, excavation and construction workers;
- Adjacent site users;
- Future intrusive workers;
- Ecological receptors in areas of exposed soil/landscaping;
- Downgradient ecological communities.

4.7 Summary of the CSM

The CSM, including the potential linkages between contamination sources, exposure pathways and human and environmental receptors, is summarised in **Table 4-2**.

Based on this model, there was potential for contamination to exist on the site, warranting the need for further (detailed / field-based) investigation.

As the natural site soils involved hard setting, high plasticity, clays, the vertical (top down) migration of any contaminants will be limited. Likewise, vapour intrusion from the subsurface upwards would be restricted. Hence, the fill layer represented the most likely contaminated medium.

Table 4-2 Summary of the CSM

Potential Source	Impacted Media	Contaminants of Potential Concern	Transport Mechanism	Exposure Pathway	Potential Receptor
On-site commercial activities Imported fill of unknown origin and quality Hazardous building materials Application of pesticides Leaks from vehicles	Soil	PM, TRH, VOC (BTEX), PAH, PCB, PFAS, asbestos	Disturbance of surface and subsurface soils during site redevelopment, future site maintenance and future use of the site post redevelopment	Ingestion Dermal contact Inhalation of particulates	Current and future site occupiers Demolition, excavation and construction workers Adjacent site users Future intrusive workers
			Atmospheric dispersion from soil to outdoor and indoor air spaces		
			Volatilisation of contamination from soil and diffusion to indoor air spaces	Inhalation of vapours	
Off-site migration	Groundwater	Dissolved PM, TRH, VOC (BTEX), PAH, PFAS	Volatilisation of contamination from groundwater to indoor or outdoor air spaces (onsite and offsite)	Inhalation of vapours	Current and future site occupiers Demolition, excavation and construction workers Adjacent site users Future intrusive workers
			Migration of dissolved phase impacts in groundwater via diffusion and advection	Biota uptake	Powells Creek

Footnotes:
The overall potential for contamination to exist on the site was deemed to be moderate
Risks associated with all Source-Pathway-Receptor (SPR) linkages considered to be low
Site workers during demolition, excavation and construction, as well as future building / service maintenance, assumed to use personal protective equipment (PPE), as per SafeWork NSW regulations; hence, eliminating SPR linkage
Apart from PFAS, all emerging chemicals managed by the EPA in accordance with the EHC Act 1985 through a chemical control order were **not** considered to be COPC for this site
ASS parameters not considered to be of relevance for this investigation / site

5. SAMPLING AND ANALYSIS

5.1 Sampling, Analytical and Quality Plan

A comprehensive sampling, analytical and quality plan (SAQP) ensures that the analytical data collected during environmental investigations are representative and provide a robust basis for land management decisions. The SAQP for this DSI included the following:

- Data quality objectives (DQO), restating the objectives of this DSI, then articulating the perceived goals of the sampling and analysis components, as well as the rationale behind their conception and means of their attainment;
- Data quality indicators (DQI), corresponding to the quality control measures integrated into the sampling and analysis components of the DSI;
- Sampling methodology, including description of the (intended) sampling points, the media sampled at each point and details of any in-field screening, with acknowledgement that all such tasks had to be consistent with industry-endorsed, standard operating procedures (SOP);
- Procedures for sample handling, preservation and storage;
- Identification of the required laboratory analyses; and
- Analytical quality assurance / quality control (QA/QC).

5.2 Data Quality Objectives

In accordance with the NEPC (2013) *Schedule B2 Guideline on Site Characterisation*, USEPA (2006) *Data Quality Assessment* and EPA (2017) *Guidelines for the NSW Site Auditor Scheme*, DQO were developed by the EI investigation team, following the NEPC- / EPA- endorsed, seven step process (**Table 5-1**). In doing so, the appropriate levels of data quantity and quality needed for the specific requirements of the project were established.

Table 5-1 Summary of Project Data Quality Objectives

DQO Steps	Details
1. State the Problem Summarise the contamination problem that required environmental data.	The site was designated for mixed use (commercial and residential) development, including bulk excavation for a five level basement facility. Previous (preliminary) investigation and the CSM indicated there was potential for site contamination. Detailed investigation subsequently required by the New South Wales Department of Planning, Housing and Infrastructure, in support of the development application. Also necessary in order for the developer to meet obligations under *State Environmental Planning Policy (Resilience and Hazards) 2021* and the C*ontaminated Land Management Act 1997*.
2. Identify the Goal of the Study (Identify the decisions) Identify the decisions that needed to be made on the contamination problem and the collated data.	Based on the objectives stated in **Section 1.3**, the decisions for this DSI were: ▪ Has the nature, extent and source of any soil and/or groundwater impacts on-site been defined? ▪ What impact do local soil conditions have on the fate and transport of any contaminants that may be present? ▪ Does the level of impact, coupled with the fate and transport of potential contaminants, represent an unacceptable risk to identified human and/or environmental receptors on- or off- site? ▪ Does the collected data provide sufficient information to confirm that the site is / is not contaminated? ▪ If the data does not provide sufficient information, what gaps require closure to enable the suitability of the site to be determined? At the end of the DSI, a conclusion had to be made regarding whether the site was suitable for the proposed development, or if additional assessment / remedial works were required to make the site suitable.
3. Identify Information Inputs (Identify inputs to decision) Identify the information needed to support any decision relating to the contamination status of the site.	Inputs to the decision making process included: ▪ The proposed land use; ▪ The previous investigation report; ▪ National and EPA guidelines endorsed under the *NSW Contaminated Land Management Act 1997*; ▪ Observations obtained from the intrusive (sampling) component, in locations and to depths appropriate for assessment purposes; and ▪ Laboratory analysis of selected soil and groundwater samples for the COPC.
4. Define the Boundaries of the Study Specify the spatial and temporal limits to the current investigation.	Lateral – The cadastral boundaries of the site; Vertical – From the existing ground surface to the deepest investigated soil, including underlying fill and natural soil horizons. Temporal – The results will be valid on the day samples are collected and will remain valid as long as no changes occur in regards to site use and contamination (if present) does not migrate onto the site from off-site sources.
5. Develop the Analytic Approach (Develop a decision rule) Specify the decision rule, in the form of a simple statement that determined a logical basis for the conclusion of the investigation.	The decision rules for the sample analysis component of the DSI were: If the concentration of a COPC in the soil exceeded the adopted criterion made or approved by the EPA, then assess the need to further investigate the extent of impact. If the concentration of a COPC in the groundwater exceeded the adopted criterion made or approved by the EPA, then assess the need to further monitor the impact. Decision criteria for QA/QC measures are defined by the DQI in **Table 5-2**.

DQO Steps	Details
6. Specify Acceptance Criteria (Specify limits on decision errors) Specify the acceptable limits on decision errors, which were established (defined) by the inherent uncertainties in the data.	Specific limits for this project were in accordance with National and EPA guidance, which covered standard procedures for field sampling and handling, as well as the indicators of data quality. The specific criteria were: ▪ The null hypothesis for the investigation was that the concentration of each COPC exceeded relevant land use criteria across the site. ▪ Acceptance of site suitability was based on the probability that: ‣ Individual COPC results satisfied (were below) the corresponding assessment criteria; ‣ The standard deviation of the data set for each COPC was less than 50% of the relevant criterion; and ‣ No single result exceeded the corresponding criterion by 250% or more. ▪ Concentrations of COPCs that were below the assessment criteria were regarded as indicative of suitability for the proposed land use(s). If contaminant concentrations exceeded the adopted criteria, further investigation / remediation was considered prudent.
7. Develop the Plan for Obtaining Data Identify the most resource-effective sampling and analysis design, to satisfy the DQOs of the investigation.	For this investigation, the most resource-effective sampling and analysis design that would satisfy the DQOs involved: ▪ Soil profiling and sampling at eight boreholes (BH101, BH102, BH103, BH104M, BH105, BH106, BH107 and BH108), distributed in a systematic (triangular grid) pattern across accessible parts of the site, providing suitable site coverage. The selection of borehole locations was assisted by reference to *Before-You-Dig* plans and GPR, the latter performed by a qualified services locator. ▪ In-field screening of soil headspace samples for VOC using a portable PID. ▪ Laboratory analysis of discrete, fill and natural soil samples from each borehole for the COPC, to determine the condition of site soils and assess impacts from past activities. ▪ Installation of a groundwater monitoring well at BH104M. ▪ Completion of a GME, utilising an existing on-site well (UNK-GW) and BH104M. ▪ Laboratory analysis of a representative water sample from UNK-GW for the COPC, to assess local groundwater quality (noting no water was present in BH104M at the time of the GME for this DSI). ▪ Review of the results, to determine if further sampling / site remediation was warranted. Prior to commencement of the field work, written instructions were issued to the personnel assigned for their completion. These included SOP, which were drafted with reference to NEPC and EPA guidelines. All subsequent field works were performed in accordance with these SOP.

5.3 Data Quality Indicators

To ensure that the sample data could be relied upon, the quality indicators in **Table 5-2** were adopted. Assessment of data quality is presented in **Section 6**.

Table 5-2 Summary of Project Data Quality Indicators

QA/QC Component	Data Quality Indicator(s)
Precision Measure of the variability (or reproducibility) of data	Data precision was assessed by reviewing blind field duplicate sets, through calculation of relative percentage differences (RPDs). Precision was deemed acceptable if RPDs were found dominantly to be less than 30%. RPDs that exceeded this range were considered acceptable where: ▪ Results were <10 times the limits of reporting (LOR); ▪ Results were <20 times the LOR and the RPD was <50%; or ▪ Heterogeneous materials or volatile compounds were encountered.
Accuracy Measure of the closeness of reported data to the true values	Data accuracy was assessed through the analysis of: ▪ Split field duplicate sets (adopting the same DQI as per blind duplicates); ▪ Field / method blanks, tested for the analytes targeted in primary samples; ▪ Matrix and surrogate spikes; and ▪ Laboratory control samples.
Representativeness Confidence the data are representative of each media present on the site	To ensure the data produced by the laboratory were representative of conditions encountered in the field, the following measures were taken: ▪ Blank samples run in parallel with field samples, to confirm there were no unacceptable instances of laboratory artefacts; ▪ Review of RPDs for field and laboratory duplicates to provide an indication that the samples were generally homogeneous, with no unacceptable instances of significant sample matrix heterogeneities; and ▪ The appropriateness of collection methodologies, handling, storage and preservation techniques was assessed to ensure/confirm there was minimal opportunity for sample interference or degradation (i.e. volatile loss during transport due to incorrect preservation / transport methods).
Completeness Percentage of useable data from sampling episode (set)	Analytical data sets were considered complete, with sufficient useable data, upon confirmation that: ▪ SOPs for sampling protocols were adhered to; and ▪ All chain of custody (COC) documentation was properly completed.
Comparability Confidence that data are equivalent for each sampling event	Issues of comparability were reduced through adherence to SOPs and regulator-endorsed or published guidelines and standards on each data gathering activity. In addition, the data were collected by experienced samplers and NATA-accredited laboratory methodologies were employed.

5.4 Sampling Rationale

With reference to the previous investigation summarised in **Section 3** and the CSM presented in **Section 4**, as well as the DQOs defined in **Section 5.2**, sampling was planned in accordance with the following rationale:

- Multiple level, *in situ* fill and natural soil sampling at eight test boreholes (BH101, BH102, BH103, BH104M, BH105, BH106, BH107 and BH108), distributed in a systematic (triangular grid) pattern across accessible parts of the site, providing suitable site coverage. The selection of borehole locations was assisted by reference to *Before-You-Dig* plans and GPR, the latter performed by a qualified services locator. The number of locations (bores: 8) complied with the minimum number of points recommended under Table 2 of the EPA (2022a) *Sampling Design Part 1 - Application* for investigation of an area of 1,329m^2.
- In-field screening of soil headspace samples for VOC using a portable PID.

- Laboratory analysis of discrete, fill and natural soil samples from each borehole for the COPC, to determine the condition of site soils and assess impacts from past activities.
- Installation of a groundwater monitoring well at BH104M.
- Completion of a GME, utilising an existing on-site well (UNK-GW) and BH104M.
- Laboratory analysis of a representative water sample from UNK-GW for the COPC, to assess local groundwater quality (noting no water was present in BH104M at the time of the GME for this DSI).

5.5 Assessment Criteria

The assessment criteria adopted for this DSI were derived from published guidelines that are endorsed by national or state regulatory authorities. The actual values were selected with due consideration of the exposure scenario that is expected for the site (i.e. the likely exposure pathways and identified potential receptors applicable to mixed commercial / residential land use). The sources are identified in **Table 5-3**.

The adopted soil criteria are referred to as the *Soil Investigation Levels* (SILs). The adopted groundwater criteria are referred to as the *Groundwater Investigation Levels* (GILs).

Table 5-3 Adopted Investigation Levels for Soil and Groundwater

Source	Levels Applicable to Proposed (Future) Exposure Scenario
NEPC (2013) Soil HILs, HSLs, EILs, ESLs and Management Limits for TRH HEPA (2020) PFAS Guidelines	**Soil Health-based Investigation Levels (HILs)** NEPC (2013) *HIL-B* thresholds for residential sites with minimal soil access and *HIL-D* thresholds for industrial/commercial land use. **Soil Health-based Screening Levels (HSLs)** NEPC (2013) *HSL-A/B* thresholds for low-high density residential properties and *HSL-D* thresholds for industrial/commercial land use (for vapour intrusion of residual hydrocarbons). **For asbestos in soil:** No visible asbestos on the ground surface, for all parts of the site. Bonded ACM: *HSL-A* 0.01% w/w. Asbestos Fines / Friable Asbestos (AF/FA): 0.001% w/w. **For PFAS in soil:** Values from the HEPA (2020) *PFAS National Environmental Management Plan* were adopted for PFAS in soils. **Ecological Investigation Levels (EILs) / Ecological Screening Levels (ESLs)** As the site surface will be fully sealed post development, EILs and ESLs were not considered applicable for the DSI. **Management Limits for Petroleum Hydrocarbons** Where HSLs were exceeded for petroleum hydrocarbons, soil sample results were assessed against the NEPC (2013) *Management Limits* for the F1-F4 TRH fractions, to assess propensity for phase-separated hydrocarbons, fire and explosive hazards and adverse effects on buried infrastructure.
ANZG (2018) GILs for Freshwater NEPC (2013) Groundwater HSLs NHMRC (2018) Recreational Criteria HEPA (2020) PFAS Guidelines	**Groundwater Investigation Levels (GILs) for Fresh Waters** ANZG (2018) 95% trigger values for protection of slightly to moderately disturbed freshwater ecosystems, with the 99% values applied for bio-accumulative toxins. **Health-based Screening Levels (HSLs)** NEPC (2013) *HSL-A/B* thresholds for low-high density residential properties (for vapour intrusion of residual hydrocarbons). **For PFAS in groundwater:** Values from the HEPA (2020) *PFAS National Environmental Management Plan* were adopted for PFAS in groundwater. **Recreational Criteria** NHMRC (2018) recreational criteria were adopted; where no criteria were available, the lowest NHMRC (2018) drinking water criterion (multiplied by a factor of 10) was used.

5.6 Soil Sampling Methodology

The soil sampling methodology is described in **Table 5-4**. Sampling locations are illustrated in **Figure 2**, **Appendix A.**

Table 5-4 Summary of Soil Sampling Methodology

Activity/Item	Details
Fieldwork	Borehole drilling and soil sampling were conducted on 24 March 2025. For each chosen bore location, an underground service (GPR) scan was completed by a licenced service locator, prior to any intrusive work.
Drilling Method and Depth	Two boreholes (BH101 and BH102) were advanced manually, using a hand auger. The remaining six bores (BH103 to BH108) were drilled mechanically, using a track-mounted rig fitted with solid flight augers. Borehole logs are attached in **Appendix D**.
Soil Logging	Drilled soils were described in the field, noting lithological characteristics, and evaluated on a qualitative basis for odour and visual signs of contamination. Soil descriptions were based on Australian Standard (AS) 1726:2017 (**Appendix D**).
Soil Sampling	Soil samples were collected by dry grab off the auger bucket or flights, the sampler wearing dedicated nitrile gloves. They were placed into laboratory-supplied, glass jars and zip-lock, plastic bags (the latter for asbestos and PID screening samples). Blind and split field duplicates were separated from the primary samples and placed into dedicated glass jars.
Soil Vapour Screening	Screening for VOC in soil headspace samples was conducted using a pre-calibrated PID with a 10.6mV ionisation lamp. The calibration form is provided in **Appendix E**. The field measurements are included in the bore logs (**Appendix D**).
Decontamination Procedures	The auger rods and bucket were decontaminated between bores, by scrubbing with a solution of *Alconox* and potable water (1:20) until they were free of all residual materials, then rinsed with potable water. Disposable nitrile sampling gloves were replaced between each sampling location.
Management of Soil Cuttings	Soil cuttings were used as backfill for completed boreholes, except at BH104M, where a groundwater monitoring well was to be installed.
Sample Preservation and Transport	Sealed sample containers were stored in an insulated chest (with ice packs), whilst on-site and in transit to the contracted laboratories. Chilled sample chests were transported to the primary laboratory (SGS Australia Pty Ltd (SGS)) using CoC procedures. Signed CoC and sample receipt advice (SRA) certificates were provided by SGS for confirmation purposes (**Appendix F**). A split (inter-laboratory) field duplicate was submitted to Envirolab Pty Ltd (the secondary laboratory) under strict CoC procedures. Signed CoC and SRA certificates were provided by Envirolab for confirmation purposes (**Appendix F**).
Laboratory Analysis and Quality Control	Soil samples were analysed by SGS and Envirolab for the COPC. All samples were analysed within the prescribed holding times, as documented in the corresponding laboratory reports (**Appendix G**). In addition to the split (inter-laboratory) field duplicate (analysed by Envirolab), the QC samples comprised one blind (intra-laboratory) field duplicate, an equipment rinsate blank, a laboratory-prepared trip spike soil and a laboratory-prepared trip blank soil, all analysed by SGS (**Appendices G** and **H**).

5.7 Groundwater Sampling Methodology

The groundwater sampling methodology is described in **Table 5-5**. Well locations are illustrated in **Figure 2**, **Appendix A.**

Table 5-5 Summary of Groundwater Sampling Methodology

Activity/Item	Details
Fieldwork	One groundwater monitoring well (BH104M) was installed on 24 March 2025, complementing the existing well UNK-GW. A GME, which included water level gauging, purging, field testing and sampling, was conducted on 31 March 2025. At that time, water was present in well UNK-GW, but not in well BH104M. Hence, the assessment of local groundwater quality was limited to the water from UNK-GW.
Well Construction	Well construction details are presented in the logs attached in **Appendix D**.
Well Development	Well development was conducted at UNK-GW on 24 March. This involved agitation of the water column using a dedicated (disposable), high-density polyethylene (HDPE) bailer, followed by removal of water and accumulated sediment.
Well Gauging	Prior to purging (31 March), monitoring well UNK-GW was gauged to determine standing water level (SWL) using a water/oil interface probe. No light / dense non-aqueous phase liquid was detected in the well.
Well Purging and Field Testing	Groundwater was purged from UNK-GW using a peristaltic, low flow pump. The measurement of water quality parameters, namely electrical conductivity (EC), temperature and oxidation-reduction potential (ORP), was conducted repeatedly during well purging, with the values recorded on field data sheets (**Appendix E**). Three consecutive measurements within ±3% for EC, ±0.2° for temperature and ±20mV for ORP was assumed to mean stable water conditions had been achieved and a representative sample could be collected.
Groundwater Sampling	A groundwater sample from UNK-GW was collected from the pump discharge point, under low flow conditions. The containers, all supplied by the contracted laboratories, were filled as follows: ▪ one, 1 litre amber glass, acid-washed and solvent-rinsed bottle; ▪ two, 40mL glass vials, pre-preserved with dilute hydrochloric acid, Teflon-sealed; ▪ one, 250mL HDPE bottle, pre-preserved with dilute nitric acid (1mL); and ▪ one, 50mL Teflon-free HDPE bottle (unpreserved). Samples for metals analysis were field-filtered using 0.45 µm pore-size membranes. All containers were filled to the brim, then capped and stored in an insulated chest (containing ice bricks), until completion of the fieldwork and during sample transit to the laboratory.
Decontamination Procedure	The interface and water quality probes were washed in a solution of potable water and *Decon 90* and then rinsed with potable water.
Sample Transport	Sealed sample containers were stored in an insulated chest (with ice packs), whilst on-site and in transit to the contracted laboratories. Chilled sample chests were transported to the primary laboratory (SGS) using CoC procedures. Signed CoC and SRA certificates were provided by SGS for confirmation purposes (**Appendix F**). A split (inter-laboratory) field duplicate was submitted to Envirolab Pty Ltd (the secondary laboratory) under strict CoC procedures. Signed CoC and SRA certificates were provided by Envirolab for confirmation purposes (**Appendix F**).
Laboratory Analysis and Quality Control	Water samples were analysed by SGS and Envirolab for the COPC. All samples were analysed within the prescribed holding times, as documented in the corresponding laboratory reports (**Appendix G**). In addition to the split (inter-laboratory) field duplicate (analysed by Envirolab), the QC samples comprised one blind (intra-laboratory) field duplicate, an equipment rinsate blank, a laboratory-prepared trip spike water and a laboratory-prepared trip blank water, all analysed by SGS (**Appendices G** and **H**).

6. DATA QUALITY ASSESSMENT

The assessment of data quality is defined as the scientific and statistical evaluation of environmental results to determine if they are reliable and meet the objectives of the project (USEPA, 2006). For this DSI, data quality assessment involved an evaluation of the compliance of the field (sampling) and laboratory procedures with established protocols, as well as the accuracy and precision of the associated results from the quality control measures. The findings are summarised in **Table 6-1** and discussed in detail in **Appendix H**.

In summary, the overall quality of the analytical data from this DSI was considered to be of an acceptable standard for interpretive use and preparation of an updated CSM.

Table 6-1 Quality Control Process

Stage	Control	Conformance [Yes, Part, No]	Report Section(s)
Planning	SAQP with DQOs and DQIs established	Yes	Sections 5.1, 5.2, 5.3
Field Work	Use of relevant and appropriate sampling plan	Yes	Section 5.4
	Suitable documentation of fieldwork observations including borehole logs	Yes	Appendices D, E
	All media sampled	Yes	Sections 5.6, 5.7 Appendices D, E
	Appropriate field duplicate, rinsate and trip blanks / spikes taken	Yes	Appendices D, E, F, H
	Use of appropriate sampling methods	Yes	Sections 5.6, 5.7
	Field equipment calibrated	Yes	Appendix E
	Preservation of samples upon collection and during transport to the laboratories	Yes	Sections 5.6, 5.7 Appendices F, G, H
Laboratory	Completed COC and SRA documentation	Yes	Appendix F
	Sample holding times within acceptable limits	Yes	Appendixes F, G, H
	Use of appropriate analytical procedures and NATA-accredited laboratories	Yes	Appendixes F, G, H
	LORs low enough to meet adopted criteria	Yes	Appendixes F, G, H
	Laboratory blanks	Yes	Appendixes F, G, H
	Laboratory control samples and duplicates	Yes	Appendixes F, G, H
	Matrix spikes	Yes	Appendixes F, G, H
	Surrogates	Yes	Appendixes F, G, H
	Checking for unusual results (e.g. laboratory results inconsistent with field observations)	Yes	Appendixes F, G, H
Reporting	Report reviewed by senior staff to confirm project meets EPA guidelines and objectives	Yes	Document Control

7. RESULTS

7.1 Soil

Sub-Surface Conditions

Based on the logs for the eight test boreholes (BH101, BH102, BH103, BH104M, BH105, BH106, BH107 and BH108; **Appendix D**), the sub-surface to 7.5 metres BGL was generalised as (excluding any hardstand pavement):

- (Dark) brown, low to high plasticity, silty clay fill with sub-angular and rounded gravels (0.3-0.7m thickness); overlying
- Mottled, yellow / orange brown and grey, medium to high plasticity, natural (residual) silty clays (0.5-1.6m thickness); grading into
- Pale brown, weathered shale bedrock (to 7.5m BGL, at least).

Additional Observations and PID Results

Soil samples were obtained from bores at various depths ranging between 0.1-1m BGL. All examined soil samples were evaluated on a qualitative basis for odour and visual signs of contamination (e.g. hydrocarbon and sulfidic odours, oil staining, petrochemical filming, FCS fragments, ash and charcoal) and the following observations were noted:

- Sub-angular ironstone gravels were reported within fill materials;
- Apart from some ash- / charcoal- like material in the fill at BH106, there was no visual evidence of contamination in any of the examined soils;
- No fragments of FCS (i.e. potential asbestos cement materials) were observed on any exposed soil surface, or in any of the examined soils; and
- Low PID readings were recorded (0.4-6.2 parts per million), consistent with the non-detection of any suspicious odour in the examined soils.

Laboratory Analytical Results

A summary of the laboratory analytical results for the analysed (representative) soil samples is presented in **Table 7-1**. More detailed tabulation is presented in **Table 1**, **Appendix I**.

Contaminant concentrations in the representative, *in situ* soil samples were found to comply with the adopted SILs, except as follows:

- Total lead in fill sample BH105_0.4-0.5 (4200 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (1200 mg/kg); and
- The sum of carcinogenic PAHs in fill samples BH101_0.1-0.2 (8.4 mg/kg), BH102_0.2-0.3 (3.8 mg/kg) and BH107_0.3-0.4 (11 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (4 mg/kg).

Table 7-1 Summary of the Soil Analytical Results

Number of primary samples	Analyte	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)	Samples Exceeding SILs
Total Metals				
12	Arsenic	3	45	None
12	Cadmium	<0.3	5.6	None
12	Chromium	7.4	28	None
12	Copper	13	170	None
13	Lead	16	4,200	BH105_0.4-0.5 (4200 mg/kg)
12	Mercury	<0.05	0.95	None
12	Nickel	<0.5	17	None
12	Zinc	8.8	1,600	None
PAH				
13	Naphthalene	<0.1	0.4	None
13	Sum Carcinogenic PAH (as B(α)P TEQ)	<0.3	11	BH101_0.1-0.2 (8.4 mg/kg) BH102_0.2-0.3 (3.8 mg/kg) BH107_0.3-0.4 (11 mg/kg)
13	Total PAH	<0.8	96	None
BTEX				
12	Benzene	<0.1	<0.1	None
12	Toluene	<0.1	<0.1	None
12	Ethyl benzene	<0.1	<0.1	None
12	Total xylenes	<0.3	<0.3	None
VOC				
12	Total VOCs	<24	<24	None
TRH				
12	C_6-C_{10} (F1) TRHs	<25	<25	None
12	>C_{10}-C_{16} (F2) TRHs	<25	28	None
12	>C_{16}-C_{34} (F3) TRHs	<90	390	None
12	>C_{34}-C_{40} (F4) TRHs	<120	<120	None
Pesticides				
8	OCPs	<0.1	0.4	None
8	OPPs	<1.7	<1.7	None
PCB				
8	Total PCBs	<0.1	<0.1	None
PFAS				
2	perfluorooctane sulfonate (PFOS)	<0.005	<0.005	None
2	perfluorohexane sulfonate (PFHxS)	<0.005	<0.005	None
2	perfluorooctanoic acid (PFOA)	<0.005	<0.005	None
Asbestos				
8	Asbestos	Not detected	Not detected	None

Footnotes:
B(α)P = benzo()pyrene
TEQ = toxicity equivalent coefficient

7.2 Groundwater

Construction details for the well installed at BH104M are summarised in **Table 7-2**.

Table 7-1 Monitoring Well Construction Details

Well	Well Depth (m BGL)	Top of Well Casing (m)	Seepage Water (m BGL)	Screen Interval (m BGL)	Lithology Screened
BH104M	9.5	1.3	Not encountered	6.5-9.5	Shale

A GME was conducted on 31 March 2025. At that time, well BH104M was dry; hence, the sampling/assessment was limited to the groundwater in UNK-GW.

Final field (EC, temperature and ORP) measurements are presented in **Table 7-3**. Refer also to **Appendix E.** The data indicated that the groundwater was brackish and reducing (low in oxygen).

Table 7-2 Groundwater Field Data

Well	SWL (m below top of casing)	EC (µS/cm)	T (°C)	ORP (mV)
UNK-GW	14.32	4,417	20.3	-117

Purged and sampled waters from UNK-GW were evaluated on the basis of odour and visual signs of contamination, with the following observations noted:

- The groundwater was light brown in colour and had low turbidity.
- No sheen was observed on the sampled groundwater.
- No light / dense non-aqueous phase liquid was detected in the well.
- No suspicious odour was detected in the monitoring well.
- The PID reading in the well headspace was 2.3 parts per million, indicating an absence of VOCs (at least above the water column);

Laboratory Analytical Results

Detailed tabulation of the laboratory analytical results for the sample collected from UNK-GW is presented in **Table 2**, **Appendix I**.

Contaminant concentrations in this sample were found to comply with the adopted GILs, except as follows:

- Total dissolved copper (2 µg/L), slightly exceeding the adopted ANZG (2018) trigger value of 1.4 µg/L;
- Total dissolved nickel (12 µg/L), slightly exceeding the adopted ANZG (2018) trigger value of 11 µg/L;
- Total dissolved zinc (52 µg/L), exceeding the adopted ANZG (2018) trigger value of 8 µg/L;
- $>C_{10}$-C_{16} (F2) TRHs (160 µg/L), exceeding the adopted criterion of 60 µg/L, although upon re-testing the sample after silica gel clean-up, the F2 TRH concentration was reported as <60 µg/L, indicating the hydrocarbons were not petroleum derived; and
- $>C_{16}$-C_{34} (F3) TRHs (550 µg/L), exceeding the adopted criterion of 500 µg/L, although upon re-testing the sample after silica gel clean-up, the F3 TRH concentration was reported as <500 µg/L, indicating the hydrocarbons were not petroleum derived.

8. SITE CHARACTERISATION

8.1 Subsurface Conditions

Based on the logs for the eight test boreholes (**Appendix D**), the sub-surface to 7.5 metres below ground level was generalised as (excluding any hardstand pavement):

- (Dark) brown, low to high plasticity, silty clay fill with sub-angular and rounded gravels (0.3-0.7m thickness); overlying
- Mottled, yellow / orange brown and grey, medium to high plasticity, natural (residual) silty clays (0.5-1.6m thickness); grading into
- Pale brown, weathered shale bedrock (to 7.5m BGL, at least).

The likelihood of ASS presence on-site was considered to be low.

No groundwater (seepage) was encountered in any of the drilled bores, nor during the installation of the well at BH104M. The local groundwater table was expected to be >7.5m BGL (indeed the SWL in UNK-GW was 14.3m below the top of its casing). The inferred groundwater gradient was north westerly, towards Powells Creek (located 1.6 kilometre northwest of the site).

8.2 Soil Impacts

Contaminant concentrations in the representative, *in situ* fill and natural soil samples were found to comply with the adopted SILs, except for:

- Total lead in fill sample BH105_0.4-0.5 (4200 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (1200 mg/kg); and
- The sum of carcinogenic PAHs in fill samples BH101_0.1-0.2 (8.4 mg/kg), BH102_0.2-0.3 (3.8 mg/kg) and BH107_0.3-0.4 (11 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (4 mg/kg).

The investigation data set indicated that only localised areas of heavy metal- (lead) and PAH- impacted fill soils were present on the site. The contamination did not appear to be gross, nor widespread; rather it was probably limited to the vicinities of BH101, BH102, BH105 and BH107. However, the lead and PAH contamination warranted lateral and vertical delineation (as best as practicable), to confirm the risks associated with these contaminants.

Asbestos was not identified in any of the screened samples, nor were fragments of FCS observed on any exposed soil surface. Although asbestos-containing materials may be associated with (former) on-site buildings, the risk of asbestos within *in situ* soils was considered to be low.

8.3 Groundwater Impacts

Based on the completed GME, local groundwater was deemed to be brackish (EC 4,417 µS/cm) and reducing (low in dissolved oxygen). No light / dense non-aqueous phase liquid appeared to be present, at least in the vicinity of UNK-GW.

Elevated concentrations of dissolved metals (copper, nickel and zinc), as well as $>C_{10}$-C_{16} (F2) and $>C_{16}$-C_{34} (F3) TRHs, were detected in the sample from UNK-GW. The metal concentrations were consistent with natural (background) levels for a long-term urban environment.

Upon re-testing the water sample after silica gel clean-up, the F2 and F3 TRH concentrations were both below the corresponding LOR, indicating the hydrocarbons were not petroleum derived (i.e. were probably derived from naturally occurring organic matter).

Given that the local groundwater aquifer is deep (>7.5m BGL and possibly >14m BGL, based on the SWL in UNK-GW), and protected by thick bands of hard setting (relatively impermeable) clays and shale bedrock, the top-down migration mechanism of contamination would not be an issue for the site. Likewise, it was considered that risks to the identified receptors from priority metals and hydrocarbons in upward moving (or extracted) groundwater were low.

8.4 Review of Conceptual Site Model

The CSM presented in **Section 4** was considered to appropriately identify contamination sources, migration mechanisms and exposure pathways, as well as potential on-site and off-site receptors. This model postulated that there was moderate potential for contamination on the land.

The current investigation data set confirmed that localised areas of heavy metal- (lead-) and PAH- impacted fill soils were present on the site. The contamination did not appear to be gross, nor widespread; rather it was probably limited to the vicinities of BH101, BH102, BH105 and BH107. Lateral and vertical delineation would confirm the risks associated with these contaminants.

In view of the proposed development, bulk excavation to 15.6m BGL is required, in order to construct the five level basement. This activity will result in the removal of filling site-wide, thus alleviating any concern regarding contamination. The corresponding waste classification process will require representative soil sampling and analysis of the COPCs listed in **Section 4.4**, in accordance with the EPA (2014) *Waste Classification Guidelines* and EPA (2022a) *Sampling Design Part 1 - Application*. The data from the current DSI and any future (delineation) investigation can be utilised for this purpose.

9. CONCLUSION

The site located at 2-4 Burleigh Street and 20-24 Railway Parade, Burwood was the subject of this detailed investigation, conducted in order to assess the nature and degree of on-site contamination. The key findings were as follows:

- The site had been occupied by triplex and duplex structures since 1943, at least. Commercial use of the premises had occurred since at least the 1960s, by way of printing, wholesale of electrical supplies and appliances, electrical contractors and health care clinics.
- The surrounding areas had been used for mixed residential, commercial and industrial purposes since 1943, at least.
- The site was free of statutory notices and licensing agreements issued under the *Contaminated Land Management Act 1997* and *Protection of the Environment Operations Act 1997*. It was not included on the *List of NSW Contaminated Sites Notified to the EPA*.
- Excluding any concrete hardstand, the sub-surface of the site to 7.5 metres below ground level was comprised of:
    - (Dark) brown, low to high plasticity, silty clay fill with sub-angular and rounded gravels (0.3-0.7m thickness); overlying
    - Mottled, yellow / orange brown and grey, medium to high plasticity, natural (residual) silty clays (0.5-1.6m thickness); grading into
    - Pale brown, weathered shale bedrock (to 7.5m BGL, at least).
- The likelihood of acid sulphate soil presence on-site was considered to be low.
- Contaminant concentrations in the representative, *in situ* fill and natural soil samples were found to comply with the adopted investigation levels, except for:
    - Total lead in fill sample BH105_0.4-0.5 (4200 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (1200 mg/kg); and
    - The sum of carcinogenic PAHs in fill samples BH101_0.1-0.2 (8.4 mg/kg), BH102_0.2-0.3 (3.8 mg/kg) and BH107_0.3-0.4 (11 mg/kg), exceeding the corresponding NEPC (2013) human health threshold for residential settings with minimal access to soil (4 mg/kg).
- No groundwater (seepage) was encountered in any of the drilled bores, nor during the installation of the well at BH104M. The local groundwater table was expected to be >7.5m BGL. The inferred groundwater gradient was north westerly, towards Powells Creek (located 1.6 kilometre northwest of the site).
- Based on the completed monitoring event, local groundwater was deemed to be brackish (electrical conductivity 4,417 µS/cm) and reducing (low in dissolved oxygen). No light / dense non-aqueous phase liquid appeared to be present. The laboratory analytical results for the representative sample indicated that risks to the identified receptors from the COPC in groundwater were low.

Based on the findings from this DSI, and due with consideration of EI's *Statement of Limitations* (**Section 11**), only localised areas of heavy metal- (lead-) and PAH- impacted fill soils were present on the site. The contamination did not appear to be gross, nor widespread; rather it was probably limited to the vicinities of BH101, BH102, BH105 and BH107.

In accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*, the site was deemed suitable for the proposed (mixed commercial and residential) development and use, subject to the implementation of the recommendations made in **Section 10**.

10. RECOMMENDATIONS

EI makes the following recommendations in relation to the proposed development of the site:

- The identified heavy metal and PAH contamination appeared to be localised to the filling in the vicinities of BH101, BH102, BH105 and BH107; however, this needed to be confirmed by way of additional (lateral and vertical delineation) investigation. In accordance with the EPA (2022a) *Sampling Design Part 1 - Application*, the corresponding SAQP should determine a statistically-justified sampling density. The plan could coincide with the waste classification program, which shall be necessary to assist the disposal of soils at licenced landfill facilities.
- Before commencement of any demolition works, a hazardous materials survey (HMS) should be completed by a suitably qualified consultant, to confirm the presence / location of any hazardous materials within the existing building fabrics.
    - All identified hazardous materials must be appropriately managed during future demolition works, to maintain worker health and safety and prevent the spread of hazardous substances onto the site surface.
    - Following demolition of the existing structures, a clearance inspection should be completed by a suitably qualified professional (SafeWork NSW Licensed Asbestos Assessor).
- Bulk excavation of site soils to 15.6m BGL is required, in order to construct the five level basement. This activity will result in the removal of filling site-wide, thus alleviating any concern regarding contamination. The corresponding waste classification process will require representative soil sampling and analysis of the COPCs listed in Section 4.4, in accordance with the EPA (2014) *Waste Classification Guidelines* and EPA (2022a) *Sampling Design Part 1 - Application*. The data from the current DSI and any future (delineation) investigation can be utilised for this purpose.
- All soil materials designated for off-site disposal, including any *virgin excavated natural material* (VENM), must be pre-classified in accordance the EPA (2014) *Waste Classification Guidelines*.
- Once appropriately classified, all waste materials are to be transported to EPA-licensed waste facilities by the appointed waste contractors. All tipping dockets supplied by the landfill companies are to be retained, to confirm the appropriate (lawful) disposal of wastes.
- Any material being imported to the site should be validated as suitable for the intended land use, in accordance with EPA guidelines. In particular, imported filling / landscaping material must be certified as meeting the VENM classification, prior to importation.
- The bulk (basement) excavation is likely to intercept the local groundwater table. A dewatering management plan should therefore be drafted for the development, and include additional groundwater quality assessment (or at least measures thereof).

EI emphasise that these recommendations can be managed through the development application and approval process, in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021*.

11. STATEMENT OF LIMITATIONS

This report has been prepared for NSW Housing Corporation Pty Ltd, whom is the only intended beneficiary of EI's work. The scope of the investigation carried out for the purpose of this report was limited to that agreed with NSW Housing Corporation Pty Ltd.

No other party should rely on this document without the prior written consent of EI, and EI undertakes no duty, or accepts any responsibility or liability, to any third party who purports to rely upon this document without EI's approval.

The findings presented in this report are the result of discrete and specific sampling methodologies used in accordance with best industry practices and standards. Due to the site-specific nature of soil sampling from point locations, it is considered likely that all variations in subsurface conditions across a site cannot be fully defined, no matter how comprehensive the field program.

While normal assessments of data reliability have been made, EI assumes no responsibility or liability for errors in any data obtained from regulatory agencies (e.g. Council, EPA), statements from sources outside of EI, or developments resulting from situations outside the scope of works of this project.

Despite all reasonable care and diligence, the ground conditions encountered and concentrations of contaminants measured may not be representative of conditions between the locations sampled and investigated. In addition, site characteristics may change at any time in response to variations in natural conditions, chemical reactions and other events (e.g. groundwater movement and or spillages of contaminating substances). These changes may occur subsequent to EI's investigation.

EI's assessment is necessarily based upon the results of the site investigation and the restricted program of surface and subsurface sampling, screening and chemical analyses which was set out in the project proposal. Neither EI, nor any other reputable consultant, can provide unqualified warranties nor does EI assume any liability for site conditions not observed or accessible during the time of the investigation.

This report was prepared for NSW Housing Corporation Pty Ltd, and no responsibility is accepted for use of any part of this report in any other context or for any other purpose or by other third parties. This report does not purport to provide legal advice.

This report and associated documents remain the property of EI subject to payment of all fees due for this assessment. The report shall not be reproduced except in full and with prior written permission by EI.

REFERENCES

ANZECC/ARMCANZ (2000) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand, October 2000.

ANZG (2018) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian and New Zealand Governments and Australian State and Territory Governments, Canberra ACT, Australia, August 2018.

ASSMAC (1998) *Acid Sulfate Soil Manual, Acid Sulfate Soils Management Advisory Committee*, NSW Agriculture, Wollongbar, NSW, 28 August 1998.ASSMAC (1998).

Chapman GA and Murphy CL (1989) *Soil Landscapes of the Sydney 1:100 000 Sheet*, Soil Conservation Service of NSW, Sydney, September 1989.

DEC (2007) *Guidelines for the Assessment and Management of Groundwater Contamination.* New South Wales Department of Environment and Conservation, DEC 2007/144, June 2007.

DMR (1991) *Penrith Geological Series Sheet 9030,* NSW Department of Mineral Resources (Retrieved from: www.resourcesandgeoscience.nsw.gov.au)

DPIE (2022) *eSPADE v2.1 Portal*, NSW Department of Planning, Industry and Environment (Retrieved from www.espade.environment.nsw.gov.au)

EI (2024) *Preliminary Site Investigation; 2-4 Burleigh Street and 20-24 Railway Parade, Burwood NSW*, EI Australia Reference E26516.E01_Rev2, 19 February 2025.

EnRisk (2016) *Proposed Decision Tree for Prioritising Sites Potentially Contaminated with PFASs,* Environmental Risk Services Pty Ltd, Environment Protection Authority of New South Wales, 25 February 2016.

EPA (1995) *Sampling Design Guidelines*, Environment Protection Authority of New South Wales, Contaminated Sites Unit, EPA 95/59, September 1995.

EPA (2014) *Waste Classification Guidelines - Part 1: Classifying Waste*, Environment Protection Authority of New South Wales, EPA 2014/0796, November 2014.

EPA (2017) *Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme* (Third Edition), Environment Protection Authority of New South Wales, EPA 2017P0269, October 2017.

EPA (2020) *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines*, Environment Protection Authority of New South Wales, EPA 2020P2233, April 2020.

EPA (2022) *Sampling Design Part 1 - Application*, Contaminated Land Guidelines, Environment Protection Authority of New South Wales, EPA 2022P3915, August 2022.

Fitzpatrick, Powell, Bernie, Marvanek and Steve (2011) *Atlas of Australian Acid Sulphate Soils* (Version 2), Published by CSIRO, Data Collection.

HEPA (2020) *PFAS National Environmental Management Plan*, National Chemicals Working Group of the Heads of the EPAs Australia and New Zealand (HEPA), January 2020.

Murphy CL (1997) *Acid Sulfate Soil Risk of the Botany Bay Sheet* (Second Edition), Department of Land and Water Conservation, Sydney (supplied by the Sydney South Coast, Geographical Information Systems Unit).

NEPC (1999) *National Environmental Protection (Assessment of Site Contamination) Measure 1999*, National Environmental Protection Council, December 1999.

NEPC (2013) *National Environment Protection (Assessment of Site Contamination) Amendment Measure*, National Environment Protection Council, April 2013.

NHMRC (2018) *Australian Drinking Water Guidelines*, National Health and Medical Research Council / National Resource Management Ministerial Council, Commonwealth of Australia, Canberra. Version 3.5, August 2018.

NSW Government (2021) *State Environmental Planning Policy (Resilience and Hazards) 2021*, last modified 2 March 2022.

Standards Australia (2005) *Australian Standard AS4482.1-2005 Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil – Part 1: Non-volatile and Semi-volatile Compounds*, Standards Australia 2005.

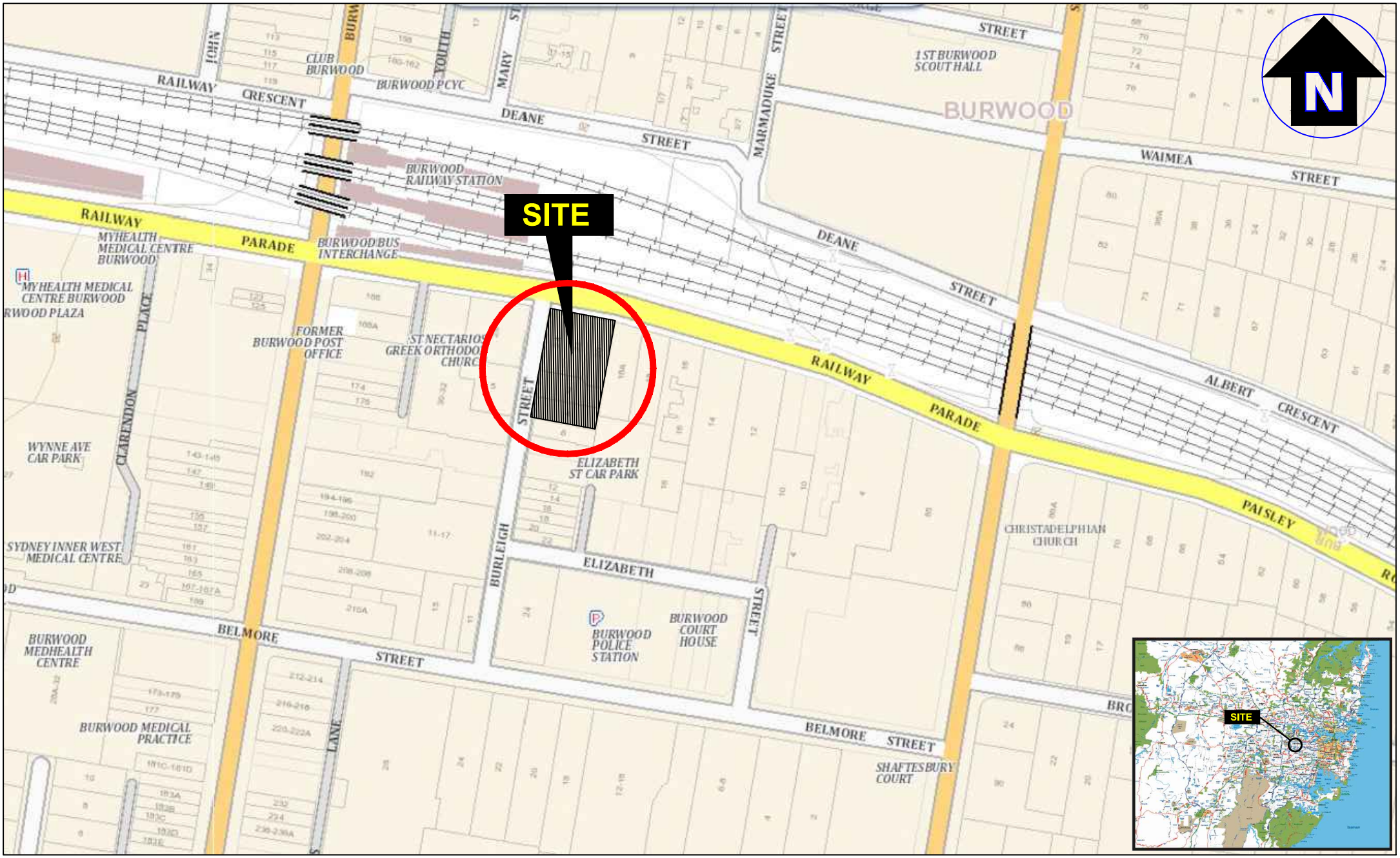
USEPA (2000a) *Guidance for the Data Quality Objectives Process - EPA QA/G-4*, United States Environmental Protection Agency, EPA/600/R-96/055, August 2000.

USEPA (2000b) *Data Quality Objectives Process for Hazardous Waste Site Investigations - EPA QA/G-4HW*, United States Environmental Protection Agency, EPA/600/R-00/007, January 2000.

USEPA (2006) *Data Quality Assessment: A Reviewers Guide - EPA QA/G-9R*, United States Environmental Protection Agency, Office of Environmental Information, EPA/240/B-06/002, February 2006.

WADOH (2009) *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*, Western Australian Department of Health, May 2009.

Appendix A – Figures



eiaustralia
Practical Solutions for Built Environments
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Ph (02) 9516 0722 Fax (02) 9518 5088

Drawn:	L.C.
Approved:	-
Date:	16-01-25
Scale:	Not To Scale

NSW Housing Corporation Pty Ltd

Detailed Site Investigation

2-4 Burleigh Street & 20-24 Railway Parade, Burwood NSW

Site Locality Plan

Figure: 1

Project: E26516. E02



Map Source: NearMap, viewed 27/03/2025

LEGEND. Note: all locations are approximate

- Site Boundary
- Borehole Locations
- Monitoring Well Location
- Pre-existing Monitoring Well Location

eiaustralia
Practical Solutions for Built Environments
Suite 6.01, 55 Miller Street, PYRMONT 2009
Ph (02) 9516 0722 Fax (02) 9518 5088

Drawn:	T.Y.
Approved:	S.R.
Date:	27/03/2025

NSW Housing Corporation Pty Ltd

Detailed Site Investigation

2-4 Burleigh Street & 20-24 Railway Parade, Burwood NSW

Site Sampling Plan

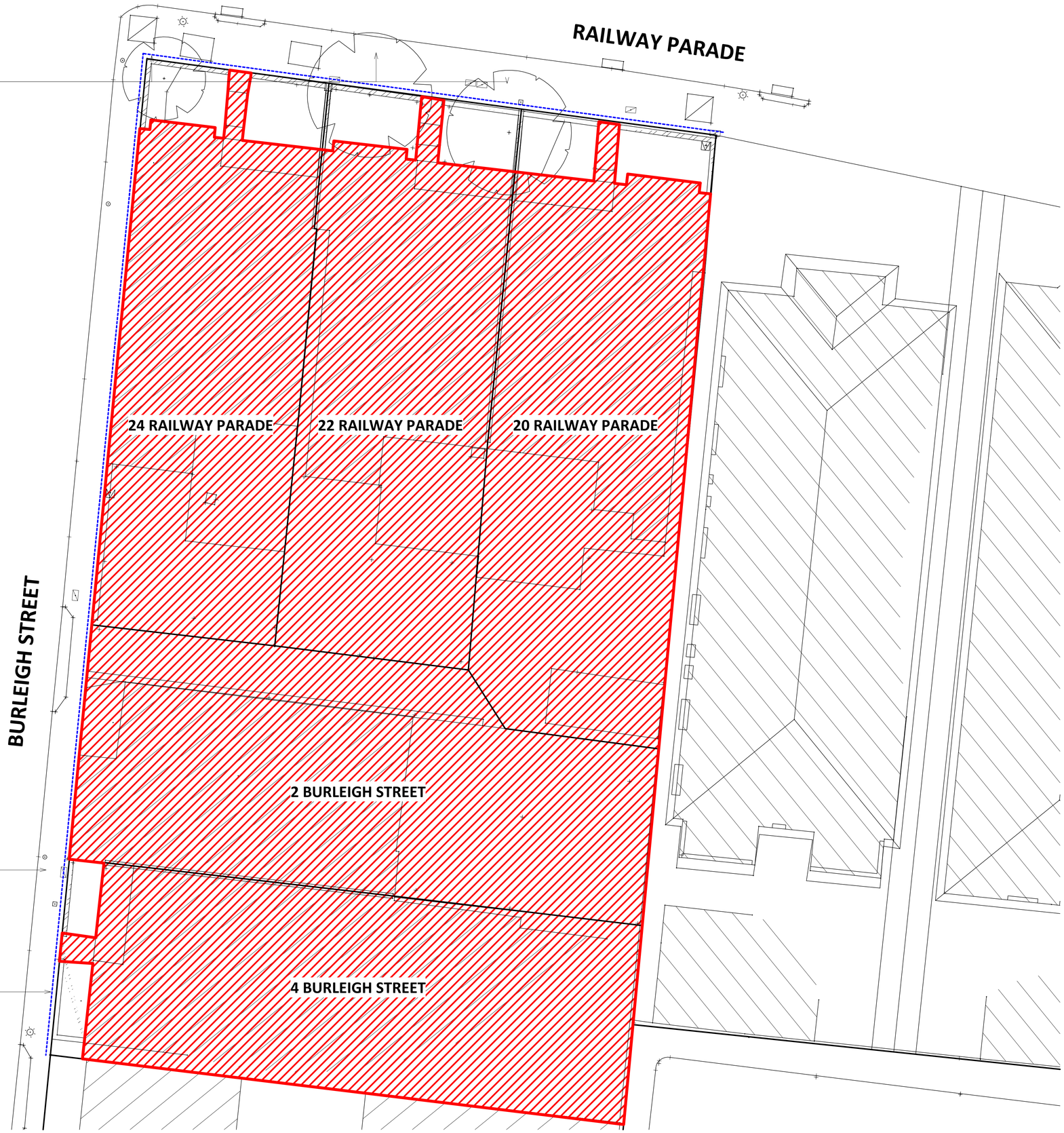
Figure: 2

Project: E26516.E02

Appendix B – Site Plans

ALL EXISTING TREES ON SITE TO BE RETAINED.

TREES TO BE PROTECTED WITH MESH AND TIMBER PALINGS.



