

28 September 2022

LOGOS Development Management Pty Ltd
Attn: Athlene Kyle
88 Philip Street
Sydney NSW 2000

By email: AthleneKyle@logosproperty.com

Dear Athlene

RE: INTERIM AUDIT ADVICE LETTER NO. 1 - REVIEW OF REMEDIATION ACTION PLAN, 28-30 BURROWS ROAD, ST PETERS

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Ref: 318001517

Audit Number: LW-031

1. INTRODUCTION

As a NSW Environment Protection Authority (EPA) accredited Contaminated Sites Auditor, I am conducting an Audit (LW-031) under the NSW *Contaminated Land Management Act 1997* (CLM Act) in relation to the property at 28-30 Burrows Road, St Peters. This initial review has been undertaken to provide an independent review of the suitability and appropriateness of a Remediation Action Plan (RAP).

The 0.8 ha site has a history of industrial use and is to be redeveloped for continued industrial use as a flight training centre. Site investigations at the site have identified infrastructure associated with historical site operations, including underground petroleum storage systems (UPSS), an oil/water separator system and a sewer pump and identified contaminated soil and groundwater below the site. Remediation of the site is required to make the site suitable for the proposed redevelopment.

This interim letter is based on a review of the documents listed below and observations made on a site visit on 9 August 2022, as well as discussions with the client, LOGOS Development Management Pty Ltd (LOGOS), and JBS&G Australia Pty Ltd (JBS&G) who undertook the latest site investigation and prepared the RAP.

The reports reviewed were:

- 'Due Diligence Contamination Assessment, 28-30 Burrows Road, St Peters' dated 25 August 2020, Sullivan Environmental Sciences Pty Ltd (SES)
- 'Detailed Site Investigation, 28-30 Burrows Road, St Peters' dated 2 August 2022, JBS&G (the DSI)

Ramboll Australia Pty Ltd
ACN 095 437 442
ABN 49 095 437 442

- 'Remediation Action Plan, 28-30 Burrows Road, St Peters' dated 19 September 2022, JBS&G (the RAP)

I have reviewed the key documents against:

- Chapter 4 Remediation of Land in the Resilience and Hazards State Environment Planning Policy (SEPP) 2021 (formerly known as SEPP 55) and NSW Department of Urban Affairs and Planning and NSW EPA (2008) '*Managing Land Contamination, Planning Guidelines SEPP 55 - Remediation of Land*'
- NSW EPA (2017) '*Guidelines for the NSW Site Auditor Scheme (3rd Edition)*'
- NSW EPA (2020) '*Contaminated Land Guidelines, Consultants Reporting on Contaminated Land*'
- National Environment Protection Council (NEPC) '*National Environment Protection (Assessment of Site Contamination) Measure 1999*', as Amended 2013 (NEPM 2013)
- Australia and New Zealand Heads of EPAs (HEPA 2020) '*PFAS National Environmental Management Plan, Version 2.0*' (NEMP)

2. SITE DETAILS

2.1 Location

The site details are as follows:

Street address:	28-30 Burrows Road, St Peters (Attachment 1)
Identifier:	Lot 2 DP 212652 and Lot 15 in DP 32332
Local Government:	City of Sydney Council
Owner:	Perpetual Corporate Trust Limited as trustee for LALV St Peters Trust
Site Area:	Approximately 0.8 ha
Zoning:	IN1 – General Industrial

The boundaries of the site are well defined by fence lines with neighbouring properties, Burrows Road and Alexandra Canal.

2.2 Adjacent Uses

The site is located within an area of commercial/industrial site use adjacent to Alexandra Canal. The surrounding site use includes:

North: Burrows Road, then an above ground multi-storey commercial building with at grade car-parking

East: Commercial/industrial development including a mechanics (motorcycle workshop) and warehousing/distribution

South: Alexandra Canal with commercial/industrial site use beyond

West: Commercial/industrial estate including hardware and engineering store and distributors.

The closest surface water receptor is Alexandra Canal which flows along the southern site boundary and receives stormwater from the site and adjacent sites.

2.3 Site Condition

The site comprises two properties at 28 and 30 Burrows Road. Site conditions noted by SES in July 2020 and JBS&G in November 2021 are summarised below. The site layout and location of site features are shown on Attachment 2.

28 Burrows Road

- The Lot is largely covered in hardstand and JBS&G reported that there were no obvious signs of gross contamination (significant surface staining, etc.). A large warehouse is present along the western site boundary.
- During the inspection by SES in 2020, this Lot was being used as a storage facility for taxi cabs and the warehouse contained taxicabs and mechanical hoists and equipment. During the inspection by JBS&G in 2022, the Lot was being used for storage of outdoor digital media equipment and outdoor furniture and the warehouse appeared to be used for storage purposes only.
- Both SES and JBS&G note that the southern portion of the warehouse was previously used as a spray booth.
- A non-functioning truck wash is present along the eastern boundary of the property and was being used as undercover storage for outdoor furniture stock at the time of the 2022 inspection.
- A sump pit (previously used for waste oil storage) is located in the south-western portion of the property. JBS&G report in the DSI that the sump was in good condition (no signs of cracking, etc.) but there was evidence of oil staining in the base of the sump.
- A sewer pump, oil water separator and pit were located adjacent to the truck wash on the eastern boundary of 28 Burrows Road. The oil water separator and pit were not in use as part of current site operations but were noted to contain residual water with a hydrocarbon odour and sheen.
- Six potential underground storage tanks (USTs) have been identified within the Lot (Attachment 2). Both SES (2020) and JBS&G identified fill and dip points and vent pipes that indicate a tank pit containing three USTs is present in the north-eastern portion of the Lot. SES inferred that, based on the location of fill points and concrete scarring, two of the USTs seemed to be aligned north-south and may have been decommissioned as there were no dip points over either of these tanks. The third UST appeared to be aligned east-west and had an accessible dip point which indicated that the tank had a capacity of 20,000 litres. A liquid mark was noted on the dip rod that indicated approximately 1,000 litres of fuel/water liquid remained in this tank.
- In addition, metal lids were observed to the south end of the warehouse indicating the presence of at least two USTs. No vent pipes were observed associated with these tanks and it was not confirmed if the tanks had been decommissioned in-situ.
- An additional vent pipe was observed by SES on the northern wall of the warehouse, and it is possible another UST is present beneath a concrete pad in this location (Attachment 2).
- No fuel bowzers were observed at the property and the USTs were not in use at the time of the inspection. SES completed a search of the Dangerous Goods register which did not contain any records of fuel storage at the site.

30 Burrows Road

- The Lot is covered by hardstand and a large warehouse-style building occupies the majority of the site along the western site boundary. During the inspection by SES in 2020, four separate

businesses were operating from individual units (Units 1 to 4) within the warehouse, including mechanics workshop businesses in the north and south ends of the building (Unit 1 and Unit 4), while the central Unit 2 appeared to operate as an engineering support business and store. Unit 3 was used to store commercial quantities of paper rolls. During the inspection by JBS&G in 2022 the warehouse was tenanted by two mechanic workshops, engineering business and marine mechanic workshop. The mechanic workshops were reported to contain several car hoists.

- External areas were used for parking and vehicle/equipment storage during both inspections. JBS&G observed several shipping containers used for storage along the south-east boundary and scrap metal and disassembled cars were also stored in this area with significant oil staining present on the hardstand.
- SES and JBS&G observed two metal lids and a vent pipe in the north-east yard off Unit 1 along with surface cuts/scarring indicating the presence of two USTs. A small adjoining area showed signs of a former fuel bowser with some metal lids and pipework noted at ground level.
- JBS&G reported that at the time of the 2022 inspection, no chemicals were stored on site with the exception of automotive engine oil and several aerosol paint tins in Units 1 and 4 and gas cylinders used for welding in Unit 3.

The Auditor completed a site inspection on 9 August 2022 and condition observed were similar to those described by SES and JBS&G. The Auditor also noted the following:

- The fill points for the USTs in the north-eastern portion of 28 Burrows Road were observed. A relatively new paved display slab for outdoor furniture was present in this area
- Stormwater was discharging into Alexandra Canal from a stormwater pipe below 28 Burrow Road
- A stockpile of building demolition wastes and used tyres was present in the eastern portion of 30 Burrows Road
- Heavy staining of the concrete surface cover was noted in the southern portion of 30 Burrows Road where scrap metal, drums and general wastes were being stored
- A concrete pit was identified to the south of the warehouse on 30 Burrows Road, adjacent to the canal, however, the purpose of the pit was unclear.