WATER AND ELECTRICITY SERVICES AT THE FRONT OF SITE TO BE DISCONNECTED

BLUE DASH LINE INDICATES EXTENTS OF SEDIMENT AND EROSION CONTROL MEASURE

N

Drawing Disclaimer:

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Verify all dimensions on site before commencing work.
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TO BE DEMOLISHED

CERTIS
Intelligent Prospect Thinking
Certis (NSW) Pty Ltd

APPROVED

CDC 8772/1
14/06/2024

Certifying Authority: Peter Hofstetter
Accreditation No: BDC 2578

Rev	Amendment	By	Chk*	Date
A	ISSUE FOR CONSTRUCTION			11.06.2024
2	ISSUE FOR CDC APPLICATION			31.05.2024
1	ISSUE FOR INFORMATION			14.05.2024

Consultant

Consultant Discipline Consultant Name

Client

Owner

Architect

CQ. Studio

CQ STUDIO- SYDNEY
Level 1, 60 Burwood Rd, Burwood, NSW 2134, Australia
P (02) 8212 5592

Project Project Number

RAILWAY PARADE

20-24 RAILWAY PARADE, BURWOOD

Title

DEMOLITION PLAN

SCALE 1 : 200 @ A1 1 : 400 @ A3

0 2m 4m 10m

Drawing Number **Revision**

AR-02-0100 A

Status



N

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CERTIS
Solution Focused Thinking
Certis (NSW) Pty Ltd

APPROVED

CDC 8772/1
14/06/2024

Certifying Authority: Peter Hofstetter
Accreditation No: BDC 2578

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Consultant Discipline Consultant Name

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Owner

Architect

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NSW 2134, Australia
P (02) 8212 5592

Project Project Number

RAILWAY PARADE

20-24 RAILWAY PARADE, BURWOOD

Title

LOCATION PLAN

SCALE 1 : 200 @ A1 1 : 400 @ A3

0 2m 4m 10m

Drawing Number **Revision**

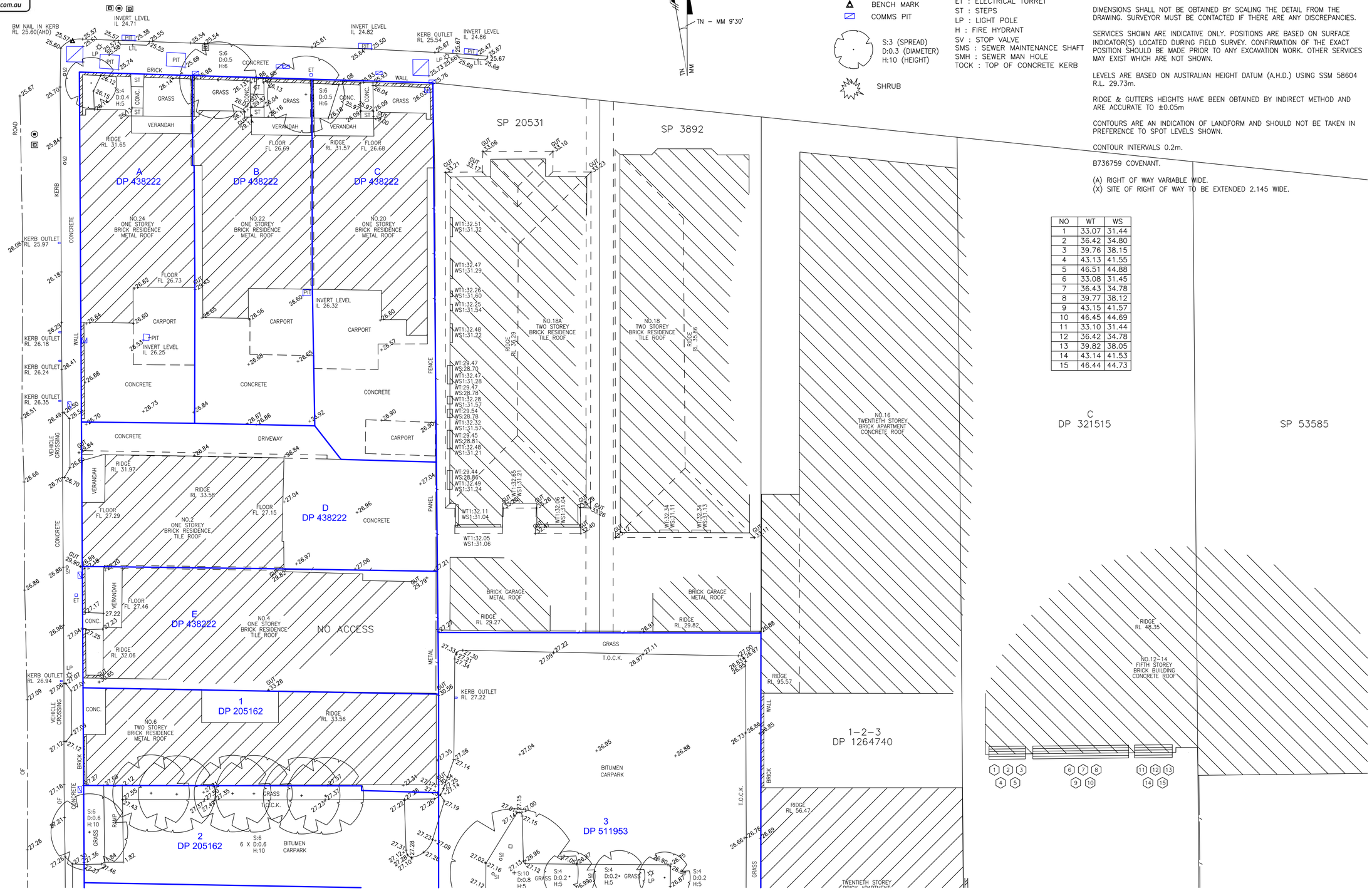
AR-01-0200 A

Status

DIAL BEFORE YOU DIG www.1100.com.au

RAILWAY PARADE

BURLEIGH STREET



LEGEND

- WATER METER
- BENCH MARK
- COMMS PIT
- S:3 (SPREAD) D:0.3 (DIAMETER) H:10 (HEIGHT)
- SHRUB

SIP : SEWER INSPECTION POINT
ET : ELECTRICAL TURRET
ST : STEPS
LP : LIGHT POLE
H : FIRE HYDRANT
SV : STOP VALVE
SMS : SEWER MAINTENANCE SHAFT
SMH : SEWER MAN HOLE
TOCK : TOP OF CONCRETE KERB

NOTES

A BOUNDARY SURVEY HAS BEEN UNDERTAKEN. BEARINGS, DIMENSIONS AND AREAS ARE FROM TITLE.

DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DETAIL FROM THE DRAWING. SURVEYOR MUST BE CONTACTED IF THERE ARE ANY DISCREPANCIES.

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LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (A.H.D.) USING SSM 58604 R.L. 29.73m.

RIDGE & GUTTERS HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ±0.05m

CONTOURS ARE AN INDICATION OF LANDFORM AND SHOULD NOT BE TAKEN IN PREFERENCE TO SPOT LEVELS SHOWN.

CONTOUR INTERVALS 0.2m.

B736759 COVENANT.

(A) RIGHT OF WAY VARIABLE WIDE.
(X) SITE OF RIGHT OF WAY TO BE EXTENDED 2.145 WIDE.

NO	WT	WS
1	33.07	31.44
2	36.42	34.80
3	39.76	38.15
4	43.13	41.55
5	46.51	44.88
6	33.08	31.45
7	36.43	34.78
8	39.77	38.12
9	43.15	41.57
10	46.45	44.69
11	33.10	31.44
12	36.42	34.78
13	39.82	38.05
14	43.14	41.53
15	46.44	44.73

A	08.06.22		

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RGM property surveys
ABN 37 145 495 825

SCALE 1 : 150 @ A1	SURVEY J.A.	DRAWN N.N.	CLIENT BUILTCOM CONSTRUCTIONS
LOCAL GOV'T AREA BURWOOD	LEVEL BK	DESIGNED	
HUY THAI – REGISTERED SURVEYOR	DATE OF SURVEY 07.06.22	CHECKED A.E.	
	HEIGHT ORIGIN AHD	APPROVED H.T.	

PROJECT TITLE
20–24 RAILWAY PARADE & 2–4 BURLEIGH STREET, BURWOOD

DRAWING TITLE
PLAN SHOWING LEVELS & DETAIL OVER DP 438222 & DP 205162 & DP 202437 & DP 420885 & LOT 1 IN DP 574391 & LOT 3 IN DP 511953 & LOT 1 IN DP 305065 & LOT A–B IN DP 321515

CAD REF C:\220801.dwg
DRAWING NO 220801/001
SHEET 1 OF 6
JOB NAME RAILWAY
REV A

DRAWING LIST

00	COVER SHEET
01	PROJECT SUMMARY
02	APARTMENT SCHEDULE
03	GFA & FSR CALCULATIONS
04	GFA & FSR CALCULATIONS
05	LOCATION PLAN
06	SITE PLAN
07	STREETSCAPE & BURWOOD HEIGHT PLANE
08	BASEMENT 5 PLAN
09	BASEMENTS 2- 4 PLAN
10	BASEMENT 1 PLAN
11	GROUND FLOOR PLAN
12	LEVEL 1 FLOOR PLAN- HOTEL FACILITIES
13	LEVEL 2 FLOOR PLAN- HOTEL FACILITIES
14	LEVELS 3-18 FLOOR PLAN- RESIDENTIAL APARTMENTS
15	LEVEL 19 FLOOR PLAN- PLANT
16	LEVELS 20-25 FLOOR PLAN- HOTEL ROOMS
17	LEVELS 26-31 FLOOR PLAN- HOTEL ROOMS
18	LEVEL 32 FLOOR PLAN- PLANT
19	LEVELS 33- 35 FLOOR PLAN- COMMERCIAL OFFICES
20	LEVEL 36 FLOOR PLAN- HOTEL FACILITIES
21	LEVEL 37 FLOOR PLAN- HOTEL FACILITIES
22	LEVEL 38 FLOOR PLAN- RESIDENTIAL C.O.S
23	ROOF PLAN
24	SECTIONS A & B
25	SECTIONS C & D
26	SECTIONS E & F
27	SECTION G
28	ELEVATIONS- NORTH & WEST
29	ELEVATIONS- SOUTH & EAST
30	SHADOW DIAGRAMS- JUNE 21 9AM-10AM
31	SHADOW DIAGRAMS- JUNE 21 11AM-12PM
32	SHADOW DIAGRAMS- JUNE 21 1PM-3PM
33	SHADOW DIAGRAMS- JAN 21 9AM & FEB 21 9AM
34	SHADOW DIAGRAMS- MAR 21 9AM & APR 21 9AM
35	SHADOW DIAGRAMS- MAY 21 9AM & JUN 21 9AM
36	SHADOW DIAGRAMS- JUL 21 9AM & AUG 21 9AM
37	SHADOW DIAGRAMS- SEP 21 9AM & OCT 21 9AM
38	SHADOW DIAGRAMS- NOV 21 9AM DEC 21 9AM
39	SOLAR ACCESS AND NATURAL CROSS VENTILATION
40	ACCESSIBLE LAYOUTS
41	FACADE GLAZING TYPES
42	FACADE GLAZING TYPES
43	POTENTIAL SURROUNDING DEVELOPMENT
44	POTENTIAL SURROUNDING DEVELOPMENT
45	POTENTIAL SURROUNDING DEVELOPMENT
46	PERSPECTIVE 1
47	PERSPECTIVE 2
48	PERSPECTIVE 3

ARCHITECTURE
Tourism + Residential

Office: Level 2, 68 Sophia Street, Surry Hills NSW 2010
+ 61 2 9283 0860 | www.ptiarchitecture.com.au
Nominated Registered Architect: Peter Israel (reg no 5064)
ABN 90 050 071 022



RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES

2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

PREPARED FOR

CONQUEST

GFA & FSR CALCULATIONS
PROJECT NO: P709
ADDRESS: 2-4 BURLEIGH ST & 20-24 RAILWAY PD, BURWOOD
REVISION/ DATE: 16.08.24

RESIDENTIAL APARTMENTS (qty) **HOTEL ROOMS (qty)**

LEVEL	STUDIO	1 BED	2 BED (DUAL KEY)	3 BED	TOTAL APART.	TYPE A5 (25sqm-29sqm)	TYPE A6 (25sqm-29sqm)	TYPE A7 (25sqm-29sqm)	TYPE B1 (30sqm-35sqm)	TYPE B2 ACC. (30sqm-35sqm)	TOTAL HOTEL ROOM
GF	-	-	-	-	-	-	-	-	-	-	-
L1	-	-	-	-	-	-	-	-	-	-	-
L2	-	-	-	-	-	-	-	-	-	-	-
L3	-	-	3	-	3	-	-	-	-	-	-
L4	-	-	3	-	3	-	-	-	-	-	-
L5	-	-	3	-	3	-	-	-	-	-	-
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L7	-	-	3	-	3	-	-	-	-	-	-
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L35	-	-	-	-	-	-	-	-	-	-	-
L36	-	-	-	-	-	-	-	-	-	-	-
L37	-	-	-	-	-	-	-	-	-	-	-
L38	-	-	-	-	-	-	-	-	-	-	-
TOTAL APT (qty)	0	0	48	0	**48**	48	24	24	18	6	**120**
UNIT MIX (%)	0%	0%	100%	0%	100%	40%	20%	20%	15%	5%	100%

UNITS (qty)

UNIT TYPE	UNIT COUNT	YIELD
2 BED (DUAL KEY)	48	100%
TOTAL	48	100%

GFA CALCULATION (sqm)

USE	RESIDENTIAL AFFORDABLE HOUSING (sqm)	RESIDENTIAL (sqm)	HOTEL (sqm)	OFFICE/ COMMERCIAL (sqm)	TOTAL GFA (sqm)
LOBBY/ COMMERCIAL	-	108	217	-	**325**
HOTEL FACILITIES	-	-	541	-	**541**
HOTEL FACILITIES	-	-	262	-	**262**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS (AH)	298	-	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
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RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
RESIDENTIAL APARTMENTS	-	298	-	-	**298**
PLANT	-	-	-	-	**-**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
HOTEL ROOMS	-	-	343	-	**343**
PLANT	-	-	-	-	**-**
OFFICE	-	-	-	344	**344**
OFFICE	-	-	-	327	**327**
OFFICE	-	-	-	327	**327**
HOTEL FACILITIES	-	-	216	-	**216**
HOTEL FACILITIES	-	-	167	-	**167**
RESIDENTIAL C.O.S	-	5	-	-	**5**
TOTAL GFA (sqm)	**1,788**	**3,093**	**5,519**	**998**	**11,398**
USE MIX (%)	**16%**	**27%**	**48%**	**9%**	**100%**

PLANNING CONTROL CALCULATIONS

DESCRIPTION	PLANNING INSTRUMENT	BONUS (%)	(m/ X:1/ sqm/ %)	COMPLIANCE Y/N
SITE AREA				
MIN. SITE AREA (sqm)	LEP		-	
SUBJECT SITE AREA (sqm)			**1,329**	Y
HEIGHT OF BUILDING				
PERMISSIBLE HOB (m)	LEP BHP		0.0	
BONUS HOB (m)		0%	0.0	
TOTAL MAX. HOB (m)			0.0	
STREET WALL INCLUSIVE IN MAX. HEIGHT (m)			15.0	Y
PROPOSED HOB (m)			**143.9**	Y
FLOOR SPACE RATIO				
PERMISSIBLE FSR (X:1)	LEP		6.60	
BONUS FSR (X:1)		0%	0.00	
SUBTOTAL FSR (X:1)			**6.60**	
BONUS FSR (X:1)	AH BONUS	30%	1.98	
TOTAL MAXIMUM FSR PERMISSIBLE (X:1)			**8.58**	
PROPOSED RESIDENTIAL FSR (X:1)			**3.67**	
PROPOSED COMMERCIAL FSR (X:1)			**4.90**	
PROPOSED TOTAL FSR (X:1)			**8.58**	Y
GROSS FLOOR AREA				
PERMISSIBLE GFA (sqm)			8,771	
BONUS GFA (sqm)		0%	-	
SUBTOTAL GFA (sqm)			**8,771**	
BONUS GFA (sqm)	AH BONUS	30%	2,631	
TOTAL MAXIMUM PERMISSIBLE GFA (sqm)			**11,403**	
PROPOSED RESIDENTIAL GFA (sqm)			**4,881**	
PROPOSED COMMERCIAL GFA (sqm)	INCLUSIVE IN MAX. GFA		**6,517**	
PROPOSED TOTAL GFA (sqm)			**11,398**	Y
AFFORDABLE HOUSING				
MINIMUM AFFORDABLE HOUSING (sqm)	INCLUSIVE IN MAX. GFA	15%	1,710	
PROPOSED TOTAL AFFORDABLE HOUSING (sqm)			**1,788**	Y
LANDSCAPING AREA				
MIN. REQUIREMENT (%)			25%	
MIN. REQUIREMENT (sqm)			332	
PROPOSED (%)			**25%**	Y
PROPOSED (sqm)			**332**	Y
COMMUNAL OPEN SPACE				
MIN. REQUIREMENT (%)			25%	
MIN. REQUIREMENT (sqm)			332	
PROPOSED (%)			**28%**	Y
PROPOSED (sqm)			**370**	Y

CAR PARKING

LEVEL	RESIDENTIAL	HOTEL	COMMERCIAL	TOTAL (no)
GF	-	-	-	-
B1	12	-	7	19
B2	30	-	-	30
B3	30	-	-	30
B4	-	30	-	30
B5	-	30	-	30
PROPOSED TOTAL (no.)	**72**	**60**	**7**	**139**

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
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ABN 90 050 071 022

CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
PROJECT SUMMARY

SCALE: 1:1 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 01 dwg no. P24 revision

UNIT SCHEDULE (qty)

DUAL KEY APARTMENT NO.	2 BED, 2 BATH	TOTAL	UNIT NO.	STUDIO	1 BED, 1 BATH	TOTAL
301	1	3	301A	-	1	6
			301B	1	-	
302	1		302A	1	-	
			302B	-	1	
303	1		303A	-	1	
			303B	1	-	
401	1	3	401A	-	1	6
			401B	1	-	
402	1		402A	1	-	
			402B	-	1	
403	1		403A	-	1	
			403B	1	-	
501	1	3	501A	-	1	6
			501B	1	-	
502	1		502A	1	-	
			502B	-	1	
503	1		503A	-	1	
			503B	1	-	
601	1	3	601A	-	1	6
			601B	1	-	
602	1		602A	1	-	
			602B	-	1	
603	1		603A	-	1	
			603B	1	-	
701	1	3	701A	-	1	6
			701B	1	-	
702	1		702A	1	-	
			702B	-	1	
703	1		703A	-	1	
			703B	1	-	
801	1	3	801A	-	1	6
			801B	1	-	
802	1		802A	1	-	
			802B	-	1	
803	1		803A	-	1	
			803B	1	-	
901	1	3	901A	-	1	6
			901B	1	-	
902	1		902A	1	-	
			902B	-	1	
903	1		903A	-	1	
			903B	1	-	
1001	1	3	1001A	-	1	6
			1001B	1	-	
1002	1		1002A	1	-	
			1002B	-	1	
1003	1		1003A	-	1	
			1003B	1	-	
1101	1	3	1101A	-	1	6
			1101B	1	-	
1102	1		1102A	1	-	
			1102B	-	1	
1103	1		1103A	-	1	
			1103B	1	-	
1201	1	3	1201A	-	1	6
			1201B	1	-	
1202	1		1202A	1	-	
			1202B	-	1	
1203	1		1203A	-	1	
			1203B	1	-	
1301	1	3	1301A	-	1	6
			1301B	1	-	
1302	1		1302A	1	-	
			1302B	-	1	
1303	1		1303A	-	1	
			1303B	1	-	
1401	1	3	1401A	-	1	6
			1401B	1	-	
1402	1		1402A	1	-	
			1402B	-	1	
1403	1		1403A	-	1	
			1403B	1	-	
1501	1	3	1501A	-	1	6
			1501B	1	-	
1502	1		1502A	1	-	
			1502B	-	1	
1503	1		1503A	-	1	
			1503B	1	-	
1601	1	3	1601A	-	1	6
			1601B	1	-	
1602	1		1602A	1	-	
			1602B	-	1	
1603	1		1603A	-	1	
			1603B	1	-	
1701	1	3	1701A	-	1	6
			1701B	1	-	
1702	1		1702A	1	-	
			1702B	-	1	
1703	1		1703A	-	1	
			1703B	1	-	
1801	1	3	1801A	-	1	6
			1801B	1	-	
1802	1		1802A	1	-	
			1802B	-	1	
1803	1		1803A	-	1	
			1803B	1	-	
TOTAL (qty)	48	48		48	48	96
UNIT MIX (%)	100%	100%		50%	50%	100%

AREA SCHEDULE (m2)

AFFORDABLE HOUSING	POST ADAPTABLE	SILVER STANDARD
1		
1		
1		1
1	1	1
1		
1		
1		
1		
1		1
1	1	1
1		
1		
1		
1		
1		
1		
1		
1		1
1	1	1
1		
1		
1		
1		
1		
1		
		1
	1	1
		1
		1
	1	1
		1
		1
	1	1
		1
		1
	1	1
		1
		1
	1	1
		1
		1
	1	1
		1
36	10	28
38%	10%	29%

STORAGE SCHEDULE (m3)

UNIT	PRIVATE OPEN SPACE	TOTAL
49	9	58
31	4	35
36	10	46
51	7	58
48	8	56
34	6	40

WITHIN UNIT	OUTSIDE OF UNIT	TOTAL	% OF MIN REQUIRED WITHIN UNIT
4	2	6	67%
3	1	4	75%
1	3	4	25%
7	0	7	117%
4	2	6	67%
1	3	4	25%

SOLAR ACCESS SCHEDULE (qty)

LIVING SPACE	PRIVATE OPEN SPACE	NO DIRECT SUNLIGHT TO UNIT
1	1	
1	1	
1	1	
1	1	
1	1	
		1
80	80	16
83%	83%	17%

NATURAL CROSS VENTILATION SCHEDULE (qty)

NATURALLY CROSS VENTILATED	
1	6
1	
1	
1	
1	6
1	
1	
1	
1	6
1	
1	
1	
1	6
1	
1	
1	
20	30
67%	

SCOPING MEETING

P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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REV	DESCRIPTION	BY	DATE

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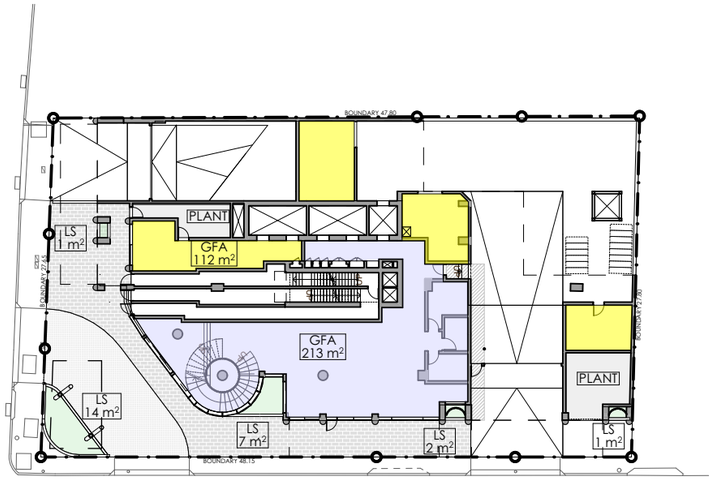
CLIENT :
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PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

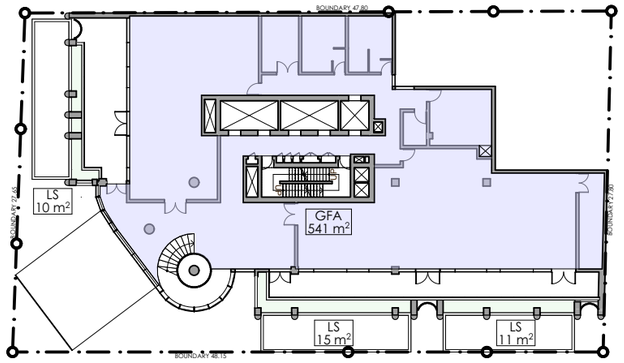
DRAWING TITLE:
APARTMENT SCHEDULE

SCALE: 1:1 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

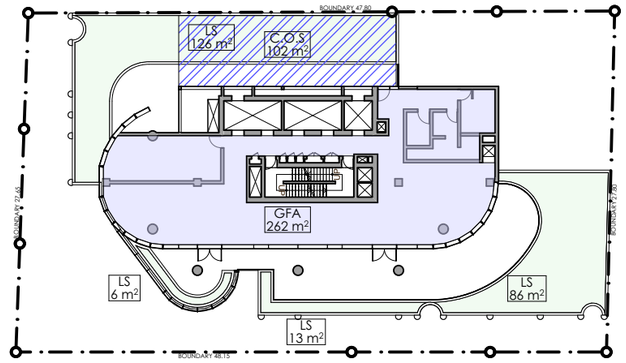
SK stage. 02 dwg no. P24 revision



1 GROUND FLOOR
1:500



2 LEVEL 1
1:500

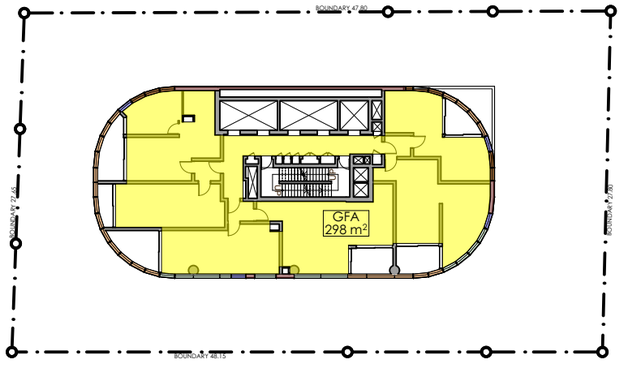


3 LEVEL 2
1:500

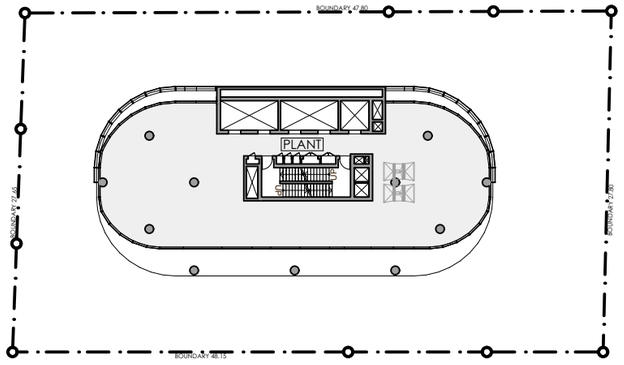
GFA LEGEND

- GFA (RESIDENTIAL)
- GFA (COMM. OFFICE & HOTEL)
- RESIDENTIAL COMMUNAL OPEN SPACE
- LANDSCAPING AREA
- PLANT

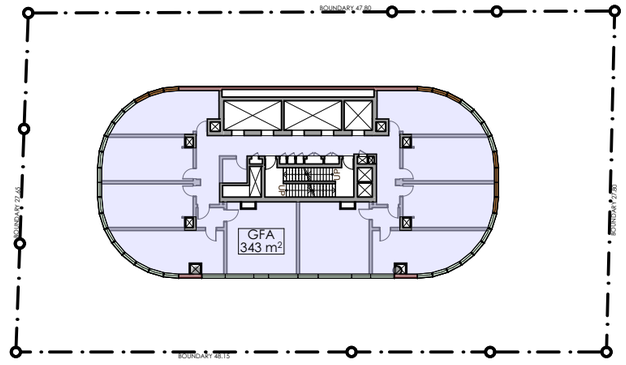
SCOPING MEETING



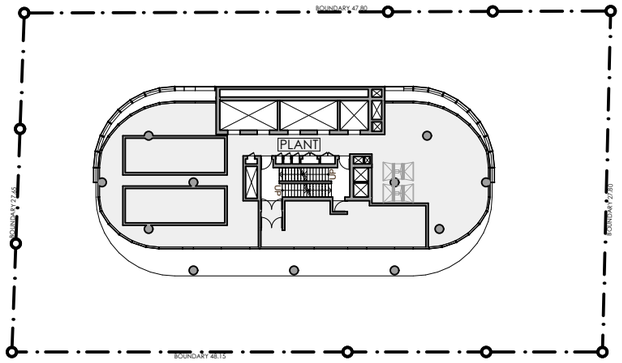
4 LEVEL 3-18 (AH LEVEL 3-8)
1:500



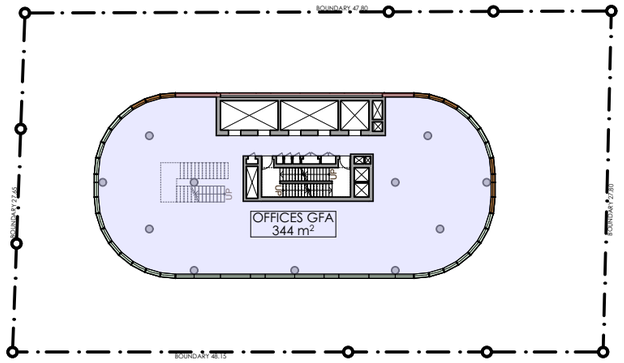
5 LEVEL 19
1:500



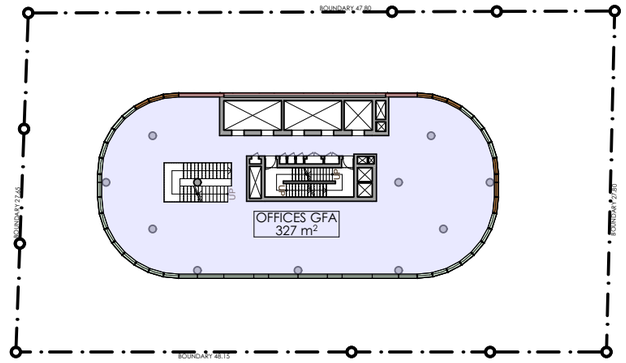
6 LEVELS 20-31
1:500



7 LEVEL 32
1:500



8 LEVEL 33
1:500



9 LEVEL 34
1:500

10m 30m
1:500

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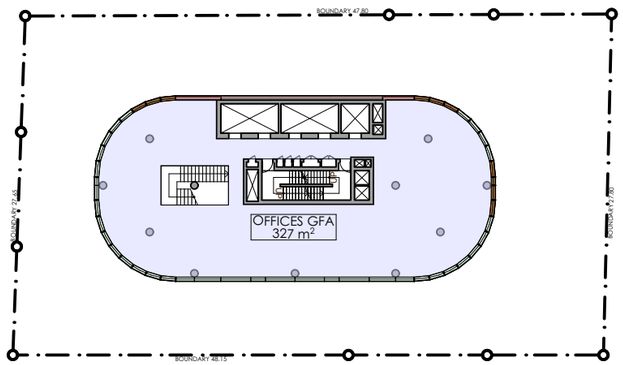
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

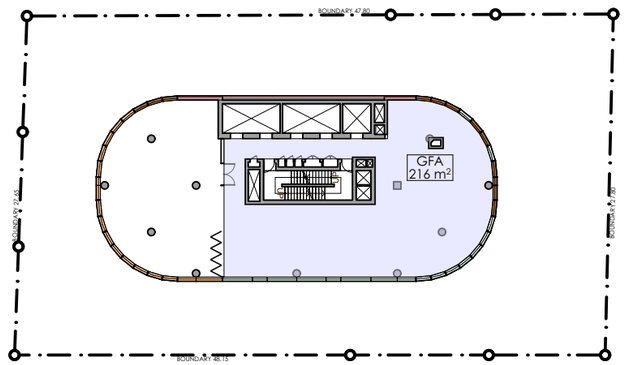
DRAWING TITLE:
GFA & FSR CALCULATIONS

SCALE: 1:500 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

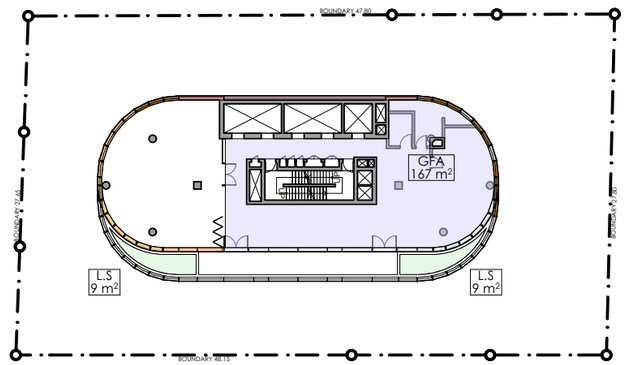
SK stage. 03 dwg no. P24 revision



1 LEVEL 35
1:500



2 LEVEL 36
1:500



3 LEVEL 37
1:500

4 LEVEL 38
1:500

5 ROOF
1:500

GFA LEGEND

- GFA (RESIDENTIAL)
- GFA (COMM. OFFICE & HOTEL)
- RESIDENTIAL COMMUNAL OPEN SPACE
- LANDSCAPING AREA
- PLANT

SCOPING MEETING

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10m 30m
1:500

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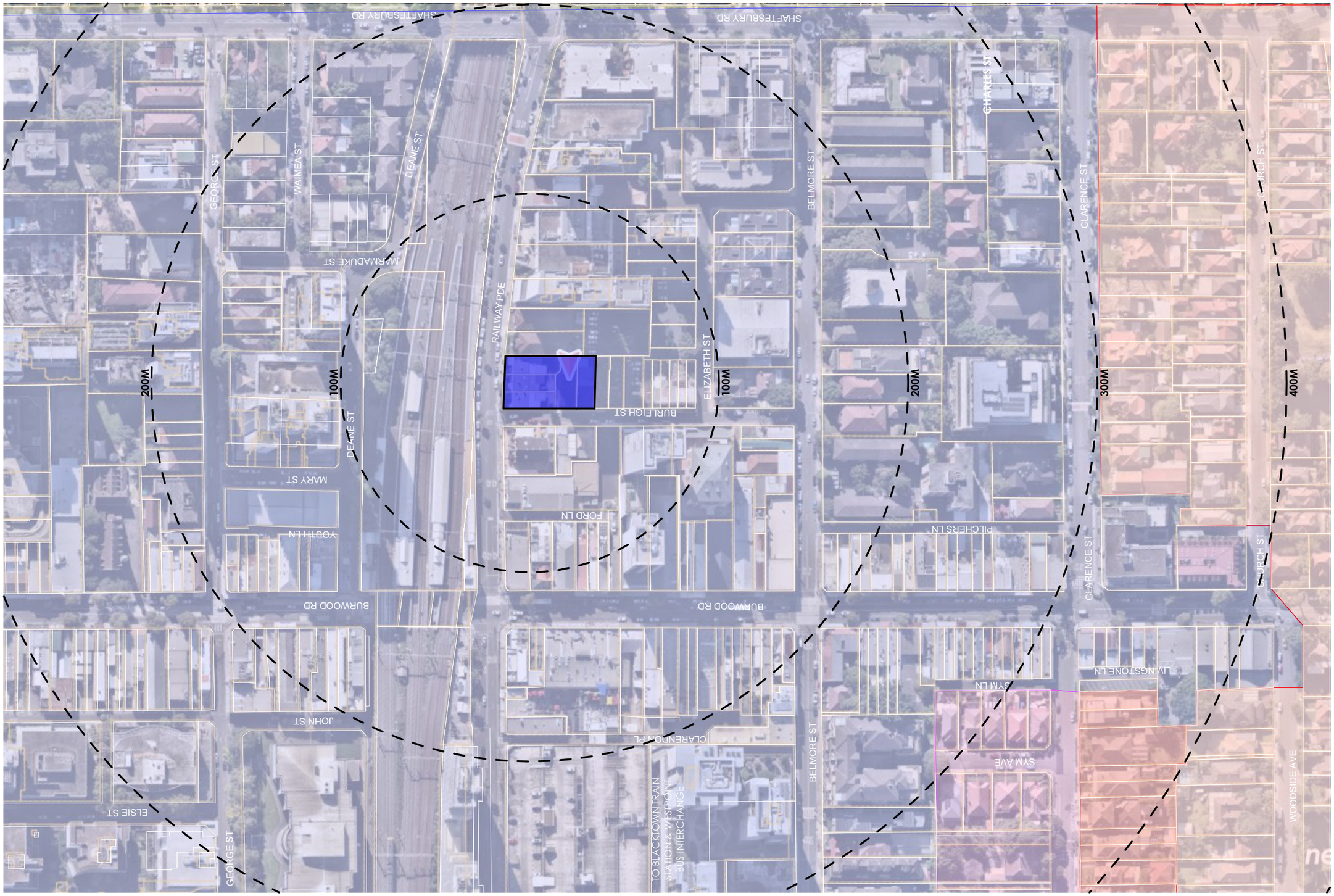
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
GFA & FSR CALCULATIONS

SCALE: 1:500 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 04 dwg no. P24 revision



50m 100m
1:2000

SUBJECT SITE

ZONE MU1
MIXED USE

ZONE R2
LOW DENSITY RESIDENTIAL

ZONE R1
GENERAL RESIDENTIAL

ZONE R3
MEDIUM DENSITY RESIDENTIAL

SCOPING MEETING

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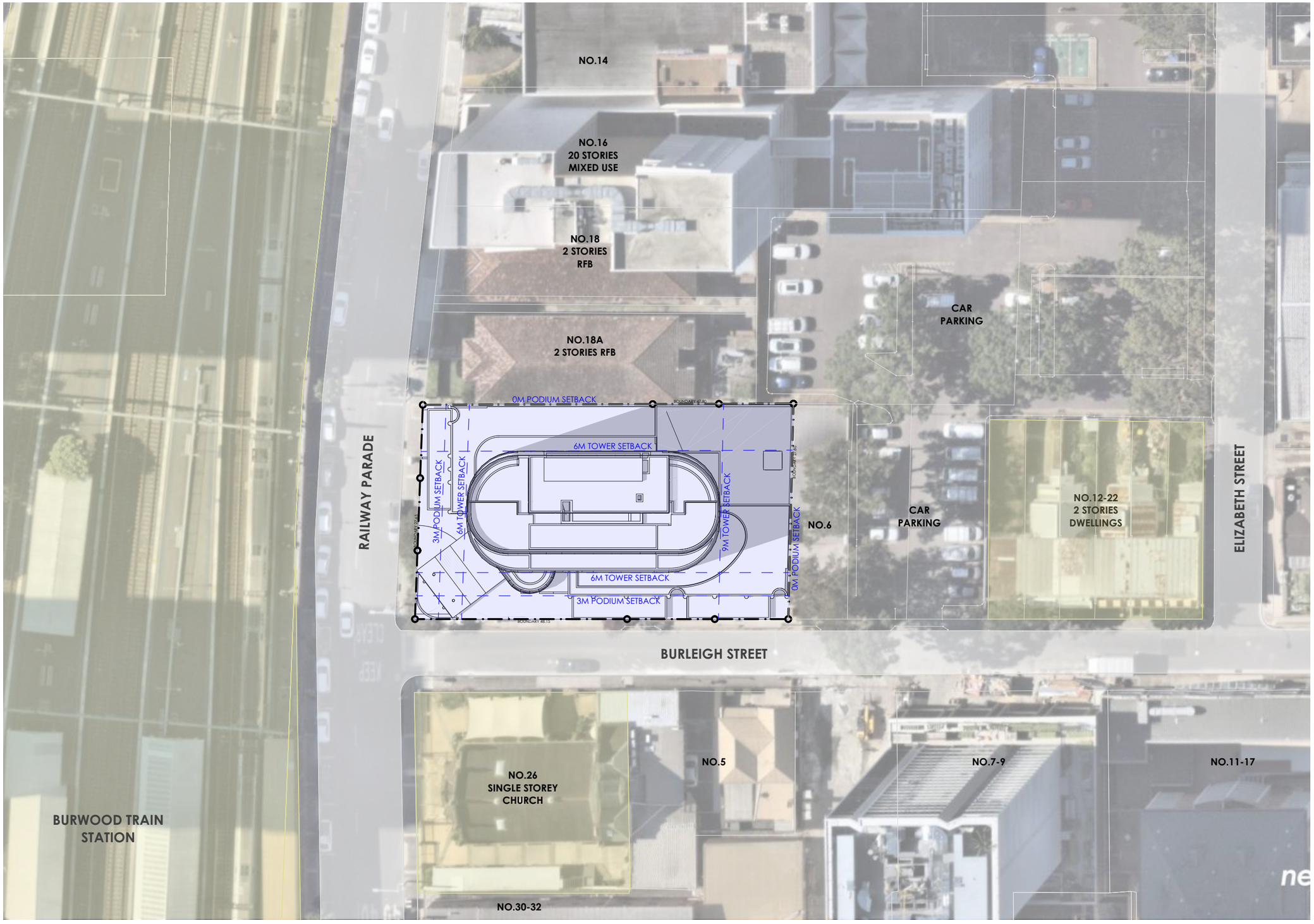
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LOCATION PLAN

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 05 dwg no. P24 revision



1 SITE/ SITE ANALYLIS PLAN
1:500

SUBJECT SITE

HERITAGE ITEMS

10m 30m
1:500

SCOPING MEETING

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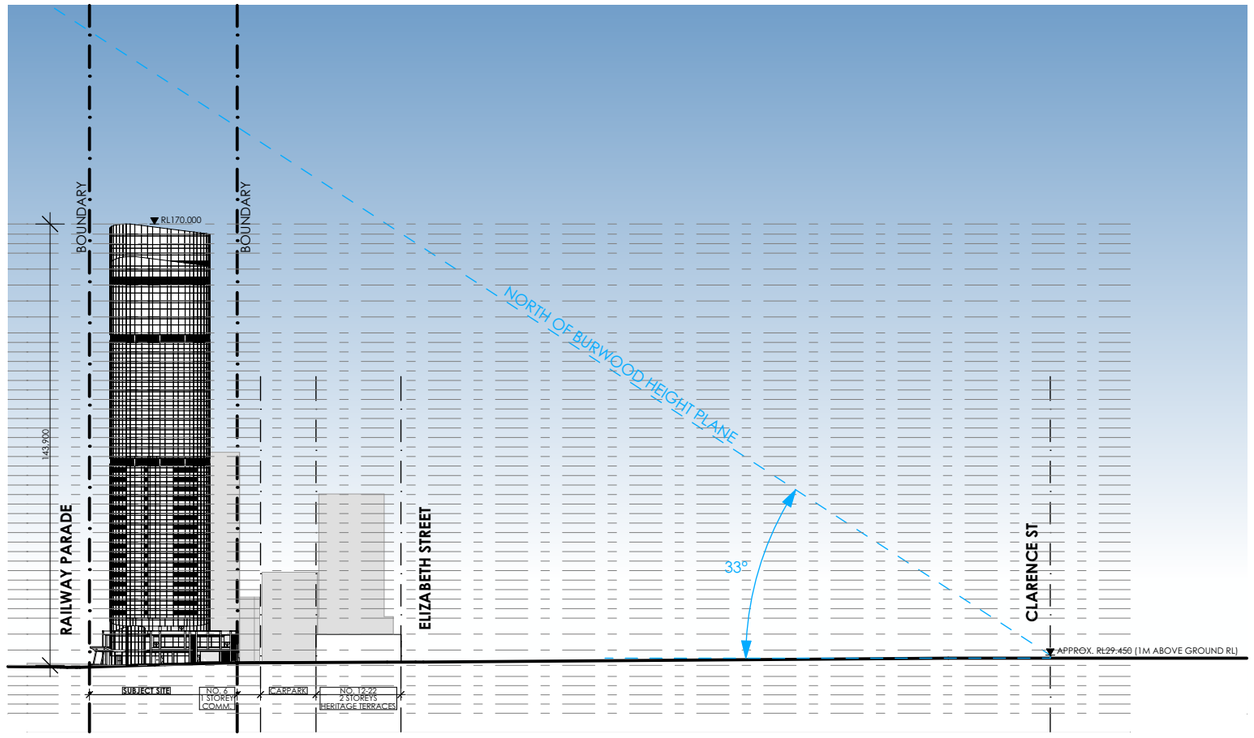
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SITE PLAN

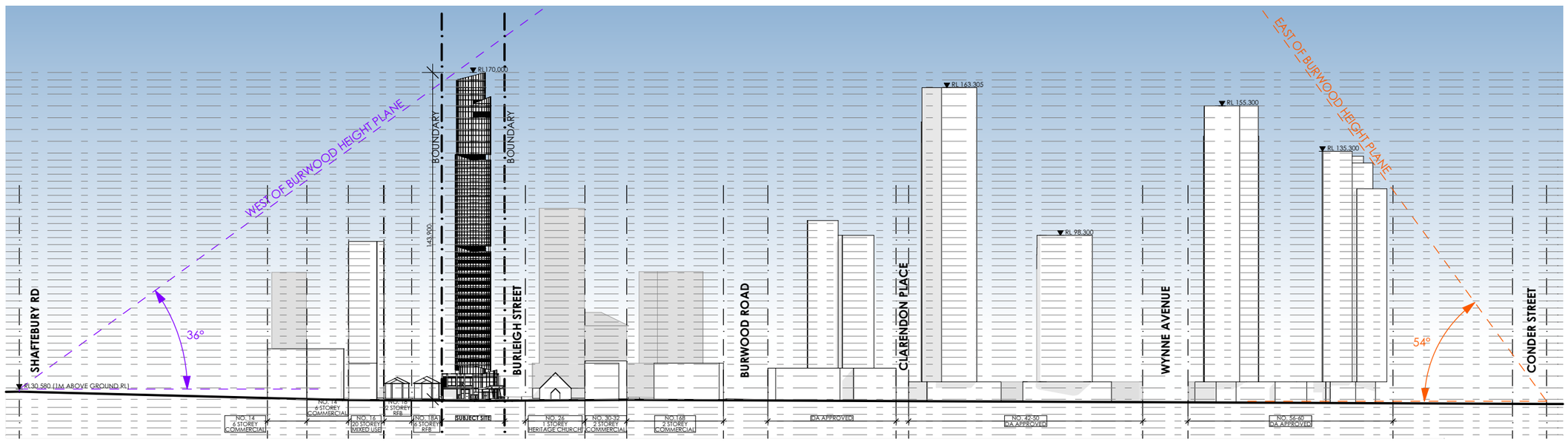
SCALE:	1:500 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 06 dwg no. P24 revision



1 BURLEIGH ST- HEIGHT PLANE D
1:2000



2 RAILWAY PDE- HEIGHT PLANE A & C
1:2000



50m 100m
1:2000

Building Height Plane

BHP Line Symbol	BHP Line Height	BHP Projected Angle	BHP General Orientation
A	1.0m	54°	East of BHP line
B	7.2m	54°	East of BHP line
C	1.0m	36°	West of BHP line
D	1.0m	33°	North of BHP line
E	1.8m	33°	North of BHP line

SUBJECT SITE

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

ARCHITECTURE
Tourism + Residential

Office: Level 2, 68 Sophia Street, Surry Hills NSW 2010
+ 61 2 9283 0860 | www.ptiarchitecture.com.au
Nominated Registered Architect: Peter Israel (reg no 5064)
ABN 90 050 071 022

CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
STREETSCAPE & BURWOOD HEIGHT PLANE

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 07 dwg no. P24 revision

5m 10m
1:200



1 BASEMENT LEVEL 5
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

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PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
BASEMENT 5 PLAN

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 08 dwg no. P24 revision

5m 10m
1:200



1 BASEMENTS LEVELS 2-4
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

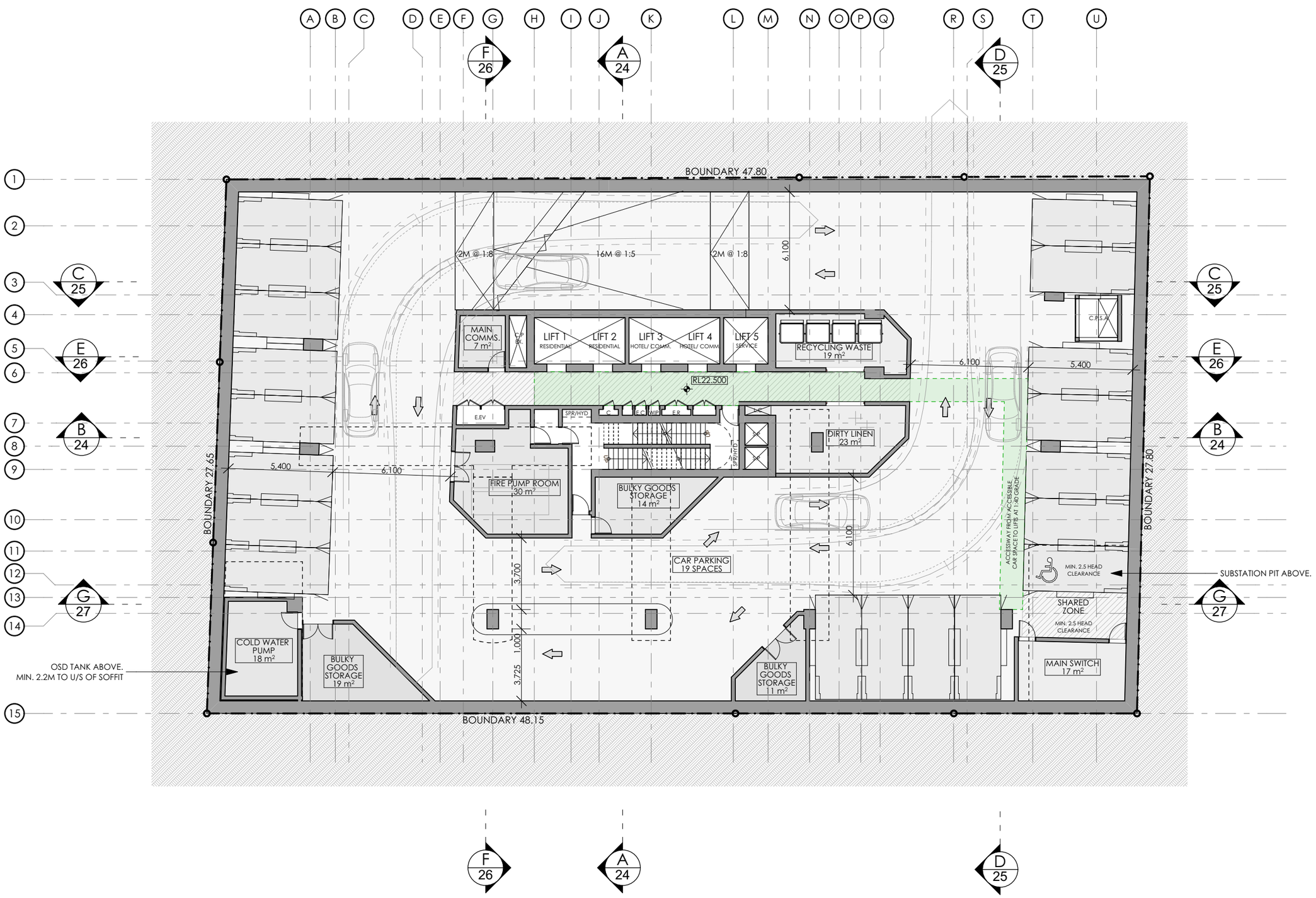
DRAWING TITLE:
BASEMENTS 2- 4 PLAN

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 09 dwg no. P24 revision

5m 10m
1:200



1 BASEMENT LEVEL 1
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

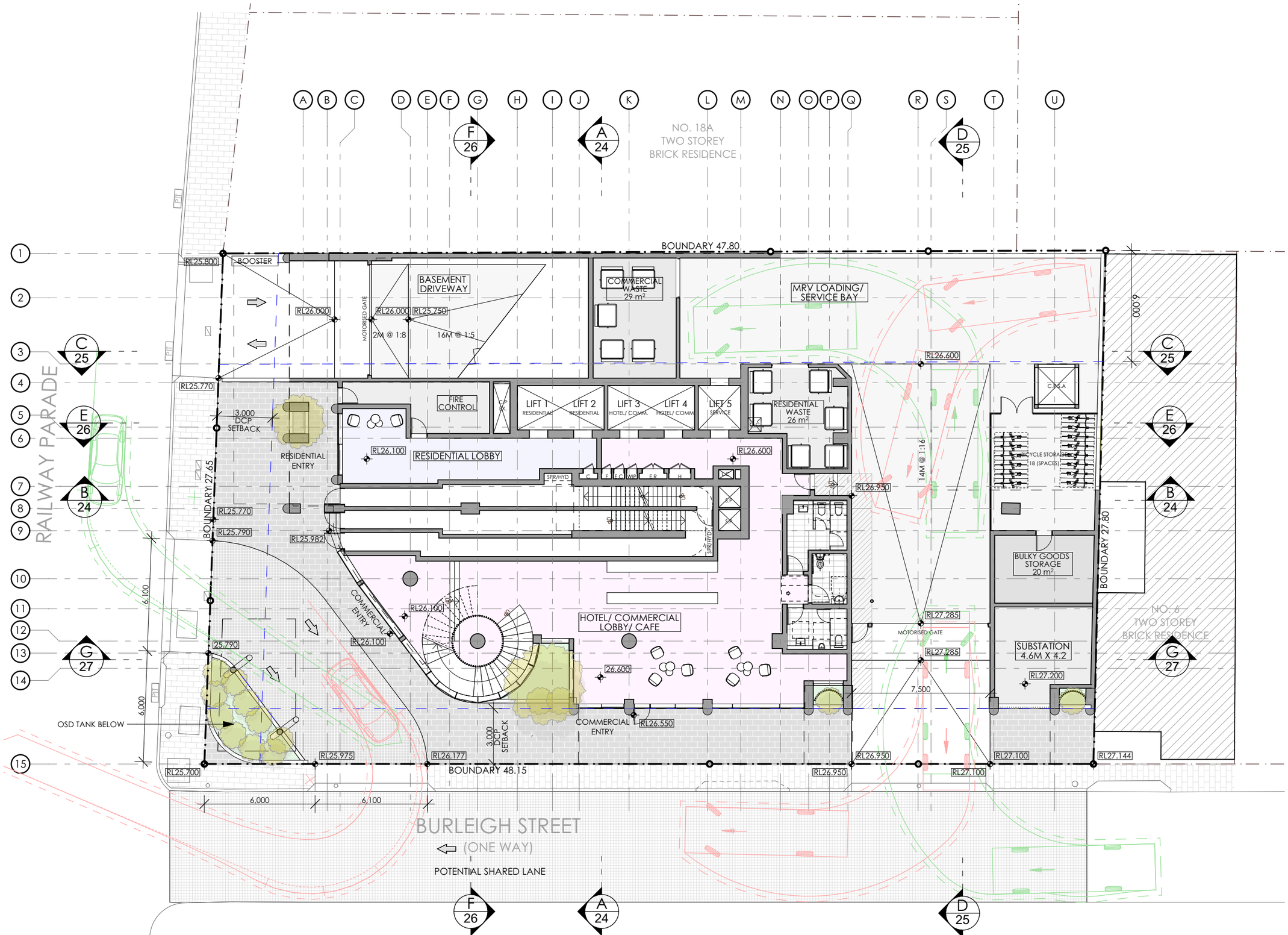
DRAWING TITLE:
BASEMENT 1 PLAN

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. | 10 dwg no. | P24 revision

5m 10m
1:200



1 GROUND FLOOR
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

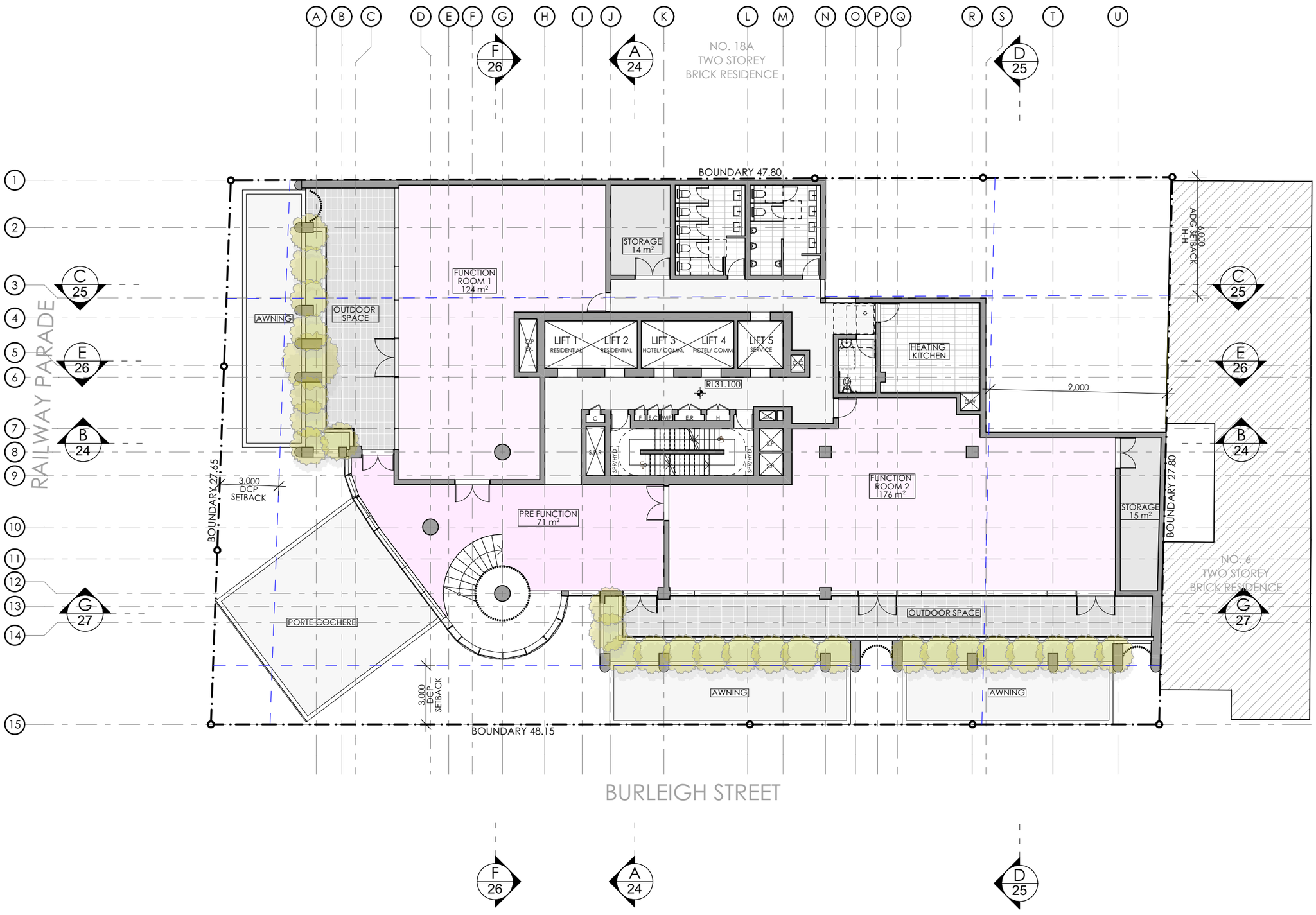
DRAWING TITLE:
GROUND FLOOR PLAN

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 11 dwg no. P24 revision

5m 10m
1:200



1 HOTEL FACILITIES LEVEL 1
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
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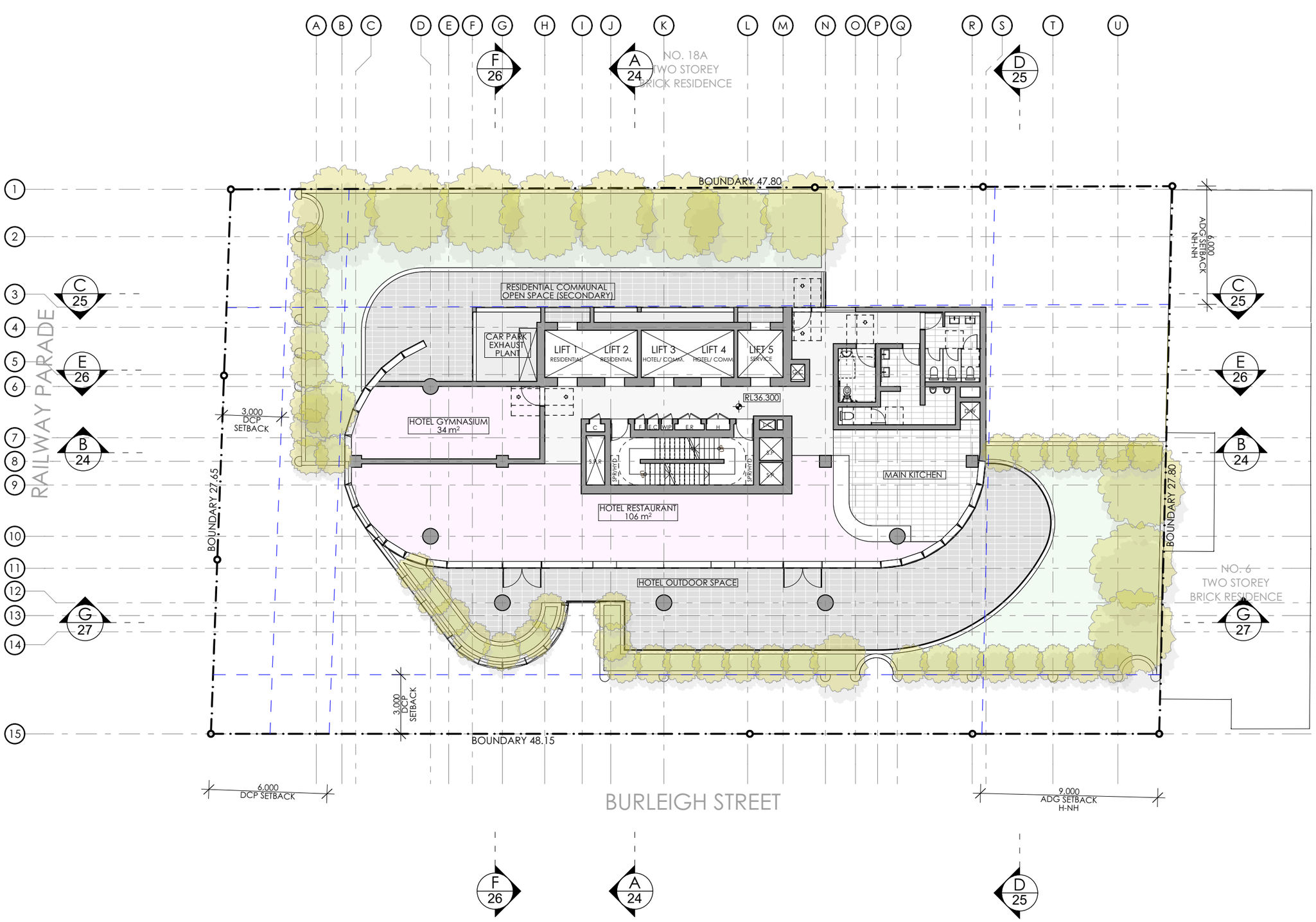
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 1 FLOOR PLAN- HOTEL FACILITIES

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 12 dwg no. P24 revision

5m 10m
1:200



1 HOTEL FACILITIES LEVEL 2
1:200

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
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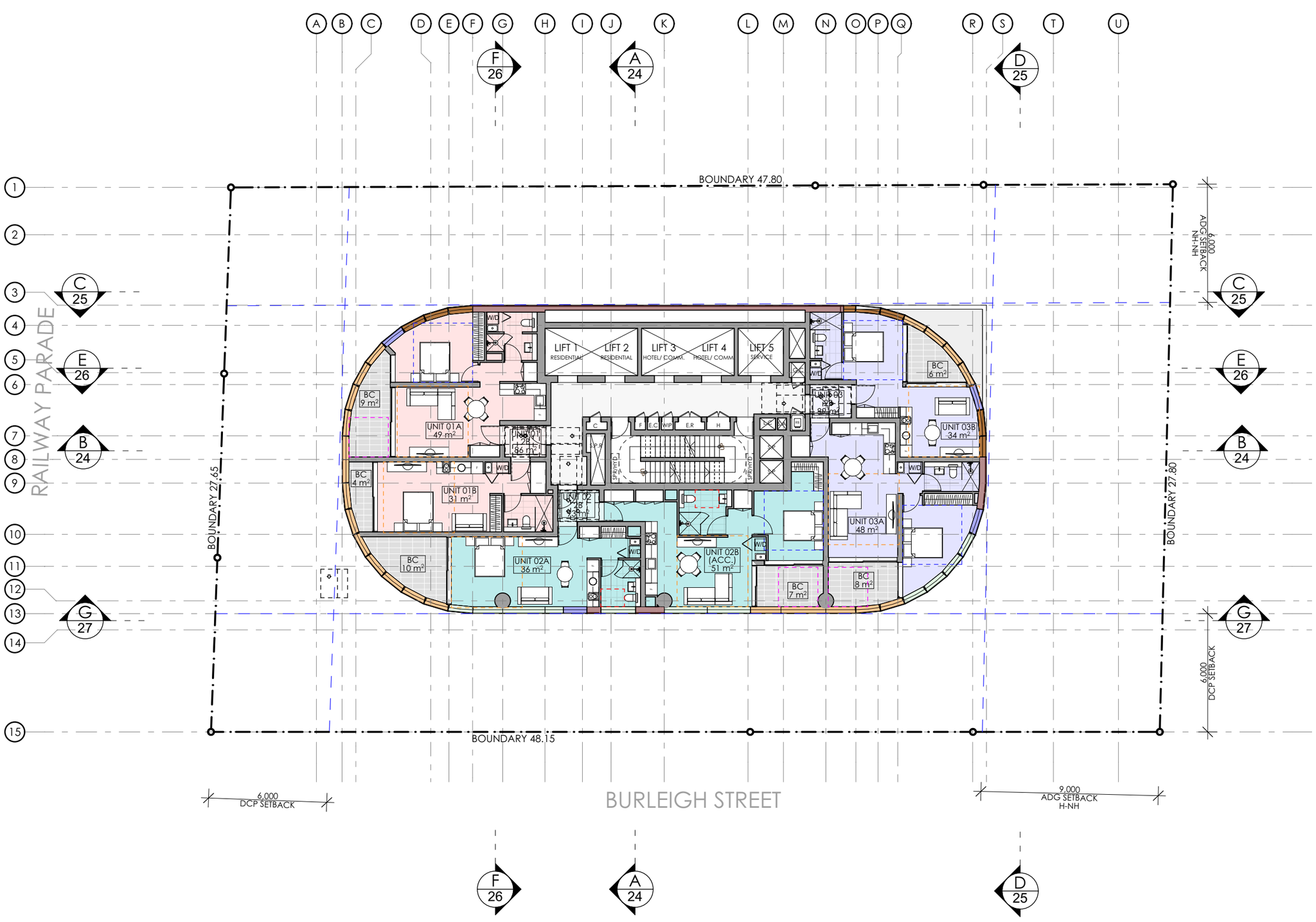
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 2 FLOOR PLAN- HOTEL FACILITIES

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 13 dwg no. P24 revision



1 RESIDENTIAL APARTMENTS LEVELS 3- 18
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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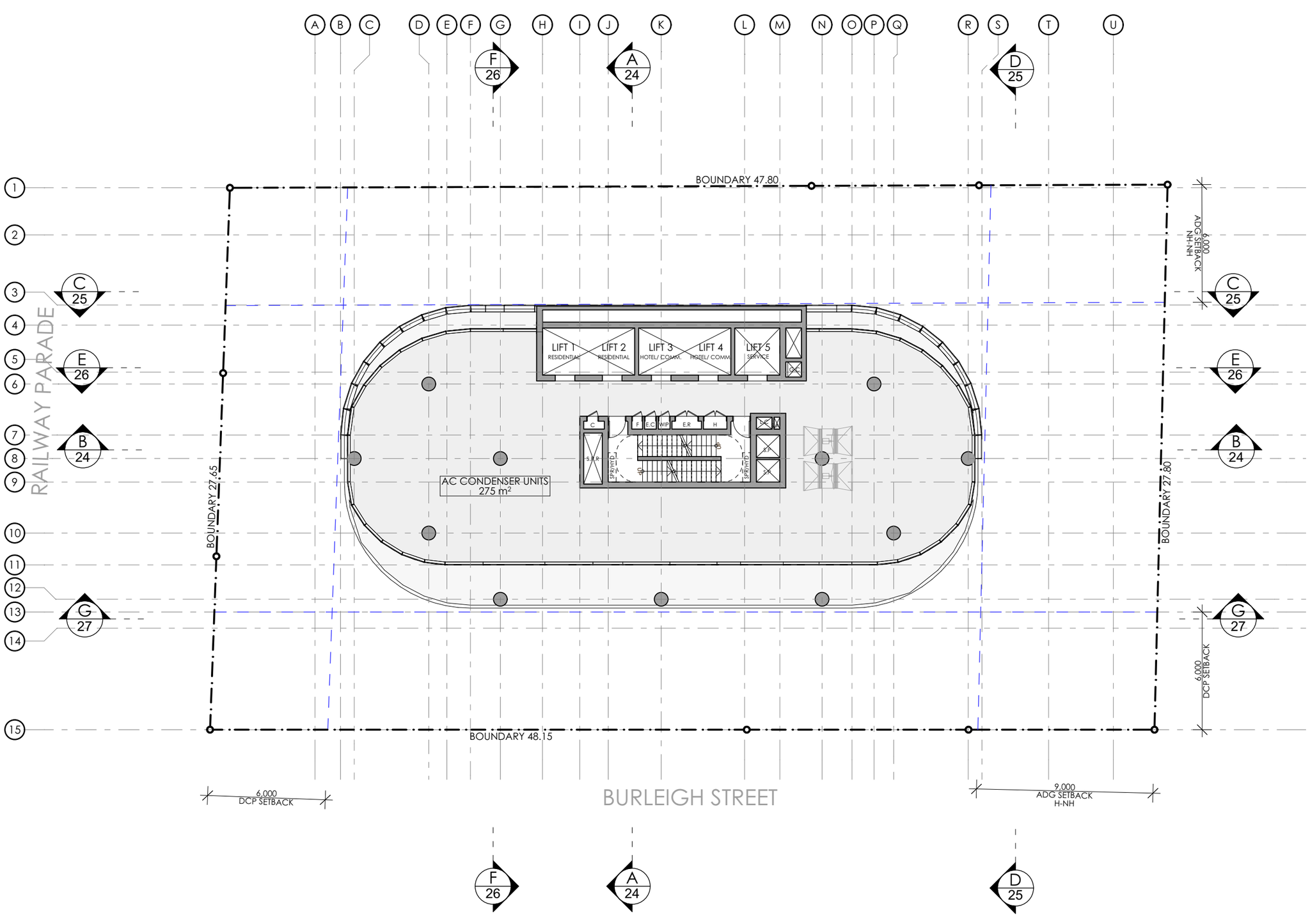
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVELS 3-18 FLOOR PLAN- RESIDENTIAL APARTMENTS

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 14 dwg no. P24 revision



1 PLANT LEVEL 19
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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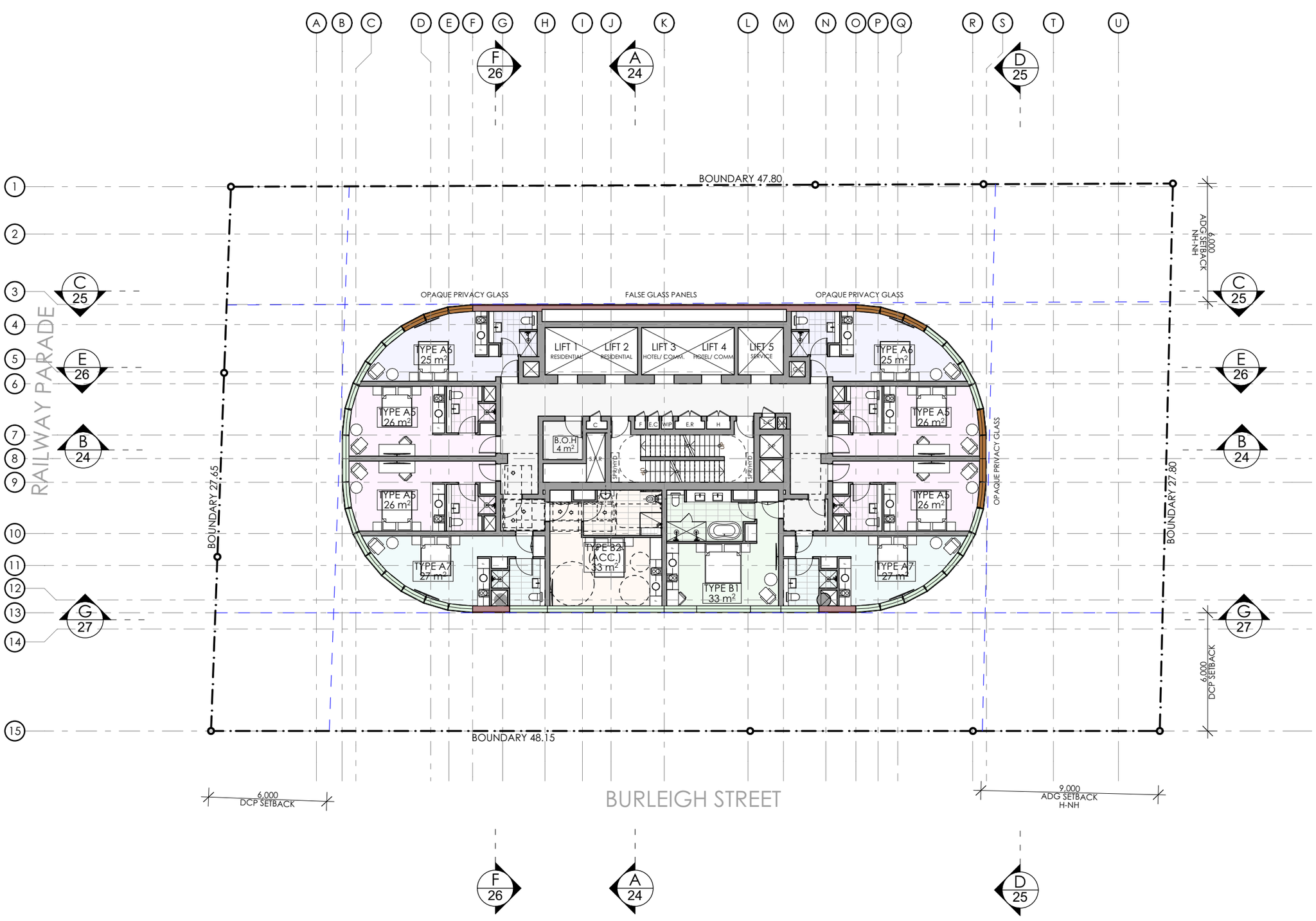
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 19 FLOOR PLAN- PLANT

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. | 15 dwg no. | P24 revision



1 HOTEL ROOMS LEVELS 20-25
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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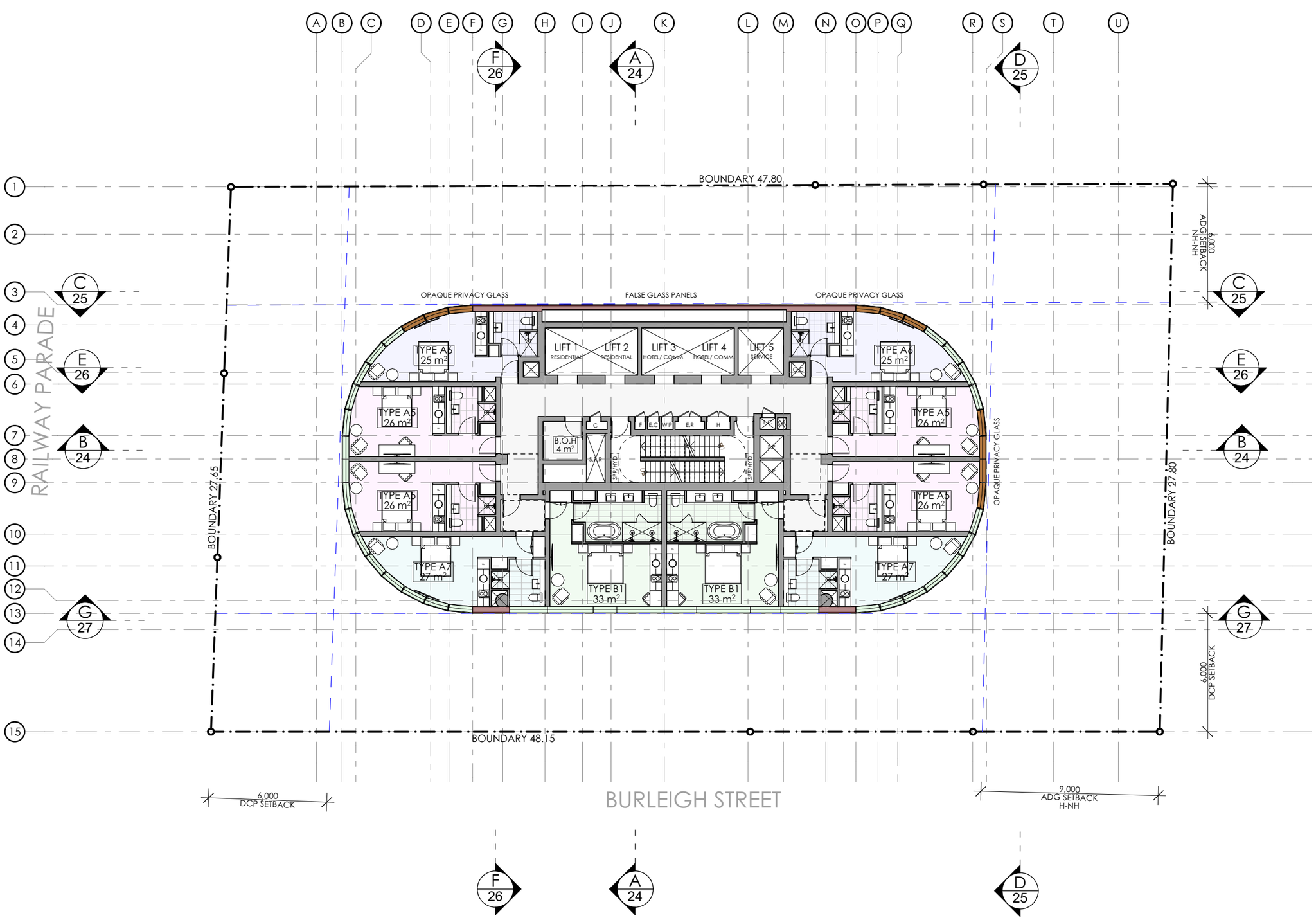
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVELS 20-25 FLOOR PLAN- HOTEL ROOMS

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 16 dwg no. P24 revision



1 HOTEL ROOMS LEVELS 26-31
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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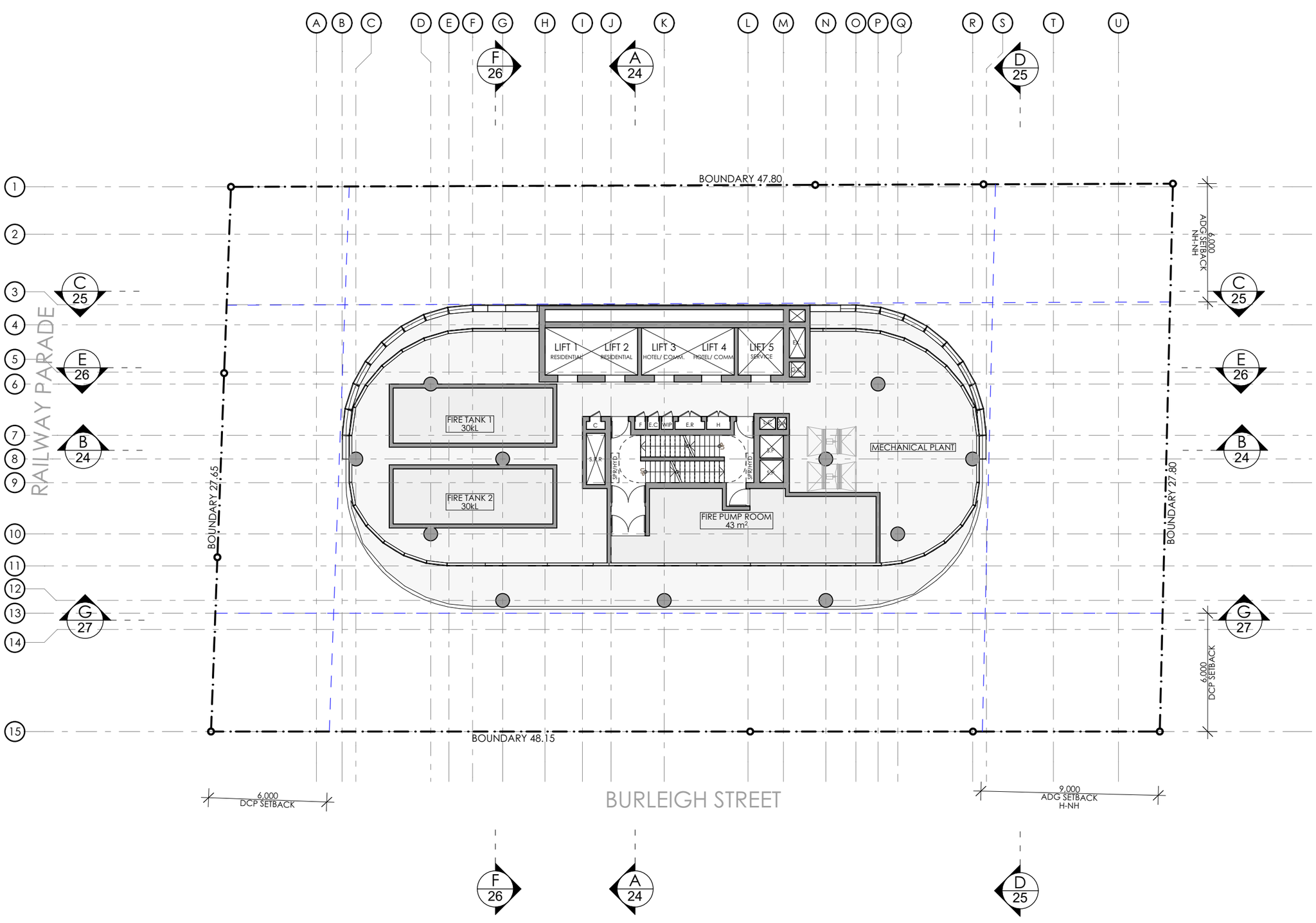
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVELS 26-31 FLOOR PLAN- HOTEL ROOMS

SCALE:	1:200 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 17 dwg no. P24 revision



1 PLANT LEVEL 32
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

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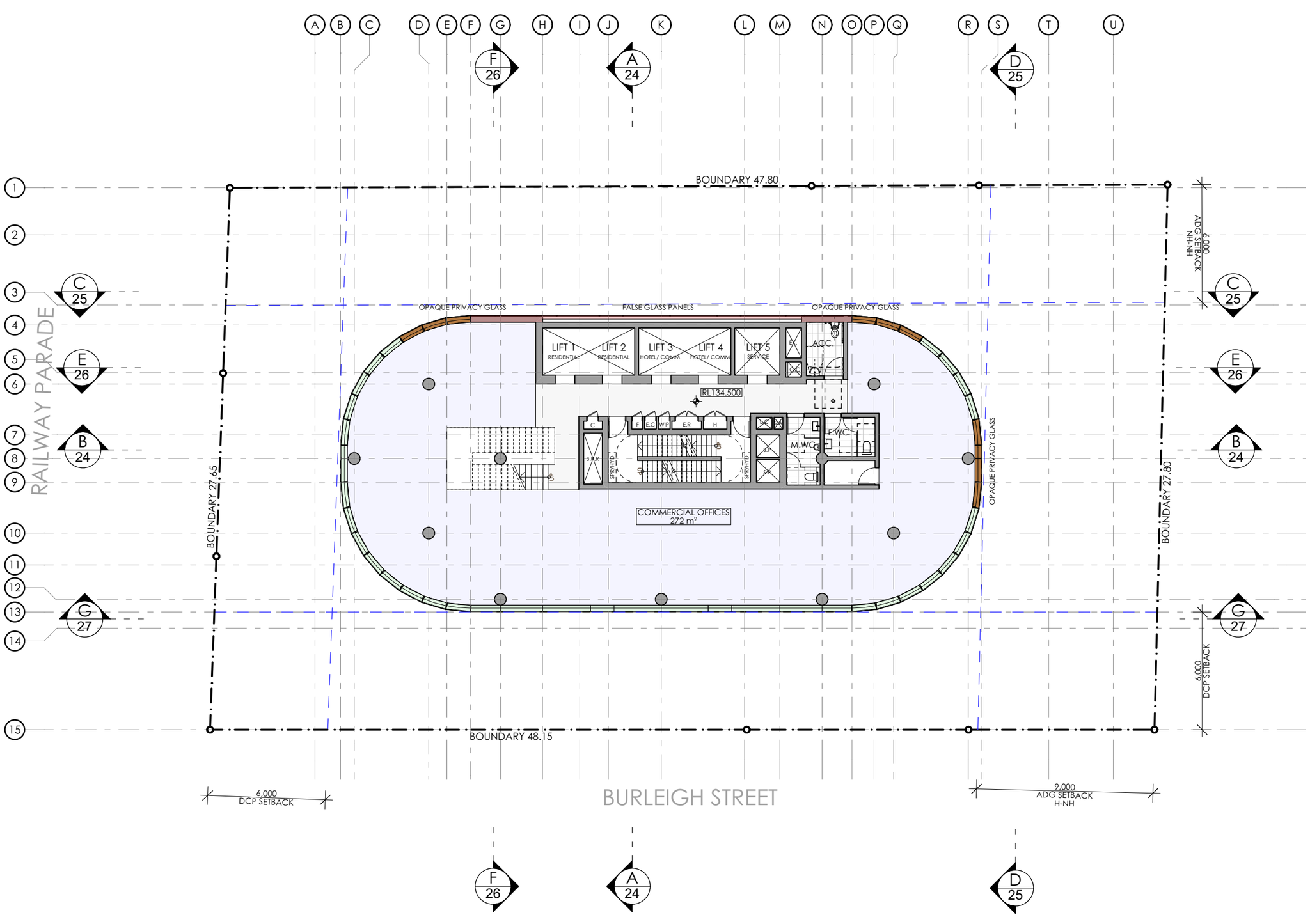
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 32 FLOOR PLAN- PLANT

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 18 dwg no. P24 revision



1 COMM. OFFICES LEVELS 33-35
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
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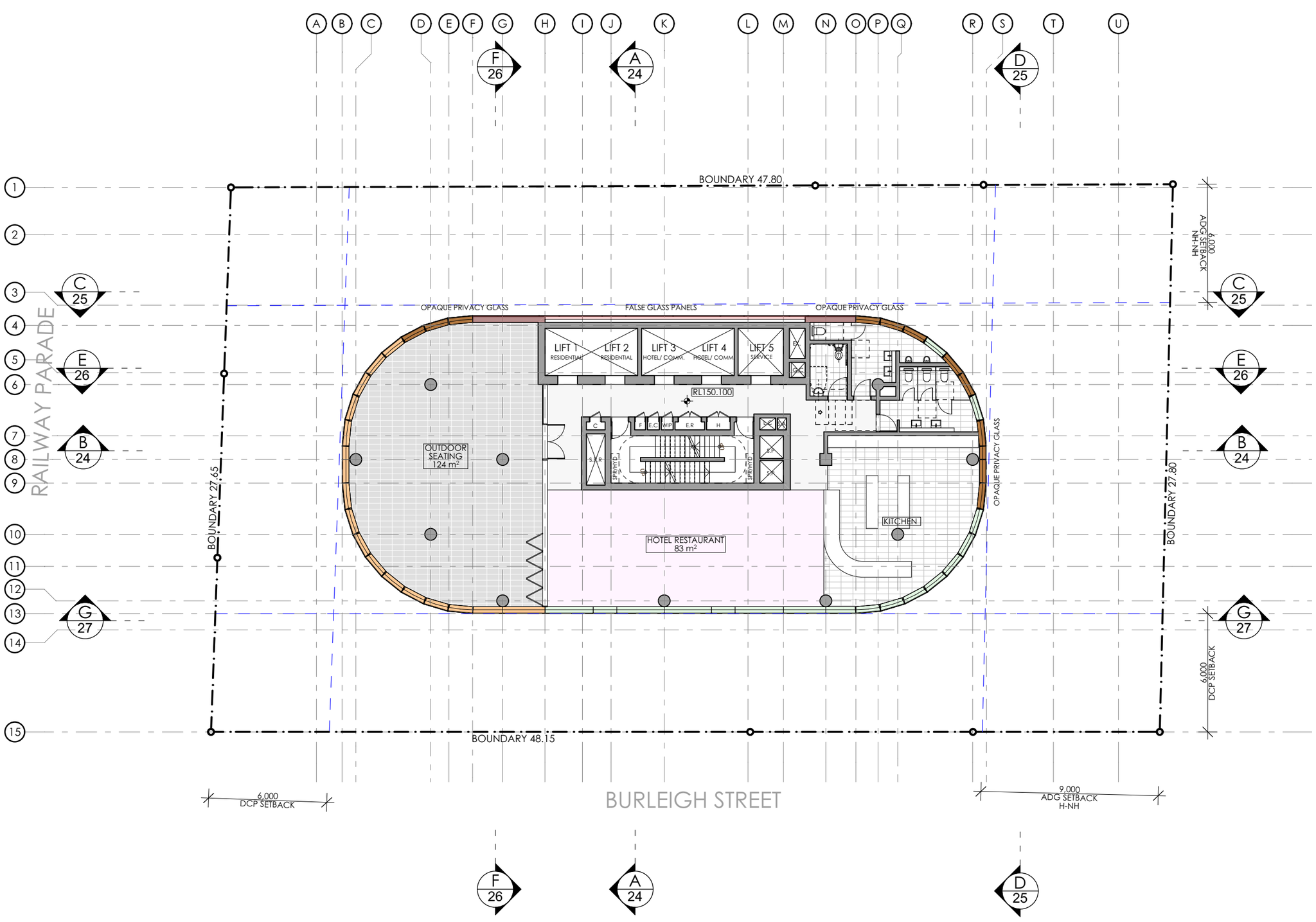
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVELS 33- 35 FLOOR PLAN- COMMERCIAL OFFICES

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 19 dwg no. P24 revision



1 HOTEL FACILITIES LEVEL 36
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
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- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

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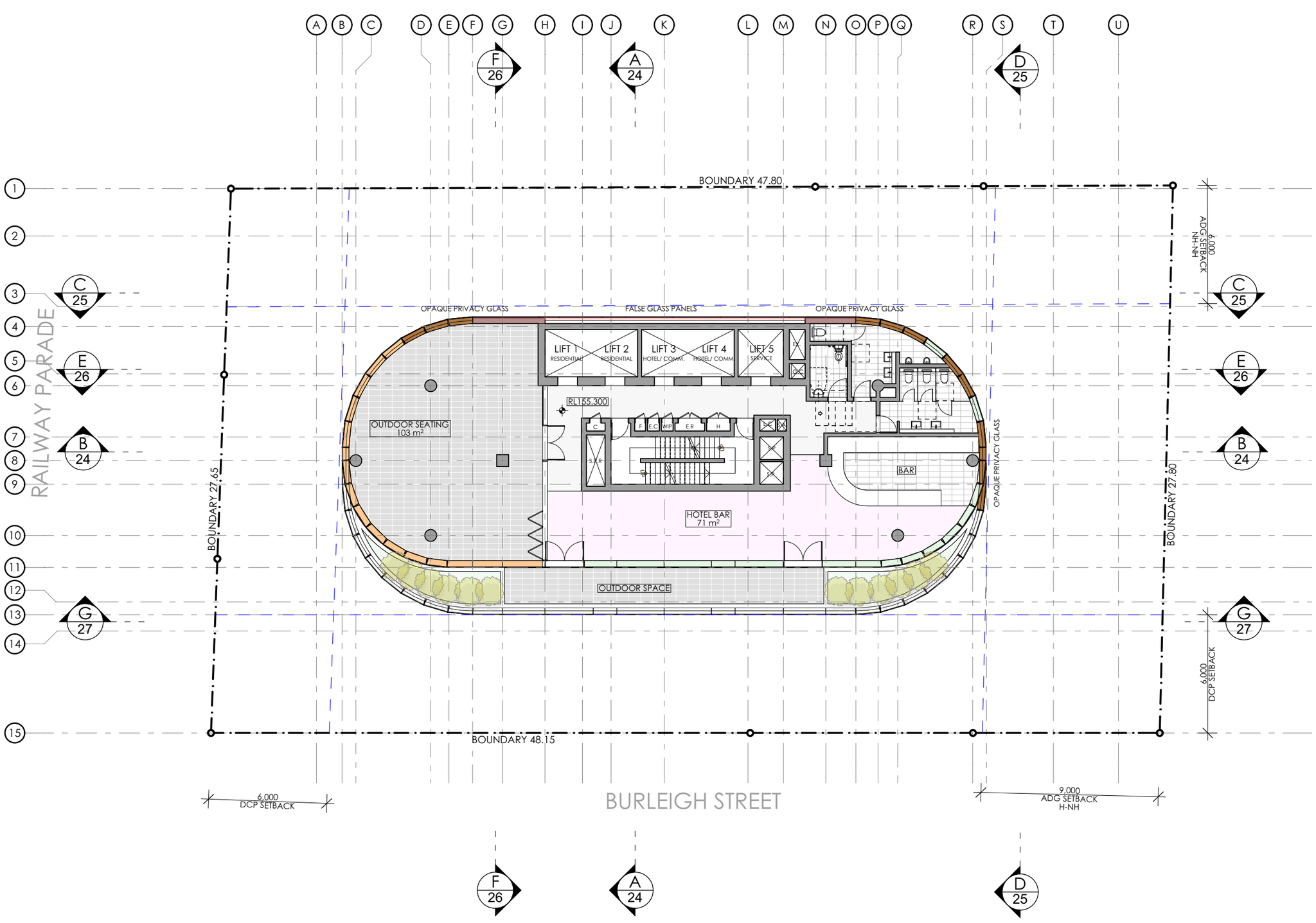
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 36 FLOOR PLAN- HOTEL FACILITIES

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 20 dwg no. P24 revision



1 HOTEL FACILITIES LEVEL 37
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

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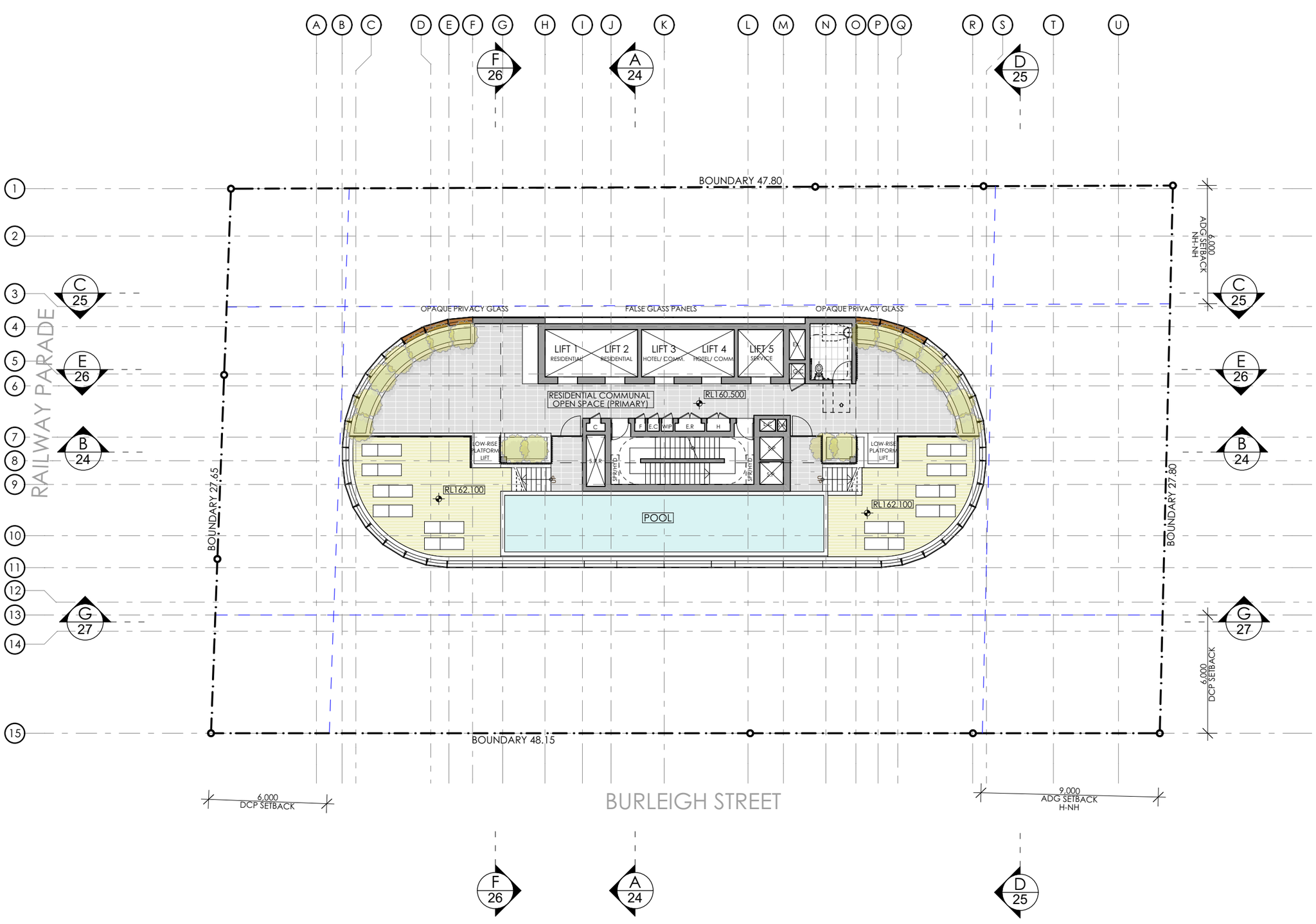
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 37 FLOOR PLAN- HOTEL FACILITIES

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 21 dwg no. P24 revision



1 RESIDENTIAL C.O.S LEVEL 38
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

ARCHITECTURE
Tourism + Residential

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Nominated Registered Architect: Peter Israel (reg no 5064)
ABN 90 050 071 022

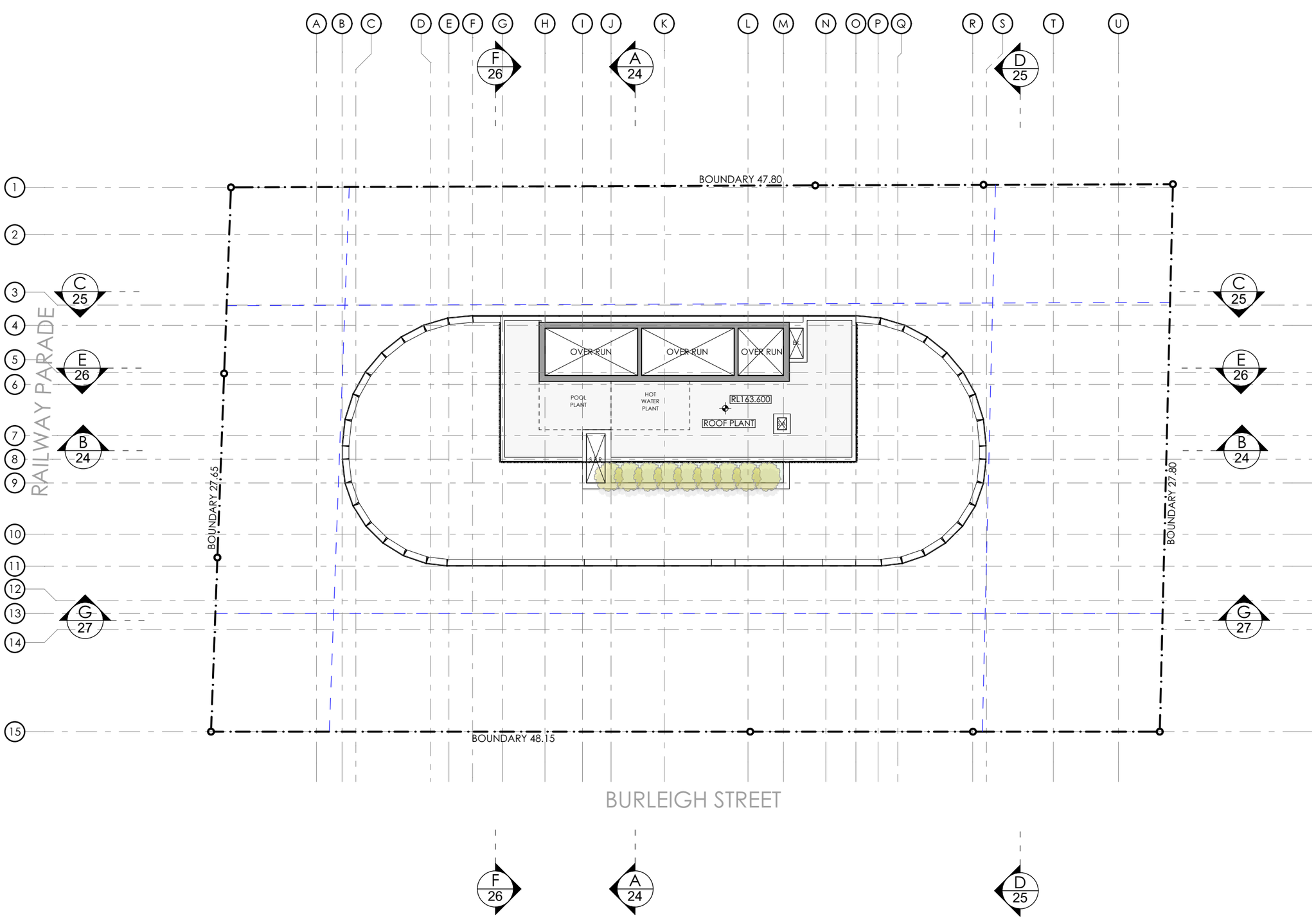
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
LEVEL 38 FLOOR PLAN- RESIDENTIAL C.O.S

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 22 dwg no. P24 revision



1 ROOF PLANT
1:200

5m 10m
1:200

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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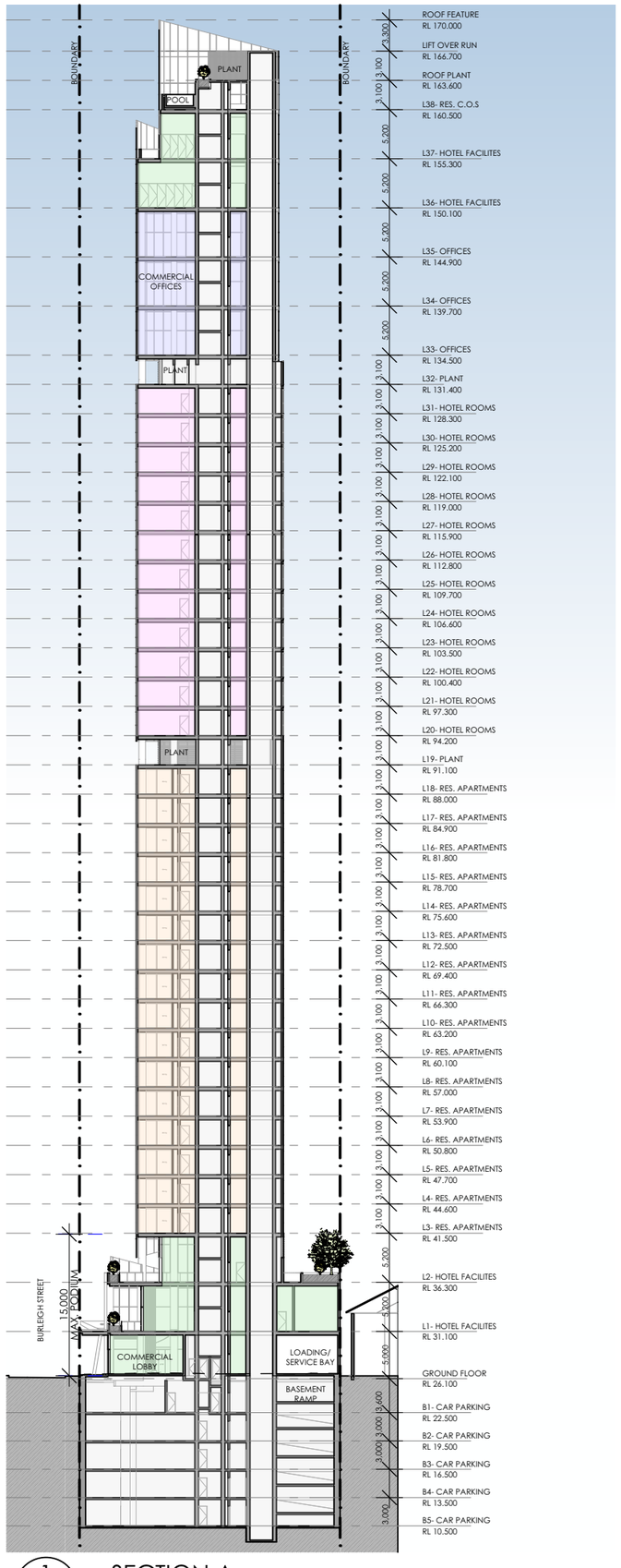
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

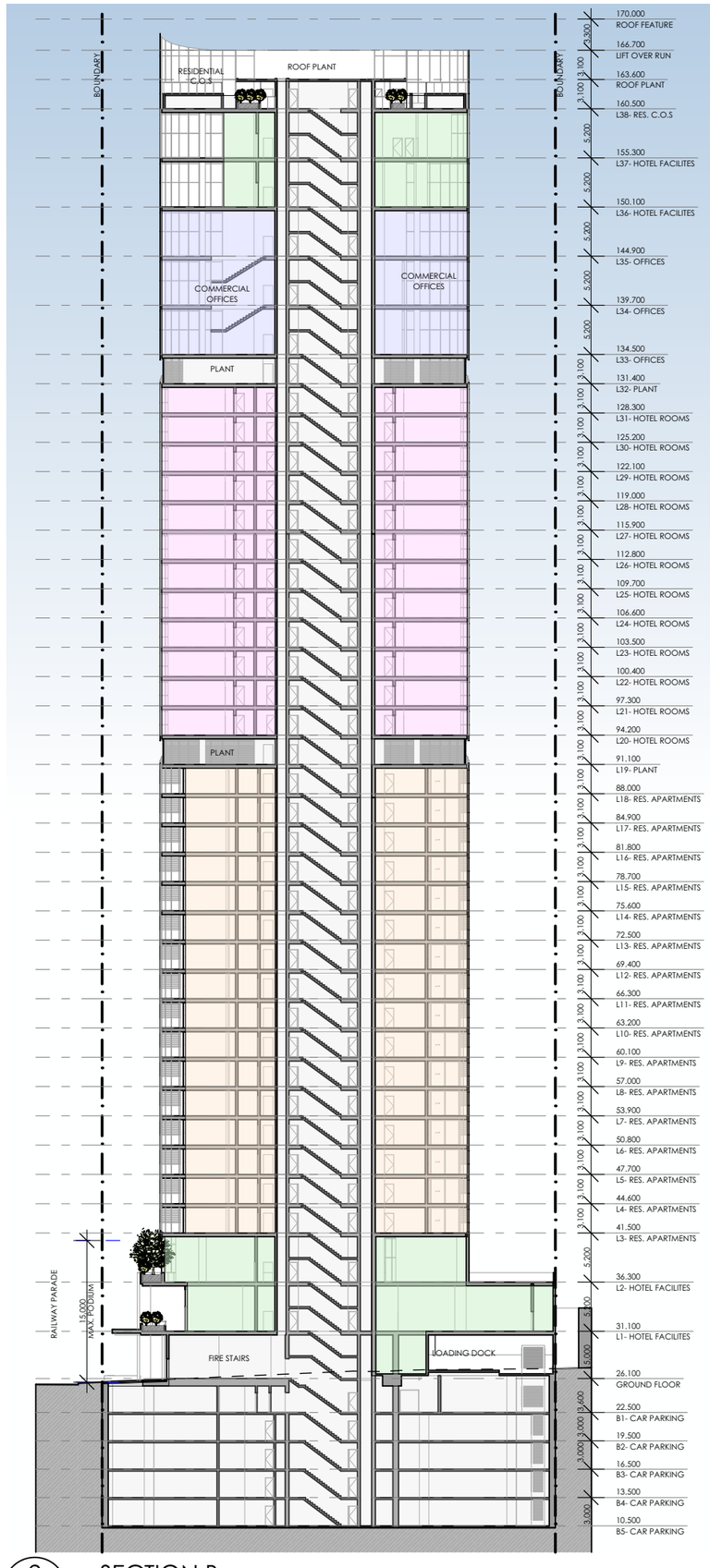
DRAWING TITLE:
ROOF PLAN

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 23 dwg no. P24 revision



1 SECTION A
1:600



2 SECTION B
1:600

USE LEGEND

- COMMERCIAL OFFICES
- HOTEL ROOM LEVELS
- RESIDENTIAL APARTMENT LEVELS
- HOTEL FACILITY LEVELS
- BACK OF HOUSE/ SERVICES

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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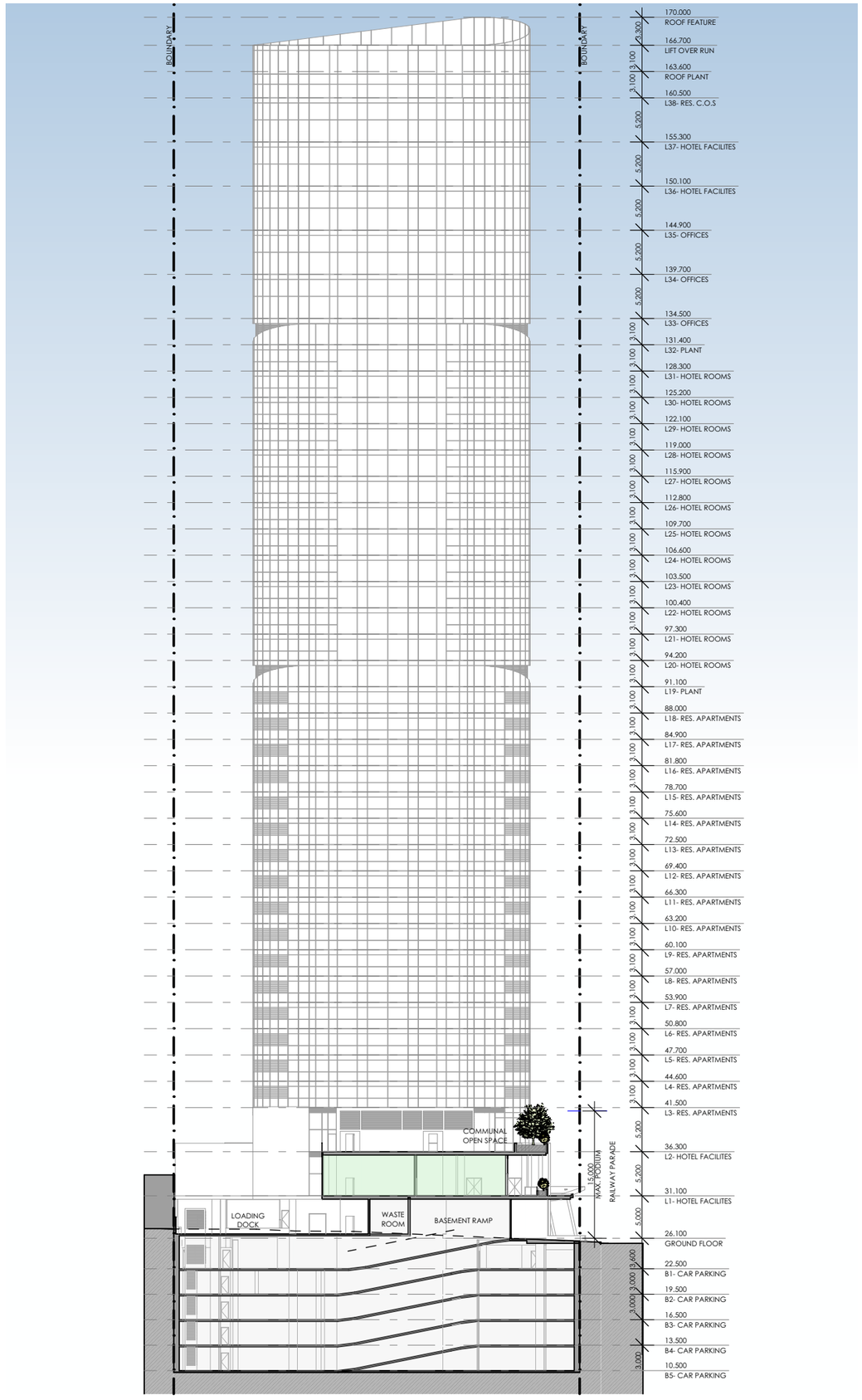
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SECTIONS A & B