2.4 Proposed Development

The proposed development is understood to comprise the construction of:

- A slab-on-grade warehouse building for the purposes of a flight training centre, occupying the central and northern extent of the site
- Internal carparking and roadways
- A 10 m landscaping setback abutting Alexandra Canal on the southern site boundary.

For the purposes of this audit, the 'commercial/industrial' land use scenario will be assumed.

3. SITE HISTORY

JBS&G provided a summary of the site history based on aerial photographs, site photographs, NSW EPA records and SafeWork NSW dangerous goods records. The Auditor summarised the site history in Table 3.1.

Table 3.1: Site History

Date	Activity
1943	The historical aerial from 1943 shows the site as vacant, cleared land adjacent to the Alexandra Canal which has likely been subject to filling. A building is present on land to the west and some industrial and residential development is present to the north. Large storage structures (wool sheds) are located on the opposite side of the canal.
1950-1990	Aerial photos show that the site and surrounding area is developed for commercial industrial use during the 1950s and 1960s. The aerial photo from 1965 shows that the current warehouse structure on 30 Burrows Road has been constructed while 28 Burrow Road appears to be used as a storage yard over this period. The 1986 aerial photo shows that the warehouse in the western portion of 28 Burrows Road was constructed between 1975 and 1986. The surrounding land continues to be developed for industrial use over this period, except land to the north-west which remains vacant.
1990-2022	The site layout remains the same as that shown in the 1986 aerial with areas outside of the warehouse used for storage of various items. Land to the north-west is developed as St Peters tip and then as the Westconnex (M8) St Peters Interchange roadway between 2012 and 2022.

SES (2020) conducted a search of the Dangerous Goods records as held by Safework NSW which did not contain any records of hazardous materials storage at the site.

During the DSI, JBS&G completed a search of EPA's public contaminated land register and indicated that there have been no notices issued under the CLM Act for the site and the site has not been notified to the EPA under section 60 of the CLM Act with regards to contamination. Review of the list of properties notified to the EPA did not identify any known nearby properties that may represent a significant contamination migration risk to the site. JBS&G also completed a search of the EPA's PFAS register of contaminated sites and did not identify any known nearby properties that may represent a significant contamination migration risk to the site.

JBS&G noted in the DSI that a former landfill (Alexandria Landfill) is present to the west of the site where areas subject to filling are located >250 m from the site. Based on the distance, JBS&G did not consider landfill gas from this potential source as an issue of concern. The Auditor also notes a tip was present approximately 100 m to the north-west of the site, but this area is now developed as the St Peters Interchange.

3.1 Auditor's Opinion

In the Auditor's opinion, the site history provides an adequate indication of past activities. The site is located within an area that has been used for industrial purposes since the 1940s. The site layout has changed little between the 1960s and the present. The historical site use includes various industrial uses, including vehicle maintenance and storage of fuels.

Previous site uses with the most significant potential to cause contamination include handling and storage of fuels and other chemicals, including in USTs, vehicle maintenance activities, importation of uncontrolled fill and use of hazardous building materials.

4. EVALUATION OF SITE CONTAMINATION INVESTIGATIONS

4.1 Scope of Investigation

SES (2020) completed a due diligence contamination assessment. The scope of works included a desktop review of available background information, sampling of soil from 21 soil bores (BH1-BH21) and installation of five groundwater monitoring wells (MW01-MW05) and sampling of groundwater (Attachment 3). The sampling strategy was based on a combination of targeted and systematic sampling. Sampling could not be completed in some inaccessible areas of the site including the warehouse footprint on 28 Burrows Road (including the spray booth), and within the mechanics workshops on 30 Burrows Road. Locations were also not completed near the interceptor or sump in the southern portion of 28 Burrows Road. Groundwater wells targeted areas adjacent to the USTs and in the south-eastern corner of the site where staining was observed.