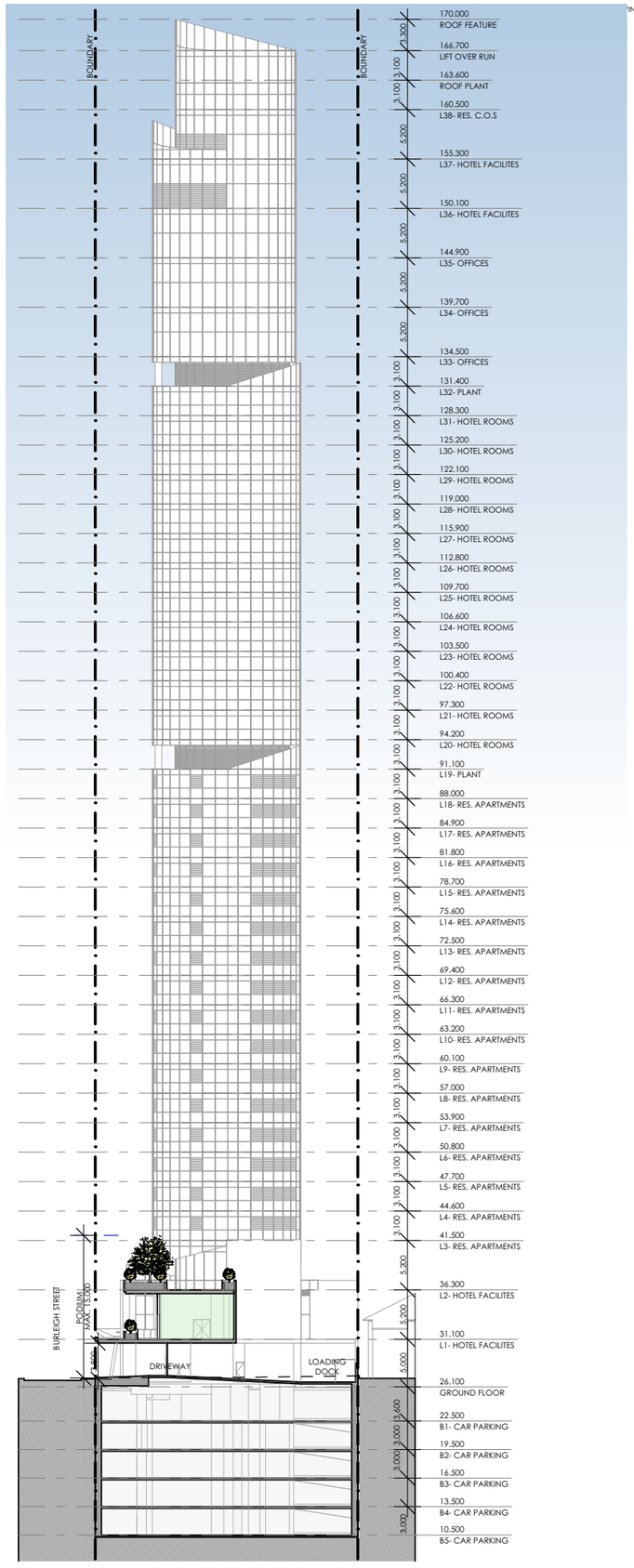
SCALE: 1:600 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

20m 40m
1:600

SK stage. 24 dwg no. P24 revision



1 SECTION C
1:600



2 SECTION D
1:600

20m 40m
1:600

USE LEGEND

- COMMERCIAL OFFICES
- HOTEL ROOM LEVELS
- RESIDENTIAL APARTMENT LEVELS
- HOTEL FACILITY LEVELS
- BACK OF HOUSE/ SERVICES

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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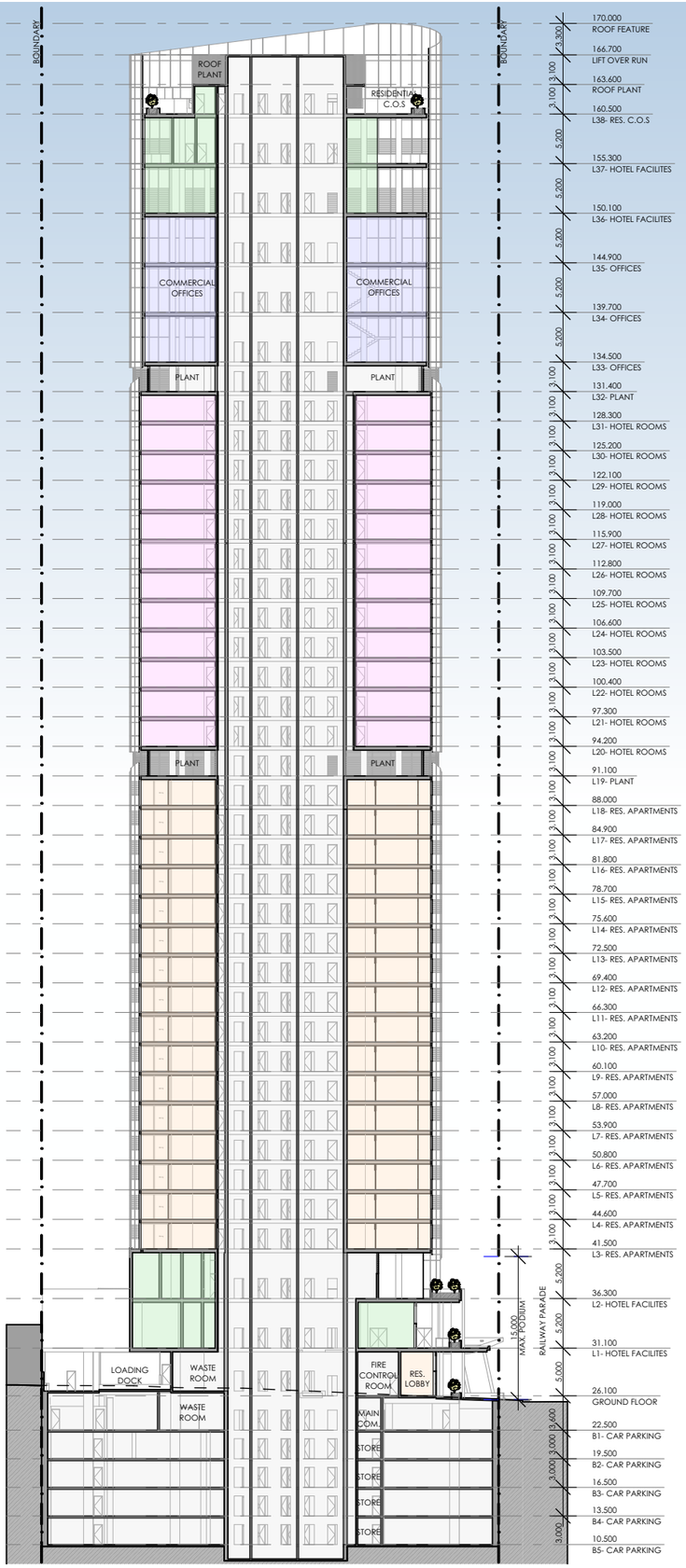
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

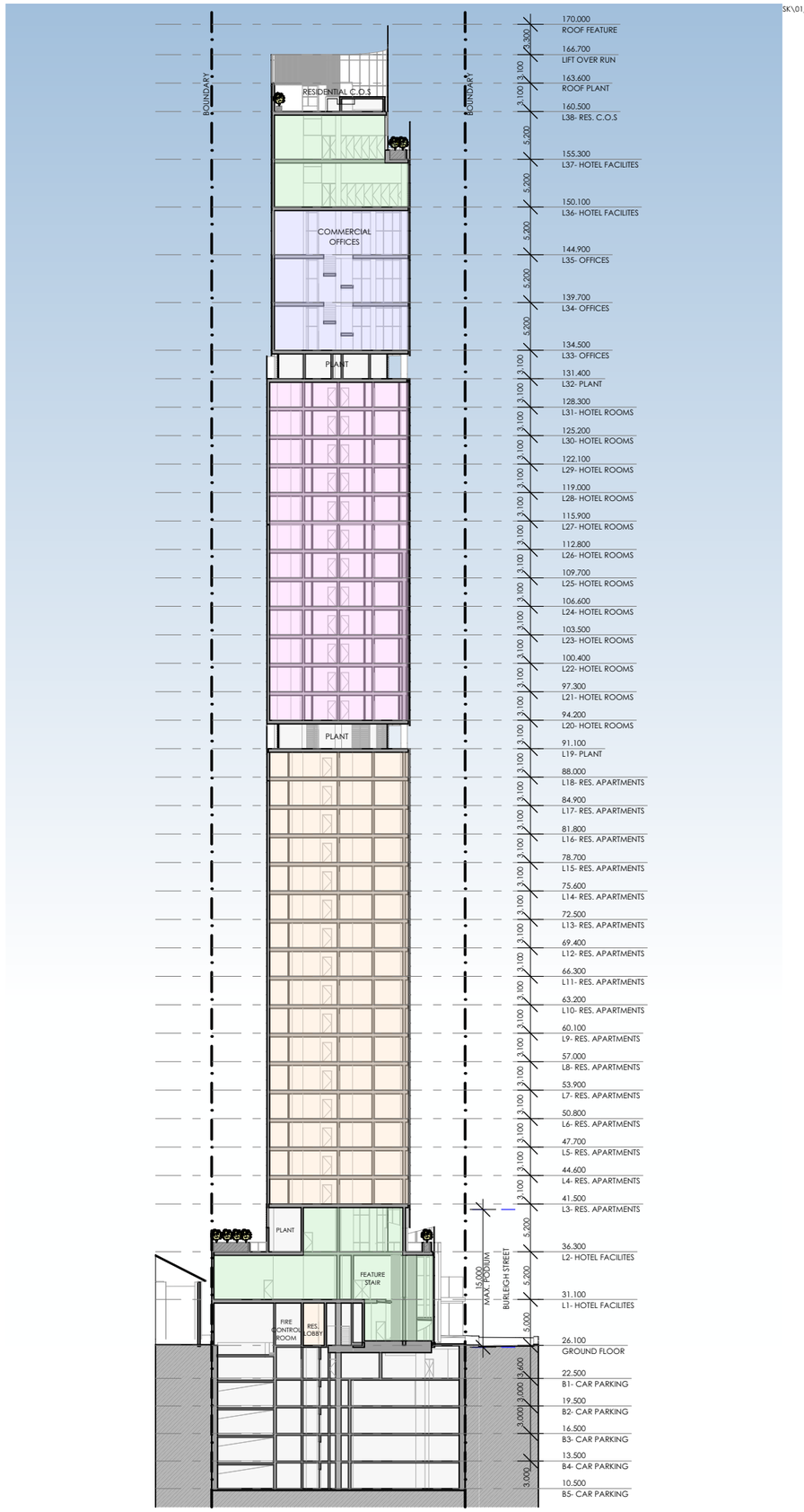
DRAWING TITLE:
SECTIONS C & D

SCALE: 1:600 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 25 dwg no. P24 revision



1 SECTION E
1:600



2 SECTION F
1:600

20m 40m
1:600

USE LEGEND

- COMMERCIAL OFFICES
- HOTEL ROOM LEVELS
- RESIDENTIAL APARTMENT LEVELS
- HOTEL FACILITY LEVELS
- BACK OF HOUSE/ SERVICES

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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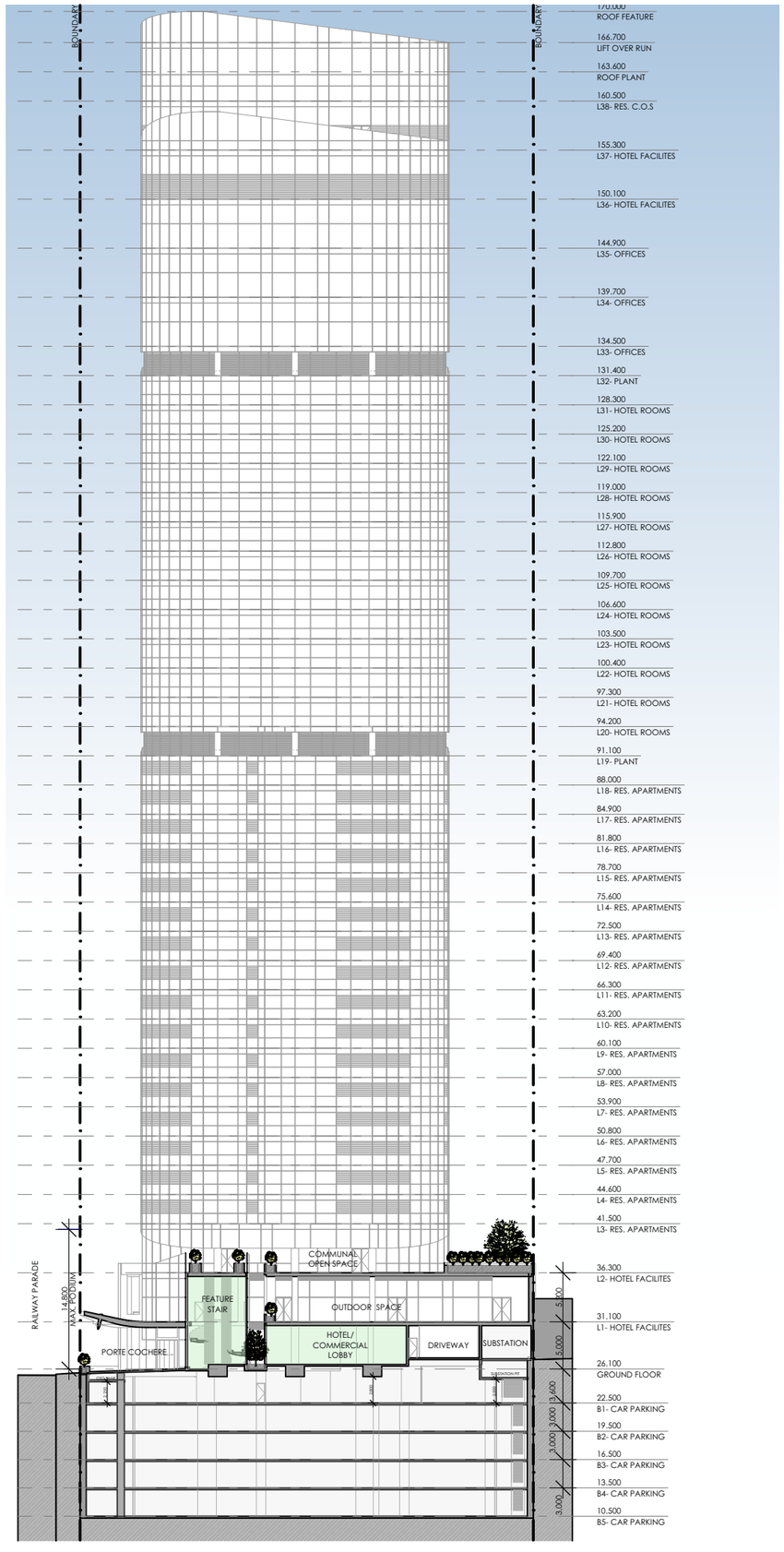
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SECTIONS E & F

SCALE:	1:600 AT A3	NORTH POINT:	
DRAWN BY:	VD/JR		
CHECKED BY:	PI		
PROJECT No:	P709		

SK stage. 26 dwg no. P24 revision



1 SECTION G
1:600

USE LEGEND

- COMMERCIAL OFFICES
- HOTEL ROOM LEVELS
- RESIDENTIAL APARTMENT LEVELS
- HOTEL FACILITY LEVELS
- BACK OF HOUSE/ SERVICES

SCOPING MEETING

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CLIENT :
CONQUEST

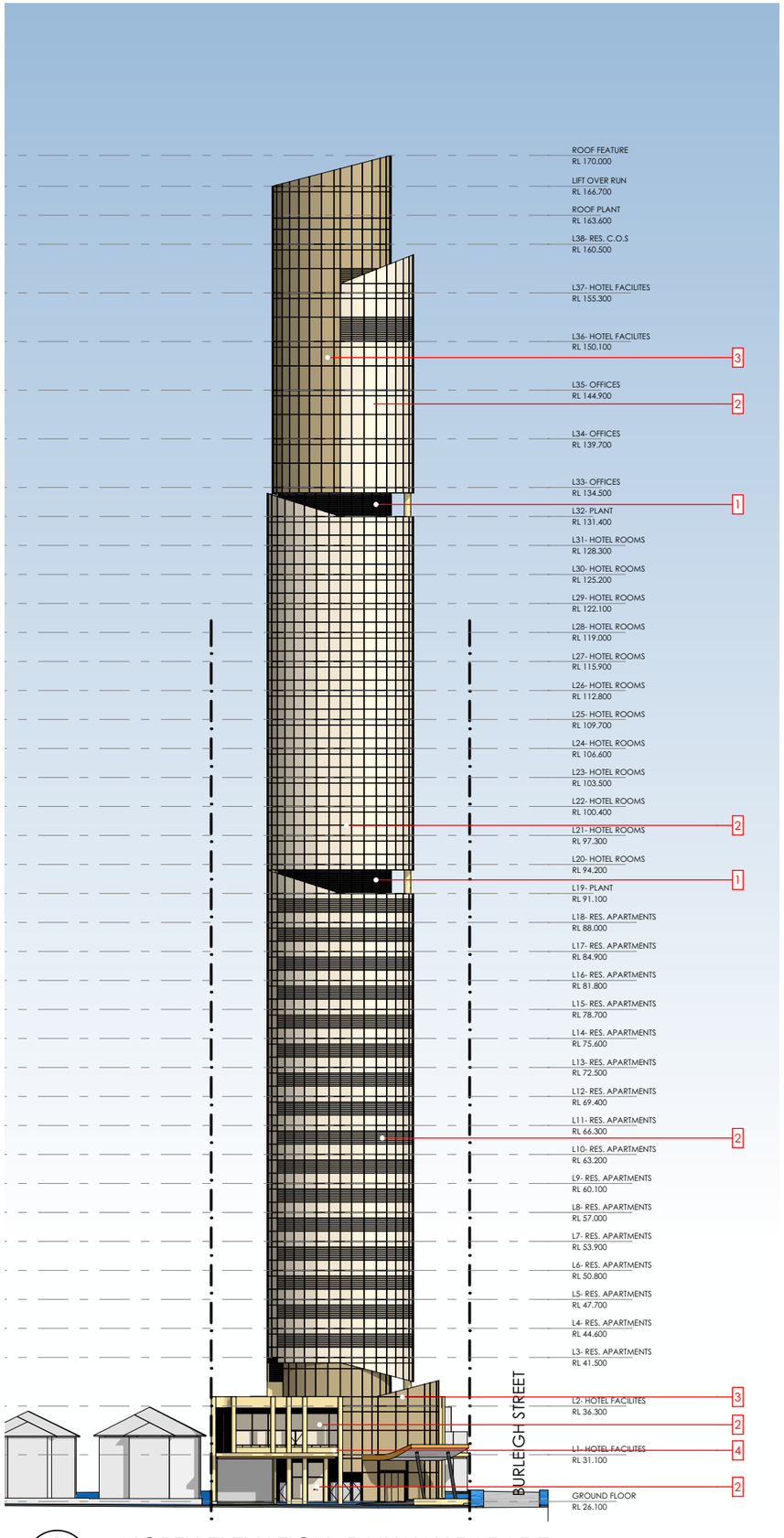
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SECTION G

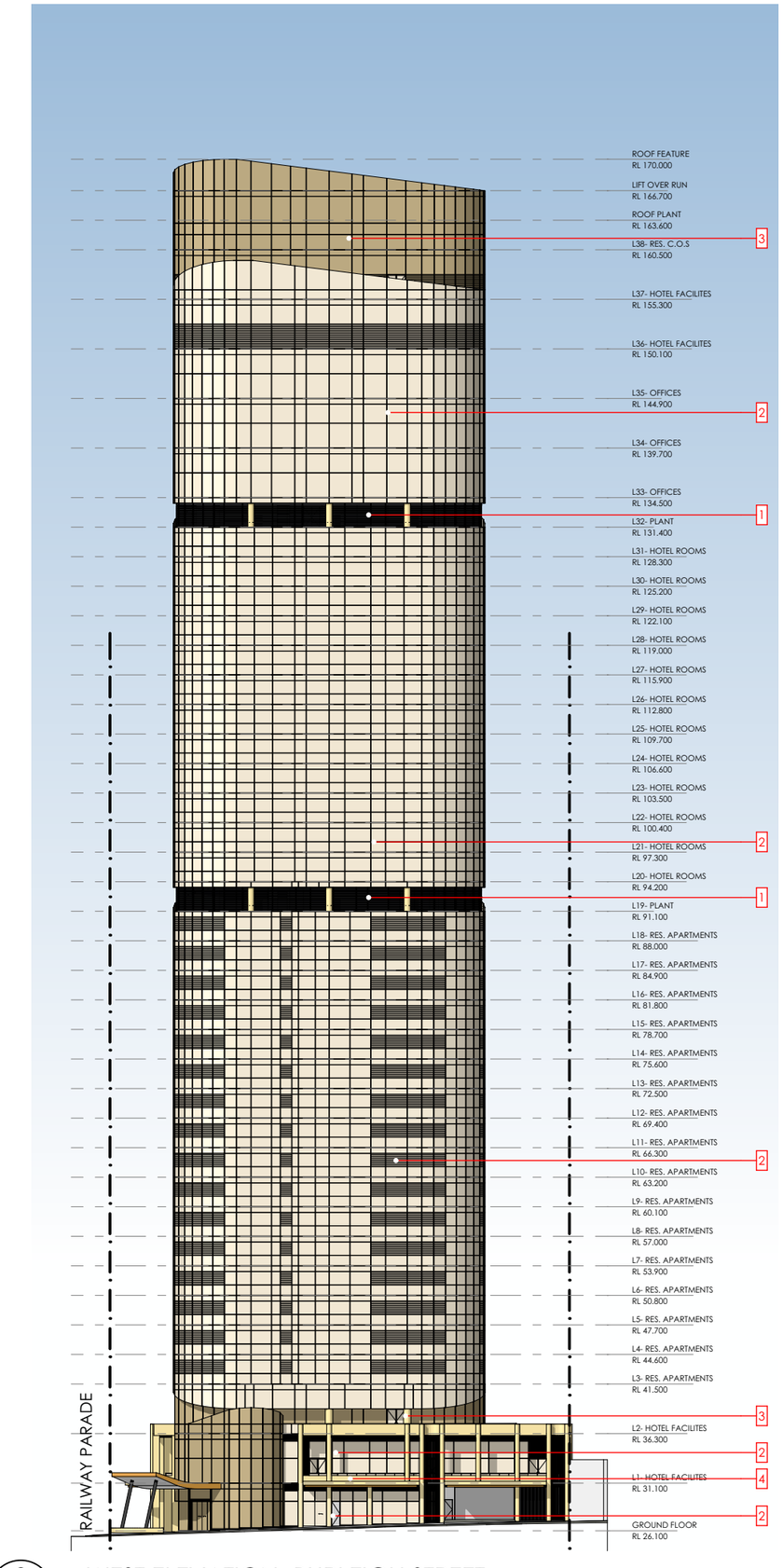
SCALE: 1:600 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

20m 40m
1:600

SK stage. 27 dwg no. P24 revision



1 NORTH ELEVATION- RAILWAY PARADE
1:600



2 WEST ELEVATION- BURLEIGH STREET
1:600

20m 40m
1:600

SCOPING MEETING

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P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

1. POWDER COATED ALUMINIUM DOOR AND WINDOW FRAME/ LOUVRES, COLOUR: BLACK

2. TINTED GLASS LIGHT BRONZE

3. TINTED GLASS DARK BRONZE

4. SANDSTONE CLADDING

ARCHITECTURE
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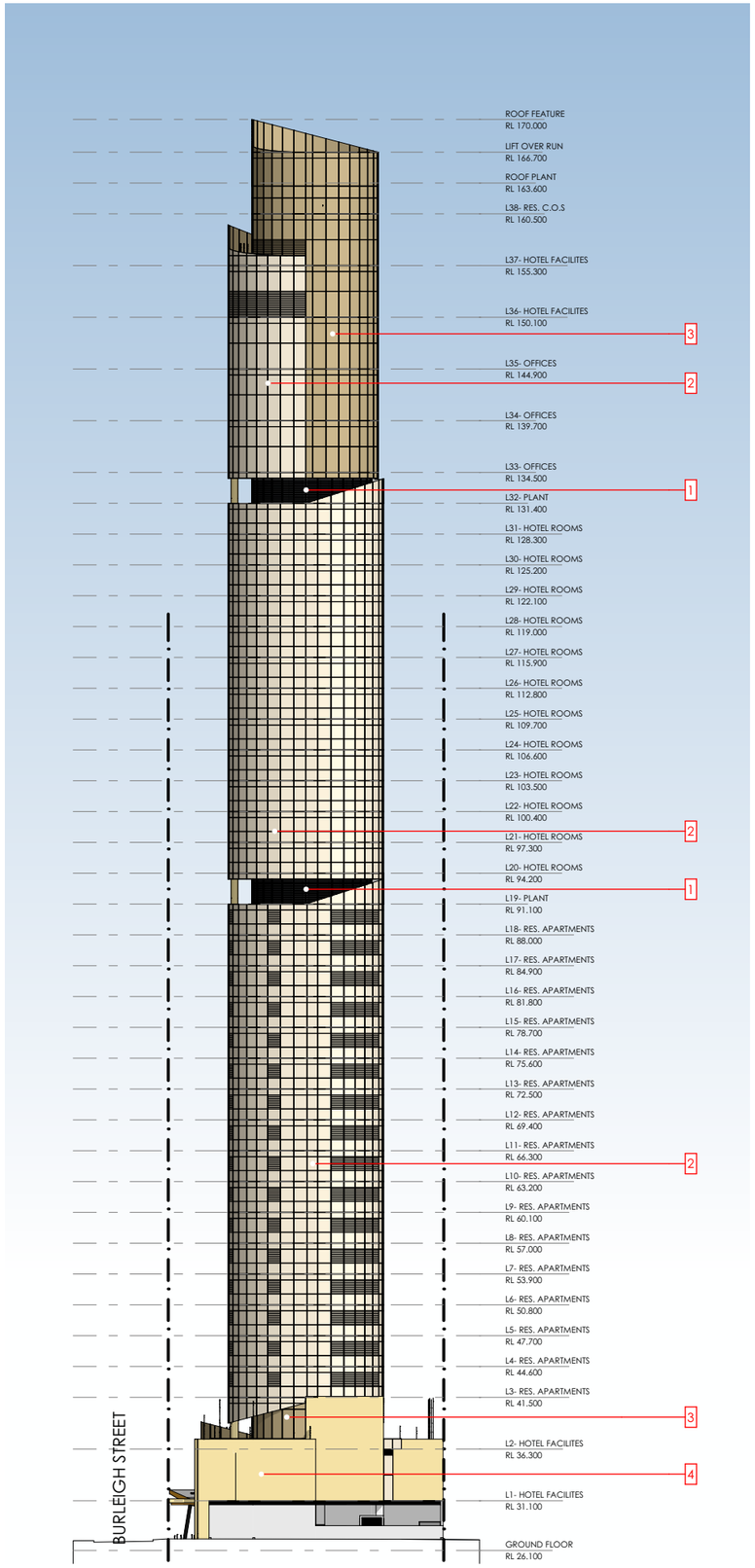
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

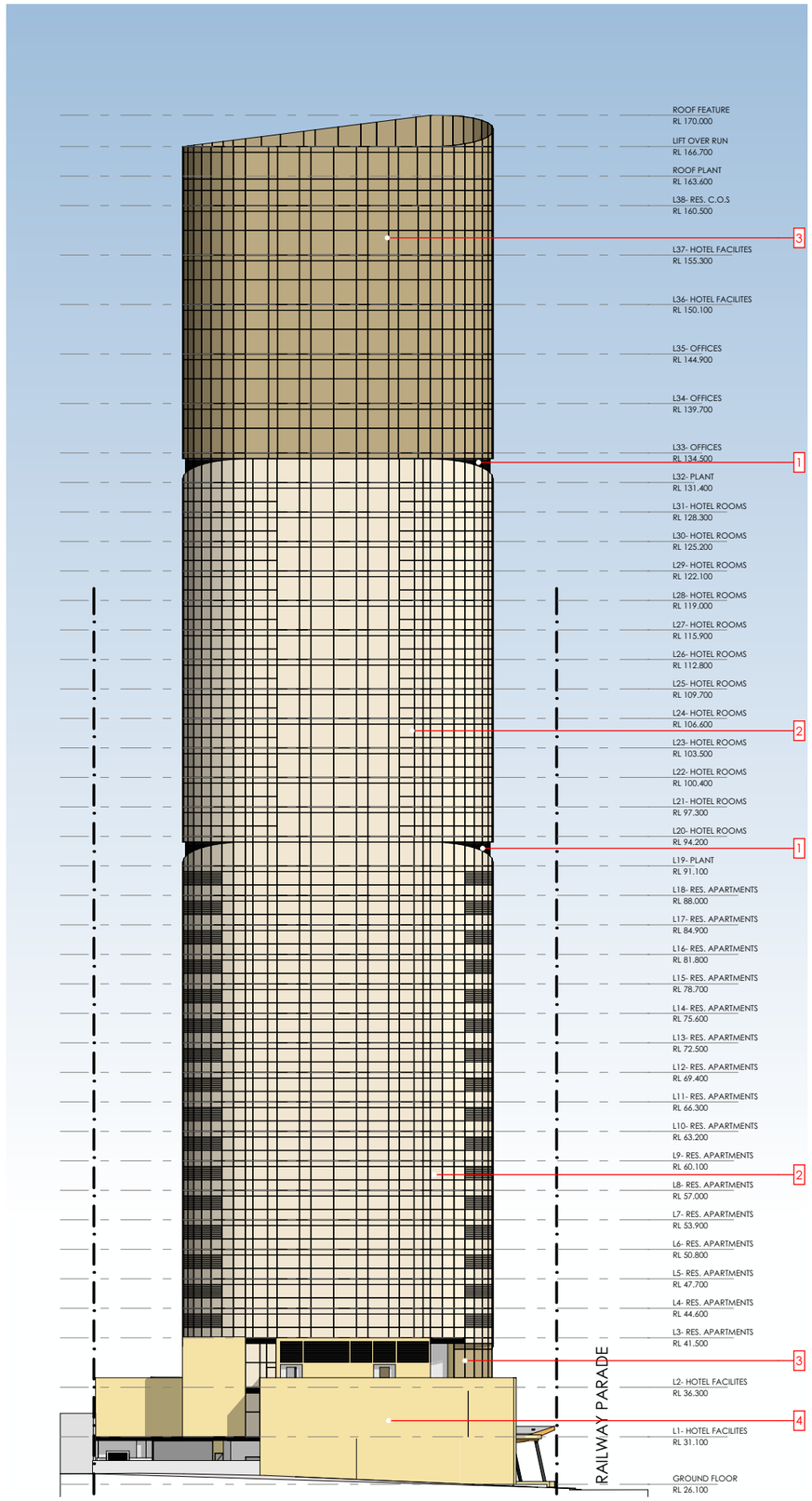
DRAWING TITLE:
ELEVATIONS- NORTH & WEST

SCALE: 1:600, 1:2000 AT A3 NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 28 dwg no. P24 revision



1 SOUTH ELEVATION
1:600



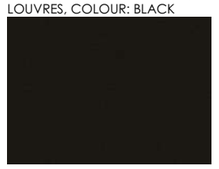
2 EAST ELEVATION
1:600

20m 40m
1:600

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

1. POWDER COATED ALUMINIUM DOOR AND WINDOW FRAME/ LOUVRES, COLOUR: BLACK



2. TINTED GLASS LIGHT BRONZE



3. TINTED GLASS DARK BRONZE



4. SANDSTONE CLADDING



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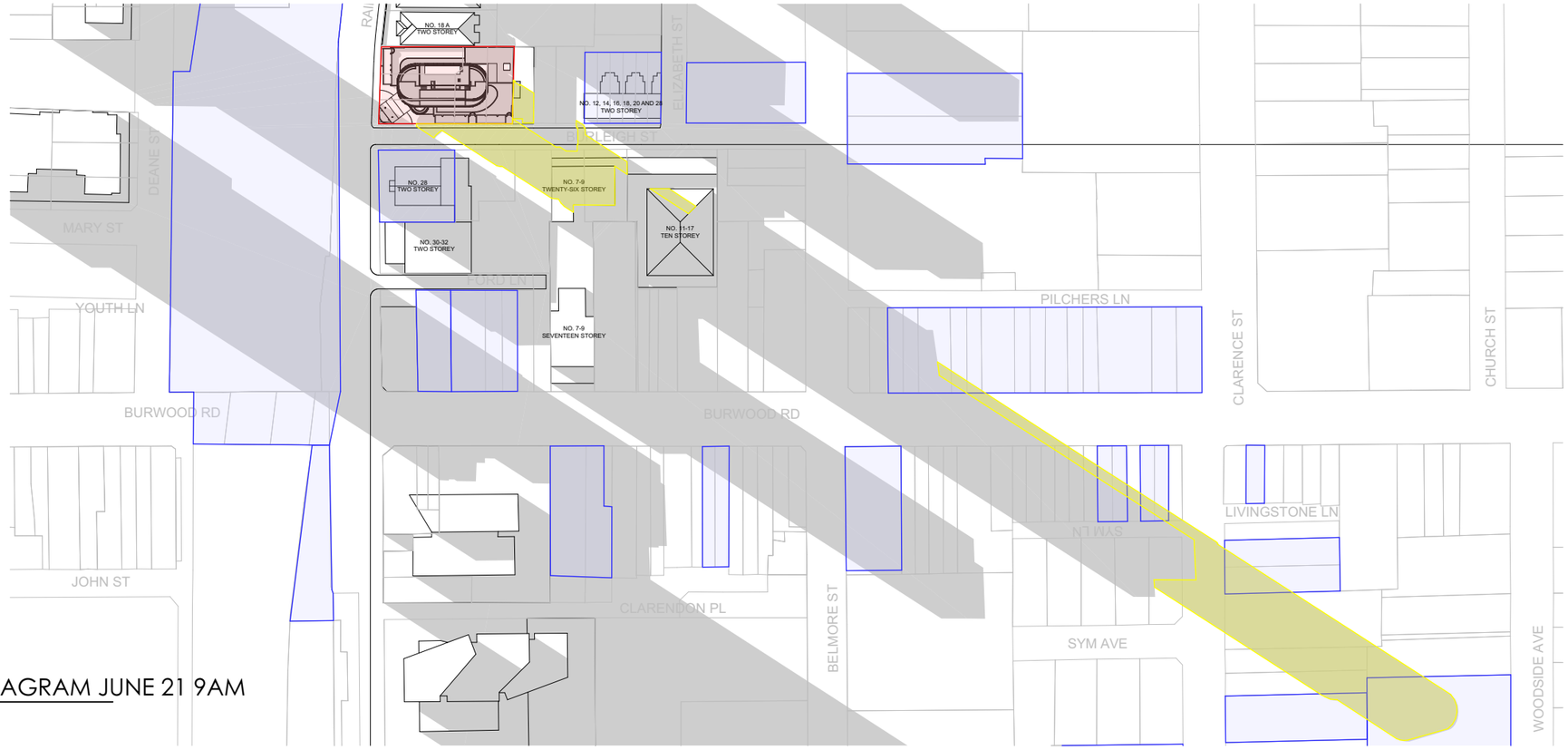
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

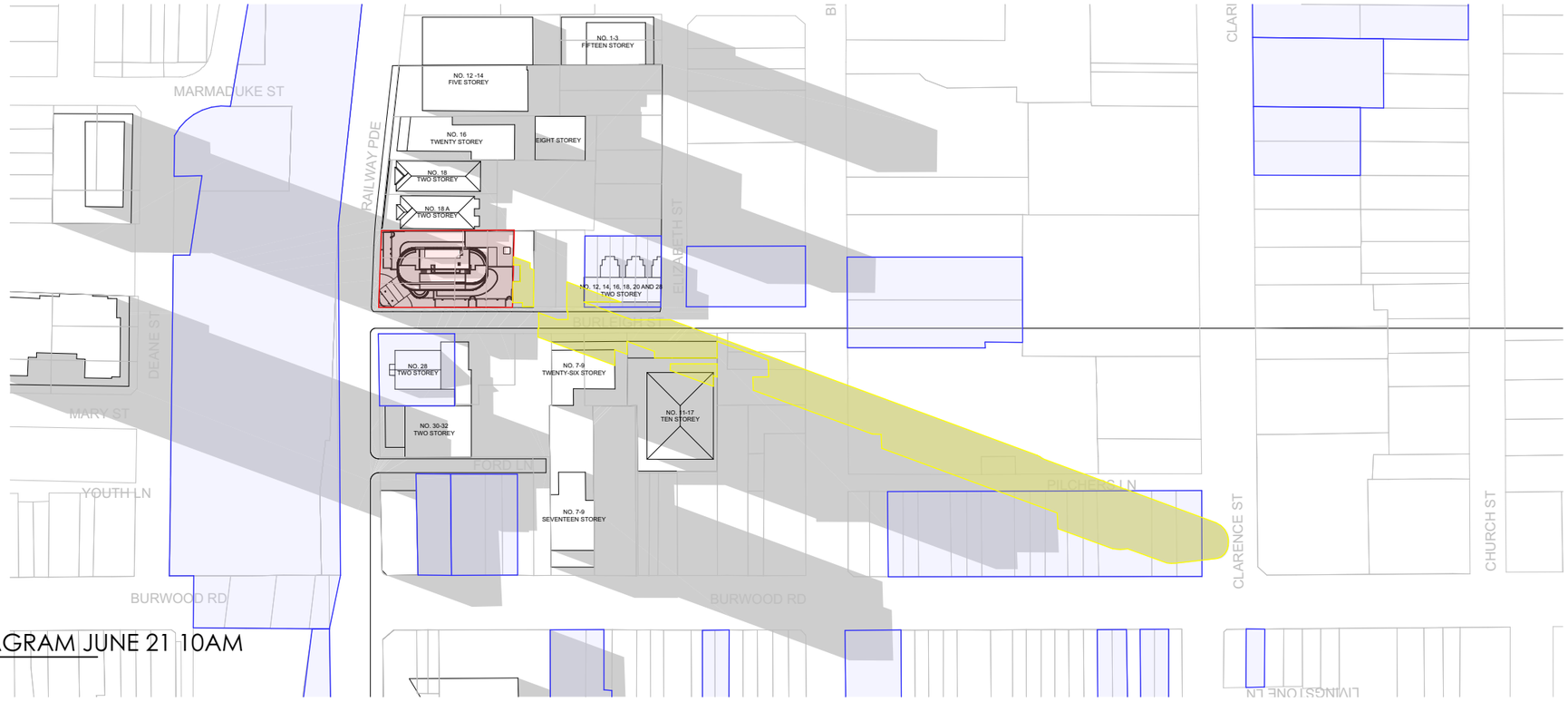
DRAWING TITLE:
ELEVATIONS- SOUTH & EAST

SCALE: 1:600, 1:2000 AT A3 NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 29 dwg no. P24 revision



1 SHADOW DIAGRAM JUNE 21 9AM
1:2000



2 SHADOW DIAGRAM JUNE 21 10AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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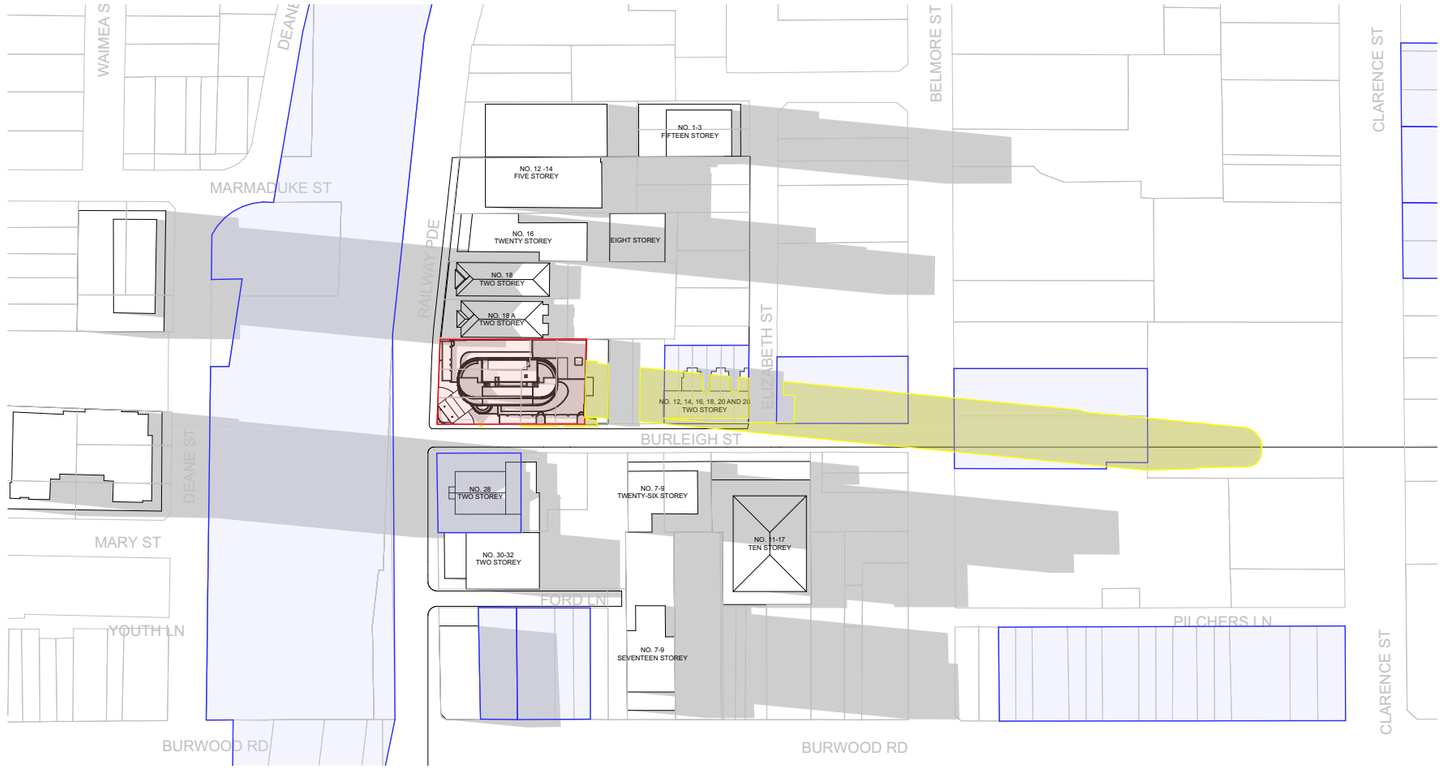
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

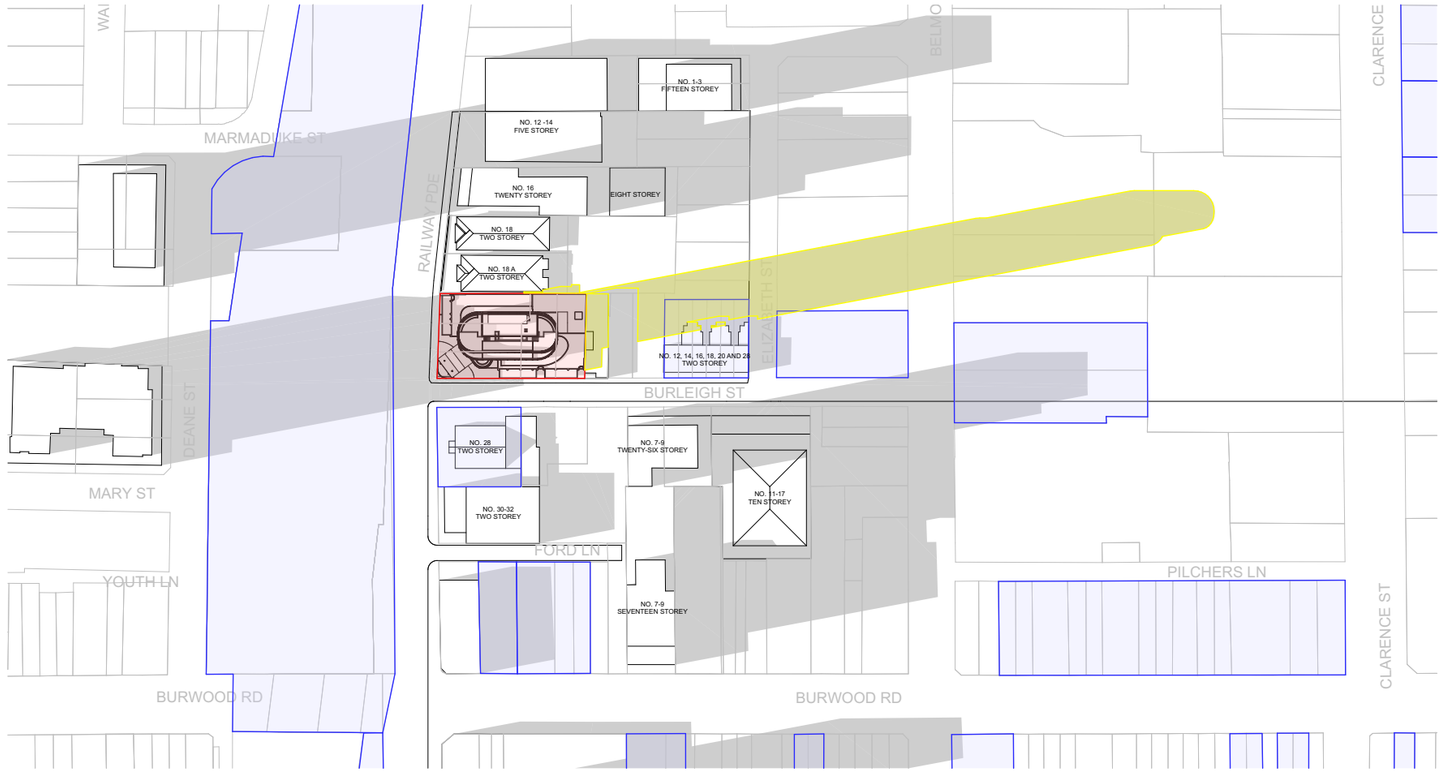
DRAWING TITLE:
SHADOW DIAGRAMS- JUNE 21 9AM-10AM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 30 dwg no. P24 revision



1 SHADOW DIAGRAM JUNE 21 11AM
1:2000



2 SHADOW DIAGRAM JUNE 21 12PM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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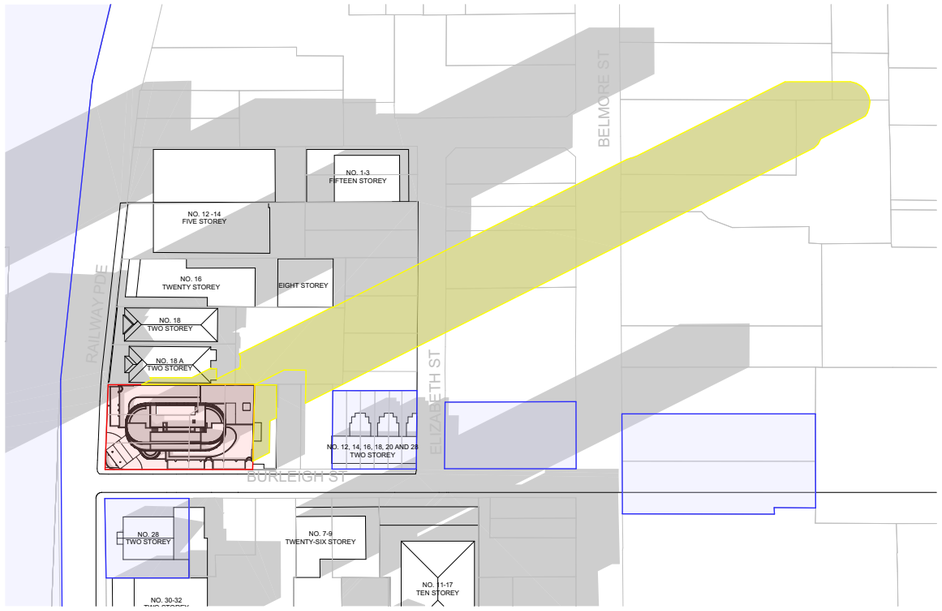
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

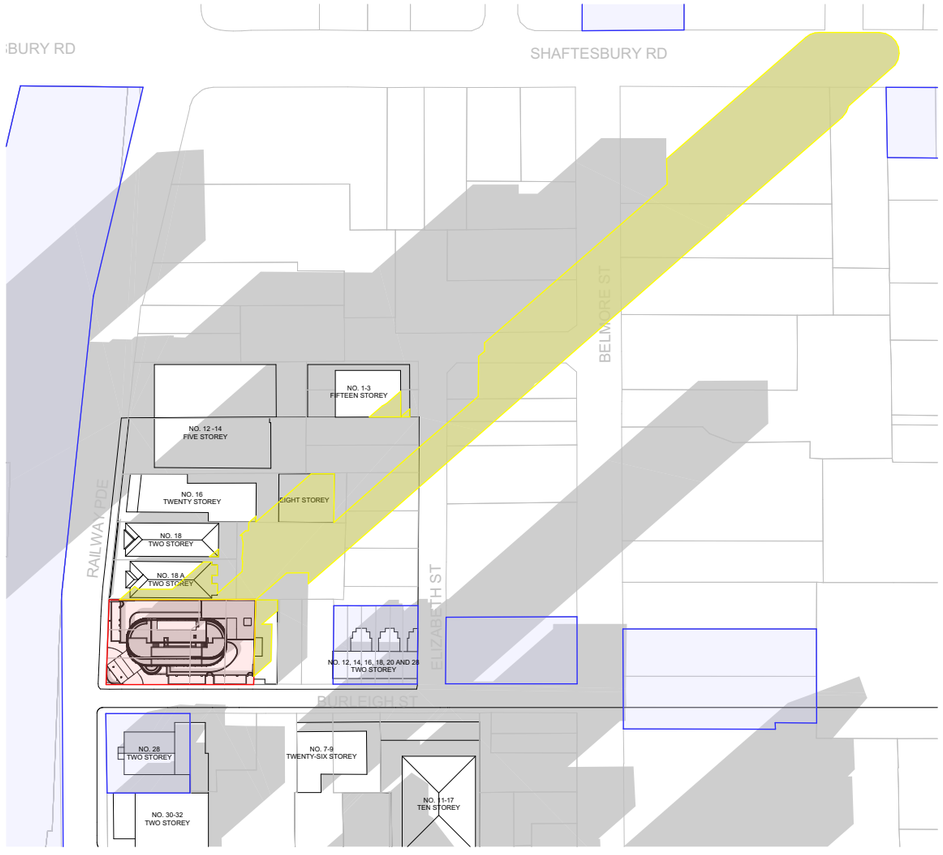
DRAWING TITLE:
SHADOW DIAGRAMS- JUNE 21 11AM-12PM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

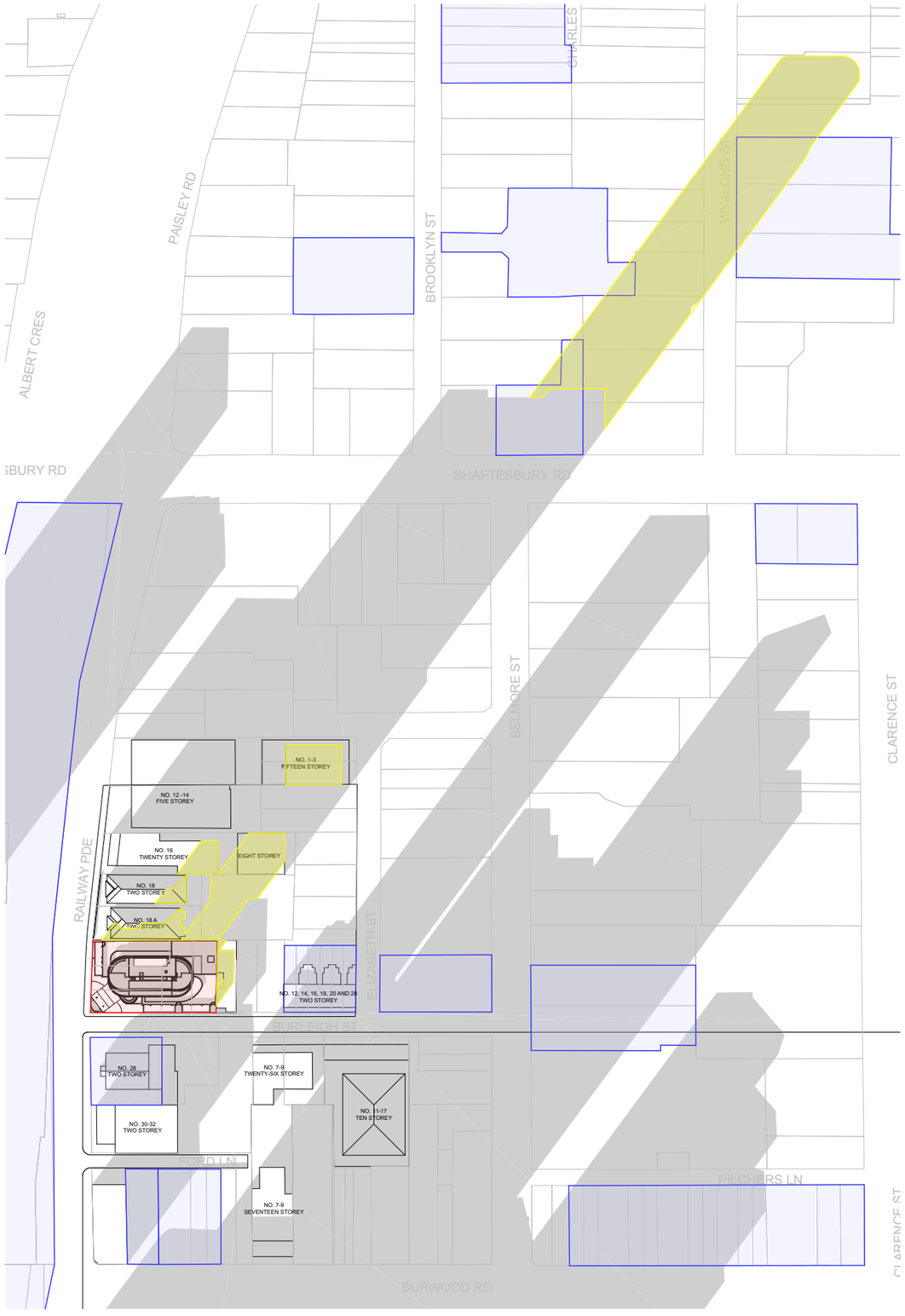
SK stage. 31 dwg no. P24 revision



1 SHADOW DIAGRAM JUNE 21 1PM
1:2000



2 SHADOW DIAGRAM JUNE 21 2PM
1:2000



3 SHADOW DIAGRAM JUNE 21 3PM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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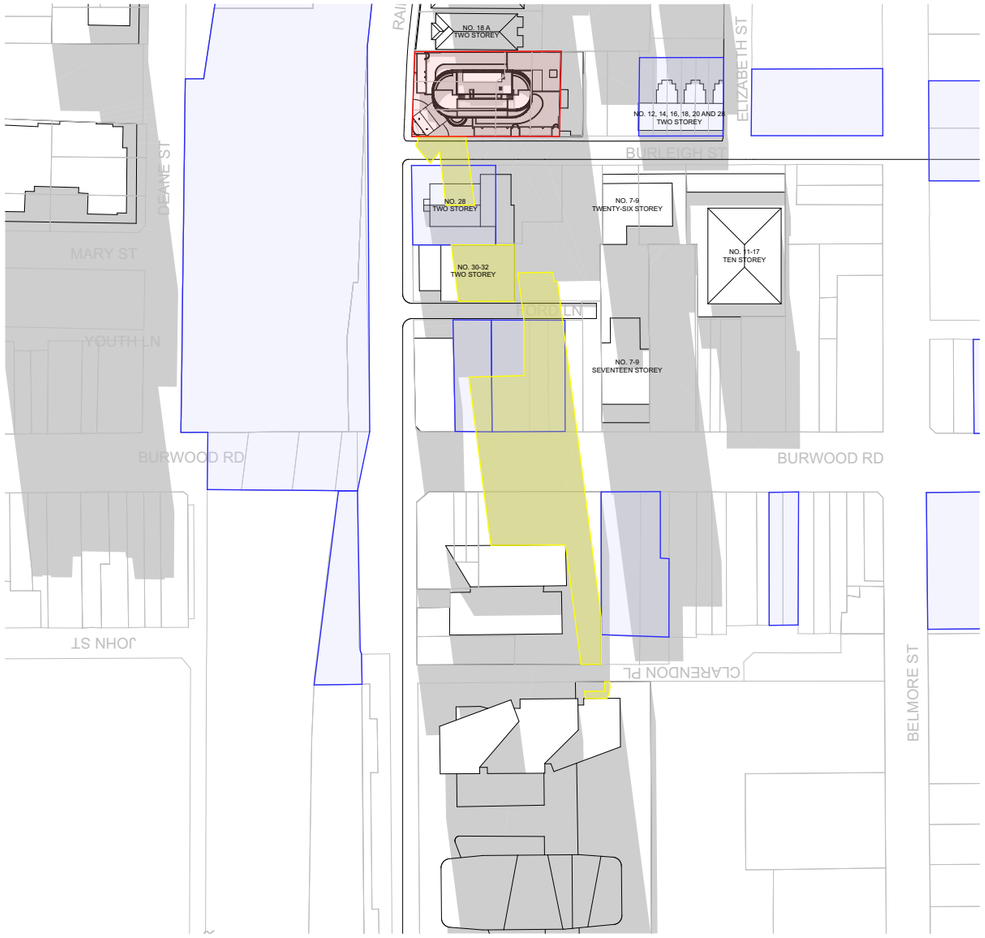
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