Wells were installed to depths of 4.0 metres below ground level (mbgl), except MW01 which was installed to 5.5 mbgl. All wells were screened with 3.0 m length of screen within natural sands and fill. Groundwater standing water levels (SWLs) were reported between 1.47 and 2.25 mbgl with water levels within the screened interval.

Soil samples were collected from fill and natural soils and analysed for total recoverable hydrocarbons (TRH) (36 primary samples), benzene, toluene, ethylbenzene, xylene and naphthalene (BTEXN) (36 samples), polycyclic aromatic hydrocarbons (PAH) (36 samples), heavy metals (36 samples), organochlorine and organophosphate pesticides (OCPs and OPPs) (17 samples), polychlorinated biphenyls (PCBs) (10 samples), phenols (20 samples), semi-volatile organic compounds (SVOC) (9 samples), volatile organic compounds (VOCs) (9 samples) and asbestos (15 samples). All five groundwater wells were sampled and analysed for the same analytical suite, excluding asbestos.

During the DSI JBS&G completed five additional soil boreholes which were installed as groundwater monitoring wells (JBS MW1 to JBS MW5) and targeted the interceptor and sewer pump, the sump to the south of the western warehouse and provided additional site coverage (Attachment 3). Wells were constructed as per SES 2020. SWLs were recorded at depths of between 1.5 and 2.4 mbgl during gauging on 15 and 16 November 2021, with water levels within the screened interval.

In addition, JBS&G installed 42 sub-slab vapour pins on a grid-based sampling plan across the site (Attachment 3). A GFM 435 gas detector was used to purge each probe for a period of approximately 30 seconds until gas readings for methane, oxygen and carbon dioxide and photo-ionisation detector (PID) readings had stabilized. Samples were then collected onto carbon tubes for analysis by the laboratory. Leak testing was completed at each sample location using a shroud and isopropyl alcohol (IPA). At each sampling location, a 6.0 L volume was collected using a calibrated pump at a flow rate of 200 mL/min (30 min sample time) onto a carbon tube. Vapour samples were analysed for VOCs and IPA (40 samples).

The five new groundwater wells and existing five wells were all sampled and groundwater analysed for TRH, VOCs, SVOCs, metals and PFAS (10 samples). In addition, soil samples were collected from the new well installation locations and analysed for TRH and BTEXN (8 samples), PAH (6 samples), metals (5 samples), OCPs (5 samples), PCBs (6 samples), asbestos (5 samples), PFAS (5 samples) and acid sulfate soils (SPOCAS) (5 samples). Toxicity characteristic leaching procedure (TCLP) was also completed on 3 soil samples for heavy metals and PAHs for preliminary waste classification purposes.

4.2 Field Observations

Field observations indicate that fill is present below the hardstand at depths of between 0.2 and 0.9 mbgl overlying dredged sands and natural sand of the Botany Sands Aquifer. The fill was reported to comprise gravelly sands and clays with inclusions of slag, sandstone, ash, igneous gravel, ironstone gravel and fragments of brick, concrete, glass, steel, plastic and wood. Asbestos as fibre cement

fragments (FCF) was identified in fill from three boreholes (BH4, BH8 and BH21) during the SES (2020) investigation. No visible ACM was identified during the DSI.

Elevated PID readings (maximum 1,047 ppm) and hydrocarbon odours and staining were noted in several soil samples in boreholes near USTs. In addition, sulfidic odours were observed within saturated soils during the investigation.

4.3 Summary of Analytical Results

Soil, groundwater and soil vapour analytical results were assessed against site assessment criteria for commercial site use from NEPM 2013 and the NEMP, where applicable. Where compounds were detected in vapour for which there are no published Australian guideline values, reference was made to screening criteria in US EPA Region 9 Screening Levels in Air (for composite workers).

Petroleum hydrocarbon impacts (at levels exceeding health screening levels for vapour intrusion) were reported in soils and groundwater in proximity to the USTs. It was considered that as no enclosed buildings were present over the areas of impact, there was no vapour intrusion risk under the current site layout; however, should future development place buildings over or adjacent to these areas then remediation of impacted soils and groundwater would be required.