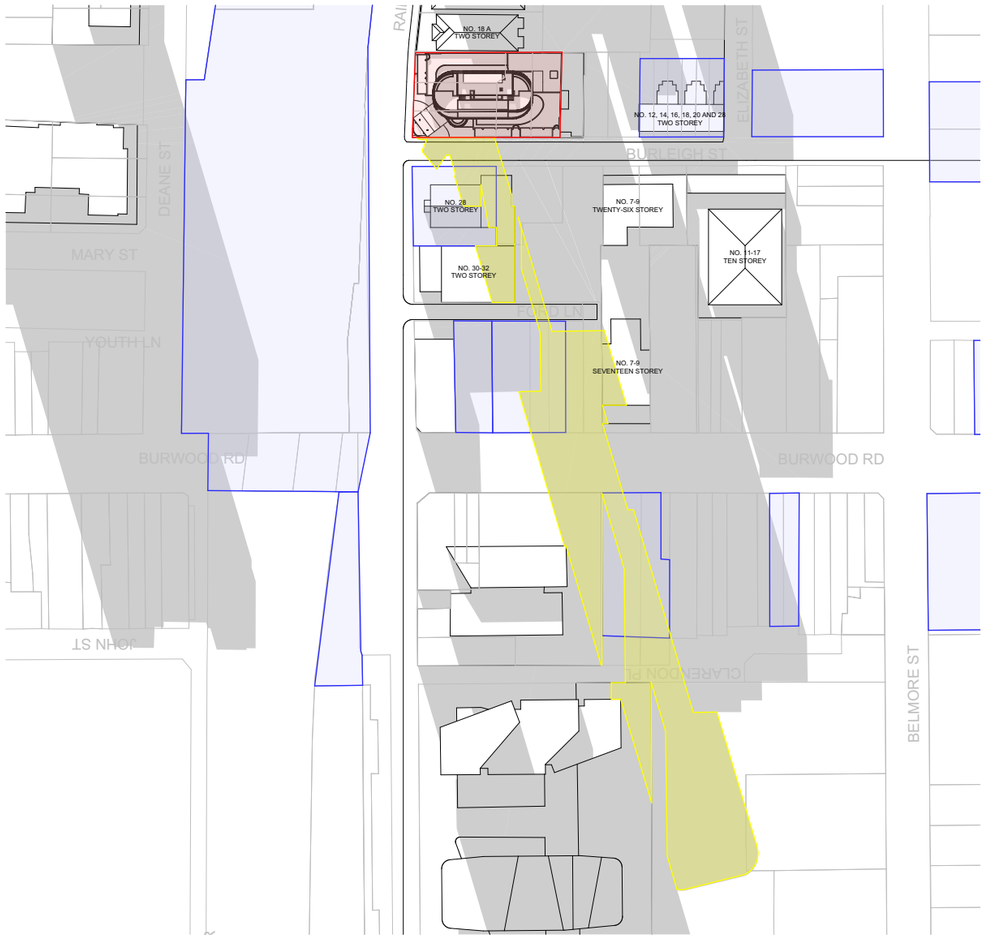
DRAWING TITLE:
SHADOW DIAGRAMS- JUNE 21 1PM-3PM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 32 dwg no. P24 revision



1 SHADOW DIAGRAM JAN 21 9AM
1:2000



2 SHADOW DIAGRAM FEB 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

ARCHITECTURE
Tourism + Residential

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Nominated Registered Architect: Peter Israel (reg no 5064)
ABN 90 050 071 022

CLIENT :
CONQUEST

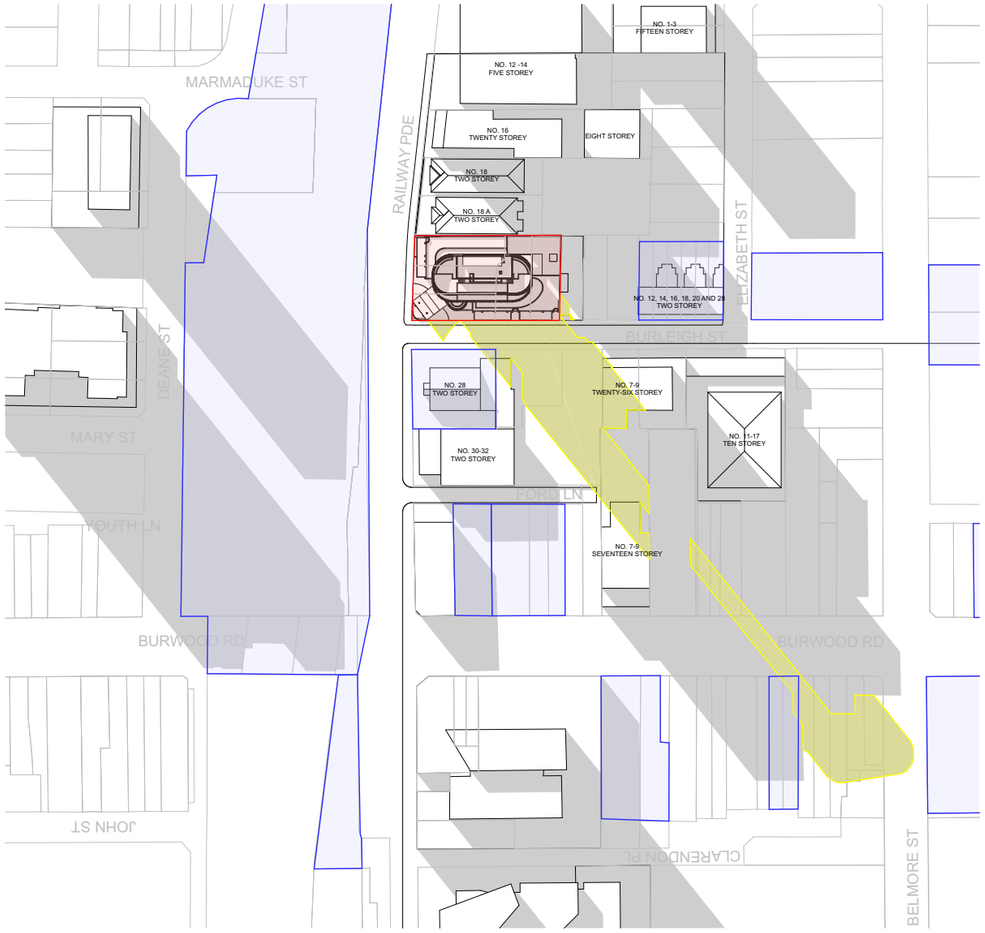
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SHADOW DIAGRAMS- JAN 21 9AM & FEB 21 9AM

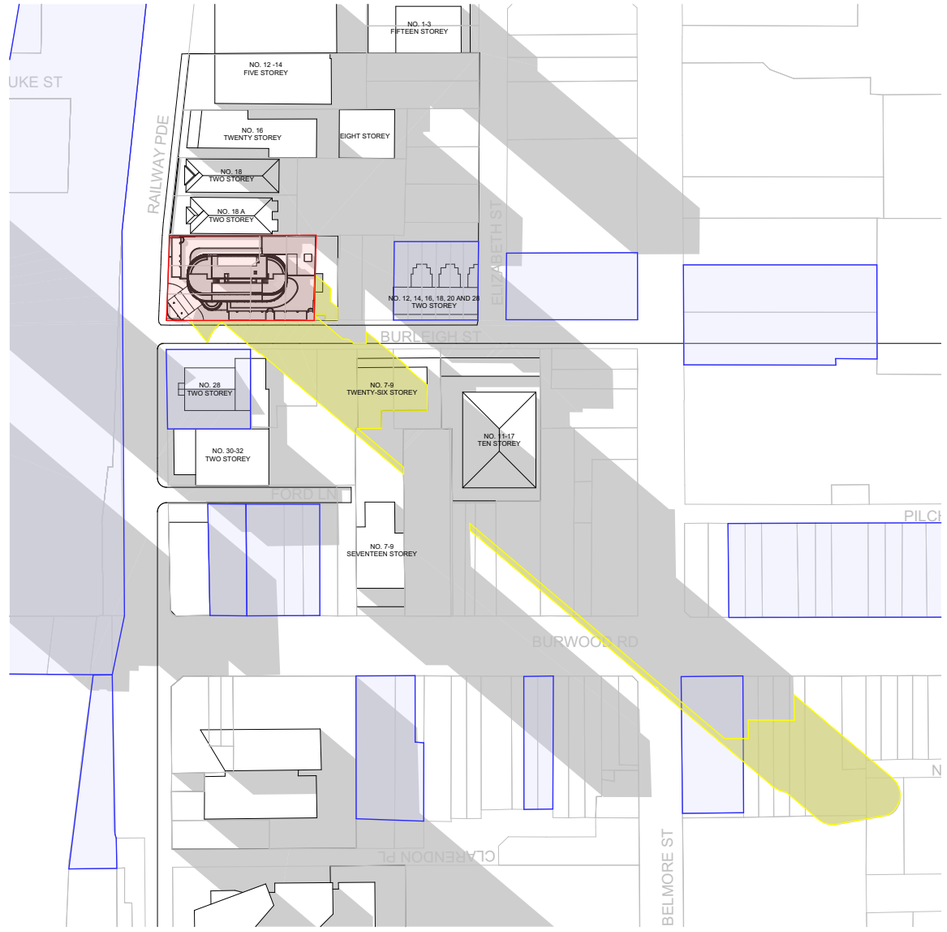
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DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK	33	P24
stage.	dwg no.	revision



1 SHADOW DIAGRAM MAR 21 9AM
1:2000



2 SHADOW DIAGRAM APR 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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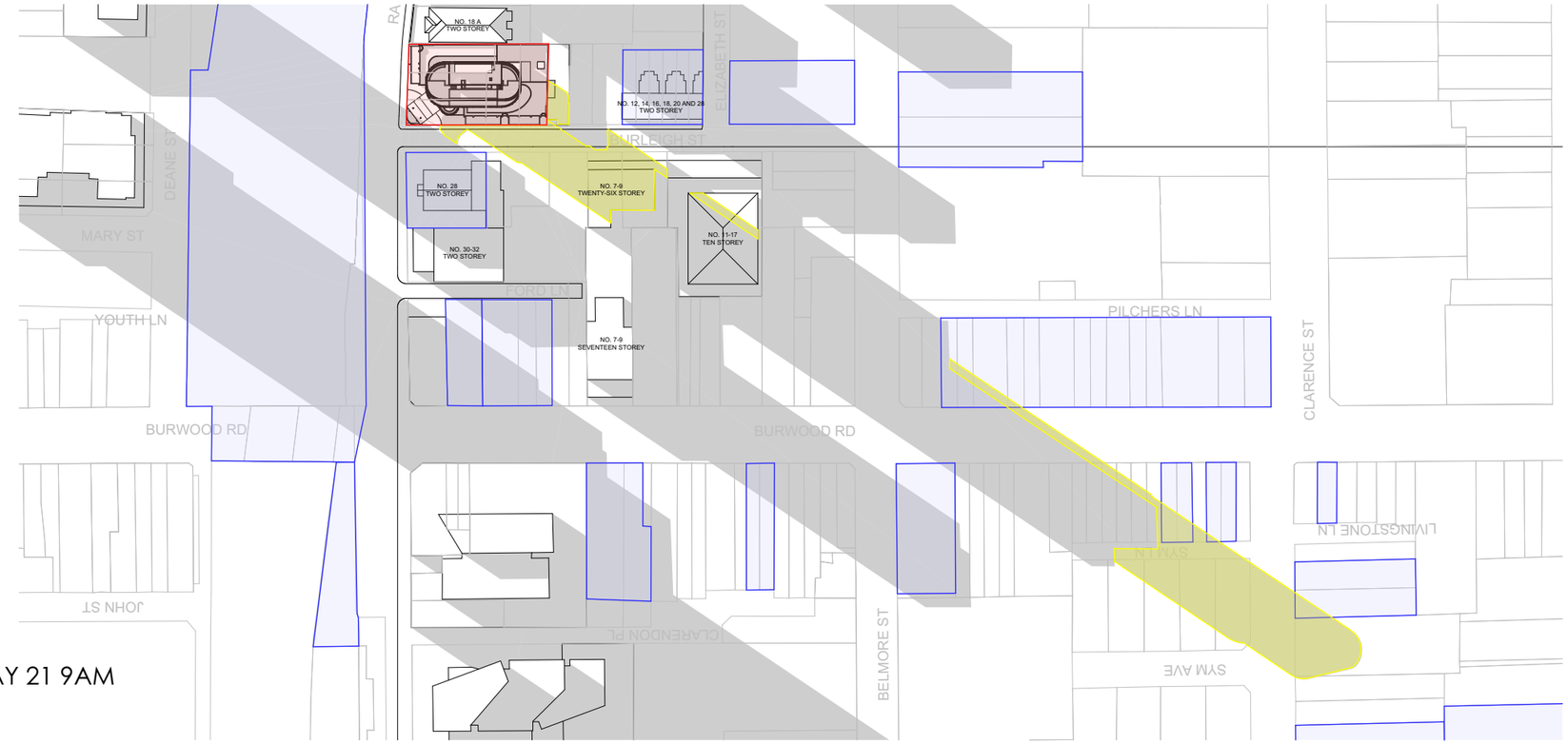
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

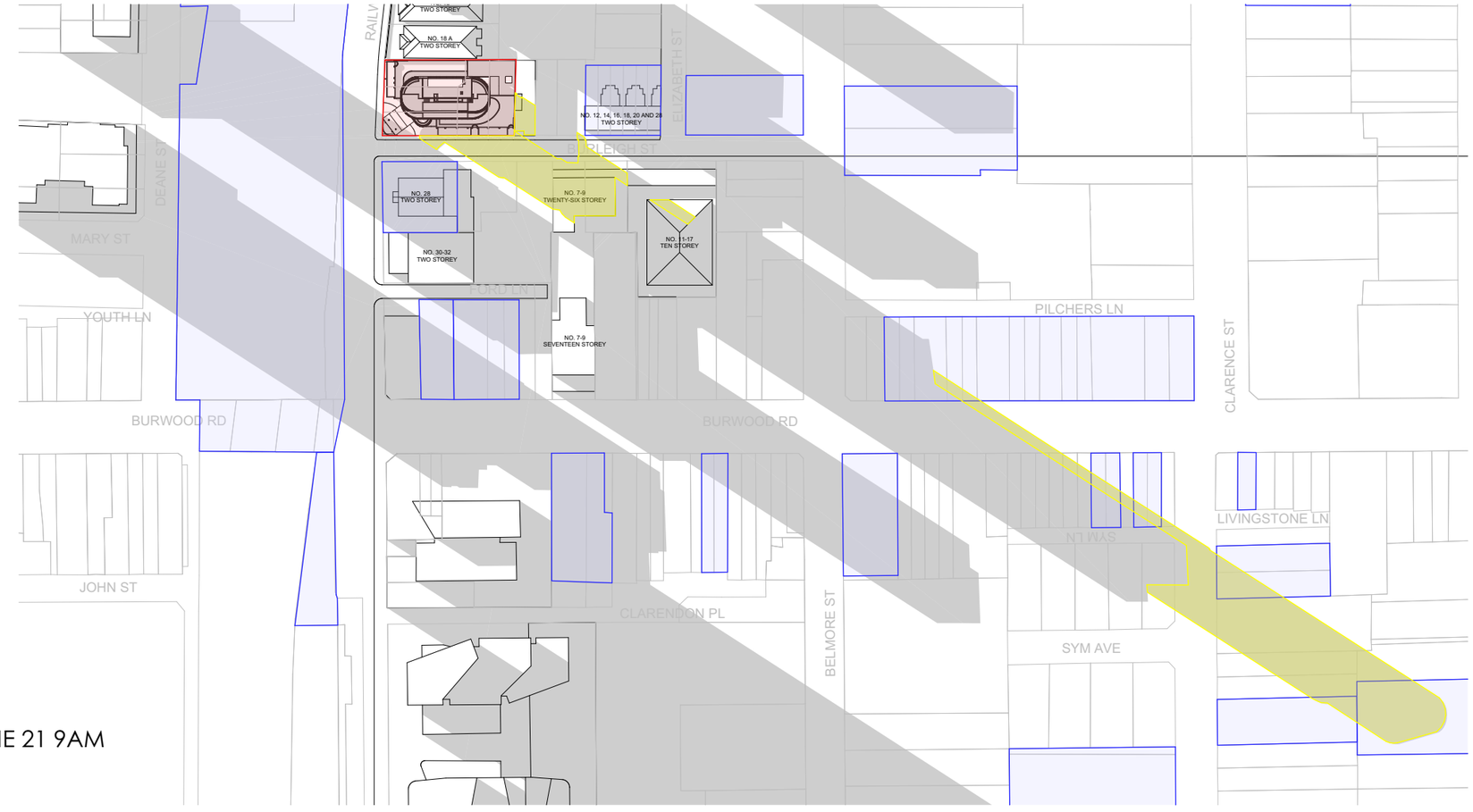
DRAWING TITLE:
SHADOW DIAGRAMS- MAR 21 9AM & APR 21 9AM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 34 dwg no. P24 revision



1 SHADOW DIAGRAM MAY 21 9AM
1:2000



2 SHADOW DIAGRAM JUNE 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
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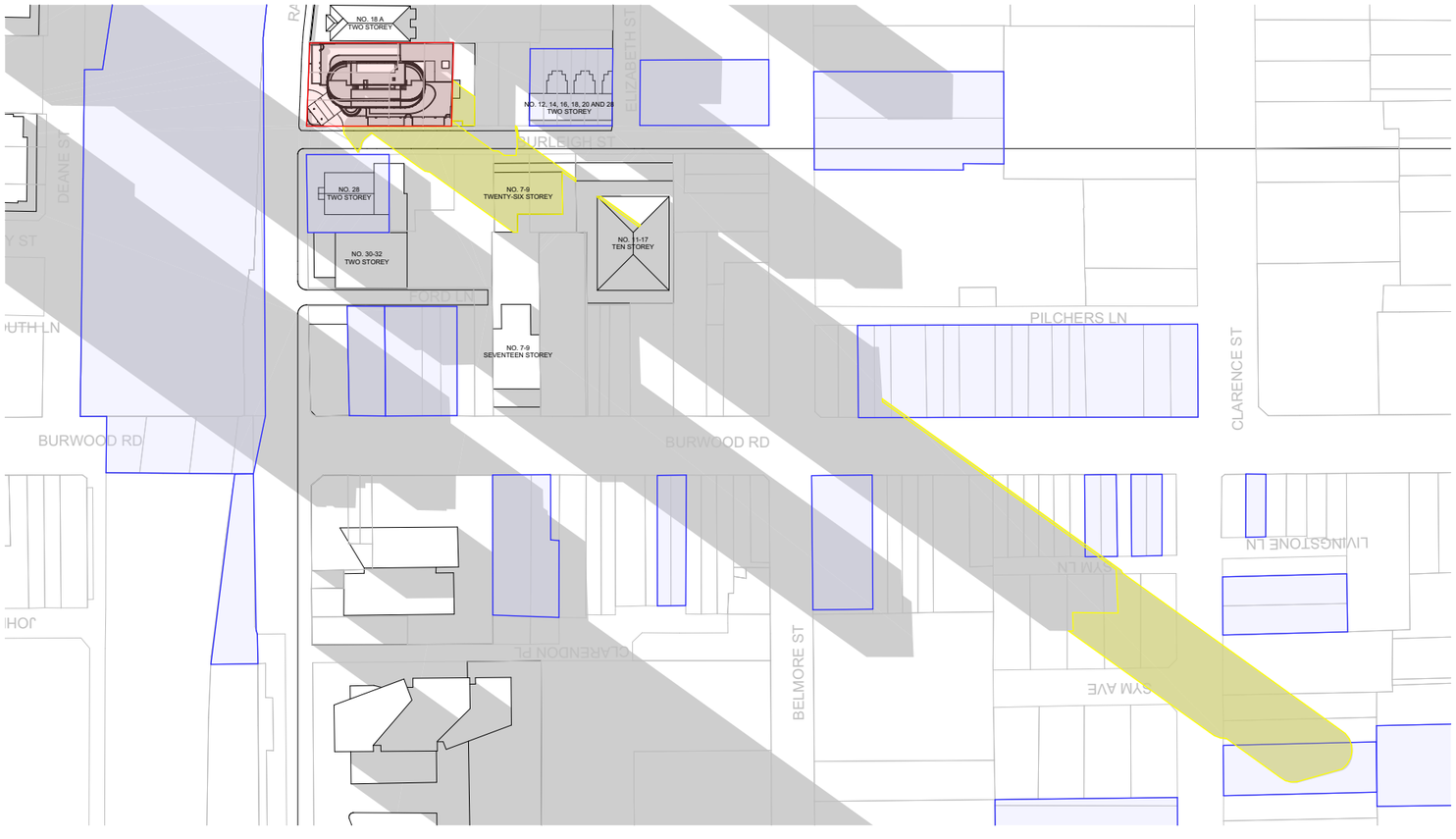
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SHADOW DIAGRAMS- MAY 21 9AM & JUN 21 9AM

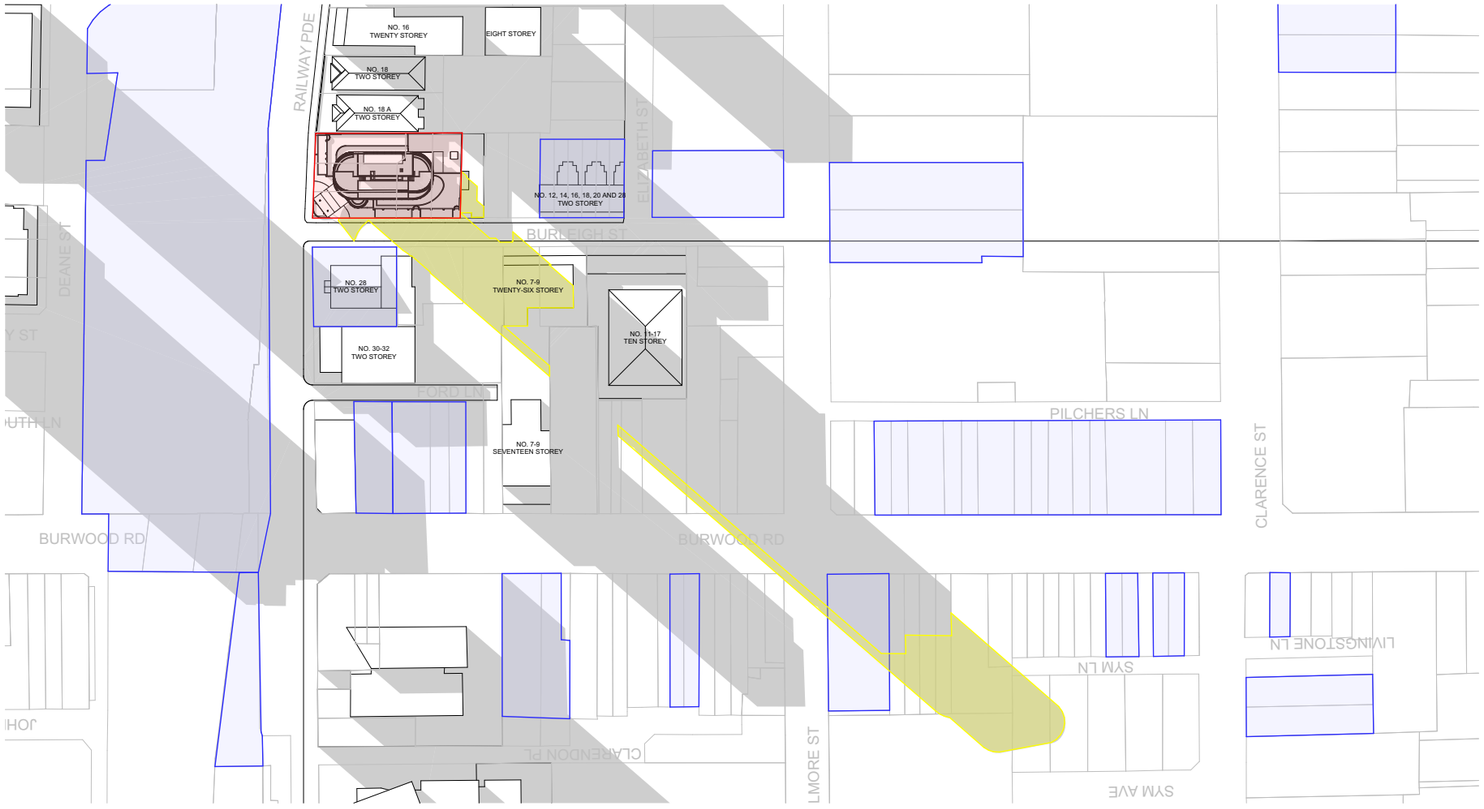
SCALE:	1:2000 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 35 dwg no. P24 revision



1 SHADOW DIAGRAM JUL 21 9AM
1:2000



2 SHADOW DIAGRAM AUG 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

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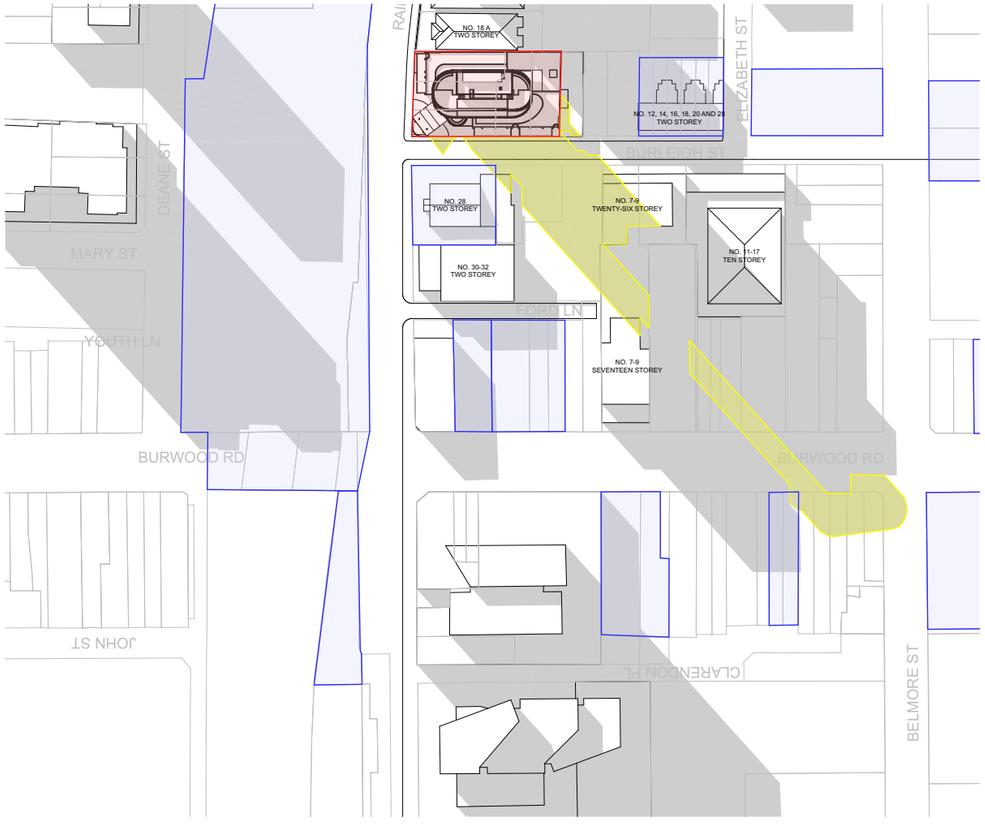
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

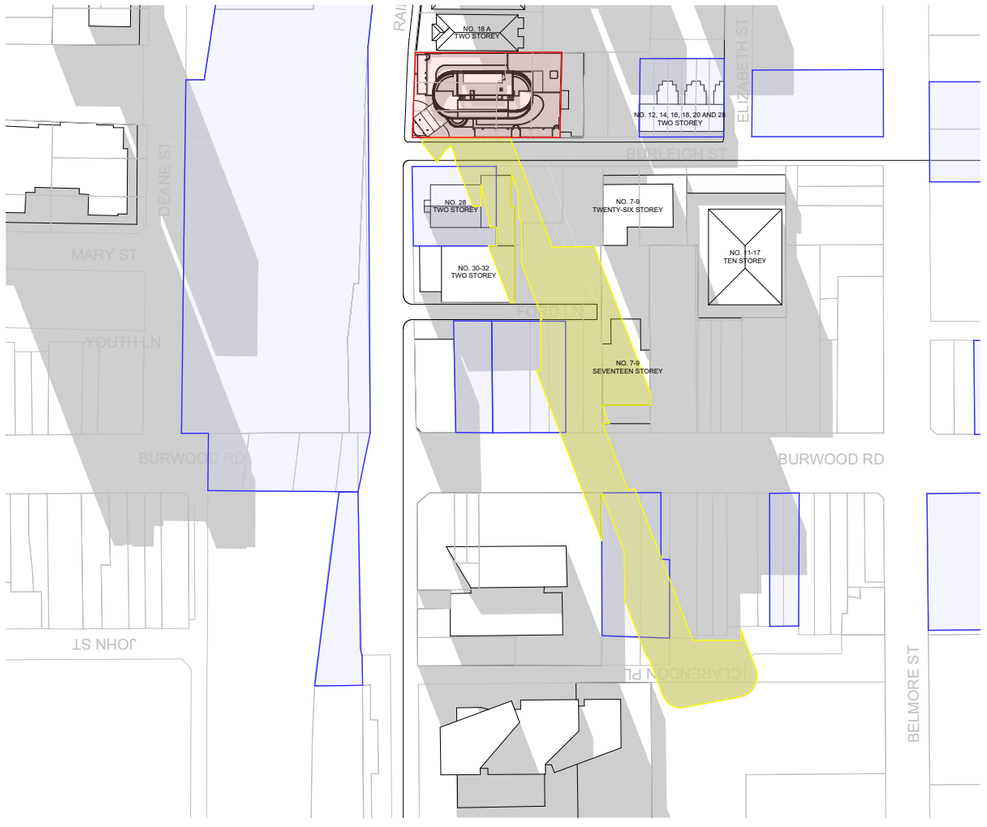
DRAWING TITLE:
SHADOW DIAGRAMS- JUL 21 9AM & AUG 21 9AM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 36 dwg no. P24 revision



1 SHADOW DIAGRAM SEP 21 9AM
1:2000



2 SHADOW DIAGRAM OCT 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
- SUBJECT SITE
- HERITAGE ITEM

SCOPING MEETING

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CLIENT :
CONQUEST

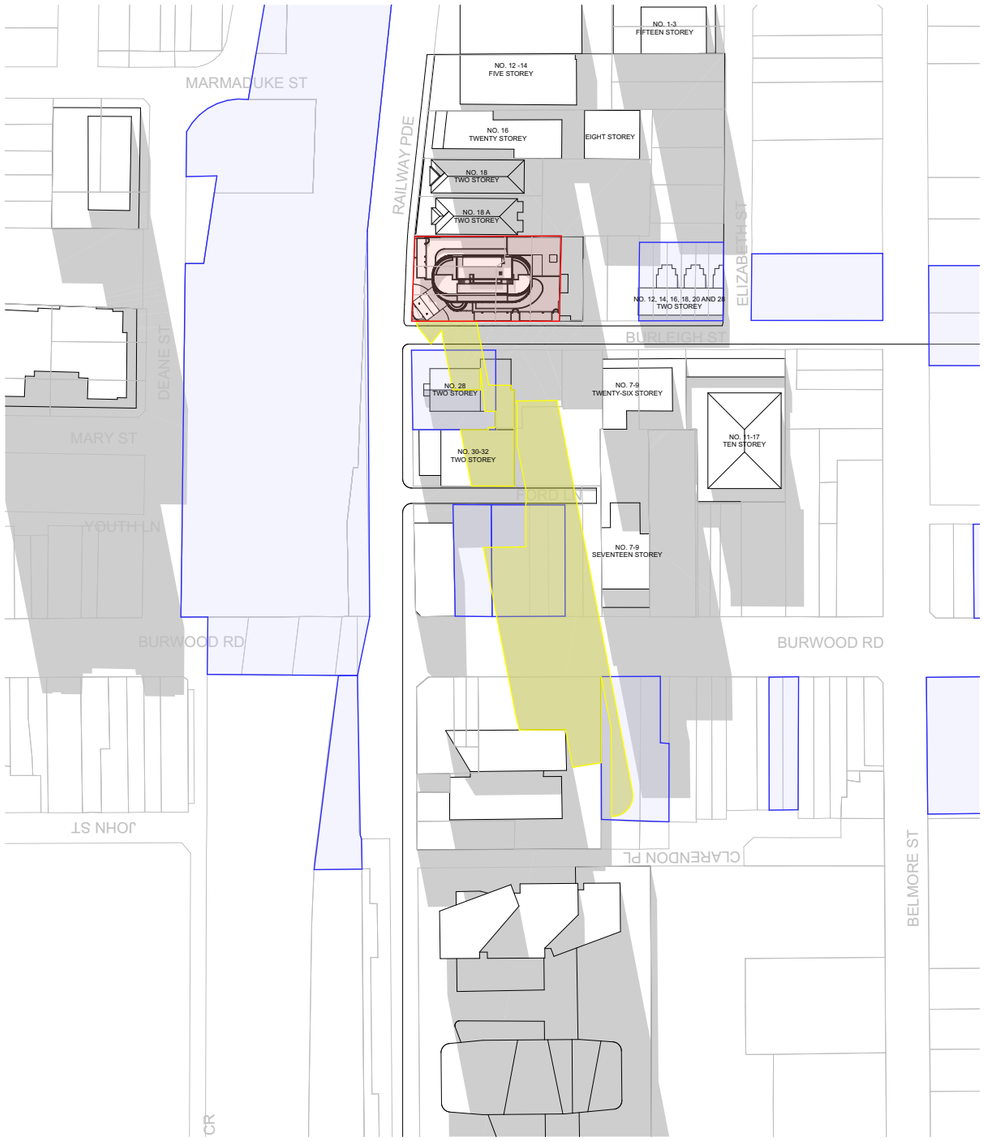
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
SHADOW DIAGRAMS- SEP 21 9AM & OCT 21 9AM

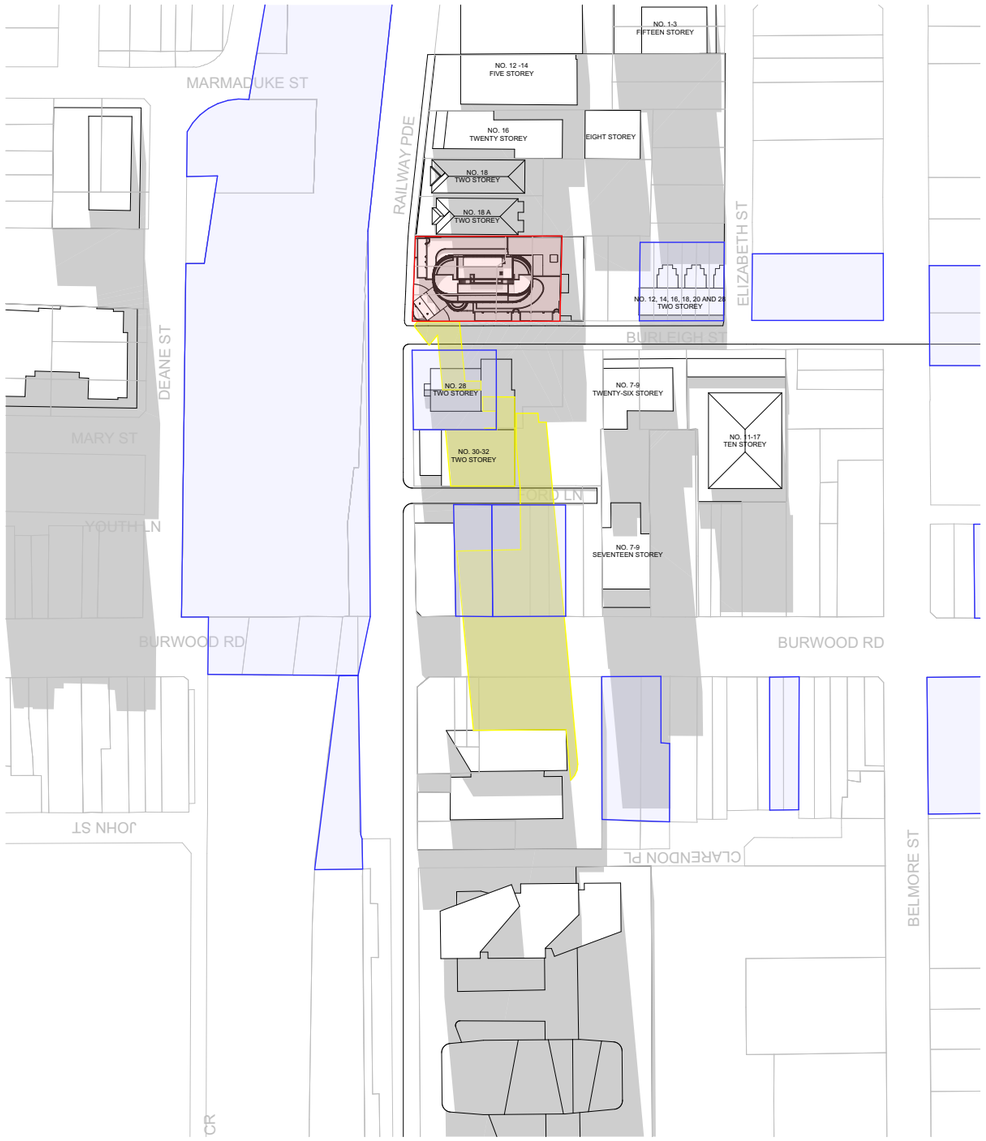
SCALE:	1:2000 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

SK stage. 37 dwg no. P24 revision



1 SHADOW DIAGRAM NOV 21 9AM
1:2000



2 SHADOW DIAGRAM DEC 21 9AM
1:2000

50m 100m
1:2000

SHADOW IMPACT LEGEND

- EXISTING SHADOWS
- ADDITIONAL SHADOW CAST BY PROPOSED BUILDING
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- HERITAGE ITEM

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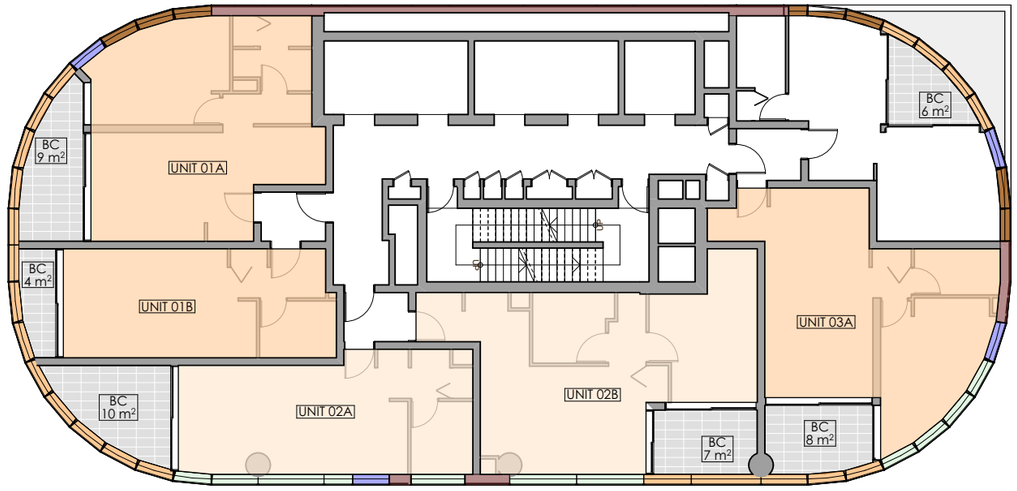
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

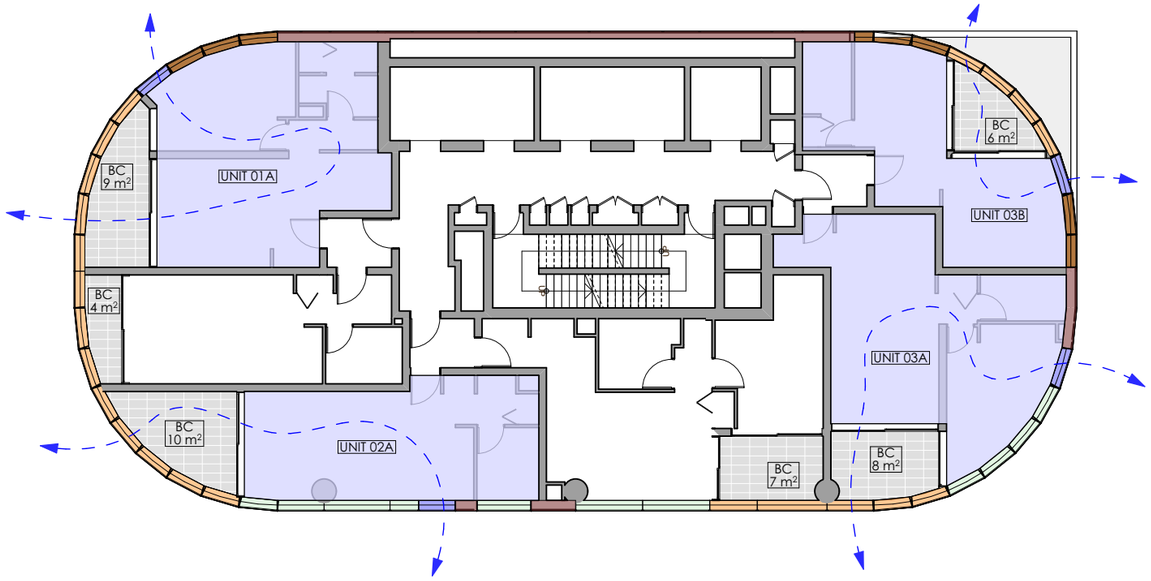
DRAWING TITLE:
SHADOW DIAGRAMS- NOV 21 9AM DEC 21 9AM

SCALE: 1:2000 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 38 dwg no. P24 revision



1 LEVELS 3 TO 18- SOLAR ACCESS
1:200



2 LEVELS 3 TO 18- NATURAL CROSS VENTILATION
1:200

5m 10m
1:200

SOLAR ACCESS & CROSS VENTILATION LEGEND

- UNITS & PRIVATE OPEN SPACE RECEIVING 2 HOURS SOLAR ACCESS
- CROSS VENTILATION

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

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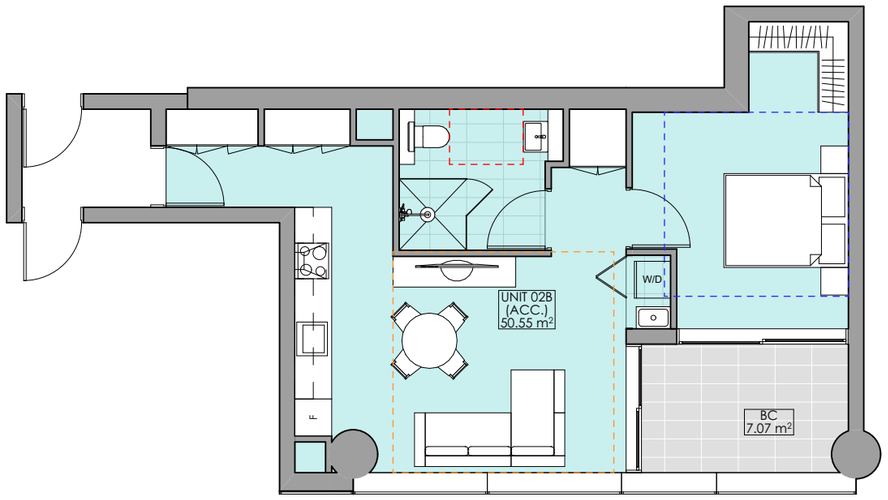
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

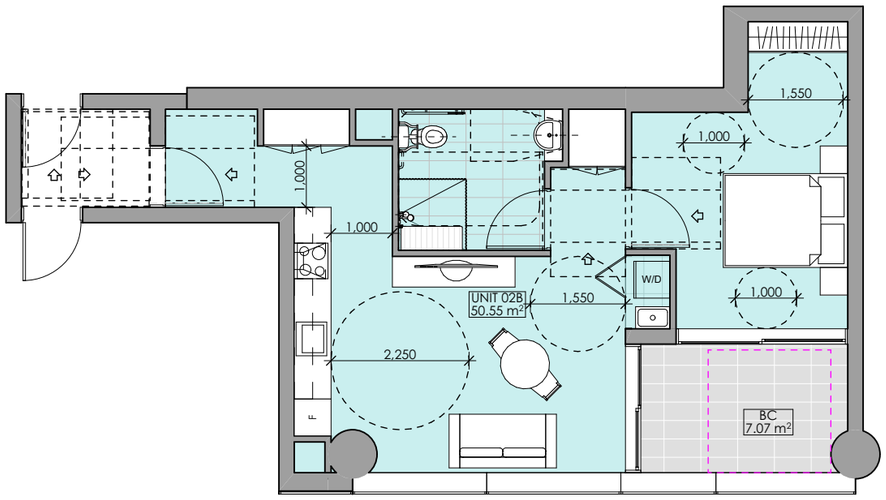
DRAWING TITLE:
SOLAR ACCESS AND NATURAL CROSS VENTILATION

SCALE: 1:200 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

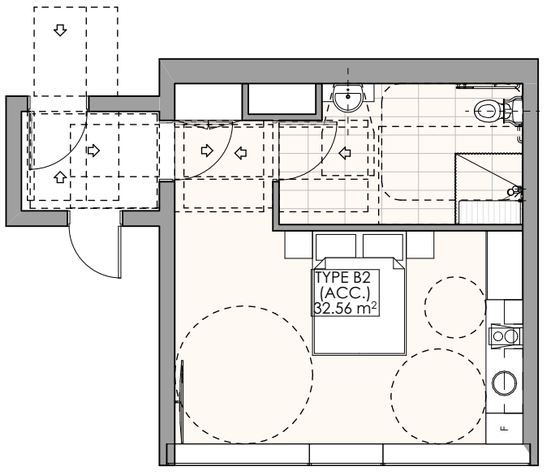
SK stage. 39 dwg no. P24 revision



1 PRE- ADAPTABLE LAYOUT
1:100



2 POST-ADAPTABLE LAYOUT
1:100



3 ACCESSIBLE HOTEL ROOM
1:100

5m 10m
1:200

SCOPING MEETING

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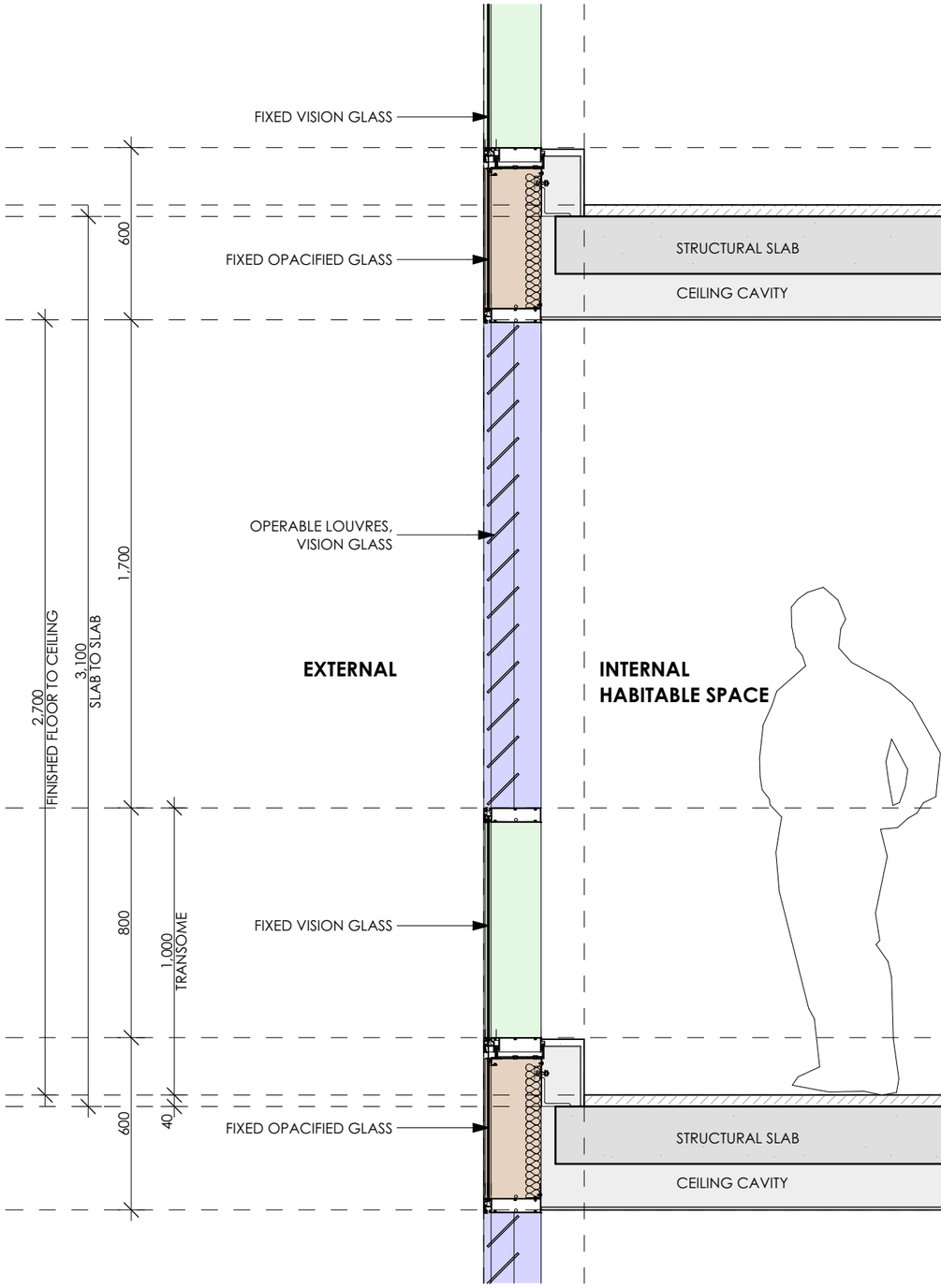
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

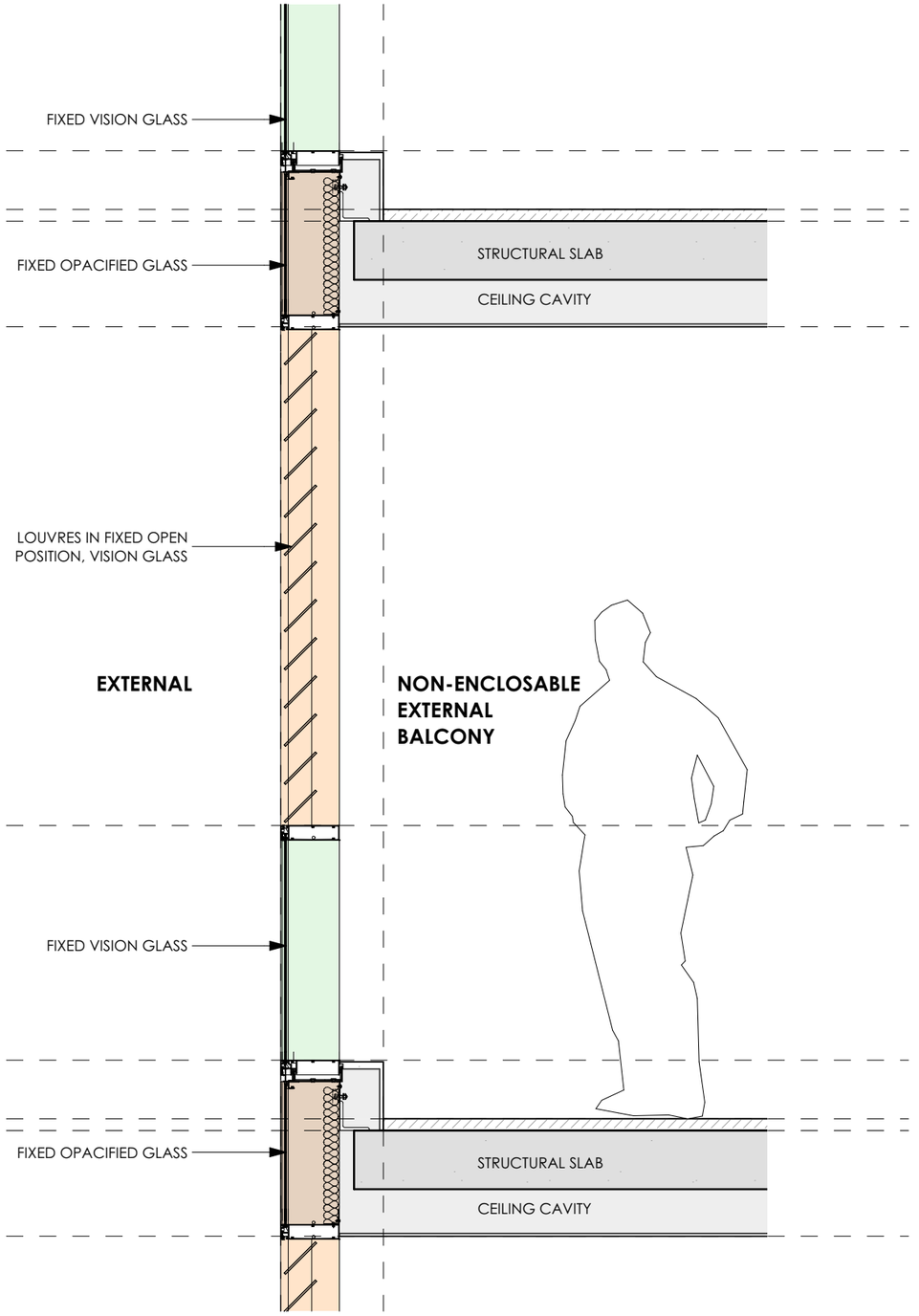
DRAWING TITLE:
ACCESSIBLE LAYOUTS

SCALE: 1:100 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 40 dwg no. P24 revision



1 CURTAIN WALL
1:20



2 CURTAIN WALL
1:20



GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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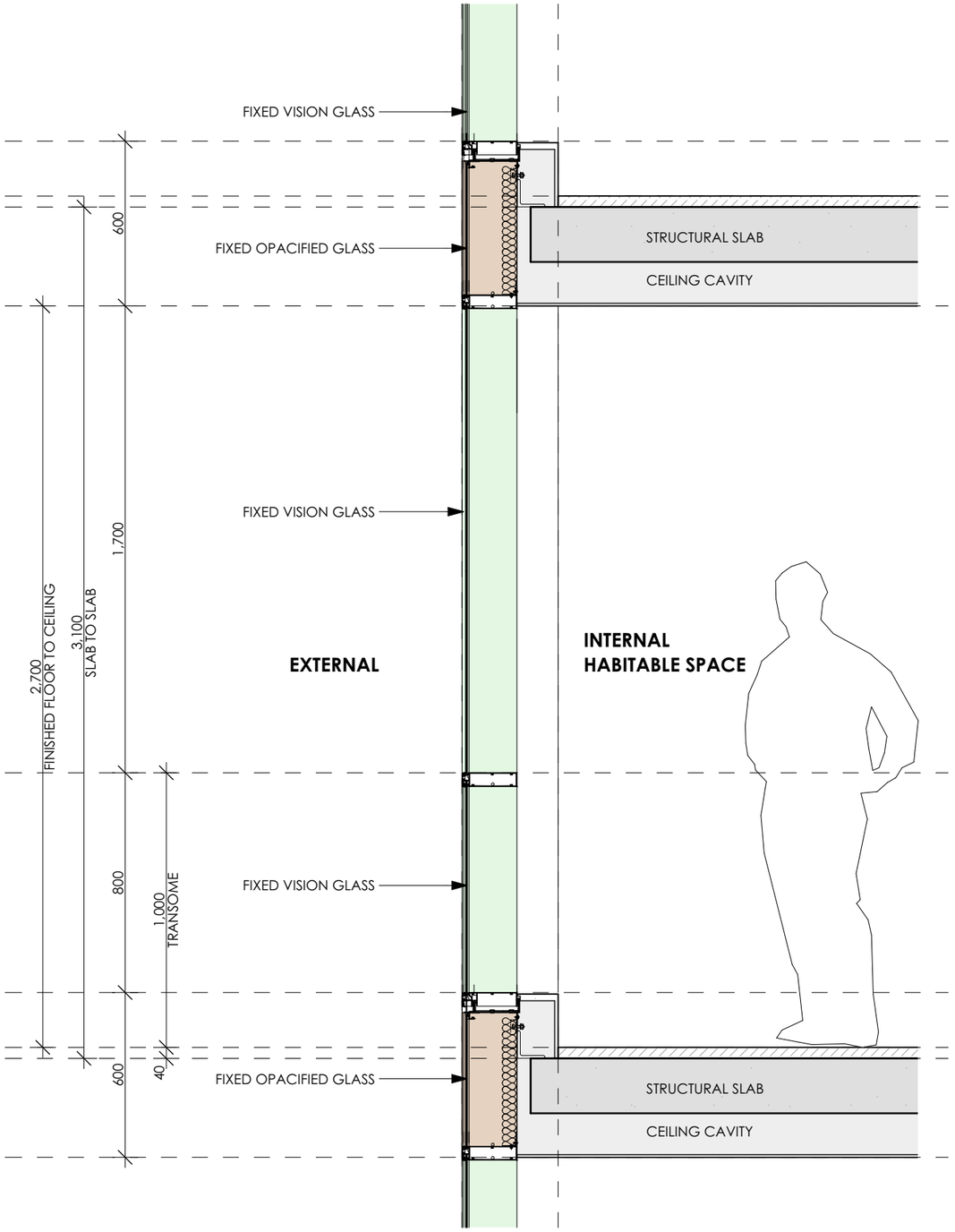
CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

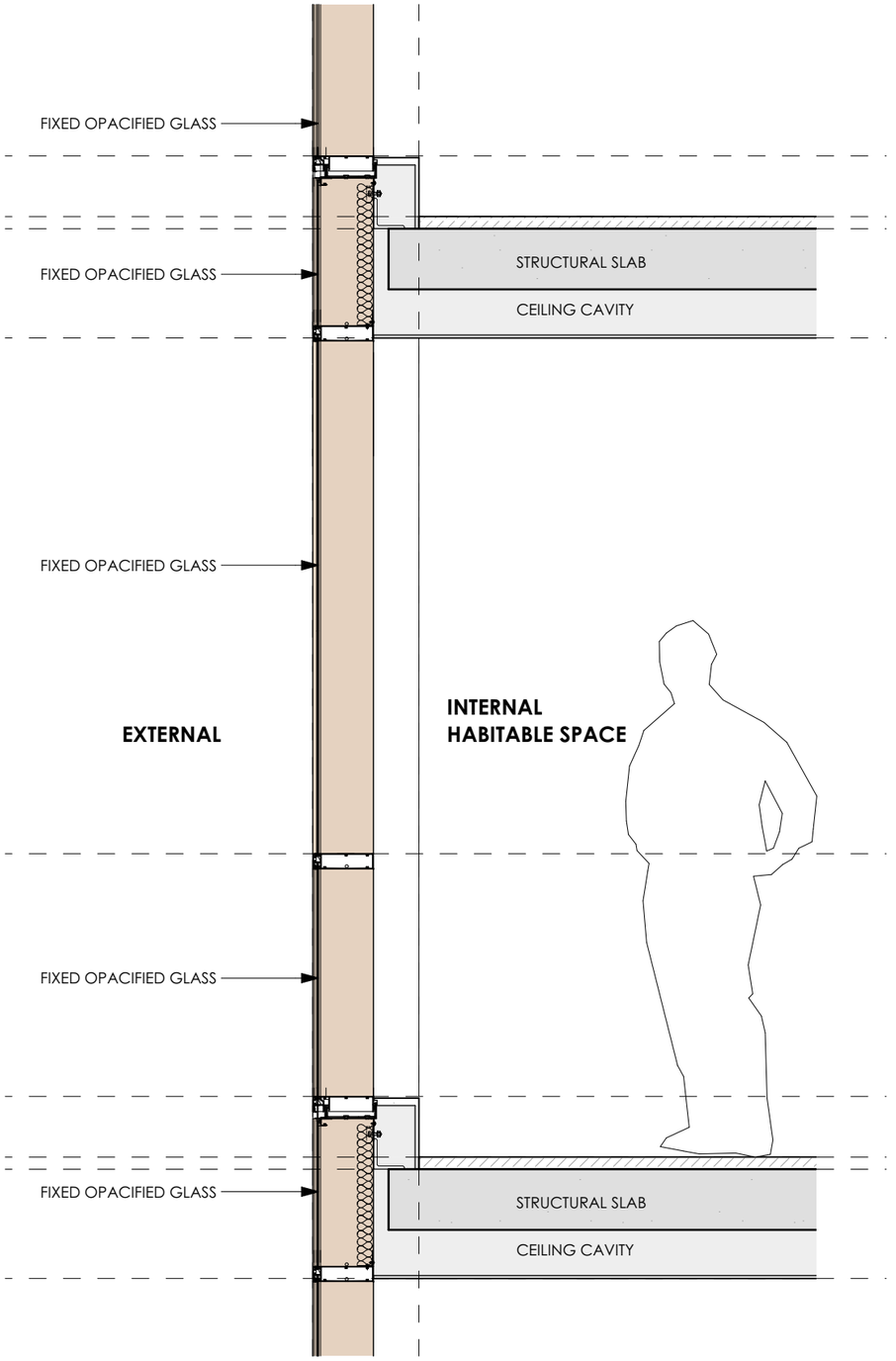
DRAWING TITLE:
FACADE GLAZING TYPES

SCALE: 1:20 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 41 dwg no. P24 revision



1 CURTAIN WALL
1:20



2 CURTAIN WALL
1:20

0.5m 1m
1:20

GLAZING TYPE LEGEND

- VISION GLASS LOUVRES- FIXED OPEN AT EXTERNAL SPACES
- VISION GLASS LOUVRES- OPERABLE AT INTERNAL SPACES
- FIXED VISION GLASS
- FIXED OPACIFIED GLASS
- FIXED OPACIFIED GLASS OVER SOLID WALL

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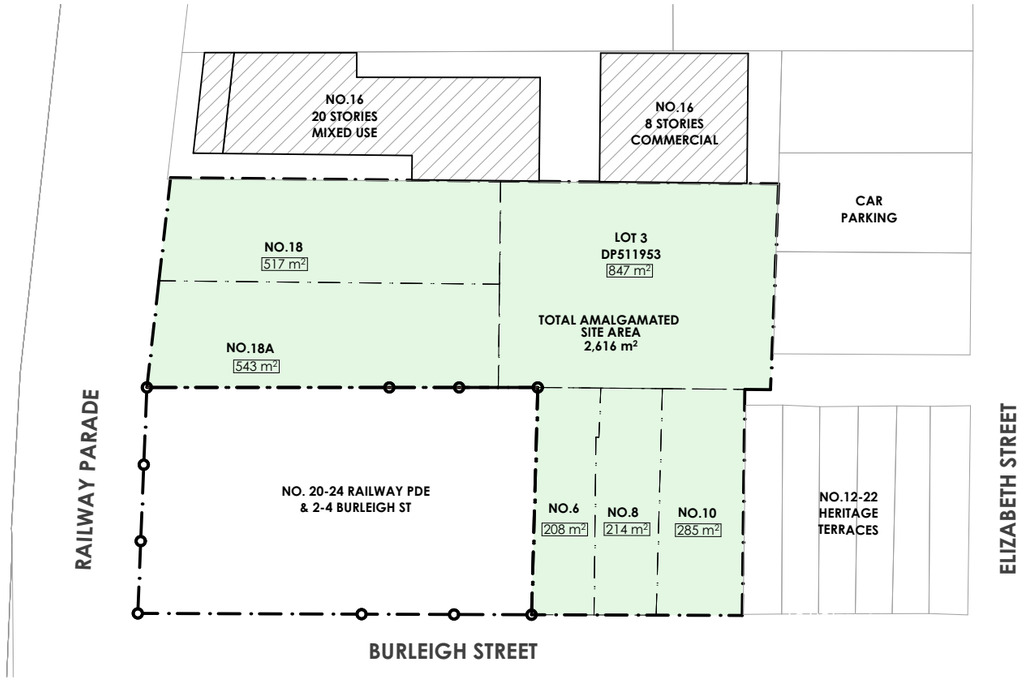
CLIENT :
CONQUEST

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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

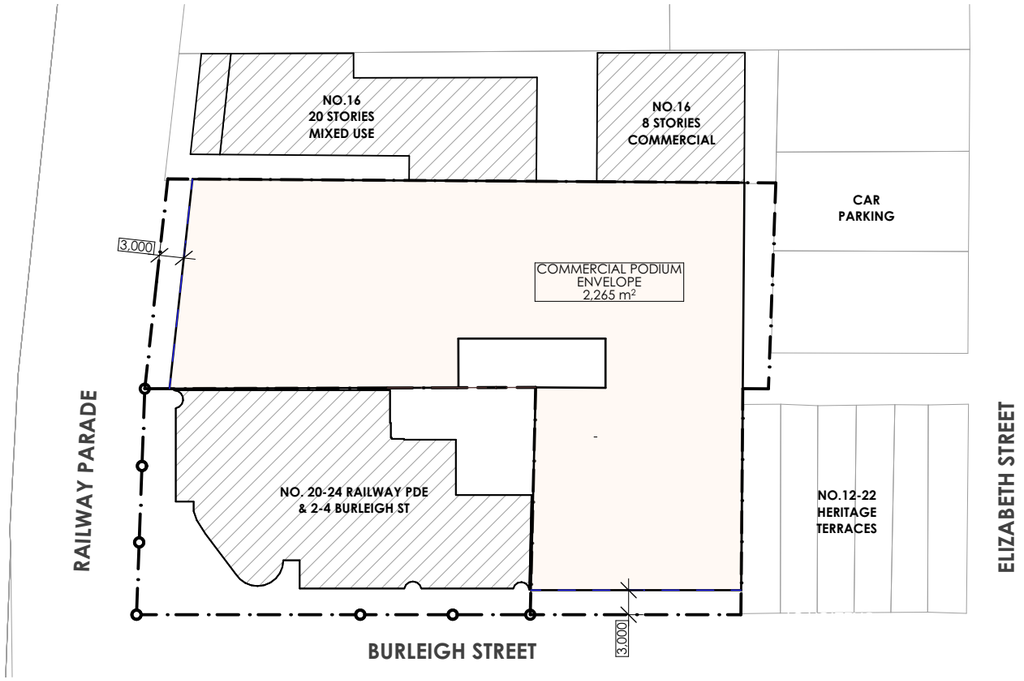
DRAWING TITLE:
FACADE GLAZING TYPES

SCALE: 1:20 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

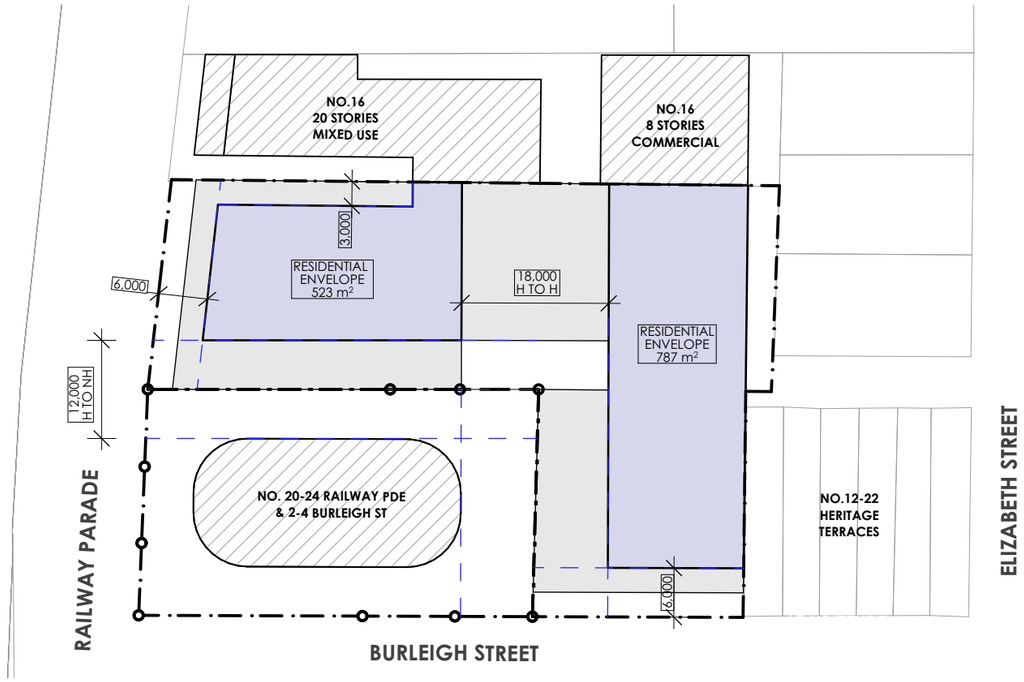
SK stage. 42 dwg no. P24 revision



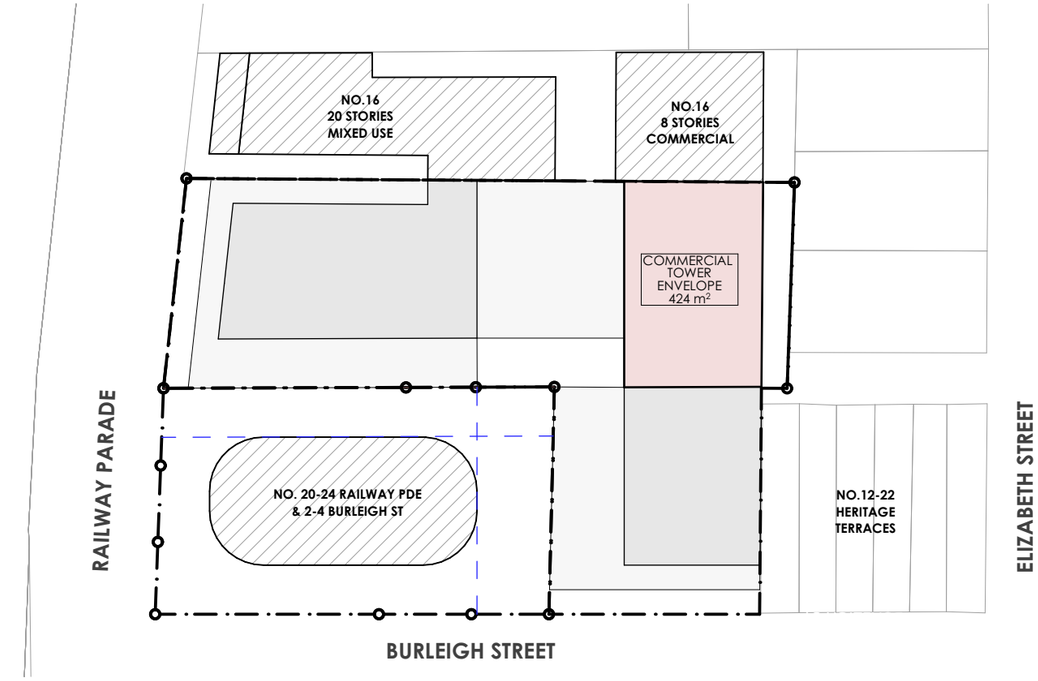
1 POTENTIAL AMALGAMATION
1:750



2 PODIUM- GF TO L3
1:750



3 TOWER- L3 TO L7
1:750



4 TOWER L8 TO L28
1:750

25m 50m
1:750

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
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CLIENT :
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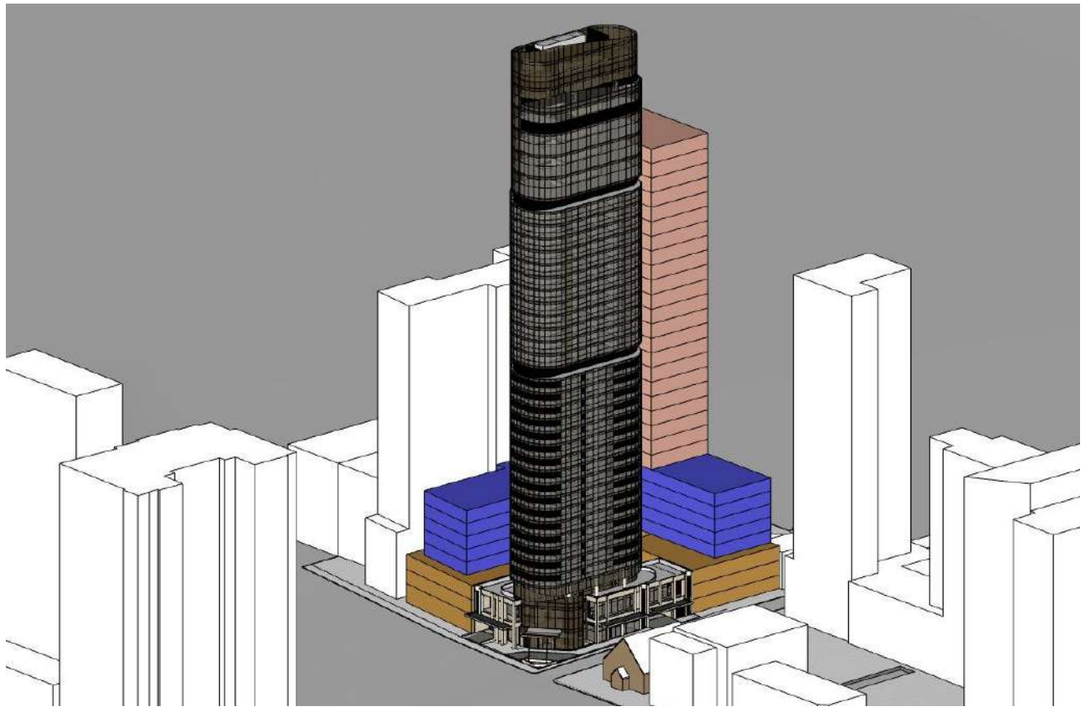
PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
POTENTIAL SURROUNDING DEVELOPMENT

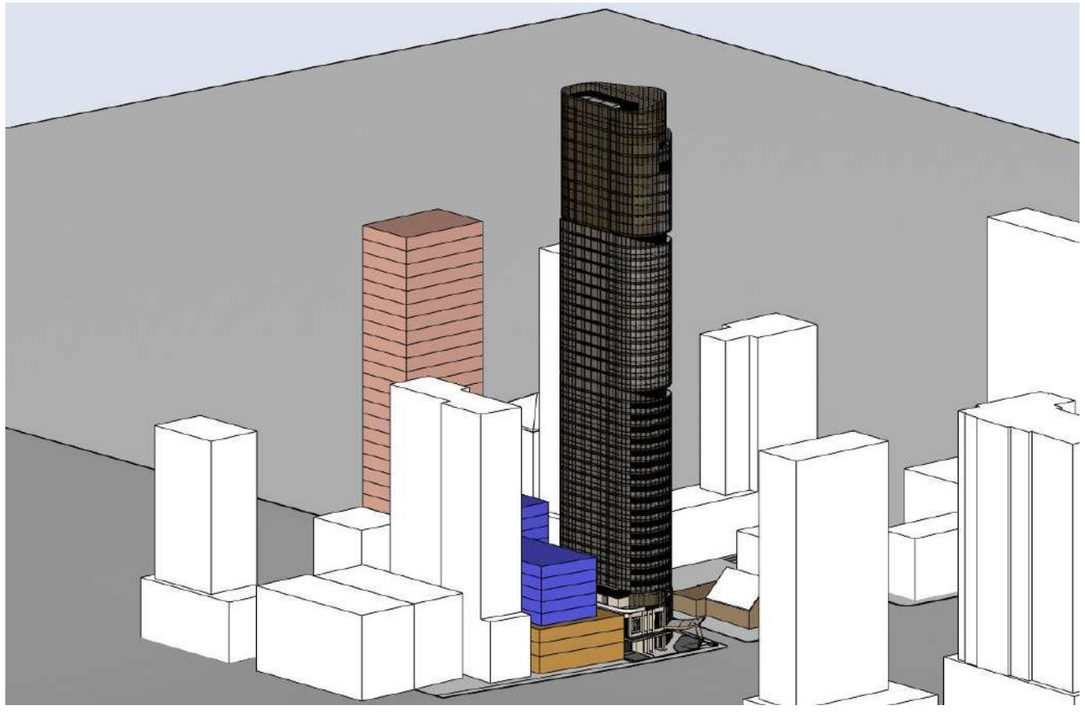
SCALE:	1:750 AT A3
DRAWN BY:	VD/JR
CHECKED BY:	PI
PROJECT No:	P709

NORTH POINT:

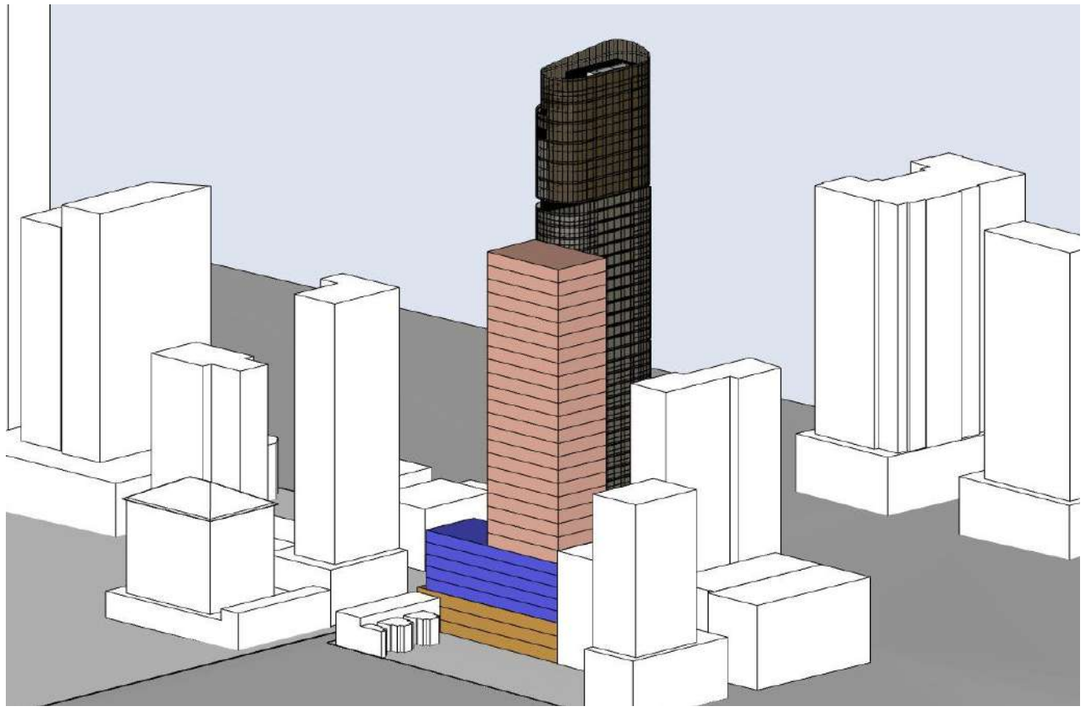
SK stage. 43 dwg no. P24 revision



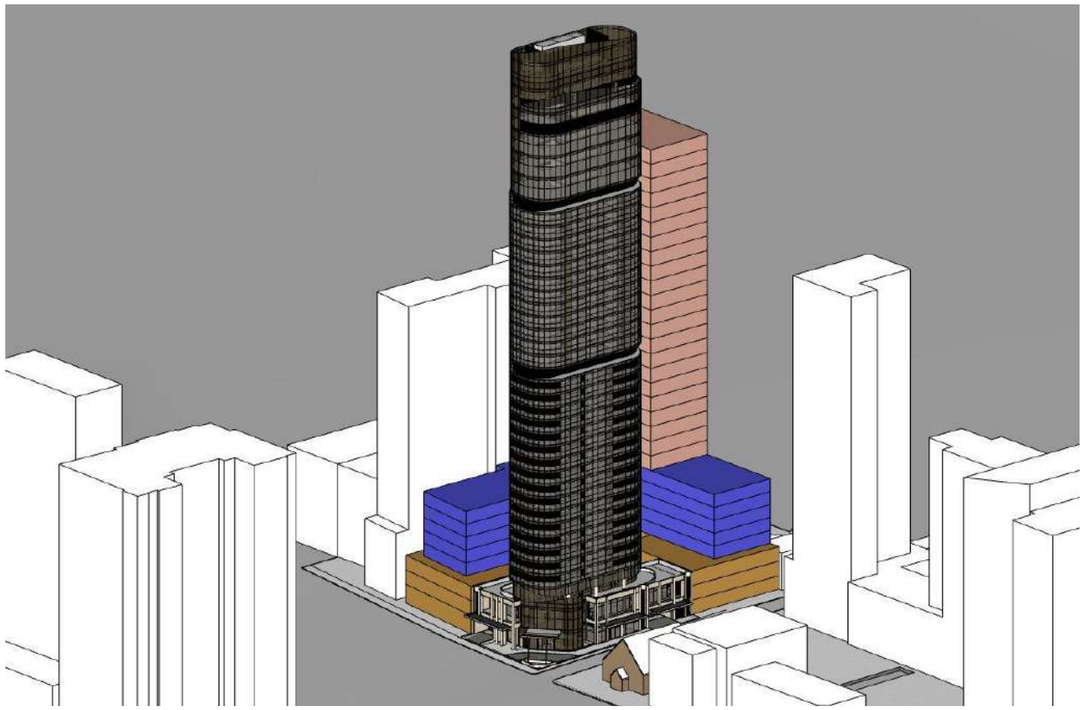
1 POTENTIAL SURROUNDING DEVELOPMENT LOOKING SOUTH-EAST
1:2.50



2 POTENTIAL SURROUNDIND DEVELOPMENT LOOKING SOUTH-WEST
1:2.50



3 POTENTIAL SURROUNDING DEVELOPMENT LOOKING NORTH-WEST
1:2.50



4 POTENTIAL SURROUNDING DEVELOPMENT LOOKING SOUTH-EAST
1:2.50

COMMERCIAL PODIUM
3M STREET SETBACK
3 STOREYS IN HEIGHT

RESIDENTIAL PODIUM
6M STREET SETBACK
8 STOREYS IN HEIGHT

COMMERCIAL TOWER
30 STOREYS IN HEIGHT

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

ARCHITECTURE
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Nominated Registered Architect: Peter Israel (reg no 5064)
ABN 90 050 071 022

CLIENT :
CONQUEST

PROJECT :
RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
POTENTIAL SURROUNDING DEVELOPMENT

SCALE: 1:1 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 44 dwg no. P24 revision

APPROXIMATE GFA EFFICIENCY

GROUND FLOOR	33%
COMMERCIAL	85%
RESIDENTIAL	75%

APPROXIMATE GFA CALCULATION

LEVEL	USE	BUILDING ENVELOPE AREA (sqm)	RESIDENTIAL EFFICIENCY (%)	RESIDENTIAL GFA (sqm)	COMMERCIAL EFFICIENCY (%)	COMMERCIAL GFA (sqm)	TOTAL GFA (sqm)
GF	COMMERCIAL	2,265	0%	-	33%	747	747
L1	COMMERCIAL	2,265	0%	-	85%	1,925	1,925
L2	COMMERCIAL	2,265	0%	-	85%	1,925	1,925
L3	RESIDENTIAL	1,310	75%	983	0%	-	983
L4	RESIDENTIAL	1,310	75%	983	0%	-	983
L5	RESIDENTIAL	1,310	75%	983	0%	-	983
L6	RESIDENTIAL	1,310	75%	983	0%	-	983
L7	RESIDENTIAL	1,310	75%	983	0%	-	983
L8	COMMERCIAL	424	0%	-	85%	360	360
L9	COMMERCIAL	424	0%	-	85%	360	360
L10	COMMERCIAL	424	0%	-	85%	360	360
L11	COMMERCIAL	424	0%	-	85%	360	360
L12	COMMERCIAL	424	0%	-	85%	360	360
L13	COMMERCIAL	424	0%	-	85%	360	360
L14	COMMERCIAL	424	0%	-	85%	360	360
L15	COMMERCIAL	424	0%	-	85%	360	360
L16	COMMERCIAL	424	0%	-	85%	360	360
L17	COMMERCIAL	424	0%	-	85%	360	360
L18	COMMERCIAL	424	0%	-	85%	360	360
L19	COMMERCIAL	424	0%	-	85%	360	360
L20	COMMERCIAL	424	0%	-	85%	360	360
L21	COMMERCIAL	424	0%	-	85%	360	360
L22	COMMERCIAL	424	0%	-	85%	360	360
L23	COMMERCIAL	424	0%	-	85%	360	360
L24	COMMERCIAL	424	0%	-	85%	360	360
L25	COMMERCIAL	424	0%	-	85%	360	360
L26	COMMERCIAL	424	0%	-	85%	360	360
L27	COMMERCIAL	424	0%	-	85%	360	360
L28	COMMERCIAL	424	0%	-	85%	360	360
L29	ROOF C.O.S	-	100%	-	0%	-	-
	LIFT OVER RUN						
	TOTAL (sqm)	**22,249**		**4,913**		**12,166**	**17,079**
	USE MIX (%)			**29%**		**71%**	**100%**

HEIGHT OF BUILDING

FLOOR TO FLOOR (m)	REDUCED LEVEL (rl)
4.50	26.20
3.50	30.70
3.50	34.20
3.50	37.70
3.50	41.20
3.50	44.70
3.50	48.20
3.50	51.70
3.50	55.20
3.50	58.70
3.50	62.20
3.50	65.70
3.50	69.20
3.50	72.70
3.10	76.20
3.10	79.30
3.10	82.40
3.10	85.50
3.10	88.60
3.10	91.70
3.10	94.80
3.10	97.90
3.10	101.00
3.10	104.10
3.10	107.20
3.10	110.30
3.10	113.40
3.10	116.50
3.10	119.60
3.10	122.70
3.10	125.80
102.70	**128.90**

PLANNING CONTROL CALCULATIONS

DESCRIPTION	PLANNING INSTRUMENT	BONUS (%)	(m/ X:1/ sqm/ %)	COMPLIANCE Y/N
SITE AREA				
MIN. SITE AREA (sqm)	LEP		-	
SUBJECT SITE AREA (sqm)			**2,618**	**Y**
HEIGHT OF BUILDING				
PERMISSIBLE HOB (m)	LEP BHP		0.00	
BONUS HOB (m)		0.0%	0.00	
BONUS HOB (m)		0.0%	0.00	
TOTAL MAX. HOB (m)			**0.00**	
PROPOSED TOTAL HOB (m)			**102.70**	**Y**
FLOOR SPACE RATIO				
PERMISSIBLE FSR (X:1)	BASE LEP		6.00	
BONUS FSR (%)	VPA	10.0%	0.60	
BONUS FSR (%)		0.0%	0.00	
MIN. COMMERCIAL INCLUSIVE IN MAX. (X:1)		.	0.00	
MAX. TOTAL PERMISSIBLE (X:1)			**6.60**	
PROPOSED TOTAL FSR (X:1)			**6.52**	**Y**
GROSS FLOOR AREA				
PERMISSIBLE GFA (sqm)	BASE LEP		15,708	
BONUS GFA (sqm)	VPA	10.0%	1,571	
BONUS GFA (sqm)		0.0%	-	
MIN. COMMERCIAL INCLUSIVE IN MAX. (sqm)			-	
MAX. TOTAL GFA (sqm)			**17,279**	
PROPOSED TOTAL GFA (sqm)			**17,079**	**Y**

SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
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DRAWING TITLE:
POTENTIAL SURROUNDING DEVELOPMENT

SCALE: 1:1 AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 45 dwg no. P24 revision



SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
PERSPECTIVE 1

SCALE: AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 46 dwg no. P24 revision



SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

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2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:
PERSPECTIVE 2

SCALE: AT A3
NORTH POINT:
DRAWN BY: VD/JR
CHECKED BY: PI
PROJECT No: P709

SK stage. 47 dwg no. P24 revision



SCOPING MEETING

REV	DESCRIPTION	BY	DATE
P24	AMENDMENTS FROM SCOPING MEETING	VD	16.08.24
P23	AMENDMENTS FROM SCOPING MEETING	VD	22.07.24
P22	SUBMISSION TO DEPARTMENT OF PLANNING	VD	22.05.24
P21	PRELIMIMARY- FOR CO-ORDINATION	VD	16.05.24
P20	PRELIMIMARY- FOR CO-ORDINATION	VD	23.04.24

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CLIENT :

CONQUEST

PROJECT :

RESIDENTIAL/ AFFORDABLE HOUSING, HOTEL & COMMERCIAL OFFICES
2-4 BURLEIGH ST & 20-24 RAILWAY PDE, BURWOOD

DRAWING TITLE:

PERSPECTIVE 3

SCALE: AT A3

NORTH POINT:

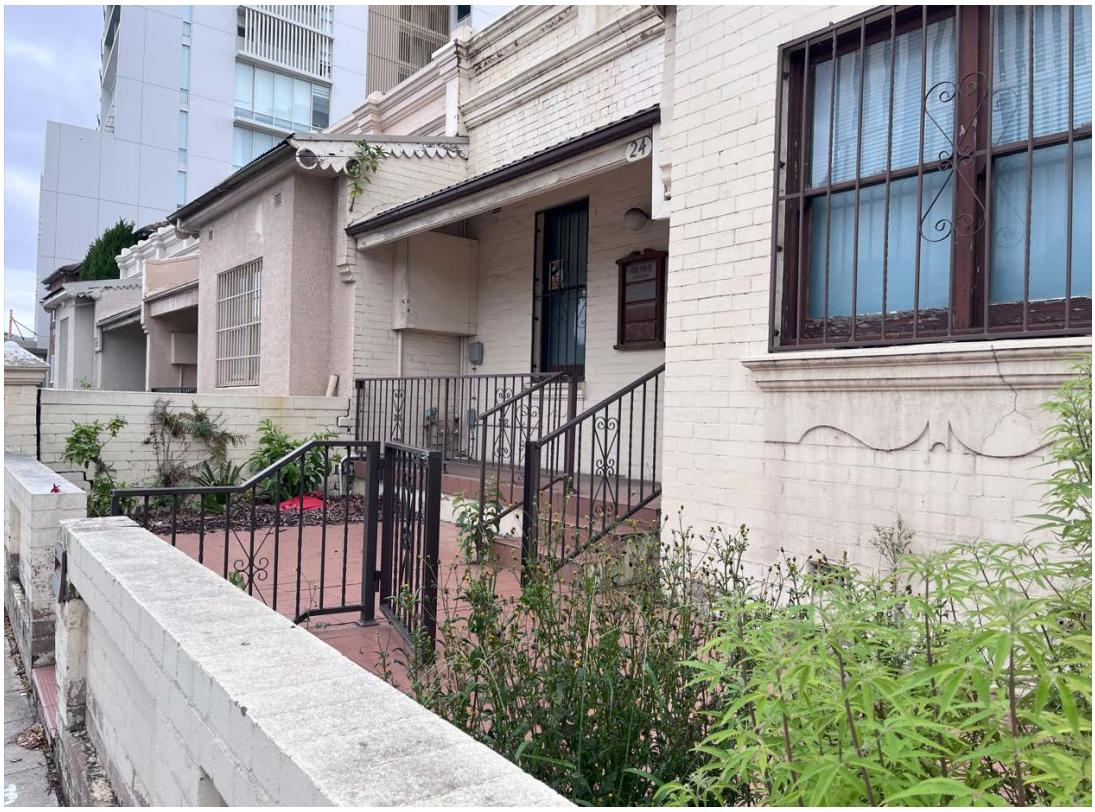
DRAWN BY: VD/JR

CHECKED BY: PI

PROJECT No: P709

SK stage. | 48 dwg no. | P24 revision

Appendix C – Site Photographs



Photograph 1: Facing east, showing the three properties on the site (24/03/25).



Photograph 2: Parking at the rear of the properties (24/03/25)



Photograph 3: Facing southeast, showing the exposed soils on the site (24/03/25)



Photograph 4: Existing groundwater well at the site (24/03/25)



Photograph 5: Soils from BH101 (24/03/25)



Photograph 6: Soils from BH104M (24/03/25)



Photograph 7: Ironstone within BH105 (24/03/25)



Photograph 8: Ash within BH106 (24/03/25)



Photograph 9: Soils from BH107 (24/03/25)

Appendix D – Borehole Logs

BOREHOLE LOG

BH ID: BH103

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW			**Started**	24 March 2025
Client	Conquest			**Completed**	24 March 2025
Job No.	E26516.E02			**Logged By**	AN **Date** 24 March 2025
Sheets	1 of 1			**Review By**	SR **Date**
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249765.1517 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324724.4168 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH103_0.40-0.50 PID = 3 PPM BH103_0.60-0.70 PID = 3..4 PPM		0.00 0.30 0.50 1			FILL: Silty CLAY: high plasticity, dark brown mottled orange with gravels, with ironstone gravels gravels are fine grained angular to sub-angular, no staining, no ACM observed, no odour From 0.30m to 0.50m, orange, with trace rootlets gravels, gravels are medium angular to sub-angular, no staining, no ACM observed, no odour Silty CLAY: low plasticity, orange with mottled yellow-grey with ironstone gravels gravels are medium sub-angular, no staining, no ACM observed, no odour Terminated at 1.00m. Target Depth Reached.	D		FILL NATURAL

BOREHOLE LOG

BH ID: BH101

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	-	**Surface RL**	-	**Northing**	6249797.6265 (MGA 2020 Zone 56)
Plant	Hand Auger	**Inclination**	90°	**Easting**	324739.0484 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
HA	GWNE	BH101_0.10-0.20 PID = 1.2 PPM		0.00			FILL: Silty CLAY: low to medium plasticity, dark brown with trace rootlets, gravels, gravels are fine grained sub-angular, no staining, no ACM observed, no odour Terminated at 0.30m. Refusal on gravels.	D		FILL

This log should be read in conjunction with EI Australia's accompanying explanatory notes.

BOREHOLE LOG

BH ID: BH102

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**		**Date**	
Drilling Contractor	-	**Surface RL**	-	**Northing**	6249789.3036 (MGA 2020 Zone 56)
Plant	Hand Auger	**Inclination**	90°	**Easting**	324739.5073 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
HA	GWNE	BH102_0.20-0.30 PID = 6.2 PPM BH102_0.40-0.50		0 0.00 0.20 0.30 0.40			FILL: Silty CLAY: low to medium plasticity, dark brown with gravels, with ash, trace rootlets and gravels. gravels are medium to angular to sub-angular, no staining, no ACM observed, no odour From 0.20m to 0.30m, dark brown with ash with gravels, gravels are medium sub-angular to rounded, no staining, no ACM observed, no odour From 0.30m to 0.40m, brown with trace rootlets with gravels fine sub-angular, no staining, no ACM observed, no odour From 0.40m to 0.50m, orange-mottled red with rootlets, no staining, no ACM observed, no odour Terminated at 0.50m. Target depth reached. Terminated at 0.50m. Target depth reached.	D		FILL
				1						
				2						
				3						
				4						
				5						

BOREHOLE LOG

BH ID: BH104M

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249768.3632 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324747.5643 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH104M_0.20-0.30 PID = 0.4 PPM		0.00			FILL: Silty CLAY: high plasticity, brown with brick, gravels, gravels are fine to medium sub-angular to rounded, no staining, no ACM observed, no odour			FILL
		BH104M_0.70-0.80 PID = 0.7 PPM		0.40			Silty CLAY: high plasticity, pale brown orange mottled red, no staining, no ACM observed, no odour	D		NATURAL
				1.30			From 1.30m to 2.00m, pale grey with mottled yellow, no staining, no ACM observed, no odour			
				2.00			SHALE: pale brown, pale orange, no staining, no ACM observed, no odour	D		WEATHERED ROCK
WB				9.50			Terminated at 9.50m. Target Depth Reached.			

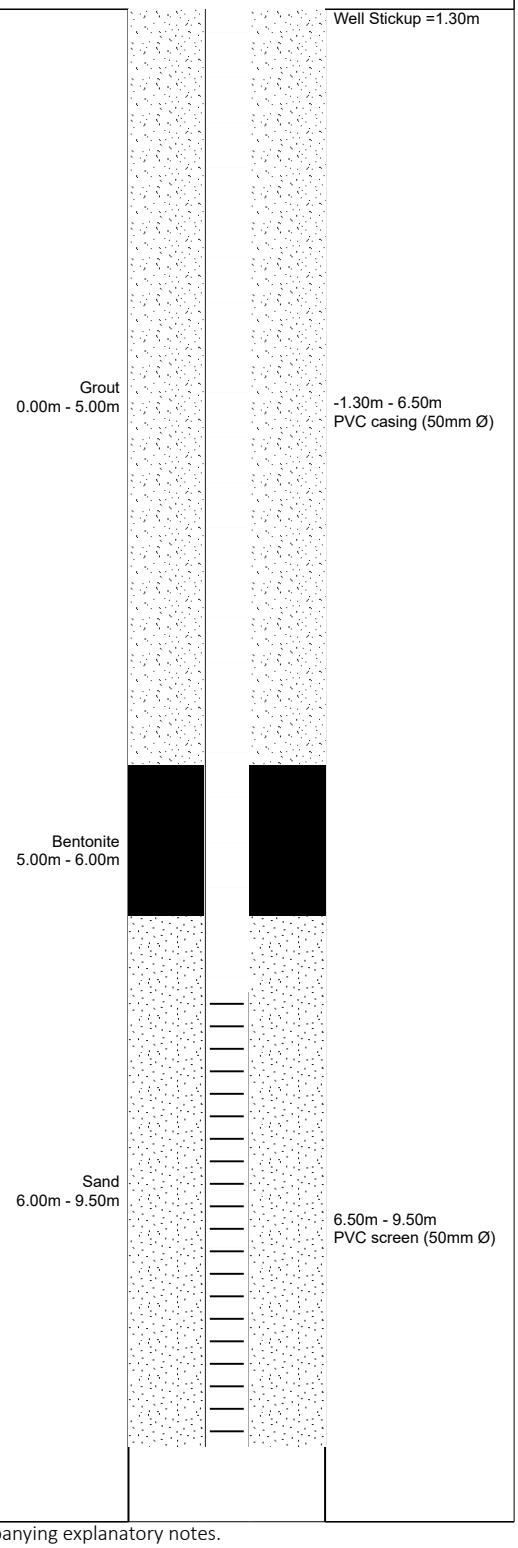
This log should be read in conjunction with EI Australia's accompanying explanatory notes.

MONITORING WELL LOG

BH ID: BH104M

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW			**Started**	24 March 2025
Client	Conquest			**Completed**	24 March 2025
Job No.	E26516.E02			**Logged By**	AN **Date** 24 March 2025
Sheets	1 of 1			**Review By**	SR **Date**
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249768.3632 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324747.5643 (MGA 2020 Zone 56)

WATER	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION
GWNE	BH104M_0.20-0.30 PID = 0.4 PPM BH104M_0.70-0.80 PID = 0.7 PPM	0.00			FILL: Silty CLAY: high plasticity, brown with brick, gravels, gravels are fine to medium sub-angular to rounded, no staining, no ACM observed, no odour	D
		0.40			Silty CLAY: high plasticity, pale brown orange mottled red, no staining, no ACM observed, no odour	
		1.30			From 1.30m to 2.00m, pale grey with mottled yellow, no staining, no ACM observed, no odour	
		2.00			SHALE: pale brown, pale orange, no staining, no ACM observed, no odour	
		10			Terminated at 9.50m. Target Depth Reached.	



BOREHOLE LOG

BH ID: BH105

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249785.6991 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324741.9611 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH105_0.40-0.50 PID = 3.9 PPM		0.00			CONCRETE: 100mm thick	D		CONCRETE
				0.10			FILL: Silty : high plasticity, mottled brown, orange with gravels, gravels are medium angular to sub-angular, no staining, no ACM observed			FILL
				0.50			From 0.50m to 0.70m, mottled brown, grey, orange with medium gravels sub-angular, no staining, no ACM observed			
		BH105_0.80-0.90 PID = 3.4 PPM		0.70			Silty CLAY: medium plasticity, mottled pale grey, orange, yellow, red with ironstone gravels gravels are angular, no staining, no ACM observed, no odour			NATURAL
				2			Terminated at 2.00m. Target Depth Reached.			

This log should be read in conjunction with EI Australia's accompanying explanatory notes.

BOREHOLE LOG

BH ID: BH106

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249761.6766 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324757.9492 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH106_0.10-0.20 PID = 2.9 PPM		0.00			FILL: Silty CLAY: low plasticity, dark brown mottled orange with ash, and gravels, fine gravels are sub-angular, no staining, no ACM observed	D		FILL
				0.50			From 0.50m to 0.80m, pale brown mottled orange with ash, with fine sub-angular gravels, no staining, no ACM observed, no odour			
				0.70			Silty CLAY: medium plasticity, pale brown, pale yellow with weathered Shale fragments, with gravels, gravels are medium angular to sub-angular, no staining, no ACM observed, no odour			NATURAL
		BH106_1.00-1.10 PID = 1.6 PPM		1						
							Terminated at 1.50m. Target Depth Reached.			
				2						
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				10						

BOREHOLE LOG

BH ID: BH107

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249782.9964 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324731.3606 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH107_0.30-0.40 PID = 2.6 PPM		0.00			FILL: Sandy CLAY: medium plasticity, dark brown with mottled orange, yellow with rootlets, gravels. gravels are fine to medium, rounded to sub-rounded, no staining, no ACM observed, no odour	D		FILL
				0.50			Silty CLAY: low plasticity, mottled orange, yellow, grey with gravels, gravels are medium, angular to sub-angular, no staining, no ACM observed, no odour			NATURAL
		BH107_0.90-1.00 PID = 1.2 PPM		1						
				1.30			SHALE: pale brown, grey with Shale fragments., no staining, no ACM observed, no odour			WEATHERED ROCK
							Terminated at 1.50m. Target Depth Reached.			
				2						
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				10						

BOREHOLE LOG

BH ID: BH108

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW			**Started**	24 March 2025
Client	Conquest			**Completed**	24 March 2025
Job No.	E26516.E02			**Logged By**	AN **Date** 24 March 2025
Sheets	1 of 1			**Review By**	SR **Date**
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Northing**	6249784.5660 (MGA 2020 Zone 56)
Plant	Comacchio Geo 205	**Inclination**	90°	**Easting**	324761.7280 (MGA 2020 Zone 56)

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE	BH108_0.20-0.30 PID = 3.3 PPM		0.00			FILL: Sandy CLAY: medium plasticity, brown with mottled orange with gravels, gravels are medium sub-angular to rounded, no staining, no ACM observed, no odour	D		FILL
				0.40			Sandy CLAY: low plasticity, brown with mottled orange, brown brick gravels, gravels are medium angular to sub-angular, no staining, no ACM observed, no odour			NATURAL
				0.60			SHALE: pale grey with shale fragments, no staining, no ACM observed, no odour			WEATHERED ROCK
				1			Terminated at 0.80m. Target Depth Reached.			
				2						
				3						
				4						
				5						
				6						
				7						
				8						
				9						
				10						

BOREHOLE LOG

BH ID: UNK-GW-A

Location	2-5 Burleigh Street and 20-24 Railway Parade, Burwood NSW	**Started**	24 March 2025		
Client	Conquest	**Completed**	24 March 2025		
Job No.	E26516.E02	**Logged By**	AN	**Date**	24 March 2025
Sheets	1 of 1	**Review By**	SR	**Date**	
Drilling Contractor	Geosense Drilling Engineers	**Surface RL**	-	**Latitude**	-
Plant	Comacchio Geo 205	**Inclination**	90°	**Longitude**	-

METHOD	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	SAMPLE RECOVERY	DEPTH (m)	GRAPHIC LOG	RL (m AHD)	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / REL. DENSITY	MATERIAL ORIGIN & OBSERVATIONS
AD/T	GWNE			0.00			FILL: Sandy CLAY: medium plasticity, dark brown with mottled orange, yellow with rootlets, gravels. gravels are fine to medium, rounded to sub-rounded, no staining, no ACM observed., no odour	D		FILL
				0.50			Silty CLAY: low plasticity, mottled orange, yellow, grey with gravels, gravels are medium, angular to sub-angular, no staining, no ACM observed, no odour			NATURAL
				1.60			SHALE: grey, with shale fragments, no staining, no ACM observed, no odour			WEATHERED ROCK
							Terminated at 1.80m. Target Depth Reached.			

This log should be read in conjunction with EI Australia's accompanying explanatory notes.

Appendix E – Calibration Documentation and Field Data Sheets

Daily Inspection / Work Summary Card - Remediation & Validation Form

OP 005a (Rev 2)

EI Australia
Suite 6.01, 55 Miller Street
PYRMONT, NSW, 2009

ABN 42 909 129 957
E service@eiaustralia.com.au
W www.eiaustralia.com.au
T 02 9516 0722

Project Number:	E26516	Engineer Name:	AMY N	Page:	1 of 3
Date:	31/3/24	Time ON Site:	9:45		
Travel Time:		Time OFF Site:	1:00		

Site Address/Location: 2-4 BURLEIGH / 20-24 RAILWAY PARADE, BURWOOD.

Climatic Conditions: WINDY

Completed Works:

GPS x 2 WELLS.

MICRO PURGE ON UNK-GW.

BUMP TEST PASSED.

Comments / Issues / Conclusions / Further Testing Required / Actions to be Undertaken / Timing of Actions:

BH104M, PID max 19.4 - DRY

UNK-GW, PID max 2.3 - WATER @ 14.49m.

GAS RAN OUT POST WQM READINGS.

SAMPLES TAKEN WITH BAILER.

Signed by:

WATER SAMPLING FIELD SHEET

eiaustralia

Site Address: 2-4 BURLEIGH/20-24 RAILWAY PARADE, BURWOOD.	Job Number: E26516
Client:	Date: 31/3/25
Field Staff: AN	Sampling Location ID UNK-GW
Well Location: UNK-GW	Round No: 1
MEDIUM ☑Groundwater ☐Surface Water	☐Stormwater ☐Other:
SAMPLING POINT INFO NOT INSTALLED BY EI	
Well Installation Date:	Stick up / down (m): (+ above ground - below ground)
Initial Well Depth (mBTOC):	Screen Interval (mBTOC):
Previous Sampling Date:	Previous SWL (mBTOC):
PID READINGS	
PID Headspace (ppm): 2.3	PID Background (ppm): 0.1
PID Breathing Space (ppm): 0.1	
PRE PURGE	
Total Well Depth (mBTOC):	Well Head Condition:
SWL (mBTOC):	Water Column (m):
PHASE SEPARATED HYDROCARBONS (PSH)	
Depth to PSH (mBTOC): -	PSH Visually Confirmed (Bailer):
PSH Thickness (mm): -	-
Field Filtered	
Yes (0.45 µm) ☑	No ☐ (Request lab 0.45 µm filter the sample)
PURGE AND SAMPLE	
Sampling Method ☑Bladder ☐Peristaltic ☐Submersible	☐Other:
Depth of Pump Inlet (mBTOC):	Fill Timer:
Pump Pressure Regulator (psi):	Discharge Timer:
Weather Conditions: WINDY	Cycle:
Pump on time:	Pump off time:
WATER QUALITY PARAMETERS	
Probe Make and Model:	Bump Test Date and Time:

Time	Volume (L)	SWL (mbtoc)	Temp (°C)	EC (µS/cm)	Redox (mV)	DO (mg/L)	pH (units)	Comments (colour, turbidity, odour, sheen etc.)
11:08	0.5	14.21	20.03	4480	-133.8	-	-	Low turbidity, light brown colour, no sheen or odour
11:12	1	14.24	19.94	4438	-138.2	-	-	" "
11:16	1.5	14.26	20.29	4420	-115.8	-	-	" "
11:20	2	14.30	20.27	4419	-119.4	-	-	" "
11:24	2.5	14.32	20.28	4417	-117.3	-	-	" "
Stabilisation range: 3 consecutive readings			**±0.2°C**	**±3%**	**±20mV**	**±10%**	**±0.2**	

OTHER COMMENTS/OBSERVATIONS:

SIGNATURE:

EI Australia
Suite 6.01, 55 Miller Street
PYRMONT, NSW, 2009

ABN 33 102 449 507
E service@eiaustralia.com.au
W www.eiaustralia.com.au
T 02 9516 0722

CALIBRATION CERTIFICATE
FOR PHOTO IONISATION DETECTOR

Instrument: Mini RAE 3000

Serial Number: 592-906667 - EI PID02 ☐ OR 592-901345 - EI PID03 ☑

Instrument Conditions: Good.

Calibration gas species: Isobutylene.

Calibration gas concentration: 340 ppm

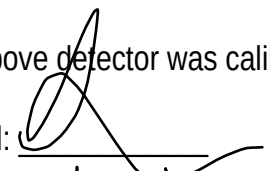
Gas bottle number: 340S1001SOA

This PID has been calibrated to Isobutylene gas with the span concentration displayed as 99.4 ppm at 100 ppm span setting (allowable range +/-10ppm from span setting).

The PID is initially zero calibrated in fresh air.

Remaining gas in bottle: 345 psi (if reading is <250 psi, notify Equipment Manager to arrange new gas bottle order)

The above detector was calibrated in accordance with manufacturer's specifications.

Signed: 

Date: 31/03/25

Time: 10 am.

EI Australia
Suite 6.01, 55 Miller Street
PYRMONT, NSW, 2009

ABN 33 102 449 507
E service@eiaustralia.com.au
W www.eiaustralia.com.au
T 02 9516 0722

CALIBRATION CERTIFICATE
FOR PHOTO IONISATION DETECTOR

Instrument: Mini RAE 3000

Serial Number: 592-906667 - EI PID02 ☐ OR 592-901345 - EI PID03 ☑

Instrument Conditions: Good.

Calibration gas species: Isobutylene.

Calibration gas concentration: 350 ppm

Gas bottle number: 34051001SOA

This PID has been calibrated to Isobutylene gas with the span concentration displayed as 99.8 ppm at 100 ppm span setting (allowable range +/-10ppm from span setting).

The PID is initially zero calibrated in fresh air.

Remaining gas in bottle: 350 psi (if reading is <250 psi, notify Equipment Manager to arrange new gas bottle order)

The above detector was calibrated in accordance with manufacturer's specifications.

Signed: _____

Date: 24/03/25

Time: 8 am.

Appendix F – Chain of Custody and Sample Receipt Forms

BURWOOD

Sheet _1_ of 2

Site: 2-4 BURLEIGH ST, 20-24 RAILWAY PARADE

Project No: E26516

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM[A] /TRH (including F1, F2, F3, F4)/BTEX/ PAHs/ OCP/OP/PCB/Asbestos	HM[A] /TRH (including F1, F2, F3, F4)/ BTEX/PAHs / VOCs	HM[A] /TRH (including F1, F2, F3, F4)/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification (500ml)	Asbestos 10L field screening	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM[A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM[B] / PAH
BH101_0.1-0.2	1	J ZLB	24/3/25	AM	X				X				X															
BH102-0.2-0.3	2	↓	↓	↓	↓				X															X				
BH102_0.4-0.5																												
BH103_0.4-0.5	3								X																			
BH103_0.6-0.7	4									X																		
BH104[M]_0.2-0.3	5								X				X											X				
BH104[M]_0.7-0.8																												
BH105_0.4-0.5	6								X																			
BH105_0.8-0.9	7									X																		
BH106_0.1-0.2	8								X																			
BH106_1.0-1.1	9									X																		
BH107_0.3-0.4	10	↓	↓	↓	↓				X																			

Comments

HM[A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM[B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- ☐ Standard
- ☐ 24 Hours
- ☐ 48 Hours
- ☒ 72 Hours
- ☐ Other____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table ☐

Sampler's Name (EI):	Received by (SGS):
Print: AMY NYIRI	Print:
Signature:	Signature:
Date: 24/03/25	Date: 24/03/25 @ 2:35

Sampler's Comments: CC AMY, RICARDO, SERGIO.

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

SGS EHS Sydney
SE280223

source:SE_Autoscan.pdf page:1 SGS Ref:SE280223_COC

Sheet 1 of 1

Site: 2-4 BURLEIGH ST, 20-24 RAILWAY PARADE, BURWOOD

Project No: E26516

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM[A] /TRH (including F1, F2, F3, F4)/BTEX/ PAHs/ OCP/OP/PCB/Asbestos	HM[A] /TRH (including F1, F2, F3, F4)/ BTEX/PAHs / VOCs	HM[A] /TRH (including F1, F2, F3, F4)/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification (500ml)	Asbestos 10L field screening	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM[A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead HOLD	TCLP HM[B] / PAH
BH107_0.9-1.0	11	J ZLB	24/3/25	AM	X					X																		
BH108_0.2-0.3	12	↓	↓	↓	↓				X																			
QD1	13				↓						X																	
QR1	14					X					X																	
QRB1						X																					X	
QTS1	15				X							X																
QTB1	16				X							X																

Comments

HM[A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM[B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- ☐ Standard
- ☐ 24 Hours
- ☐ 48 Hours
- ☒ 72 Hours
- ☐ Other____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table ☐

Sampler's Name (EI):	Received by (SGS):
Print: AMY NYIRI	Print:
Signature: 24/03/25	Signature:
Date:	Date: 24/03/25 @ 2-35

Sampler's Comments:

CC AMY, RICARDO, SERGIO

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

SAMPLE RECEIPT ADVICE

SE280223

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Borleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	16

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 24/3/2025
Report Due	Thu 27/3/2025
SGS Reference	**SE280223**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Monday 24/3/2025. Results are expected to be ready by COB Thursday 27/3/2025. Please quote SGS reference SE280223 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	15 Soil, 1 Water	Type of documentation received	COC
Date documentation received	24/03/2025	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	2.3°C
Sample container provider	SGS	Turnaround time requested	Three Days
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

2 soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE280223

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Borleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	BH101_0.1-0.2	27	14	26	9	7	10	81	7
002	BH102_0.2-0.3	27	14	26	9	7	10	11	7
003	BH103_0.4-0.5	27	14	26	9	7	10	11	7
004	BH103_0.6-0.7	-	-	26	-	7	10	81	7
005	BH104m_0.2-0.3	27	14	26	9	7	10	81	7
006	BH105_0.4-0.5	27	14	26	9	7	10	11	7
007	BH105_0.8-0.9	-	-	26	-	7	10	81	7
008	BH106_0.1-0.2	27	14	26	9	7	10	11	7
009	BH106_1.0-1.1	-	-	26	-	7	10	81	7
010	BH107_0.3-0.4	27	14	26	9	7	10	11	7
011	BH107_0.9-1.0	-	-	26	-	7	10	81	7
012	BH108_0.2-0.3	27	14	26	9	7	10	11	7
013	QD1	-	-	-	-	7	10	11	7
015	QTS1	-	-	-	-	-	-	11	-
016	QTB1	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE280223

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Borleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in
001	BH101_0.1-0.2	3	1	1	-
002	BH102_0.2-0.3	3	1	1	57
003	BH103_0.4-0.5	3	1	1	-
004	BH103_0.6-0.7	-	1	1	-
005	BH104m_0.2-0.3	3	1	1	57
006	BH105_0.4-0.5	3	1	1	-
007	BH105_0.8-0.9	-	1	1	-
008	BH106_0.1-0.2	3	1	1	-
009	BH106_1.0-1.1	-	1	1	-
010	BH107_0.3-0.4	3	1	1	-
011	BH107_0.9-1.0	-	1	1	-
012	BH108_0.2-0.3	3	1	1	-
013	QD1	-	1	1	-
016	QTB1	-	-	1	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE280223

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Borleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
014	QR1	1	7	9	11	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Hi GBS team.

Please book in A and B jobs, 1 and 3 day TATs as per request.
Thanks.

Matthew Tyler
Industries & Environment
Client Services Officer

SGS Australia Pty Ltd
Unit 16, 33 Maddox St
Alexandria NSW 2015

Phone: +61 2 8594 0400
Email: matthew.tyler@sgs.com
Visit: https://www.sgs.com/en-au

How did we go? Your feedback helps us to improve.



From: Amy Nyiri - EIAustralia <amy.nyiri@eiaustralia.com.au>
Sent: Tuesday, 1 April 2025 10:09 AM
To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@SGS.com>
Cc: Ricardo Lopes - EIAustralia <ricardo.lopes@eiaustralia.com.au>; Sergio Raposeira - EIAustralia <sergio.raposeira@eiaustralia.com.au>
Subject: [EXTERNAL] RE: Report Job SE280223, your reference E26516 2-4 Borleigh St, 20-24 Railway Pa, order number E26516

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi SGS,

Please can we request the following on 24hr TAT:

- BH102_0.4-0.5: Pb and PAHs

Please can we request the following on 3 day TAT:

- BH101_0.1-0.2: TCLP for Pb and B(a)P
- BH105_0.4-0.5: TCLP for Pb
- BH107_0.3-0.4: TCLP for B(a)P

Best regards,

Amy Nyiri
Environmental Engineer
BSc, MSc

M 0424 624 770
E amy.nyiri@eiaustralia.com.au

Suite 6.01, 55 Miller Street
Pyrmont, NSW 2009

www.eiaustralia.com.au



Environmental | Geotechnical | Structural | Civil | Hazardous Materials

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From: AU.Environmental.Sydney@SGS.com [mailto:AU.Environmental.Sydney@SGS.com]
Sent: Thursday, 27 March 2025 4:47 PM
To: Amy Nyiri - EIAustralia; Laboratory Results - EIAustralia; Ricardo Lopes - EIAustralia; Sergio Raposeira - EIAustralia
Subject: Report Job SE280223, your reference E26516 2-4 Borleigh St, 20-24 Railway Pa, order number E26516

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Valued Customer,
Please find attached the report for SGS job SE280223, your reference E26516 2-4 Borleigh St, 20-24 Railway Pa, order number E26516.
If you have any questions or concerns, please don't hesitate to contact your SGS Client Services representative.
Please provide any feedback you have on our service via this link
https://sgssurveys.qualtrics.com/jfe/form/SV_6fbPVjB8TRGUXKC?utm_source=Feedback&utm_medium=email&utm_campaign=Survey
Best Regards,
SGS Alexandria Customer Service Team
SGS Australia Pty Ltd
Phone: +61 (0)2 8594 0400
Information in this email and any attachments is confidential and intended solely for the use of the individual(s) to whom it is addressed or otherwise directed. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Company. Finally, the recipient should check this email and any attachments for the presence of viruses. The Company accepts no liability for any damage caused by any virus transmitted by this email. All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at https://www.sgs.com/en/terms-and-conditions

SAMPLE RECEIPT ADVICE

SE280223A

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Borleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	17

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 1/4/2025
Report Due	Wed 2/4/2025
SGS Reference	**SE280223A**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Tuesday 1/4/2025. Results are expected to be ready by COB Wednesday 2/4/2025.
Please quote SGS reference SE280223A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	1 Soil	Type of documentation received	Email
Date documentation received	1/4/2025@10:09am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	2.3°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE280223A

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Borleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	Total Recoverable Elements in Soil/Waste
017	BH102_0.4-0.5	1	26	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Sheet 1 of 1

Site: 2-4 BURLEIGH STREET, 20-24 RAILWAY PARADE, BURWOOD

Project No: E26516

Laboratory: **Envirolab Services**
12 Ashley Street,
CHATSWOOD NSW 2067
P: 02 9910 6200

	Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride			TCLP HM [B] / PAH
1	QT1		1 2LB	24/3/25	AM	X					X																	

ENVIROLAB GROUP
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 376487
Date Received: 25/3/25
Time Received: 1630
Received By: OC
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH

LABORATORY TURNAROUND
- ☐ Standard
- ☐ 24 Hours
- ☐ 48 Hours
- ☒ 72 Hours
- ☐ Other_____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table ☐

Sampler's Name (EI):	Received by (Envirolab):
Print: Ricardo Lopes	Print: Owen Cullivan
Signature:	Signature: OC
Date: 24/3/25	Date: 25/3/25

Sampler's Comments:
CC AMY, RICARDO, SERGIO.

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

source: Sydney.pdf page: 1 SGS Ref: SE280587_COC

Sheet 1 of 1

Site: 2-4 Burleigh St; 20-24 Railway Parade, Burwood

Project No: E26516

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM[A] /TRH (including F1, F2, F3, F4)/BTEX/ PAHs/ OCP/OP/PCB/Asbestos	HM[A] /TRH (including F1, F2, F3, F4)/ BTEX/PAHs / VOCs	HM[A] /TRH (including F1, F2, F3, F4)/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification (500ml)	Asbestos 10L field screening	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM[A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM[B] / PAH
~~UNK~~-GW	1	VCSP	31/03	AM		X	X			X														X				
GWQD1	2	VCP					X				X																	
~~GWQT1~~																												
~~R~~GWR1	3	VCP									X																	
GWRB1	4	VCP									X																	
QTS1	5	VC	LAB PREP									X																
QTB1	6	VC	" "									X																

SGS EHS Sydney COC
SE280587

Comments

HM[A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM[B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND
- ☐ Standard
- ☒ 24 Hours
- ☐ 48 Hours
- ☐ 72 Hours
- ☐ Other____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC November 2024 FORM v.6 - SGS

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table ☐

Sampler's Name (EI):	Received by (SGS):
Print AMY NYIRI	Print Joel K
Signature	Signature
Date 31/03/25	Date 31/3/25 @ 1-30

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

Sampler's Comments:
Please CC Amy, Sergio, Ricardo.
Please send QT1 to Enviolab.

SAMPLE RECEIPT ADVICE

SE280587

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 31/3/2025
Report Due	Tue 1/4/2025
SGS Reference	**SE280587**

SUBMISSION DETAILS

This is to confirm that 6 samples were received on Monday 31/3/2025. Results are expected to be ready by COB Tuesday 1/4/2025. Please quote SGS reference SE280587 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	6 Water	Type of documentation received	COC
Date documentation received	31/3/2025	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	15.6°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

GWQT1 forwarded to Envirolab.

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SAMPLE RECEIPT ADVICE

SE280587

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Burleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	UNK-GW	1	22	60	7	9	78	7
002	GWQD1	1	-	60	7	9	11	7
003	GWR1	1	-	60	7	9	11	7
004	GWRB1	1	-	60	7	9	11	7
005	QTS1	-	-	60	-	-	11	-
006	QTB1	-	-	60	-	-	11	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

source: SE_Autoscan.pdf page: 1 SGS Ref: SE280587A_COC

Luong, Thi Song Van (Alexandria)

From: AU.Environmental.Sydney, AU (Sydney)
Sent: Wednesday, 2 April 2025 9:34 AM
To: Amy Nyiri - EIAustralia; AU.SampleReceipt.Sydney, AU (Sydney)
Cc: Ricardo Lopes - EIAustralia; Sergio Raposeira - EIAustralia; AU.Environmental.Sydney, AU (Sydney)
Subject: RE: [EXTERNAL] RE: Report Job SE280587, your reference E26516 2-4 Burleigh St, 20-24 Railway Pa, order number E26516

Hi Amy.

No worries. We can get this reported on a same day TAT for you.
@AU.SampleReceipt.Sydney, AU (Sydney) Please book in urgent same day job, SE280587A.
Thanks.

Matthew Tyler
Industries & Environment
Client Services Officer

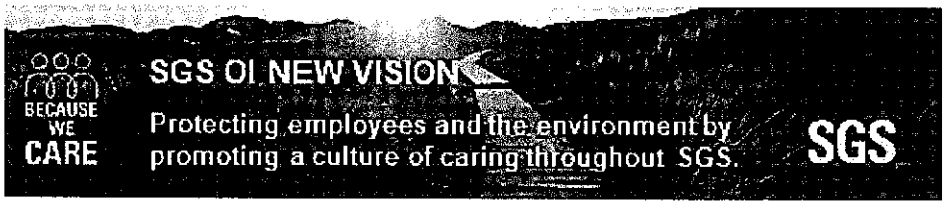
SGS Australia Pty Ltd
Unit 16, 33 Maddox St
Alexandria NSW 2015

Phone: +61 2 8594 0400
Email: matthew.tyler@sgs.com
Visit: https://www.sgs.com/en-au

SGS EHS Alexandria Laboratory

SE280587A COC
Received: 02 – Apr – 2025

How did we go? Your feedback helps us to improve.



From: Amy Nyiri - EIAustralia <amy.nyiri@eiaustralia.com.au>
Sent: Wednesday, 2 April 2025 9:04 AM
To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@SGS.com>
Cc: Ricardo Lopes - EIAustralia <ricardo.lopes@eiaustralia.com.au>; Sergio Raposeira - EIAustralia <sergio.raposeira@eiaustralia.com.au>
Subject: [EXTERNAL] RE: Report Job SE280587, your reference E26516 2-4 Burleigh St, 20-24 Railway Pa, order number E26516

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi SGS,

Please can you apply a silica clean-up of TRH for UNK-GW? Are you able to do a same day turnaround for this?

Should you have any queries, please do not hesitate in contacting me.

Best regards,

Amy Nyiri
Environmental Engineer
BSc, MSc

M 0424 624 770
E amy.nyiri@eiaustralia.com.au

Suite 6.01, 55 Miller Street
Pyrmont, NSW 2009

www.eiaustralia.com.au

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From: AU.Environmental.Sydney@SGS.com [mailto:AU.Environmental.Sydney@SGS.com]
Sent: Tuesday, 1 April 2025 6:00 PM
To: Amy Nyiri - EIAustralia; Laboratory Results - EIAustralia; Ricardo Lopes - EIAustralia; Sergio Raposeira - EIAustralia
Subject: Report Job SE280587, your reference E26516 2-4 Burleigh St, 20-24 Railway Pa, order number E26516

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Valued Customer,

Please find attached the report for SGS job SE280587, your reference E26516 2-4 Burleigh St, 20-24 Railway Pa, order number E26516.

If you have any questions or concerns, please don't hesitate to contact your SGS Client Services representative.

Please provide any feedback you have on our service via this link
https://sgssurveys.qualtrics.com/jfe/form/SV_6fbPVjB8TRGUXKC?utm_source=Feedback&utm_medium=email&utm_campaign=Survey

Best Regards,
SGS Alexandria Customer Service Team
SGS Australia Pty Ltd
Phone: +61 (0)2 8594 0400

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SAMPLE RECEIPT ADVICE

SE280587A

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 2/4/2025
Report Due	Wed 2/4/2025
SGS Reference	**SE280587A**

SUBMISSION DETAILS

This is to confirm that 6 samples were received on Wednesday 2/4/2025. Results are expected to be ready by COB Wednesday 2/4/2025. Please quote SGS reference SE280587A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	1 Water	Type of documentation received	Email
Date documentation received	2/04/2025@9:04am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	15.6°C
Sample container provider	SGS	Turnaround time requested	Same Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE280587A

CLIENT DETAILS

Client EI AUSTRALIA

Project E26516 2-4 Burleigh St, 20-24 Railway Pa

SUMMARY OF ANALYSIS

No.	Sample ID	TRH Silica Gel (Total Recoverable
001	UNK-GW	9

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

#377007

Sheet _1_ of _1_

Site: 2-4 Burleigh St, 20-24 Railway Parade, Burwood

Project No: E26516

Laboratory: **Envirolab Services**
12 Ashley Street, CHATSWOOD NSW 2067
P: 02 9910 6200

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM[A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM[A] /TRH/BTEX/PAHs	HM[A] /TRH (including F1, F2, F3, F4) /BTEX	BTEX	VOCs	Ph + Turbidity	**Heavy Metals A + Aluminium**	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM[A] /pH / EC / Foreign Materials)	**Dewatering Suite**	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	**HOLD**	TCLP HM[B] / PAH
GWQT1	1	VCP	31/03	AM		X	X				X																	

ENVIROLAB GROUP
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 377007
Date Received: 31/3/25
Time Received: 1650
Received By: KW
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Comments

HM[A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM[B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- ☐ Standard
- ☒ 24 Hours
- ☐ 48 Hours
- ☐ 72 Hours
- Other

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass botlle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag
HM: heavy metals bottle
BB = Bulk Bag

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Sampler's Name (EI):	Received by (SGS):
Print AMY NGYIRI	*Print*
Signature	*Signature*
Date 31/03/25	*Date*

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

Report with EI Waste Classification Table ☐

Sampler's Comments:
Please CC Amy, Sergio + Ricardo.
~~Please send~~

Appendix G – Laboratory Analytical Reports

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Borleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	16

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE280223 R0**
Date Received	24/3/2025
Date Reported	27/3/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.
Asbestos analysed by Approved Identifier Yusuf Kuthpudin

SIGNATORIES

Bennet LO
Senior Chemist

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
Organic Section Head

Yusuf KUTHPUDIN
Asbestos Analyst

VOC's in Soil [AN433] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	<1	<1
Chloromethane	mg/kg	1	<1	-	-	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromomethane	mg/kg	1	<1	-	-	<1	<1
Chloroethane	mg/kg	1	<1	-	-	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	-	-	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	-	-	<10	<10
Iodomethane	mg/kg	5	<5	-	-	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	-	-	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Vinyl acetate*	mg/kg	10	<10	-	-	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Chloroform (THM)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	-	-	<10	<10
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	-	-	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	<1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1

VOC's in Soil [AN433] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
n-propylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Total VOC*	mg/kg	24	<24	-	-	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8	<1.8
Total Chlorinated Hydrocarbons - subset A*	mg/kg	3	<3.0	-	-	<3.0	<3.0
MEK (2-butanone)	mg/kg	10	<10	-	-	<10	<10

VOC's in Soil [AN433] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	<1	-
Chloromethane	mg/kg	1	-	<1	-	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromomethane	mg/kg	1	-	<1	-	<1	-
Chloroethane	mg/kg	1	-	<1	-	<1	-
Trichlorofluoromethane	mg/kg	1	-	<1	-	<1	-
Acetone (2-propanone)	mg/kg	10	-	<10	-	<10	-
Iodomethane	mg/kg	5	-	<5	-	<5	-
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
Acrylonitrile	mg/kg	0.1	-	<0.1	-	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	<0.5	-
Allyl chloride	mg/kg	0.1	-	<0.1	-	<0.1	-
Carbon disulfide	mg/kg	0.5	-	<0.5	-	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Vinyl acetate*	mg/kg	10	-	<10	-	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromochloromethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Chloroform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	<0.1	-
Dibromomethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	-	<0.1	-	<0.1	-
2-nitropropane	mg/kg	10	-	<10	-	<10	-
Bromodichloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
Dibromochloromethane (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
2-hexanone (MBK)	mg/kg	5	-	<5	-	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
Chlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromoform (THM)	mg/kg	0.1	-	<0.1	-	<0.1	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	<1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	<0.1	-
Bromobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-

VOC's in Soil [AN433] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
n-propylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
n-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1	-
Total VOC*	mg/kg	24	-	<24	-	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	-	<3.0	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	-	<1.8	-
Total Chlorinated Hydrocarbons - subset A*	mg/kg	3	-	<3.0	-	<3.0	-
MEK (2-butanone)	mg/kg	10	-	<10	-	<10	-

VOC's in Soil [AN433] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013	QTS1 SOIL - 24/3/2025 SE280223.015	QTB1 SOIL - 24/3/2025 SE280223.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[100%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[98%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[96%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[97%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[96%]	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
Vinyl acetate*	mg/kg	10	<10	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	-
Chloroform (THM)	mg/kg	0.1	<0.1	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1	-	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-	-
Bromodichloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Dibromochloromethane (THM)	mg/kg	0.1	<0.1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Bromoform (THM)	mg/kg	0.1	<0.1	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	-

VOC's in Soil [AN433] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013	QTS1 SOIL - 24/3/2025 SE280223.015	QTB1 SOIL - 24/3/2025 SE280223.016
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-
Total Chlorinated Hydrocarbons - subset A*	mg/kg	3	<3.0	-	-	-	-
MEK (2-butanone)	mg/kg	10	<10	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013
TRH C6-C9	mg/kg	20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
TRH C10-C14	mg/kg	20	<20	**21**	<20	<20	<20
TRH C15-C28	mg/kg	45	**230**	**160**	<45	<45	<45
TRH C29-C36	mg/kg	45	**120**	**74**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	**28**	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	**28**	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**310**	**210**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**350**	**260**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**310**	**240**	<210	<210	<210

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**130**	<45	<45	<45	**310**
TRH C29-C36	mg/kg	45	**51**	<45	<45	<45	**110**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	**25**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	**25**
TRH >C16-C34 (F3)	mg/kg	90	**160**	<90	<90	<90	**390**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**180**	<110	<110	<110	**420**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	**410**

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
Naphthalene	mg/kg	0.1	0.1	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.6	0.5	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	0.2	0.2	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	4.3	2.7	<0.1	<0.1	0.7
Anthracene	mg/kg	0.1	0.8	0.6	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	8.9	4.4	<0.1	<0.1	0.8
Pyrene	mg/kg	0.1	8.8	4.3	<0.1	<0.1	0.7
Benzo(a)anthracene	mg/kg	0.1	4.4	2.2	<0.1	<0.1	0.3
Chrysene	mg/kg	0.1	4.3	2.1	<0.1	<0.1	0.3
Benzo(b&j)fluoranthene	mg/kg	0.1	4.2	1.8	<0.1	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	4.6	2.2	<0.1	<0.1	0.3
Benzo(a)pyrene	mg/kg	0.1	5.8	2.6	<0.1	<0.1	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	4.1	1.8	<0.1	<0.1	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	0.8	0.4	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	3.5	1.5	<0.1	<0.1	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	8.4	3.8	<0.2	<0.2	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	8.4	3.8	<0.3	<0.3	0.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	8.4	3.8	<0.2	<0.2	0.4
Total PAH (18)	mg/kg	0.8	55	28	<0.8	<0.8	3.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	55	27	<0.8	<0.8	3.8

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.4
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.4
Acenaphthylene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	2.0
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Fluorene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	0.9
Phenanthrene	mg/kg	0.1	3.2	<0.1	0.7	0.2	14
Anthracene	mg/kg	0.1	0.6	<0.1	0.1	<0.1	2.9
Fluoranthene	mg/kg	0.1	4.3	<0.1	0.7	0.2	15
Pyrene	mg/kg	0.1	4.1	<0.1	0.5	0.2	17
Benzo(a)anthracene	mg/kg	0.1	1.9	<0.1	0.2	<0.1	7.9
Chrysene	mg/kg	0.1	1.7	<0.1	0.2	<0.1	6.6
Benzo(b&j)fluoranthene	mg/kg	0.1	1.4	<0.1	0.2	<0.1	5.5
Benzo(k)fluoranthene	mg/kg	0.1	1.9	<0.1	0.2	<0.1	6.7
Benzo(a)pyrene	mg/kg	0.1	2.2	<0.1	0.2	<0.1	7.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.3	<0.1	0.1	<0.1	4.6
Dibenzo(ah)anthracene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	1.0
Benzo(ghi)perylene	mg/kg	0.1	1.2	<0.1	0.1	<0.1	3.8
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	3.2	<0.2	0.3	<0.2	11
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.2	<0.3	0.4	<0.3	11
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	3.2	<0.2	0.3	<0.2	11
Total PAH (18)	mg/kg	0.8	25	<0.8	3.3	<0.8	97
Total PAH (NEPM/WHO 16)	mg/kg	0.8	25	<0.8	3.3	<0.8	96

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.3**
Pyrene	mg/kg	0.1	<0.1	**0.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.1**
Chrysene	mg/kg	0.1	<0.1	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.2**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.1**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	**0.2**
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	**0.3**
Total PAH (18)	mg/kg	0.8	<0.8	**1.4**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**1.4**

OP Pesticides in Soil [AN420] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

OC Pesticides in Soil [AN420] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1

OC Pesticides in Soil [AN420] Tested: 25/3/2025 (continued)

PARAMETER	UOM	LOR	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	**0.1**
Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	<0.1
Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1
Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	<0.1

PCBs in Soil [AN420] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012
Arochlor 1016	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	0.1	<0.1	<0.1	<0.1
Total PCBs	mg/kg	0.1	<0.1	<0.1	<0.1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
Arsenic, As	mg/kg	1	45	8	6	7	7
Cadmium, Cd	mg/kg	0.3	0.9	0.6	<0.3	<0.3	0.6
Chromium, Cr	mg/kg	0.5	18	16	16	9.8	20
Copper, Cu	mg/kg	0.5	72	90	15	22	70
Lead, Pb	mg/kg	1	1200	540	32	16	130
Nickel, Ni	mg/kg	0.5	9.3	7.6	2.0	<0.5	5.8
Zinc, Zn	mg/kg	2	450	220	17	13	900

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
Arsenic, As	mg/kg	1	14	6	5	3	23
Cadmium, Cd	mg/kg	0.3	5.6	<0.3	<0.3	<0.3	0.6
Chromium, Cr	mg/kg	0.5	28	14	12	7.4	16
Copper, Cu	mg/kg	0.5	170	13	18	33	43
Lead, Pb	mg/kg	1	4200	17	72	24	360
Nickel, Ni	mg/kg	0.5	17	0.7	4.1	0.9	6.0
Zinc, Zn	mg/kg	2	1600	13	70	13	310

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013
Arsenic, As	mg/kg	1	7	4	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.8
Chromium, Cr	mg/kg	0.5	12	13	19
Copper, Cu	mg/kg	0.5	14	29	41
Lead, Pb	mg/kg	1	16	180	150
Nickel, Ni	mg/kg	0.5	<0.5	1.5	5.2
Zinc, Zn	mg/kg	2	8.8	72	2100

Mercury in Soil [AN312] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
Mercury	mg/kg	0.05	**0.95**	**0.48**	<0.05	<0.05	**0.20**

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
Mercury	mg/kg	0.05	**0.45**	<0.05	**0.45**	<0.05	**0.50**

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013
Mercury	mg/kg	0.05	<0.05	**0.29**	**0.37**

Moisture Content [AN002] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH103_0.6-0.7 SOIL - 24/3/2025 SE280223.004	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
% Moisture	%w/w	1	16.8	15.6	20.7	20.1	24.4

PARAMETER	UOM	LOR	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006	BH105_0.8-0.9 SOIL - 24/3/2025 SE280223.007	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH106_1.0-1.1 SOIL - 24/3/2025 SE280223.009	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010
% Moisture	%w/w	1	21.5	25.6	7.0	13.2	13.3

PARAMETER	UOM	LOR	BH107_0.9-1.0 SOIL - 24/3/2025 SE280223.011	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012	QD1 SOIL - 24/3/2025 SE280223.013	QTB1 SOIL - 24/3/2025 SE280223.016
% Moisture	%w/w	1	18.9	15.7	24.5	<1.0

Fibre Identification in soil [AS4964/AN602] Tested: 26/3/2025

PARAMETER	UOM	LOR	BH101_0.1-0.2 SOIL - 24/3/2025 SE280223.001	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH103_0.4-0.5 SOIL - 24/3/2025 SE280223.003	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005	BH105_0.4-0.5 SOIL - 24/3/2025 SE280223.006
Date Analysed*	No unit	-	27/03/2025 00:00	27/03/2025 00:00	27/03/2025 00:00	27/03/2025 00:00	27/03/2025 00:00
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	BH106_0.1-0.2 SOIL - 24/3/2025 SE280223.008	BH107_0.3-0.4 SOIL - 24/3/2025 SE280223.010	BH108_0.2-0.3 SOIL - 24/3/2025 SE280223.012
Date Analysed*	No unit	-	27/03/2025 00:00	27/03/2025 00:00	27/03/2025 00:00
Asbestos Detected	No unit	-	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [AN404] Tested: 25/3/2025

PARAMETER	UOM	LOR	BH102_0.2-0.3 SOIL - 24/3/2025 SE280223.002	BH104m_0.2-0.3 SOIL - 24/3/2025 SE280223.005
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	<0.005
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	<0.005
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	<0.005
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005	<0.005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005	<0.005
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	<0.005
Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005
Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005
Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	<0.01
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01	<0.01
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01
Sum PFOS and PFHxS	mg/kg	0.005	<0.005	<0.005
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	mg/kg	0.005	<0.005	<0.005
Sum of US EPA PFAS (PFOS+PFOA)	mg/kg	0.005	<0.005	<0.005
Sum of Positive PFAS	mg/kg	0.005	<0.005	<0.005

VOCs in Water [AN433] Tested: 27/3/2025

PARAMETER	UOM	LOR	QR1 WATER - 24/3/2025 SE280223.014
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 27/3/2025

PARAMETER	UOM	LOR	QR1 WATER - 24/3/2025 SE280223.014
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 25/3/2025

PARAMETER	UOM	LOR	QR1 WATER - 24/3/2025 SE280223.014
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	**230**
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 25/3/2025

PARAMETER	UOM	LOR	QR1 WATER - 24/3/2025 SE280223.014
Arsenic	µg/L	1	<1
Cadmium	µg/L	0.1	<0.1
Chromium	µg/L	1	<1
Copper	µg/L	1	<1
Lead	µg/L	1	<1
Nickel	µg/L	1	<1
Zinc	µg/L	5	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 26/3/2025

PARAMETER	UOM	LOR	QR1 WATER - 24/3/2025 SE280223.014
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.

AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE280223 R0

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Order Number	**E26516**
Samples	16

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SGS Reference	**SE280223 R0**
Date Received	24 Mar 2025
Date Reported	27 Mar 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Mercury in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	7 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Sample counts by matrix	15 Soil, 1 Water	Type of documentation received	COC
Date documentation received	24/03/2025	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	2.3°C
Sample container provider	SGS	Turnaround time requested	Three Days
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE280223 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre Identification in soil

Method: ME-(AU)-[ENV]AS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342226	24 Mar 2025	24 Mar 2025	24 Mar 2026	26 Mar 2025	24 Mar 2026	27 Mar 2025

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR1	SE280223.014	LB342156	24 Mar 2025	24 Mar 2025	21 Apr 2025	26 Mar 2025	21 Apr 2025	26 Mar 2025

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025
QD1	SE280223.013	LB342113	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	21 Apr 2025	26 Mar 2025

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
QD1	SE280223.013	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025
QTB1	SE280223.016	LB342110	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	30 Mar 2025	26 Mar 2025

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
QD1	SE280223.013	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025

HOLDING TIME SUMMARY

SE280223 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
QD1	SE280223.013	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
QD1	SE280223.013	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
QD1	SE280223.013	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH102_0.2-0.3	SE280223.002	LB342070	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	22 Apr 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342070	24 Mar 2025	24 Mar 2025	21 Apr 2025	25 Mar 2025	22 Apr 2025	26 Mar 2025

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH107_0.3-0.4	SE280223.010	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025
QD1	SE280223.013	LB342112	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	27 Mar 2025

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR1	SE280223.014	LB342094	24 Mar 2025	24 Mar 2025	20 Sep 2025	25 Mar 2025	20 Sep 2025	26 Mar 2025

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025
QD1	SE280223.013	LB342100	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	04 May 2025	26 Mar 2025

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR1	SE280223.014	LB341984	24 Mar 2025	24 Mar 2025	31 Mar 2025	25 Mar 2025	04 May 2025	26 Mar 2025

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH106_0.1-0.2	SE280223.008	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QD1	SE280223.013	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QTS1	SE280223.015	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QTB1	SE280223.016	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR1	SE280223.014	LB342305	24 Mar 2025	24 Mar 2025	07 Apr 2025	27 Mar 2025	07 Apr 2025	27 Mar 2025

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH101_0.1-0.2	SE280223.001	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH102_0.2-0.3	SE280223.002	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH103_0.4-0.5	SE280223.003	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH103_0.6-0.7	SE280223.004	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH104m_0.2-0.3	SE280223.005	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH105_0.4-0.5	SE280223.006	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH105_0.8-0.9	SE280223.007	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025

HOLDING TIME SUMMARY

SE280223 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH106_0.1-0.2	SE280223.008	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH106_1.0-1.1	SE280223.009	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH107_0.3-0.4	SE280223.010	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH107_0.9-1.0	SE280223.011	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
BH108_0.2-0.3	SE280223.012	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QD1	SE280223.013	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QTS1	SE280223.015	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025
QTB1	SE280223.016	LB342102	24 Mar 2025	24 Mar 2025	07 Apr 2025	25 Mar 2025	07 Apr 2025	27 Mar 2025

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QR1	SE280223.014	LB342305	24 Mar 2025	24 Mar 2025	07 Apr 2025	27 Mar 2025	07 Apr 2025	27 Mar 2025

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	90
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	96
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	95
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	96
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	92
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	92
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	92
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	80

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	89
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	97
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	94
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	94
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	84
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	91
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	93
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	79
d14-p-terphenyl (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	93
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	98
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	93
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	95
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	93
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	89
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	97
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	79

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH101_0.1-0.2	SE280223.001	%	70 - 130%	89
	BH102_0.2-0.3	SE280223.002	%	70 - 130%	97
	BH103_0.4-0.5	SE280223.003	%	70 - 130%	94
	BH103_0.6-0.7	SE280223.004	%	70 - 130%	93
	BH104m_0.2-0.3	SE280223.005	%	70 - 130%	94
	BH105_0.4-0.5	SE280223.006	%	70 - 130%	84
	BH105_0.8-0.9	SE280223.007	%	70 - 130%	90
	BH106_0.1-0.2	SE280223.008	%	70 - 130%	91
	BH106_1.0-1.1	SE280223.009	%	70 - 130%	94
	BH107_0.3-0.4	SE280223.010	%	70 - 130%	93
	BH107_0.9-1.0	SE280223.011	%	70 - 130%	87
	BH108_0.2-0.3	SE280223.012	%	70 - 130%	79
d14-p-terphenyl (Surrogate)	BH101_0.1-0.2	SE280223.001	%	70 - 130%	93
	BH102_0.2-0.3	SE280223.002	%	70 - 130%	98
	BH103_0.4-0.5	SE280223.003	%	70 - 130%	93
	BH103_0.6-0.7	SE280223.004	%	70 - 130%	97
	BH104m_0.2-0.3	SE280223.005	%	70 - 130%	95
	BH105_0.4-0.5	SE280223.006	%	70 - 130%	93
	BH105_0.8-0.9	SE280223.007	%	70 - 130%	91
	BH106_0.1-0.2	SE280223.008	%	70 - 130%	89
	BH106_1.0-1.1	SE280223.009	%	70 - 130%	96
	BH107_0.3-0.4	SE280223.010	%	70 - 130%	97
	BH107_0.9-1.0	SE280223.011	%	70 - 130%	85
	BH108_0.2-0.3	SE280223.012	%	70 - 130%	79
d5-nitrobenzene (Surrogate)	BH101_0.1-0.2	SE280223.001	%	70 - 130%	85
	BH102_0.2-0.3	SE280223.002	%	70 - 130%	98
	BH103_0.4-0.5	SE280223.003	%	70 - 130%	97
	BH103_0.6-0.7	SE280223.004	%	70 - 130%	94
	BH104m_0.2-0.3	SE280223.005	%	70 - 130%	92
	BH105_0.4-0.5	SE280223.006	%	70 - 130%	80
	BH105_0.8-0.9	SE280223.007	%	70 - 130%	90
	BH106_0.1-0.2	SE280223.008	%	70 - 130%	88

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	BH106_1.0-1.1	SE280223.009	%	70 - 130%	91
	BH107_0.3-0.4	SE280223.010	%	70 - 130%	88
	BH107_0.9-1.0	SE280223.011	%	70 - 130%	89
	BH108_0.2-0.3	SE280223.012	%	70 - 130%	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	90
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	96
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	95
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	96
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	92
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	92
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	92
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	80

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	81
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	76
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 300%	97
	BH104m_0.2-0.3	SE280223.005	%	40 - 300%	90
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 300%	89
	BH104m_0.2-0.3	SE280223.005	%	40 - 300%	74
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 300%	125
	BH104m_0.2-0.3	SE280223.005	%	40 - 300%	80
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	80
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	78
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	81
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	77
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	89
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	83
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	89
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	88
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	5 - 150%	91
	BH104m_0.2-0.3	SE280223.005	%	5 - 150%	86
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	87
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	80
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	89
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	84
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	35 - 150%	82
	BH104m_0.2-0.3	SE280223.005	%	35 - 150%	72
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	78
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	71
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	30 - 150%	86
	BH104m_0.2-0.3	SE280223.005	%	30 - 150%	76
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	87
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	76
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	20 - 150%	57
	BH104m_0.2-0.3	SE280223.005	%	20 - 150%	48
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	40 - 150%	86
	BH104m_0.2-0.3	SE280223.005	%	40 - 150%	80
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	51
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	42
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	30 - 170%	52
	BH104m_0.2-0.3	SE280223.005	%	30 - 170%	38
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	53
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	47
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	20 - 150%	55
	BH104m_0.2-0.3	SE280223.005	%	20 - 150%	41
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	34
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	26

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	BH102_0.2-0.3	SE280223.002	%	10 - 150%	34
	BH104m_0.2-0.3	SE280223.005	%	10 - 150%	28

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	85
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	90
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	93
	BH103_0.6-0.7	SE280223.004	%	60 - 130%	91
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	94
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	86
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	84
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	91
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	93
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	84
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	94
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	87
	QD1	SE280223.013	%	60 - 130%	89
	QTS1	SE280223.015	%	60 - 130%	82
	QTB1	SE280223.016	%	60 - 130%	84
d4-1,2-dichloroethane (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	72
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	75
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	79
	BH103_0.6-0.7	SE280223.004	%	60 - 130%	76
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	81
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	76
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	66
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	79
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	78
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	71
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	83
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	77
	QD1	SE280223.013	%	60 - 130%	76
	QTS1	SE280223.015	%	60 - 130%	84
	QTB1	SE280223.016	%	60 - 130%	74
d8-toluene (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	73
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	78
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	82
	BH103_0.6-0.7	SE280223.004	%	60 - 130%	77
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	83
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	78
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	70
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	83
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	80
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	74
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	83
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	81
	QD1	SE280223.013	%	60 - 130%	79
	QTS1	SE280223.015	%	60 - 130%	89
	QTB1	SE280223.016	%	60 - 130%	76

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QR1	SE280223.014	%	40 - 130%	85
d4-1,2-dichloroethane (Surrogate)	QR1	SE280223.014	%	40 - 130%	89
d8-toluene (Surrogate)	QR1	SE280223.014	%	40 - 130%	93

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	85
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	90
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH103_0.6-0.7	SE280223.004	%	60 - 130%	91
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	94
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	86
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	84
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	91
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	93
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	84
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	94
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	87
	QD1	SE280223.013	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	72
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	75
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	79
	BH103_0.6-0.7	SE280223.004	%	60 - 130%	76
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	81
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	76
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	66
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	79
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	78
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	71
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	83
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	77
	QD1	SE280223.013	%	60 - 130%	76
d8-toluene (Surrogate)	BH101_0.1-0.2	SE280223.001	%	60 - 130%	73
	BH102_0.2-0.3	SE280223.002	%	60 - 130%	78
	BH103_0.4-0.5	SE280223.003	%	60 - 130%	82
	BH103_0.6-0.7	SE280223.004	%	60 - 130%	77
	BH104m_0.2-0.3	SE280223.005	%	60 - 130%	83
	BH105_0.4-0.5	SE280223.006	%	60 - 130%	78
	BH105_0.8-0.9	SE280223.007	%	60 - 130%	70
	BH106_0.1-0.2	SE280223.008	%	60 - 130%	83
	BH106_1.0-1.1	SE280223.009	%	60 - 130%	80
	BH107_0.3-0.4	SE280223.010	%	60 - 130%	74
	BH107_0.9-1.0	SE280223.011	%	60 - 130%	83
	BH108_0.2-0.3	SE280223.012	%	60 - 130%	81
	QD1	SE280223.013	%	60 - 130%	79

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QR1	SE280223.014	%	40 - 130%	85
d4-1,2-dichloroethane (Surrogate)	QR1	SE280223.014	%	60 - 130%	89
d8-toluene (Surrogate)	QR1	SE280223.014	%	40 - 130%	93

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB342156.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB342113.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB342100.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.1	<0.1
		Beta Endosulfan	mg/kg	0.1	<0.1
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB342100.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB342100.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB342100.001		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	99
		2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	103

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB342100.001		Arochlor 1016	mg/kg	0.1	<0.1
		Arochlor 1221	mg/kg	0.1	<0.1
		Arochlor 1232	mg/kg	0.1	<0.1
		Arochlor 1242	mg/kg	0.1	<0.1
		Arochlor 1248	mg/kg	0.1	<0.1
		Arochlor 1254	mg/kg	0.1	<0.1
		Arochlor 1260	mg/kg	0.1	<0.1
		Total PCBs	mg/kg	0.1	<0.1
	Surrogates	TCMX (Surrogate)	%	-	101

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB342070.001	Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005
	Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005
	Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005
	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005
	Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005
	Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005
	Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005
	Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005
	Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005
	Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005
	Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005
	Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005
	Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	mg/kg	0.005	<0.005
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	mg/kg	0.01	<0.01
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	mg/kg	0.01	<0.01
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	mg/kg	0.01	<0.01
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	mg/kg	0.01	<0.01

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR

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Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB342112.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB342094.001	Arsenic	µg/L	1	<1
	Cadmium	µg/L	0.1	<0.1
	Chromium	µg/L	1	<1
	Copper	µg/L	1	<1
	Lead	µg/L	1	<1
	Nickel	µg/L	1	<1
	Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB342100.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB341984.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342102.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Iodomethane	mg/kg	5	<5
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342102.001	Halogenated Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate*	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81
		d8-toluene (Surrogate)	%	-	83
		Bromofluorobenzene (Surrogate)	%	-	94
	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total BTEX*	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform (THM)	mg/kg	0.1	<0.1
		Bromodichloromethane (THM)	mg/kg	0.1	<0.1
		Dibromochloromethane (THM)	mg/kg	0.1	<0.1
		Bromoform (THM)	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342305.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
		d8-toluene (Surrogate)	%	-	96
		Bromofluorobenzene (Surrogate)	%	-	78

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342102.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342305.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
		d8-toluene (Surrogate)	%	-	96
		Bromofluorobenzene (Surrogate)	%	-	78

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280288.014	LB342156.014	Mercury	µg/L	0.0001	<0.00005	<0.00005	200	190

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342113.014	Mercury	mg/kg	0.05	0.20	0.35	48	53 ②
SE280223.013	LB342113.023	Mercury	mg/kg	0.05	0.37	0.25	46	39

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342110.011	% Moisture	%w/w	1	24.4	20.7	34	16
SE280223.013	LB342110.020	% Moisture	%w/w	1	24.5	24.1	34	1

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.48	0.47	30	1
SE280317.041	LB342100.025		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280317.041	LB342100.025		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC Pesticides	mg/kg	0.1	<0.1	<0.1	200	0
			Total OC VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.46	0.48	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
SE280317.041	LB342100.025		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	0.7	<0.1	56	148 ②
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	0.8	0.2	51	128 ②
		Pyrene	mg/kg	0.1	0.7	0.2	54	122 ②
		Benzo(a)anthracene	mg/kg	0.1	0.3	<0.1	90	91 ②
		Chrysene	mg/kg	0.1	0.3	<0.1	82	98 ②
		Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	<0.1	99	76
		Benzo(k)fluoranthene	mg/kg	0.1	0.3	<0.1	89	89
		Benzo(a)pyrene	mg/kg	0.1	0.3	<0.1	82	97 ②
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	<0.1	112	56
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014		Benzo(ghi)perylene	mg/kg	0.1	0.2	<0.1	124	41
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	0.4	<0.2	113	64
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	0.4	<0.2	82	74
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	0.5	<0.3	92	48
			Total PAH (18)	mg/kg	0.8	3.8	<0.8	35	168 ⓡ
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
SE280317.041	LB342100.025		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1221	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.48	0.47	30	1
SE280317.041	LB342100.025		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1221	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	200	0
			Arochlor 1260	mg/kg	0.1	<0.1	<0.1	200	0
			Total PCBs	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.46	0.48	30	3

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.002	LB342070.004		Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005	<0.005	200	0
			Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005	<0.005	200	0
			Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005	<0.005	200	0
			Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	<0.005	200	0
			Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	<0.005	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: ME-(AU)-[ENV]AN404

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.002	LB342070.004	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropropane sulfonic acid (PFPrS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorononane sulfonic acid (PFNS)	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorodecane sulfonic acid (PFDS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	mg/kg	0.005	<0.005	<0.005	200	0
		1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	mg/kg	0.005	<0.005	<0.005	200	0
		Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.01	<0.01	<0.01	200	0
		N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		N-Ethylperfluorooctanesulfonamidoacetic acid	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.01	<0.01	<0.01	200	0
		(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	91	86	200	5
		(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	82	76	200	8
		(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	89	86	200	4
		(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	87	86	200	1
		(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	89	86	200	3
		(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	86	85	200	1
		(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	78	71	200	9
		(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	86	75	200	15
		(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	80	74	200	8
		(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	81	71	200	13
		(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	81	75	200	8
		(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	89	82	200	8
		(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	87	73	200	17
		(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	57	57	200	0
		(D3-N-MeFOSAA) Isotopically Labelled Internal	%	-	52	44	200	16
		(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	55	50	200	9
		(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	97	81	200	18
		(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	89	81	200	10
		(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	125	129	200	3
		(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	34	33	200	2
		(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	34	32	200	6
		(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	51	54	200	7
		(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	53	57	200	7

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342112.014	Arsenic, As	mg/kg	1	7	7	44	1
		Cadmium, Cd	mg/kg	0.3	0.6	0.4	91	29
		Chromium, Cr	mg/kg	0.5	20	19	33	4
		Copper, Cu	mg/kg	0.5	70	62	31	12
		Nickel, Ni	mg/kg	0.5	5.8	5.3	39	9
		Lead, Pb	mg/kg	1	130	140	31	9
		Zinc, Zn	mg/kg	2	900	850	30	6
SE280223.013	LB342112.023	Arsenic, As	mg/kg	1	7	7	44	11
		Cadmium, Cd	mg/kg	0.3	0.8	0.6	74	32
		Chromium, Cr	mg/kg	0.5	19	18	33	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.013	LB342112.023	Copper, Cu	mg/kg	0.5	41	38	31	9
		Nickel, Ni	mg/kg	0.5	5.2	5.3	39	2
		Lead, Pb	mg/kg	1	150	160	31	7
		Zinc, Zn	mg/kg	2	2100	2300	30	9

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.014	LB342094.011	Arsenic	µg/L	1	<1	<1	200	0
		Cadmium	µg/L	0.1	<0.1	<0.1	200	0
		Chromium	µg/L	1	<1	<1	200	0
		Copper	µg/L	1	<1	<1	200	0
		Lead	µg/L	1	<1	<1	200	0
		Nickel	µg/L	1	<1	<1	200	0
		Zinc	µg/L	5	<5	<5	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.005	LB342100.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE280317.041	LB342100.025		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.003	LB342102.015	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.9	7.9	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.2	7.8	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.0	50	3
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE280317.042	LB342102.008	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.4	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.8	9.4	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	8.1	50	12
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280223.003	LB342102.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.9	7.9	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.2	7.8	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.0	50	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE280317.042	LB342102.008		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.4	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.8	9.4	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	8.1	50	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342113.002	Mercury	mg/kg	0.05	0.21	0.2	80 - 120	105

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342100.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	88
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	85
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	90
		Dieldrin	mg/kg	0.1	0.2	0.2	60 - 140	105
		Endrin	mg/kg	0.1	0.2	0.2	60 - 140	98
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	62
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.47	0.5	40 - 130	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342100.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	89
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	108
		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Ethion	mg/kg	0.2	1.7	2	60 - 140	87
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342100.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	96
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthene	mg/kg	0.1	4.0	4	60 - 140	99
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	101
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	112
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	5.0	4	60 - 140	125
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	70 - 130	89
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	70 - 130	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342100.002		Arochlor 1260	mg/kg	0.1	0.4	0.4	60 - 140	93
	Surrogates	TCMX (Surrogate)	mg/kg	-	0.47	0.5	40 - 130	95

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342070.002	Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005	0.004	40 - 160	85
	Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005	0.004	40 - 160	118
	Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005	0.004	40 - 160	97
	Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005	0.004	40 - 160	100
	Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005	0.004	40 - 160	86
	Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005	0.004	40 - 160	92
	Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005	0.004	40 - 160	81
	Perfluorooctane sulfonamide (FOSA)	mg/kg	0.01	<0.01	0.004	40 - 160	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342112.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	113
	Cadmium, Cd	mg/kg	0.3	4.9	4.81	70 - 130	102
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	330	290	80 - 120	114
	Nickel, Ni	mg/kg	0.5	210	187	80 - 120	110
	Lead, Pb	mg/kg	1	98	89.9	80 - 120	109
	Zinc, Zn	mg/kg	2	300	273	80 - 120	108

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342094.002		Arsenic	µg/L	1	18	20	80 - 120	90
		Cadmium	µg/L	0.1	22	20	80 - 120	108
		Chromium	µg/L	1	21	20	80 - 120	107
		Copper	µg/L	1	22	20	80 - 120	110
		Lead	µg/L	1	21	20	80 - 120	106
		Nickel	µg/L	1	21	20	80 - 120	103
		Zinc	µg/L	5	21	20	80 - 120	106

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342100.002		TRH C10-C14	mg/kg	20	47	40	60 - 140	118
		TRH C15-C28	mg/kg	45	50	40	60 - 140	124
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	92
	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	122
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	110
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	91

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB341984.002		TRH C10-C14	µg/L	50	1300	1200	60 - 140	106
		TRH C15-C28	µg/L	200	1400	1200	60 - 140	118
		TRH C29-C36	µg/L	200	1400	1200	60 - 140	117
	TRH F Bands	TRH >C10-C16	µg/L	60	1400	1200	60 - 140	113
		TRH >C16-C34 (F3)	µg/L	500	1400	1200	60 - 140	118
		TRH >C34-C40 (F4)	µg/L	500	710	600	60 - 140	118

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342102.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.3	5	60 - 140	85
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.5	5	60 - 140	89
		Trichloroethene (Trichloroethylene,TCE)	mg/kg	0.1	4.0	5	60 - 140	80
	Halogenated	Chlorobenzene	mg/kg	0.1	4.1	5	60 - 140	81
	Monocyclic	Benzene	mg/kg	0.1	3.8	5	60 - 140	76
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	82
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	87
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.7	5	60 - 140	93
	Trihalomethan	Chloroform (THM)	mg/kg	0.1	4.6	5	60 - 140	92

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342305.002	Monocyclic	Benzene	µg/L	0.5	48	45.45	60 - 140	106
	Aromatic	Toluene	µg/L	0.5	50	45.45	60 - 140	110
		Ethylbenzene	µg/L	0.5	43	45.45	60 - 140	94
		m/p-xylene	µg/L	1	81	90.9	60 - 140	89
		o-xylene	µg/L	0.5	40	45.45	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	8.8	10	60 - 140	88
		d8-toluene (Surrogate)	µg/L	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	µg/L	-	9.1	10	70 - 130	91

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342102.002		TRH C6-C10	mg/kg	25	86	92.5	60 - 140	93
		TRH C6-C9	mg/kg	20	71	80	60 - 140	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	61	62.5	60 - 140	97

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342305.002		TRH C6-C10	µg/L	50	790	946.63	60 - 140	83
		TRH C6-C9	µg/L	40	690	818.71	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	8.8	10	60 - 140	88
		d8-toluene (Surrogate)	µg/L	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	µg/L	-	9.1	10	70 - 130	91
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	530	639.67	60 - 140	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280177.032	LB342156.004	Mercury	mg/L	0.0001	0.0021	0.002	0.008	105

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342113.004	Mercury	mg/kg	0.05	0.25	<0.05	0.2	99

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	93
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	92
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	95
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlordane (alpha + gamma chlordane)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.1	0.2	<0.1	0.2	106
			Endrin	mg/kg	0.1	0.2	<0.1	0.2	97
			Beta Endosulfan	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.1	<0.1	0.2	64
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total OC Pesticides	mg/kg	0.1	1.1	<0.1	-	-
			Total OC VIC EPA IWRG621	mg/kg	0.1	1.1	<0.1	-	-
			Total Other OCP VIC EPA IWRG621	mg/kg	0.1	0.6	<0.1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.44	0.44	-	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	95
			Diazinon (Dimpylate)	mg/kg	0.5	2.2	<0.5	2	112
			Dichlorvos	mg/kg	0.5	1.8	<0.5	2	89
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.3	<0.2	2	112
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.3	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	87

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004	Naphthalene	mg/kg	0.1	3.6	<0.1	4	90
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004		Acenaphthylene	mg/kg	0.1	3.8	<0.1	4	95
			Acenaphthene	mg/kg	0.1	3.7	<0.1	4	92
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.0	<0.1	4	98
			Anthracene	mg/kg	0.1	3.8	<0.1	4	95
			Fluoranthene	mg/kg	0.1	3.8	<0.1	4	94
			Pyrene	mg/kg	0.1	4.0	<0.1	4	100
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	114
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.6	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.7	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	31	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	88
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004		Arochlor 1016	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1221	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1232	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1242	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1248	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1254	mg/kg	0.1	<0.1	<0.1	-	-
			Arochlor 1260	mg/kg	0.1	0.4	<0.1	0.4	104
			Total PCBs	mg/kg	0.1	0.4	<0.1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0.44	0.44	-	87

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342112.004	Arsenic, As	mg/kg	1	48	6	50	85
		Cadmium, Cd	mg/kg	0.3	39	<0.3	50	78
		Chromium, Cr	mg/kg	0.5	53	15	50	77
		Copper, Cu	mg/kg	0.5	73	32	50	81
		Nickel, Ni	mg/kg	0.5	64	27	50	74
		Lead, Pb	mg/kg	1	54	14	50	80
		Zinc, Zn	mg/kg	2	110	83	50	55 ⑨

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280125.001	LB342094.004	Arsenic	µg/L	1	20	0.30330206	20	98
		Cadmium	µg/L	0.1	26	0.00924551	20	128
		Chromium	µg/L	1	23	0.48837081	20	114
		Copper	µg/L	1	25	0.83081898	20	119
		Lead	µg/L	1	22	0.22701882	20	111
		Nickel	µg/L	1	21	1.24045062	20	101
		Zinc	µg/L	5	30	6.33485684	20	116

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004	TRH C10-C14	mg/kg	20	58	<20	40	124
		TRH C15-C28	mg/kg	45	71	<45	40	92
		TRH C29-C36	mg/kg	45	51	<45	40	72
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	180	<110	-	-
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342100.004	TRH F Bands	TRH >C10-C16	mg/kg	25	60	<25	40	121
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	60	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	62
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342102.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.2	<0.1	5	84
			Toluene	mg/kg	0.1	5.0	<0.1	5	100
			Ethylbenzene	mg/kg	0.1	3.8	<0.1	5	77
			m/p-xylene	mg/kg	0.2	6.4	<0.2	10	64
			o-xylene	mg/kg	0.1	3.1	<0.1	5	62
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	8.6	-	96
			d8-toluene (Surrogate)	mg/kg	-	10.6	9.1	-	106
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.1	-	74
		Totals	Total BTEX*	mg/kg	0.6	22	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	9.5	<0.3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280317.039	LB342102.004		TRH C6-C10	mg/kg	25	64	<25	92.5	66
			TRH C6-C9	mg/kg	20	58	<20	80	70
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	8.6	-	96
			d8-toluene (Surrogate)	mg/kg	-	10.6	9.1	-	106
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.1	-	74
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	62

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**E26516 2-4 Borleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	8

LABORATORY DETAILS

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SGS Reference	**SE280223 R0**
Date Received	24 Mar 2025
Date Reported	27 Mar 2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.
Asbestos analysed by Approved Identifier Yusuf Kuthpudin

SIGNATORIES

Yusuf KUTHPUDIN
Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Date Analysed	Fibre Identification	Est.%w/w*
SE280223.001	BH101_0.1-0.2	Soil	135g Clay, Sand, Soil, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE280223.002	BH102_0.2-0.3	Soil	160g Clay, Sand, Soil, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE280223.003	BH103_0.4-0.5	Soil	146g Clay, Sand, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg	<0.01
SE280223.005	BH104m_0.2-0.3	Soil	203g Clay, Sand, Soil, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg	<0.01
SE280223.006	BH105_0.4-0.5	Soil	175g Clay, Sand, Soil, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE280223.008	BH106_0.1-0.2	Soil	152g Clay, Sand, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg	<0.01
SE280223.010	BH107_0.3-0.4	Soil	236g Clay, Sand, Soil, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg	<0.01
SE280223.012	BH108_0.2-0.3	Soil	249g Clay, Sand, Rocks	24 Mar 2025	27 Mar 2025	No Asbestos Found at RL of 0.1g/kg	<0.01

METHOD SUMMARY

SE280223 R0

METHOD	METHODOLOGY SUMMARY
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**E26516 2-4 Borleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	17

LABORATORY DETAILS

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SGS Reference	**SE280223A R0**
Date Received	1/4/2025
Date Reported	2/4/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Dong LIANG
Metals/Inorganics Team Leader

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/4/2025

PARAMETER	UOM	LOR	BH102_0.4-0.5 SOIL - 24/3/2025 SE280223A.017
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**
Pyrene	mg/kg	0.1	**0.2**
Benzo(a)anthracene	mg/kg	0.1	**0.1**
Chrysene	mg/kg	0.1	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.1**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.1**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	**0.2**
Total PAH (18)	mg/kg	0.8	**1.1**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.1**

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/4/2025

PARAMETER	UOM	LOR	BH102_0.4-0.5 SOIL - 24/3/2025 SE280223A.017
Lead, Pb	mg/kg	1	**40**

Moisture Content [AN002] Tested: 1/4/2025

PARAMETER	UOM	LOR	BH102_0.4-0.5 SOIL - 24/3/2025 SE280223A.017
% Moisture	%w/w	1	**19.8**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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CERTIFICATE OF ANALYSIS 376487

Client Details

Client	EI Australia
Attention	Lab Email
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details

Your Reference	**E26516 - 2-4 Burleigh Street, 20-24 Railway Parade**
Number of Samples	1 Soil
Date samples received	25/03/2025
Date completed instructions received	25/03/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	28/03/2025
Date of Issue	28/03/2025

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Results Approved By
Giovanni Agosti, Group Technical Manager
Timothy Toll, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		376487-1
Your Reference	UNITS	QT1
Date Sampled		24/03/2025
Type of sample		Soil
Date extracted	-	26/03/2025
Date analysed	-	28/03/2025
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	113

svTRH (C10-C40) in Soil		
Our Reference		376487-1
Your Reference	UNITS	QT1
Date Sampled		24/03/2025
Type of sample		Soil
Date extracted	-	26/03/2025
Date analysed	-	27/03/2025
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	120

Acid Extractable metals in soil		
Our Reference		376487-1
Your Reference	UNITS	QT1
Date Sampled		24/03/2025
Type of sample		Soil
Date prepared	-	26/03/2025
Date analysed	-	27/03/2025
Arsenic	mg/kg	8
Cadmium	mg/kg	0.9
Chromium	mg/kg	20
Copper	mg/kg	30
Lead	mg/kg	110
Mercury	mg/kg	0.2
Nickel	mg/kg	5
Zinc	mg/kg	4,100

Moisture		
Our Reference		376487-1
Your Reference	UNITS	QT1
Date Sampled		24/03/2025
Type of sample		Soil
Date prepared	-	26/03/2025
Date analysed	-	27/03/2025
Moisture	%	23

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES. Total Phosphate determined stochiometrically from Phosphorus (assumed to be present as Phosphate). Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			26/03/2025	[NT]	[NT]	[NT]	[NT]	26/03/2025	[NT]
Date analysed	-			28/03/2025	[NT]	[NT]	[NT]	[NT]	28/03/2025	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	124	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	124	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	131	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	124	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	122	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	121	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	122	[NT]	[NT]	[NT]	[NT]	118	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			26/03/2025	[NT]	[NT]	[NT]	[NT]	26/03/2025	[NT]
Date analysed	-			27/03/2025	[NT]	[NT]	[NT]	[NT]	27/03/2025	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	90	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	81	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	90	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	81	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
Surrogate o-Terphenyl	%		Org-020	72	[NT]	[NT]	[NT]	[NT]	118	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			26/03/2025	[NT]	[NT]	[NT]	[NT]	26/03/2025	[NT]
Date analysed	-			27/03/2025	[NT]	[NT]	[NT]	[NT]	27/03/2025	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	115	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	107	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
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Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE280587 R0**
Date Received	31/3/2025
Date Reported	1/4/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
Organic Section Head

VOCs in Water [AN433] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004	QTS1 WATER - 31/3/2025 SE280587.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[104%]
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[89%]
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[112%]
m/p-xylene	µg/L	1	<1	<1	<1	<1	[115%]
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[114%]
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	-
Total BTEX	µg/L	3	<3	<3	<3	<3	-
Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[82%]
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	-	-	-	-
Chloromethane	µg/L	5	<5	-	-	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	-	-	-	-
Bromomethane	µg/L	10	<10	-	-	-	-
Chloroethane	µg/L	5	<5	-	-	-	-
Trichlorofluoromethane	µg/L	1	<1	-	-	-	-
Acetone (2-propanone)	µg/L	10	<10	-	-	-	-
Iodomethane	µg/L	5	<5	-	-	-	-
1,1-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
Acrylonitrile	µg/L	0.5	<0.5	-	-	-	-
Dichloromethane (Methylene chloride)	µg/L	5	<5	-	-	-	-
Allyl chloride	µg/L	2	<2	-	-	-	-
Carbon disulfide	µg/L	2	<2	-	-	-	-
trans-1,2-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	0.5	<0.5	-	-	-	-
1,1-dichloroethane	µg/L	0.5	<0.5	-	-	-	-
Vinyl acetate*	µg/L	10	<10	-	-	-	-
MEK (2-butanone)	µg/L	10	<10	-	-	-	-
cis-1,2-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
Bromochloromethane	µg/L	0.5	<0.5	-	-	-	-
Chloroform (THM)	µg/L	0.5	<0.5	-	-	-	-
2,2-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
1,2-dichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,1,1-trichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,1-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
Carbon tetrachloride	µg/L	0.5	<0.5	-	-	-	-
Dibromomethane	µg/L	0.5	<0.5	-	-	-	-
1,2-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	-	-	-	-
2-nitropropane	µg/L	100	<100	-	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	<0.5	-	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	-	-	-	-
cis-1,3-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
trans-1,3-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,3-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	<0.5	-	-	-	-
2-hexanone (MBK)	µg/L	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	-	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	-	-	-	-
Chlorobenzene	µg/L	0.5	<0.5	-	-	-	-
Bromoform (THM)	µg/L	0.5	<0.5	-	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	-	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	-	-	-	-
1,2,3-trichloropropane	µg/L	0.5	<0.5	-	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	-	-	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	-	-	-	-

VOCs in Water [AN433] Tested: 1/4/2025 (continued)

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004	QTS1 WATER - 31/3/2025 SE280587.005
Bromobenzene	µg/L	0.5	<0.5	-	-	-	-
n-propylbenzene	µg/L	0.5	<0.5	-	-	-	-
2-chlorotoluene	µg/L	0.5	<0.5	-	-	-	-
4-chlorotoluene	µg/L	0.5	<0.5	-	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	-	-	-	-
tert-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	-	-	-	-
sec-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	-	-	-	-
p-isopropyltoluene	µg/L	0.5	<0.5	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
n-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	-	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	<1	-	-	-	-
Total VOC	µg/L	10	<10	-	-	-	-

VOCs in Water [AN433] Tested: 1/4/2025 (continued)

PARAMETER	UOM	LOR	QTB1 WATER - 31/3/2025 SE280587.006
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene (VOC)*	µg/L	0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	-
Chloromethane	µg/L	5	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-
Bromomethane	µg/L	10	-
Chloroethane	µg/L	5	-
Trichlorofluoromethane	µg/L	1	-
Acetone (2-propanone)	µg/L	10	-
Iodomethane	µg/L	5	-
1,1-dichloroethene	µg/L	0.5	-
Acrylonitrile	µg/L	0.5	-
Dichloromethane (Methylene chloride)	µg/L	5	-
Allyl chloride	µg/L	2	-
Carbon disulfide	µg/L	2	-
trans-1,2-dichloroethene	µg/L	0.5	-
MtBE (Methyl-tert-butyl ether)	µg/L	0.5	-
1,1-dichloroethane	µg/L	0.5	-
Vinyl acetate*	µg/L	10	-
MEK (2-butanone)	µg/L	10	-
cis-1,2-dichloroethene	µg/L	0.5	-
Bromochloromethane	µg/L	0.5	-
Chloroform (THM)	µg/L	0.5	-
2,2-dichloropropane	µg/L	0.5	-
1,2-dichloroethane	µg/L	0.5	-
1,1,1-trichloroethane	µg/L	0.5	-
1,1-dichloropropene	µg/L	0.5	-
Carbon tetrachloride	µg/L	0.5	-
Dibromomethane	µg/L	0.5	-
1,2-dichloropropane	µg/L	0.5	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-
2-nitropropane	µg/L	100	-
Bromodichloromethane (THM)	µg/L	0.5	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-
cis-1,3-dichloropropene	µg/L	0.5	-
trans-1,3-dichloropropene	µg/L	0.5	-
1,1,2-trichloroethane	µg/L	0.5	-
1,3-dichloropropane	µg/L	0.5	-
Dibromochloromethane (THM)	µg/L	0.5	-
2-hexanone (MBK)	µg/L	5	-
1,2-dibromoethane (EDB)	µg/L	0.5	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-
Chlorobenzene	µg/L	0.5	-
Bromoform (THM)	µg/L	0.5	-
Styrene (Vinyl benzene)	µg/L	0.5	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-
1,2,3-trichloropropane	µg/L	0.5	-
trans-1,4-dichloro-2-butene	µg/L	1	-
Isopropylbenzene (Cumene)	µg/L	0.5	-

VOCs in Water [AN433] Tested: 1/4/2025 (continued)

PARAMETER	UOM	LOR	QTB1 WATER - 31/3/2025 SE280587.006
Bromobenzene	µg/L	0.5	-
n-propylbenzene	µg/L	0.5	-
2-chlorotoluene	µg/L	0.5	-
4-chlorotoluene	µg/L	0.5	-
1,3,5-trimethylbenzene	µg/L	0.5	-
tert-butylbenzene	µg/L	0.5	-
1,2,4-trimethylbenzene	µg/L	0.5	-
sec-butylbenzene	µg/L	0.5	-
1,3-dichlorobenzene	µg/L	0.5	-
1,4-dichlorobenzene	µg/L	0.3	-
p-isopropyltoluene	µg/L	0.5	-
1,2-dichlorobenzene	µg/L	0.5	-
n-butylbenzene	µg/L	0.5	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-
1,2,4-trichlorobenzene	µg/L	0.5	-
Hexachlorobutadiene	µg/L	0.5	-
1,2,3-trichlorobenzene	µg/L	0.5	-
cis-1,4-dichloro-2-butene	µg/L	1	-
Total VOC	µg/L	10	-

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004
TRH C6-C9	µg/L	40	<40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004
TRH C10-C14	µg/L	50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	**440**	**260**	<200	<200
TRH C29-C36	µg/L	200	**330**	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	**160**	**150**	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	**160**	**150**	<60	<60
TRH >C16-C34 (F3)	µg/L	500	**550**	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	**960**	**550**	<320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004
Arsenic	µg/L	1	<1	<1	<1	<1
Cadmium	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Chromium	µg/L	1	<1	<1	<1	<1
Copper	µg/L	1	**2**	**2**	<1	<1
Lead	µg/L	1	<1	<1	<1	<1
Nickel	µg/L	1	**12**	**11**	<1	<1
Zinc	µg/L	5	**52**	**50**	<5	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001	GWQD1 WATER - 31/3/2025 SE280587.002	GWR1 WATER - 31/3/2025 SE280587.003	GWRB1 WATER - 31/3/2025 SE280587.004
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [AN404] Tested: 1/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587.001
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.05
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.01
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.01
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.01
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.01
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.01
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.01
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.01
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.01
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.01
Perfluoropropane sulfonic acid (PFPrS)	µg/L	0.01	<0.01
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.01
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.01
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.01
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	**0.01**
Perfluorononane sulfonic acid (PFNS)	µg/L	0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	<0.01
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	µg/L	0.01	<0.01
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	µg/L	0.01	<0.01
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	µg/L	0.01	<0.01
1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2	µg/L	0.01	<0.01
Perfluorooctane sulfonamide (FOSA)	µg/L	0.01	<0.01
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.05	<0.05
N-Ethylperfluorooctanesulfonamidoacetic acid	µg/L	0.05	<0.05
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.05	<0.05
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.05	<0.05
Sum of PFOS and PFHxS	µg/L	0.01	**0.01**
Sum of enHealth PFAS (PFHxS+PFOS+PFOA)	µg/L	0.01	**0.01**
Sum of US EPA PFAS (PFOS+PFOA)	µg/L	0.01	**0.01**
Sum of PFAS A	µg/L	0.01	<0.01
Sum of PFAS B	µg/L	0.01	<0.01
Sum of PFAS C	µg/L	0.01	**0.01**
Sum of Positive PFAS	µg/L	0.01	**0.01**

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN404	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts. After spiking with isotopically labelled quantification surrogates and sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification. PFOS and PFHXS are determined as the total of linear and branched isomers.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE280587 R0

CLIENT DETAILS

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Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE280587 R0**
Date Received	31 Mar 2025
Date Reported	01 Apr 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	6 Water	Type of documentation received	COC
Date documentation received	31/3/2025	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	15.6°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE280587 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342760	31 Mar 2025	31 Mar 2025	28 Apr 2025	01 Apr 2025	28 Apr 2025	01 Apr 2025
GWQD1	SE280587.002	LB342760	31 Mar 2025	31 Mar 2025	28 Apr 2025	01 Apr 2025	28 Apr 2025	01 Apr 2025
GWR1	SE280587.003	LB342760	31 Mar 2025	31 Mar 2025	28 Apr 2025	01 Apr 2025	28 Apr 2025	01 Apr 2025
GWRB1	SE280587.004	LB342760	31 Mar 2025	31 Mar 2025	28 Apr 2025	01 Apr 2025	28 Apr 2025	01 Apr 2025

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWQD1	SE280587.002	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWR1	SE280587.003	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWRB1	SE280587.004	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: ME-(AU)-[ENV]AN404

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342751	31 Mar 2025	31 Mar 2025	28 Apr 2025	01 Apr 2025	29 Apr 2025	01 Apr 2025

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342775	31 Mar 2025	31 Mar 2025	27 Sep 2025	01 Apr 2025	27 Sep 2025	01 Apr 2025
GWQD1	SE280587.002	LB342775	31 Mar 2025	31 Mar 2025	27 Sep 2025	01 Apr 2025	27 Sep 2025	01 Apr 2025
GWR1	SE280587.003	LB342775	31 Mar 2025	31 Mar 2025	27 Sep 2025	01 Apr 2025	27 Sep 2025	01 Apr 2025
GWRB1	SE280587.004	LB342775	31 Mar 2025	31 Mar 2025	27 Sep 2025	01 Apr 2025	27 Sep 2025	01 Apr 2025

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWQD1	SE280587.002	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWR1	SE280587.003	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025
GWRB1	SE280587.004	LB342734	31 Mar 2025	31 Mar 2025	07 Apr 2025	01 Apr 2025	11 May 2025	01 Apr 2025

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWQD1	SE280587.002	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWR1	SE280587.003	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWRB1	SE280587.004	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
QTS1	SE280587.005	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
QTB1	SE280587.006	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587.001	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWQD1	SE280587.002	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWR1	SE280587.003	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
GWRB1	SE280587.004	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
QTS1	SE280587.005	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025
QTB1	SE280587.006	LB342739	31 Mar 2025	31 Mar 2025	14 Apr 2025	01 Apr 2025	14 Apr 2025	01 Apr 2025

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	80
d14-p-terphenyl (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	82
d5-nitrobenzene (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	72

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: ME-(AU)-[ENV]AN404

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	68
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 300%	108
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 300%	111
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 300%	105
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	52
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	99
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	101
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	96
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	5 - 150%	96
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	94
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	93
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	35 - 150%	125
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	87
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	30 - 150%	69
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	106
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	20 - 150%	72
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	40 - 150%	96
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	49
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	30 - 170%	76
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	57
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	20 - 150%	69
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	59
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	UNK-GW	SE280587.001	%	10 - 150%	58

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	95
	GWQD1	SE280587.002	%	40 - 130%	72
	GWR1	SE280587.003	%	40 - 130%	83
	GWRB1	SE280587.004	%	40 - 130%	92
	QTS1	SE280587.005	%	40 - 130%	90
	QTB1	SE280587.006	%	40 - 130%	101
d4-1,2-dichloroethane (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	86
	GWQD1	SE280587.002	%	40 - 130%	102
	GWR1	SE280587.003	%	40 - 130%	103
	GWRB1	SE280587.004	%	40 - 130%	103
	QTS1	SE280587.005	%	40 - 130%	97
	QTB1	SE280587.006	%	40 - 130%	97
d8-toluene (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	90
	GWQD1	SE280587.002	%	40 - 130%	97
	GWR1	SE280587.003	%	40 - 130%	88
	GWRB1	SE280587.004	%	40 - 130%	82
	QTS1	SE280587.005	%	40 - 130%	90
	QTB1	SE280587.006	%	40 - 130%	97

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	95
	GWQD1	SE280587.002	%	40 - 130%	72
	GWR1	SE280587.003	%	40 - 130%	83
	GWRB1	SE280587.004	%	40 - 130%	92
d4-1,2-dichloroethane (Surrogate)	UNK-GW	SE280587.001	%	60 - 130%	86
	GWQD1	SE280587.002	%	60 - 130%	102
	GWR1	SE280587.003	%	60 - 130%	103
	GWRB1	SE280587.004	%	60 - 130%	103
d8-toluene (Surrogate)	UNK-GW	SE280587.001	%	40 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	GWQD1	SE280587.002	%	40 - 130%	97
	GWR1	SE280587.003	%	40 - 130%	88
	GWRB1	SE280587.004	%	40 - 130%	82

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB342760.001	Mercury	mg/L	0.0001	<0.0001

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB342734.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	84
		2-fluorobiphenyl (Surrogate)	%	-	88
		d14-p-terphenyl (Surrogate)	%	-	94

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result
LB342751.001	Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.05
	Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.01
	Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.01
	Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.01
	Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01
	Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.01
	Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.01
	Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.01
	Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.01
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.01
	Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.01
	Perfluoropropane sulfonic acid (PFPrS)	µg/L	0.01	<0.01
	Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.01
	Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.01
	Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01
	Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.01
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01
	Perfluorononane sulfonic acid (PFNS)	µg/L	0.01	<0.01
	Perfluorodecane sulfonic acid (PFDS)	µg/L	0.01	<0.01
	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	µg/L	0.01	<0.01
	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	µg/L	0.01	<0.01
	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	µg/L	0.01	<0.01
	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	µg/L	0.01	<0.01
	Perfluorooctane sulfonamide (FOSA)	µg/L	0.01	<0.01
	N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
	N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
	N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	µg/L	0.05	<0.05
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	µg/L	0.05	<0.05
	2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	µg/L	0.05	<0.05
	2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	µg/L	0.05	<0.05

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB342775.001	Arsenic	µg/L	1	<1
	Cadmium	µg/L	0.1	<0.1
	Chromium	µg/L	1	<1
	Copper	µg/L	1	<1
	Lead	µg/L	1	<1
	Nickel	µg/L	1	<1
	Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB342734.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342739.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		1,1-dichloroethene	µg/L	0.5	<0.5
		Iodomethane	µg/L	5	<5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342739.001	Monocyclic Aromatic Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		o-xylene	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	0.5	<0.5
		Vinyl acetate*	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene (VOC)*	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	93
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB342739.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	93

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280587.001	LB342734.025		Naphthalene	µg/L	0.1	<0.1	0	200	0
			2-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
			1-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
			Acenaphthylene	µg/L	0.1	<0.1	0	200	0
			Acenaphthene	µg/L	0.1	<0.1	0.0625	190	0
			Fluorene	µg/L	0.1	<0.1	0	200	0
			Phenanthrene	µg/L	0.1	<0.1	0	200	0
			Anthracene	µg/L	0.1	<0.1	0	200	0
			Fluoranthene	µg/L	0.1	<0.1	0	200	0
			Pyrene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)anthracene	µg/L	0.1	<0.1	0.0625	200	0
			Chrysene	µg/L	0.1	<0.1	0	200	0
			Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.38	30	5
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.41	30	2
			d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.42	30	2

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280587.004	LB342775.008	Arsenic	µg/L	1	<1	<1	200	0
		Cadmium	µg/L	0.1	<0.1	<0.1	200	0
		Chromium	µg/L	1	<1	<1	200	0
		Copper	µg/L	1	<1	<1	200	0
		Lead	µg/L	1	<1	<1	200	0
		Nickel	µg/L	1	<1	<1	200	0
		Zinc	µg/L	5	<5	<5	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE280587.001	LB342734.025		TRH C10-C14	µg/L	50	<50	66	119	27
			TRH C15-C28	µg/L	200	440	530	71	19
			TRH C29-C36	µg/L	200	330	420	83	25
			TRH C37-C40	µg/L	200	<200	<200	149	0
			TRH C10-C40	µg/L	320	960	1200	59	25
		TRH F Bands	TRH >C10-C16	µg/L	60	160	190	64	22
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	160	190	64	22
			TRH >C16-C34 (F3)	µg/L	500	550	690	110	22
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342734.002		Naphthalene	µg/L	0.1	35	40	60 - 140	87
		Acenaphthylene	µg/L	0.1	38	40	60 - 140	95
		Acenaphthene	µg/L	0.1	38	40	60 - 140	94
		Phenanthrene	µg/L	0.1	39	40	60 - 140	98
		Anthracene	µg/L	0.1	36	40	60 - 140	91
		Fluoranthene	µg/L	0.1	39	40	60 - 140	98
		Pyrene	µg/L	0.1	38	40	60 - 140	94
		Benzo(a)pyrene	µg/L	0.1	45	40	60 - 140	113
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	72

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: ME-(AU)-[ENV]AN404

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342751.002	Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	0.16	0.2	40 - 160	82
	Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.23	0.2	40 - 160	116
	Perfluorononanoic acid (PFNA)	µg/L	0.01	0.17	0.2	40 - 160	86
	Perfluorodecanoic acid (PFDA)	µg/L	0.01	0.17	0.2	40 - 160	87
	Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	0.20	0.2	40 - 160	98
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	0.18	0.2	40 - 160	89
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.15	0.2	40 - 160	76
	Perfluorooctane sulfonamide (FOSA)	µg/L	0.01	0.18	0.2	40 - 160	88

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342775.002	Arsenic	µg/L	1	18	20	80 - 120	91
	Cadmium	µg/L	0.1	22	20	80 - 120	110
	Chromium	µg/L	1	22	20	80 - 120	108
	Copper	µg/L	1	22	20	80 - 120	112
	Lead	µg/L	1	21	20	80 - 120	107
	Nickel	µg/L	1	21	20	80 - 120	107
	Zinc	µg/L	5	22	20	80 - 120	110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342734.002		TRH C10-C14	µg/L	50	1300	1200	60 - 140	110
		TRH C15-C28	µg/L	200	1500	1200	60 - 140	122
		TRH C29-C36	µg/L	200	1500	1200	60 - 140	125
	TRH F Bands	TRH >C10-C16	µg/L	60	1400	1200	60 - 140	117
		TRH >C16-C34 (F3)	µg/L	500	1500	1200	60 - 140	126
		TRH >C34-C40 (F4)	µg/L	500	760	600	60 - 140	127

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342739.002	Halogenated Aliphatics	1,1-dichloroethene	µg/L	0.5	60	45.45	60 - 140	133
		1,2-dichloroethane	µg/L	0.5	55	45.45	60 - 140	121
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	55	45.45	60 - 140	121
	Halogenated Monocyclic Aromatic	Chlorobenzene	µg/L	0.5	48	45.45	60 - 140	105
		Benzene	µg/L	0.5	49	45.45	60 - 140	108
		Toluene	µg/L	0.5	53	45.45	60 - 140	116
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	101
		m/p-xylene	µg/L	1	92	90.9	60 - 140	101
		o-xylene	µg/L	0.5	46	45.45	60 - 140	100
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.4	10	60 - 140	94
		d8-toluene (Surrogate)	µg/L	-	10.9	10	70 - 130	109
		Bromofluorobenzene (Surrogate)	µg/L	-	8.1	10	70 - 130	81
	Trihalomethan	Chloroform (THM)	µg/L	0.5	63	45.45	60 - 140	138

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342739.002		TRH C6-C10	µg/L	50	770	946.63	60 - 140	82
		TRH C6-C9	µg/L	40	680	818.71	60 - 140	83
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.4	10	60 - 140	94

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342739.002	Surrogates	d8-toluene (Surrogate)	µg/L	-	10.9	10	70 - 130	109
		Bromofluorobenzene (Surrogate)	µg/L	-	8.1	10	70 - 130	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	490	639.67	60 - 140	76

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water — Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280512.002	LB342760.004	Mercury	mg/L	0.0001	0.0020	<0.00005	0.008	103

Trace Metals (Dissolved) in Water by ICPMS — Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE280587.001	LB342775.004	Arsenic	µg/L	1	24	<1	20	118
		Cadmium	µg/L	0.1	20	<0.1	20	99
		Chromium	µg/L	1	20	<1	20	101
		Copper	µg/L	1	19	2	20	85
		Lead	µg/L	1	20	<1	20	102
		Nickel	µg/L	1	30	12	20	86
		Zinc	µg/L	5	67	52	20	77

MATRIX SPIKE DUPLICATES

SE280587 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE280587A R0**
Date Received	2/4/2025
Date Reported	2/4/2025

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Ly Kim HA

Organic Section Head

TRH Silica Gel (Total Recoverable Hydrocarbons - Silica Gel) in Water [AN403] Tested: 2/4/2025

PARAMETER	UOM	LOR	UNK-GW WATER - 31/3/2025 SE280587A.001
TRH C10-C14-Silica	µg/L	50	<50
TRH C15-C28-Silica	µg/L	200	<200
TRH C29-C36-Silica	µg/L	200	<200
TRH C37-C40-Silica	µg/L	200	<200
TRH >C10-C16-Silica	µg/L	60	<60
TRH >C16-C34-Silica	µg/L	500	<500
TRH >C34-C40-Silica	µg/L	500	<500
TRH Sum C10-C36-Silica	µg/L	225	<225
TRH Sum C10-C40-Silica	µg/L	320	<320

METHOD	METHODOLOGY SUMMARY
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRHisilica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE280587A R0

CLIENT DETAILS

Contact	Amy Nyiri
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	amy.nyiri@eiaustralia.com.au
Project	**E26516 2-4 Burleigh St, 20-24 Railway Pa**
Order Number	**E26516**
Samples	6

LABORATORY DETAILS

Manager	Shane McDermott
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE280587A R0**
Date Received	02 Apr 2025
Date Reported	02 Apr 2025

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	1 Water	Type of documentation received	Email
Date documentation received	2/04/2025@9:04am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	15.6°C
Sample container provider	SGS	Turnaround time requested	Same Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE280587A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH Silica Gel (Total Recoverable Hydrocarbons - Silica Gel) in Water — **Method: ME-(AU)-[ENV]AN403**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
UNK-GW	SE280587A.001	LB342925	31 Mar 2025	02 Apr 2025	07 Apr 2025	02 Apr 2025	12 May 2025	02 Apr 2025

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH Silica Gel (Total Recoverable Hydrocarbons - Silica Gel) in Water — **Method: ME-(AU)-[ENV]AN403**

Sample Number	Parameter	Units	LOR	Result
LB342925.001	TRH C10-C14-Silica	µg/L	50	<50
	TRH C15-C28-Silica	µg/L	200	<200
	TRH C29-C36-Silica	µg/L	200	<200
	TRH C37-C40-Silica	µg/L	200	<200

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Original	Duplicate	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH Silica Gel (Total Recoverable Hydrocarbons - Silica Gel) in Water — **Method: ME-(AU)-[ENV]AN403**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB342925.002	TRH C10-C14-Silica	µg/L	50	1400	1200	60 - 140	120
	TRH C15-C28-Silica	µg/L	200	1600	1200	60 - 140	133
	TRH C29-C36-Silica	µg/L	200	1500	1200	60 - 140	127
	TRH >C10-C16-Silica	µg/L	60	1600	1200	60 - 140	129
	TRH >C16-C34-Silica	µg/L	500	1600	1200	60 - 140	132
	TRH >C34-C40-Silica	µg/L	500	750	600	60 - 140	125

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE280587A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CERTIFICATE OF ANALYSIS 377007

Client Details

Client	EI Australia
Attention	Amy Nyiri
Address	Suite 6.01, 55 Miller Street, Pyrmont, NSW, 2009

Sample Details

Your Reference	**E26516, 2-4 Burleigh St, 20-24 Railway Parade**
Number of Samples	1 Water
Date samples received	31/03/2025
Date completed instructions received	31/03/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	01/04/2025
Date of Issue	01/04/2025

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Results Approved By
Dragana Tomas, Senior Chemist
Giovanni Agosti, Group Technical Manager

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Water		
Our Reference		377007-1
Your Reference	UNITS	GWQT1
Date Sampled		31/03/2025
Type of sample		Water
Date extracted	-	01/04/2025
Date analysed	-	01/04/2025
TRH C_6 - C_9	µg/L	<10
TRH C_6 - C_{10}	µg/L	<10
TRH C_6 - C_{10} less BTEX (F1)	µg/L	<10
Benzene	µg/L	<1
Toluene	µg/L	<1
Ethylbenzene	µg/L	<1
m+p-xylene	µg/L	<2
o-xylene	µg/L	<1
Naphthalene	µg/L	<1
Surrogate Dibromofluoromethane	%	105
Surrogate Toluene-d8	%	100
Surrogate 4-Bromofluorobenzene	%	97

svTRH (C10-C40) in Water		
Our Reference		377007-1
Your Reference	UNITS	GWQT1
Date Sampled		31/03/2025
Type of sample		Water
Date extracted	-	01/04/2025
Date analysed	-	01/04/2025
TRH C_{10} - C_{14}	µg/L	<50
TRH C_{15} - C_{28}	µg/L	110
TRH C_{29} - C_{36}	µg/L	<100
Total +ve TRH (C10-C36)	µg/L	110
TRH >C_{10} - C_{16}	µg/L	55
TRH >C_{10} - C_{16} less Naphthalene (F2)	µg/L	55
TRH >C_{16} - C_{34}	µg/L	130
TRH >C_{34} - C_{40}	µg/L	<100
Total +ve TRH (>C10-C40)	µg/L	180
Surrogate o-Terphenyl	%	83

HM in water - dissolved		
Our Reference	UNITS	377007-1
Your Reference		GWQT1
Date Sampled		31/03/2025
Type of sample		Water
Date prepared	-	01/04/2025
Date analysed	-	01/04/2025
Arsenic-Dissolved	µg/L	<1
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	µg/L	<1
Copper-Dissolved	µg/L	2
Lead-Dissolved	µg/L	<1
Mercury-Dissolved	µg/L	<0.05
Nickel-Dissolved	µg/L	31
Zinc-Dissolved	µg/L	51

Method ID	Methodology Summary
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-023	Water samples are analysed directly by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
Date analysed	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
TRH C_6 - C_9	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	115	[NT]
TRH C_6 - C_{10}	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	115	[NT]
Benzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Toluene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Ethylbenzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	113	[NT]
m+p-xylene	µg/L	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	117	[NT]
o-xylene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Naphthalene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-023	104	[NT]	[NT]	[NT]	[NT]	105	[NT]
Surrogate Toluene-d8	%		Org-023	100	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-023	98	[NT]	[NT]	[NT]	[NT]	104	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Water						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
Date analysed	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
TRH C_{10} - C_{14}	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	80	[NT]
TRH C_{15} - C_{28}	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	113	[NT]
TRH C_{29} - C_{36}	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH >C_{10} - C_{16}	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	80	[NT]
TRH >C_{16} - C_{34}	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	113	[NT]
TRH >C_{34} - C_{40}	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
Surrogate o-Terphenyl	%		Org-020	94	[NT]	[NT]	[NT]	[NT]	122	[NT]

QUALITY CONTROL: HM in water - dissolved						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date prepared	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
Date analysed	-			01/04/2025	[NT]	[NT]	[NT]	[NT]	01/04/2025	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	87	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	[NT]	[NT]	[NT]	[NT]	98	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Appendix H – QA/QC Assessment

Project QA/QC

Quality assurance comprises an assessment of the reliability of the field procedures and the laboratory results against standard industry practices, documented sampling and analysis plans or remediation action plans. A summary of the project QA/QC protocols applied during the investigation works is presented in **Table H-1**.

Table H-1 QA/QC Protocols

Task	Description	Project
Field QA/QC		
General	Work was to be undertaken following standard field procedures which are based on industry accepted standard practice.	Yes. Soil samples collected directly from the auger flights and bucket and placed in laboratory-supplied containers. Water samples collected by low flow pump into laboratory-supplied bottles and vials.
	All fieldwork was supervised by a suitably qualified and experienced scientist or engineer.	Yes.
Soil Screening with PID	The PID was serviced and calibrated as per manufacturer requirements, at the beginning of fieldwork.	Yes. See **Appendix E** for calibration documentation.
Equipment Decontamination	Sampling equipment decontaminated in accordance with best industry practice. Rinsate blanks collected and analysed for the primary contaminants. All results should be non-detect.	Yes. Two rinsate samples collected and analysed (**Appendix I**). All results were below detection levels.
Transport	Samples were stored in a chilled (with ice) cooler box and transported to the laboratories. To ensure the integrity of the samples from collection to receipt by the analytical laboratory, samples were sent by courier to the laboratories under 'chain of custody' describing sample preservation and transport duration.	Yes.
Trip Blanks	Trip Blank samples were to be prepared and analysed by the primary laboratory for BTEX. Analytical results were to be below the laboratory LOR.	Two trip blank samples (soil and water) were prepared by the primary laboratory, then analysed for BTEX (**Appendix I**). All results were reported below the laboratory LOR, indicating that ideal sample transport and handling conditions were achieved (no cross contamination).
Trip Spikes	Trip spike samples were to be submitted to the primary laboratory for BTEX analysis, the results for which were to be 80-120% recovery.	Two trip spike samples were prepared by the primary laboratory, then analysed for BTEX **Appendix I**). All results complied with the DQI, indicating that satisfactory sample handling and transport were achieved (no loss of volatiles).

Task	Description	Project
Duplicates	Field and laboratory duplicates were analysed as follows: ▪ intra-laboratory duplicate samples at a rate of 1 in 20 primary samples (as per NEPC(2013)); and ▪ inter-laboratory duplicate samples at a rate of 1 in 20 primary samples (as per NEPC (2013)). Acceptable limits between 30-50% RPD as stated by AS4482.1. RPDs that exceed this range may be considered acceptable where: ▪ Results are less than 10 times the LOR; ▪ Results are less than 20 times the LOR and the RPD is less than 50%; or ▪ Heterogeneous materials or volatile compounds are encountered.	The required sampling density of 1 per 20 duplicated primary samples was achieved. Generally, duplicate results complied with the DQI. Variability due to sample heterogeneity and/or low limits of reporting. Refer to **Appendies G** and **I**.
Laboratory QA/QC		
Laboratory analysis	The laboratories selected are NATA accredited for the analytes selected and perform their own internal QA/QC programs	Yes. SGS - primary laboratory. Envirolab - secondary laboratory. Laboratory QC analyses are included in **Appendix G**.
	Appropriate detection limits were used for the analyses to be undertaken.	LORs for all analysed parameters are presented with the laboratory reports in **Appendix G**.
Holding Times	Holding times are the maximum permissible elapsed time in days from the collection of the sample to its extraction and/or analysis. All extraction and analyses should be completed within standard guidelines.	Yes.
Method Blanks	The method blank sample is laboratory prepared, containing the reagents used to prepare the sample for final analysis. The purpose is to identify contamination in the reagent materials and assess potential bias. The DQI is to find no detectable contamination in the reagents.	Yes. Concentrations of all parameters in method blanks were below the laboratory LORs, therefore complying with the DQI.

Task	Description	Project
Laboratory Duplicates	Laboratory duplicates are field samples that are split in the laboratory and subsequently analysed a number of times. Laboratory duplicates should be performed at a frequency of 1 per 10 samples.	Yes. Generally, RPDs complied with the DQI. Some variability observed, attributed to sample heterogeneity and/or matrix interference.
Laboratory Control Standard	A laboratory control standard is a standard reference material used in preparing primary standards. The concentration should be equivalent to a mid-range standard to confirm the primary calibration. Laboratory control samples should be performed on a frequency of 1 per 20 samples or at least one per analytical run.	Yes. Results complied with the DQI.
Matrix Spikes	Matrix spikes are samples to which a predetermined stock solution of known concentration has been added. The samples are then analysed for recovery of the known addition. Recoveries should be within the stated laboratory control limits of 70 to 130% and duplicates should have RPDs of less than 50%.	Yes. Results for the matrix spikes complied with the DQI.
Surrogate Spikes	Surrogate spikes provide a means of checking, for every analysis that no gross errors have occurred at any stage of the procedure leading to significant analyte loss. Recoveries should be within the stated laboratory control limits of 70 to 130%.	Yes. Results complied with the DQI.
QA/QC Conclusion	The QA/QC indicators should either all comply with the required standards or showed no variations that would have no significant effect on the quality of the data.	Yes. Based on the laboratory QA/QC reports, EI considered that although a small number of discrepancies were identified, the data generally confirmed that the analytical results for the various phases of the validation were valid and useable for interpretation purposes.

Field QA/QC

The field duplicates collected during the works are identified in **Table H-2**. The inter-laboratory duplicates were analysed by the secondary laboratory (Envirolab).

Table H-2 Field Duplicates

Matrix	Primary Sample	Blind Duplicate (Primary Lab)	Split Duplicate (Secondary Lab)
Soil	HA1_0.2-0.3	QD1	QT2
Water	UNK-GW	GW QD1	GW QT1

Discussion of the field data quality indicators is presented in **Table H-3** below.

Table H-3 Field Data Quality Indicators

QA Component	Item	Conformance
Completeness Percentage of useable data from sampling episode / data set.	Each critical location sampled	**Yes**
	SAQP appropriate and complied with	**Yes**
	Appropriate number of field duplicate samples taken	**Yes**
	Experienced sampler	**Yes**
	Field documentation correct	**Yes**
Comparability Confidence that data may be considered to be equivalent for each sampling / analytical event.	Same sampling method used on each occasion/location	**Yes**
	Experienced sampler	**Yes**
	Same type of samples collected (filtered, size, fractions)	**Yes**
Representativeness Confidence the data is representative of each media present on the site.	Appropriate media sampled according to SAQP	**Yes**
	Each media identified in SAQP sampled	**Yes**
Precision Quantitative measure of the variability (or reproducibility) of data.	Sampling/laboratory protocols appropriate and complied with	**Yes**
Accuracy Quantitative measure of the closeness of reported data to the true value.	Sampling/laboratory protocols appropriate and complied with	**Yes**

Conclusion for the Field QA/QC

All samples, including field QC samples, were transported to the primary and secondary laboratories under strict Chain-of-Custody conditions and appropriate copies of relevant documentation were included in the respective reports.

The overall completeness of documentation produced under the field program was considered to be adequate for the purposes of drawing valid conclusions regarding the environmental condition of the site.

Based on the results of the field QA/QC data, EI considers the field QA/QC program carried out during the investigation to be appropriate and the results to be acceptable.

Laboratory QA/QC

Primary and intra-laboratory duplicate samples were analysed by SGS located in Alexandria NSW. The inter-laboratory duplicate was analysed by Envirolab located in Chatswood NSW. All laboratories were accredited by NATA for the analyses undertaken.

Discussion of the laboratory data quality indicators is presented in **Table H-4**.

Table H-4 Laboratory Data Quality Indicators

QA Component	Item	Conformance
Completeness Percentage of useable data from sampling episode / data set.	All critical samples analysed according to SAQP and proposal	**Yes**
	All analytes analysed according to SAQP in proposal	**Yes**
	Appropriate methods and LORs	**Yes**
	Sample documentation complete	**Yes**
	Sample holding times complied with	**Yes**
Comparability Confidence that data may be considered to be equivalent for each sampling / analytical event.	Recognised analytical methods used (including clean-up)	**Yes**
	Suitable LORs (justify/ quantify if different)	**Yes**
	Same laboratories (justify/ quantify if different)	**Yes**
	Same units (justify/ quantify if different)	**Yes**
Representativeness Confidence the data is representative of each media present on the site.	All key samples analysed according to SAQP in the proposal.	**Yes**
Precision Quantitative measure of the variability (or reproducibility) of data.	Analysis of laboratory duplicates	**Yes**
	Analysis of field duplicates	**Yes**
	Analysis of laboratory-prepared volatile trip spikes	**Yes**
Accuracy Quantitative measure of the closeness of reported data to the true value.	Analysis of field blanks	**Yes**
	Analysis of rinsate blanks	**Yes**
	Analysis of method blanks	**Yes**
	Analysis of matrix spikes	**Yes**
	Analysis of surrogate spikes	**Yes**
	Analysis of laboratory control samples	**Yes**

Conclusion for the Laboratory QA/QC

Based on the laboratory QA/QC results EI considered that the data generally confirms the analytical results for the various phases of the laboratory works were valid and useable for interpretation purposes.

Summary of Project QA/QC

The sampling methods (including sample preservation, transport and decontamination procedures) and laboratory methods followed during this investigation works were consistent with EI protocols and were found to meet the DQOs for this project. It was therefore considered that the data is sufficiently precise and accurate and that the results can be used for interpretative purposes.

Appendix I – Tables of Analytical Results

Table 1 – Summary of Analytical Results: Soil

E26516.E02 - Burwood

Sample ID	Material	Sampling Date	Priority Metals								PAHs				BTEX				VOCs			TRHs				PFAS			Pesticides		PCBs	Asbestos
			As	Cd	Cr#	Cu	Pb	Hg	Ni	Zn	Carcinogenic PAHs (as B(a)P TEQ)	Benzo(a)pyrene	Total PAHs	Naphthalene	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,2,4-trimethylbenzene	p-isopropyltoluene	Total VOCs	F1	F2	F3	F4	PFOS	PFOS+PFHxS	PFOA	OCPs	OPPs		Presence / Absence
BH101_0.1-0.2	Fill	24/03/2025	45	0.9	18	72	1200	0.95	9.3	450	8.4	5.8	55	0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	310	<120	NA	NA	NA	<0.1	<1.7	<0.1	Absent
BH102_0.2-0.3	Fill		8	0.6	16	90	540	0.48	7.6	220	3.8	2.6	27	0.1	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	28	210	<120	<0.005	<0.005	<0.005	<0.1	<1.7	<0.1	Absent
BH102_0.4-0.5	Fill		NA	NA	NA	NA	40	NA	NA	NA	0.2	0.1	1.1	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH103_0.4-0.5	Fill		6	<0.3	16	15	32	<0.05	2	17	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	<25	<90	<120	NA	NA	NA	0.4	<1.7	<0.1	Absent
BH103_0.6-0.7	Natural		7	<0.3	9.8	22	16	<0.05	<0.5	13	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	<90	<120	NA	NA	NA	NA	NA	NA	NA
BH104M_0.2-0.3	Fill		7	0.6	20	70	130	0.2	5.8	900	0.5	0.3	3.8	<0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	<90	<120	<0.005	<0.005	<0.005	<0.1	<1.7	<0.1	Absent
BH105_0.4-0.5	Fill		14	5.6	28	170	4200	0.45	17	1600	3.2	2.2	25	<0.1	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	<25	160	<120	NA	NA	NA	<0.1	<1.7	<0.1	Absent
BH105_0.8-0.9	Natural		6	<0.3	14	13	17	<0.05	0.7	13	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	<90	<120	NA	NA	NA	NA	NA	NA	NA
BH106_0.1-0.2	Fill		5	<0.3	12	18	72	0.45	4.1	70	0.4	0.2	3.3	<0.1	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	<25	<90	<120	NA	NA	NA	<0.1	<1.7	<0.1	Absent
BH106_1.0-1.1	Natural		3	<0.3	7.4	33	24	<0.05	0.9	13	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	<90	<120	NA	NA	NA	NA	NA	NA	NA
BH107_0.3-0.4	Fill		23	0.6	16	43	360	0.5	6	310	11	7.9	96	0.4	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	25	390	<120	NA	NA	NA	<0.1	<1.7	<0.1	Absent
BH107_0.9-1.0	Natural		7	<0.3	12	14	16	<0.05	<0.5	8.8	<0.3	<0.1	<0.8	<0.1	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1	<PQL	<25	<25	<90	<120	NA	NA	NA	NA	NA	NA	NA
BH108_0.2-0.3	Fill		4	<0.3	13	29	180	0.29	1.5	72	0.3	0.2	1.4	<0.1	<0.1	<0.1	<0.1	<0.3	NA	NA	<PQL	<25	<25	<90	<120	NA	NA	NA	<0.1	<1.7	<0.1	Absent
Statistical Analysis																																
Maximum concentration			45	5.6	28	170	4200	0.95	17	1600	11	7.9	96	0.4	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<25	28	390	<120	<0.005	<0.005	<0.005	<0.1	<1.7	<0.1	NA
NEPM (2013) Criteria																																
HIL B - *Residential with minimal soil access*			500	150	500 Cr(VI)	30,000	1200	120	1,200	60,000	4		400																600		1	
HIL D - *Commercial / Industrial*			3,000	900	3,600 Cr(VI)	240,000	1500	730	6,000	400,000	40		4,000																		7	
HSL A & B - Low to high density residential Soil texture classification – Clay			Source depths (0 m to <1 m. BGL)											5	0.7	480	NL	110				50	280									0.01 / 0.001
			Source depths (1 m to <2 m. BGL)											NL	1	NL	NL	310				90	NL									
			Source depths (2 m to <4 m. BGL)											NL	2	NL	NL	NL				150	NL									
			Source depths (4 m + BGL)											NL	3	NL	NL	NL				290	NL									
HSL D - *Commercial / Industrial* Soil texture classification – Sand			Source depths (0 m to <1 m. BGL)											NL	3	NL	NL	230				260	NL									
			Source depths (1 m to <2 m. BGL)											NL	3	NL	NL	NL				370	NL									
			Source depths (2 m to <4 m. BGL)											NL	3	NL	NL	NL				630	NL									
			Source depths (4 m + BGL)											NL	3	NL	NL	NL				NL	NL									
(HEPA (2025)) PFAS HIL B - Residential with minimal soil access																												2	20			
(HEPA (2025)) PFAS HIL D - Industrial / commercial																												20	50			

Notes:

Highlighted values exceed adopted criteria

Highlighted values indicate criteria exceeded

Results are recorded in mg/kg - TCLP results are recorded in mg/L

HIL A

NA Not Analysed

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Table 2 - Summary of Groundwater Analytical Results

E26516 - Burwood

	Sample ID	Sampling Date	Metals								PAHs [9]			BTEX					TRHs								VOCs [9]					PFAS		
			As	Cd	Cr[4]	Cu	Pb	Hg	Ni	Zn	Total PAHs	Benzo(a)pyrene	Naphthalene	Benzene	Toluene	Ethylbenzene	o-xylene	m/p-xylene	F1	F1 - Silica Gel Clean-up	F2	F2 - Silica Gel Clean-up	F3	F3- Silica Gel Clean-up	F4	F4 - Silica Gel Clean-up	Chloroform (THM)	Dichloromethane	Trichloroethene (Trichloroethylene,TCE)	Vinyl chloride (Chloroethene)	Total VOC	PFOS	PFOS + PFHxs	PFOA
	UNK-GW	31/03/2025	<1	<0.1	<1	2	<1	<0.1	12	52	<1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<1	<50	<50	160	<60	550	<500	<500	<500	<0.5	<5	<0.5	<0.3	<10	0.01	0.01	<0.01
	Statistical Analysis																																	
	GILs																																	
	HSL A & B - *Low to high density residential* Soil texture classification – Clay	2m to <4m											NL	5,000	NL	NL	NL	NL	NL		NL													
		4m to <8m											NL	5,000	NL	NL	NL	NL	NL		NL													
		8m+											NL	5,000	NL	NL	NL	NL	NL		NL													
	HSL D - *Commercial / industrial* Soil texture classification – Clay	2m to <4m											NL	30,000	NL	NL	NL	NL	NL		NL													
		4m to <8m											NL	30,000	NL	NL	NL	NL	NL		NL													
		8m+											NL	35,000	NL	NL	NL	NL	NL		NL													
95%	Fresh Waters [1]		24 (AsIII) 13 (AsV)	0.06 [1]	1 (Cr VI) 3.3 (Cr III) [5]	1.4	3.4	0.06 [1]	11	8		0.1 [1]	16	950	180	80	350	275	50	50	60	60	500	500	500	500								
	Recreational Water [2]		100	20		1,000 *	100	10	200	3,000*				10	25*	3*	20 *	20 *															7	56
95%	PFAS - Freshwater [3]																															0.13		220

Notes:

Highlighted indicates criteria exceeded

Highlighted indicates criteria not met

All values are µg/L unless stated otherwise

HSL A & B	NEPC 1999 Amendment 2013 'HSL A & B' Health Based Screening Levels for vapour intrusion applicable for low-high density residential settings.
HSL C	NEPC 1999 Amendment 2013 'HSL C' Health Based Screening Levels for vapour intrusion applicable for recreational/open space settings.
HSL D	NEPC 1999 Amendment 2013 'HSL D' Health Based Screening Levels for vapour intrusion applicable for commercial / industrial settings.
NL	Not Limiting
NA	'Not Analysed' i.e. the sample was not analysed.
ND	Not Detected - i.e. concentration below the laboratory PQL
F1	To obtain F1 subtract the sum of BTEX concentrations from the C6-C10 fraction.
F2	To obtain F2 subtract naphthalene from the >C10-C16 fraction.
F3	(>C16-C34)
F4	(>C34-C40)
1	Discharge water criteria are the ANZG (2018) 95% Default Guideline Values (DGVs) for the protection of slightly to moderately disturbed freshwater ecosystems, with the 99% DGVs applied for the bio-accumulative parameters benzo(a)pyrene, cadmium and mercury, unless otherwise indicated.
2	Based on NHMRC (2011 - update August 2018 v.3.5) Drinking Water Guidelines. The lowest of the Health Guideline x10 or the Aesthetic Guideline has been chosen as the assessment criteria. Aesthetic based criteria have been indicated by *
3	Value dervied from the National Environmental Management Plan for PFAS - 95% species protection for slightly to moderately disturbed systems.
4	This result was for Total Chromium. Chromium speciation testing was not undertaken, but should be included in future monitoring.
5	The ANZG (2018) only provides freshwater criteria at an 'unknown' level (%) of species protection for chromium III; therefore, this DGVs are applied.

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Table 3 Summary of QA/QC Results for Soil and Groundwater Samples

Sample identification	Sampled Date	Description	TRH				BTEX				Heavy Metals							
			F1*	F2**	F3 (>C_{16} - C_{34})	F4 (>C_{34} - C_{40})	Benzene	Toluene	Ethylbenzene	Xylene (total)	Arsenic	Cadmium	Chromium (Total)	Copper	Lead	Mercury	Nickel	Zinc
Intra-laboratory Duplicate																		
BH104M_0.2-0.3	24/3/2025	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	7	0.6	20	70	130	0.2	5.8	900
QD1		Replicate of BH104M_0.2-0.3	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	7	0.8	19	41	150	0.37	5.2	2100
RPD			***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***28.57***	***5.13***	**52.25**	***14.29***	**59.65**	**10.91**	**80.00**
UNK-GW	31/3/2025	Groundwater	<50	160	550	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	2	<1	<0.01	12	52
GWQD1		Replicate of UNK-GW	<50	150	<500	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	2	<1	<0.01	11	50
RPD			***0.00***	***6.45***	***12.50***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***8.70***	***3.92***
Inter-laboratory Duplicate																		
BH104M_0.2-0.3	24/3/2025	Fill	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	7	0.6	20	70	130	0.2	5.8	900
QT1		Replicate of BH104M_0.2-0.3	<25	<50	<100	<100	<0.2	<0.5	<1	<3	8	0.9	20	30	110	0.2	5	4100
RPD			***0.00***	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***	***NA***	***13.33***	***40.00***	***0.00***	**80.00**	***16.67***	***0.00***	***14.81***	**128.00**
UNK-GW	31/3/2025	Groundwater	<50	160	550	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	2	<1	<0.01	12	52
GWQT1		Replicate of UNK-GW	<10	55	130	<100	<1	<1	<1	<3	<1	0.1	<1	2	<1	<0.05	31	51
RPD			***NA***	**97.67**	**123.53**	***NA***	***NA***	***NA***	***NA***	***NA***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***NA***	**88.37**	***1.94***
QTB1	24/03/2025	Soil Trip blank	-	-	-	-	<0.1	<0.1	<0.1	<0.3	-	-	-	-	-	-	-	-
QTS1		Soil Trip spike	-	-	-	-	[100%]	[98%]	[96%]	[97%]	-	-	-	-	-	-	-	-
QR1		Soil Rinsate	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5
QTB1	31/03/202	Groundwater Trip blank	-	-	-	-	<0.5	<0.5	<0.5	<1.5	-	-	-	-	-	-	-	-
QTS1		Groundwater Trip spike	-	-	-	-	[104%]	[89%]	[112%]	[114%]	-	-	-	-	-	-	-	-
GWR1		Groundwater Rinsate	<50	<60	<500	<500	<0.5	<0.5	<0.5	<1.5	<1	<0.1	<1	<1	<1	<0.1	<1	<5

Indicates values where a single result is found to be less than detection, with the duplicate sample found to be over the detection limit.

RPD exceeds 30-50% range referenced from AS4482.1 (2005)

NOTE:

All soil results are reported in mg/kg . All water results are reported in µg/L.

* - to obtain F1 subtract the sum of BTEX concentrations from the C_6-C_{10} fraction

** - to obtain F2 subtract naphthalene from the > C_{10}-C_{16} fraction

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