JBS&G reported that during the DSI, medium to heavy chain TRH impacts were reported in soil and groundwater at various locations across the site, associated with fuel storage infrastructure and sumps and pits. Concentrations of TRH in soil and groundwater did not exceed the adopted assessment criteria, however, the highest TRH concentrations were reported in groundwater from well JBS_MW4, located in the south-eastern portion of the site on the boundary with the Alexandra Canal, where TRH in the >C₁₀-C₄₀ fraction was reported at a concentration of 3.4 mg/L. JBS&G noted that the concentration exceeds the solubility limit of 2.0 mg/L (NEPM 2013) which indicated the potential presence of light non aqueous phase liquid (LNAPL) on groundwater in this area. The source of the TRH impacts reported at JBS_MW4 were considered to be associated with surface oil staining observed in the area as a result of operation of the mechanics workshop.

JBS&G report that all other contaminants in groundwater (including heavy metals, VOCs, SVOCs and PFAS) were reported at concentrations either below detection limits or at concentrations that were not considered to pose a risk to on or off-site receptors and therefore did not require further assessment and/or management.

PCB impacts were reported in shallow fill at sample location JBS_MW3, located near the sewer pump and interceptor pit, at a depth of 0.2-0.3 mbgl (18 mg/kg). An elevated lead concentration (1,400 mg/kg) was also reported in shallow soil at this location, although the concentration was below assessment criteria. TCLP analysis on this sample indicated a leachable concentration of lead above the NSW EPA (2014) Waste Classification Guidelines TCLP1 criteria for classification of general solid waste. JBS&G consider that the PCB impacts are localised but would require further investigation to determine if management of the impacts is required.

Results from the sub-slab vapour investigation reported volatile contaminant concentrations below laboratory detection limits or the adopted guideline values for the assessment, indicating that the identified petroleum hydrocarbon impacts within site soils and groundwater as well as other potential volatile contamination sources underlying the site, do not pose an unacceptable health risk for the proposed development. Field monitoring indicated that methane was not detected at any vapour sampling location and carbon dioxide concentrations were within the range of background concentrations.

While asbestos was not detected in soils during the DSI, JBS&G concluded that, given the presence of building and demolition wastes in all site fill, there was a potential for ACM to be present to a greater extent than was detected during the site investigations.

Based on the results of the DSI, JBS&G concluded that the shallow gravelly sand-fill did not comprise potential acid sulfate soils (PASS). However saturated underlying sands at a depth of >2 m were considered to comprise PASS and would require management during future construction activities if works disturb these materials.

4.4 Auditor’s Opinion

The Auditor considers that the density and depth of sampling, the media sampled, and the analytical suite adopted are sufficient for assessing the contamination status of the site for the purpose of determining remediation requirements. The Auditor reviewed the sampling methodology and quality assurance and quality control procedures undertaken by SES and JBS&G and considers the data acceptable and sufficient for use in determining remediation requirements.

The heterogeneity and extent of fill material has the greatest potential to impact the remediation of the site, however, further investigation to characterise fill material is not considered necessary prior to demolition and remediation given the access restrictions due to site infrastructure and limitations of borehole investigations.

In the Auditor’s opinion, the soil and groundwater analytical results are consistent with the site history and field observations. The results indicate that soil impacted by petroleum hydrocarbons is present in areas where USTs are located and in the down-gradient, south-eastern portion of the site, adjacent to the boundary with Alexandra Canal. Concentrations of mid to heavy end TRH in groundwater in well JBS_MW4 on the boundary with the canal exceed solubility limits and may be indicative of LNAPL. Soil vapour sampling results provide good coverage of the site for assessment of volatile contaminants and indicate that vapour intrusion is not a significant risk at the site.

Due to the presence of hardstand across the site and limitations involved in assessment using boreholes, the Auditor agrees that there is the potential for asbestos contamination to be more widespread in fill than observed during the investigations. There are also data gaps with regards to soil conditions in inaccessible areas of the site such as non-volatile contamination below the warehouse footprints. These data gaps are to be assessed during the development process as outlined in the RAP and discussed in Section 6.

5. EVALUATION OF CONCEPTUAL SITE MODEL

A conceptual site model (CSM) is a representation of the source, pathway and receptor linkages at a site. JBS&G developed a CSM based on the data obtained from SES (2020) and the DSI to inform the remediation strategy. Table 5.1 provides the Auditors review of the CSM presented by JBS&G in the RAP.

Table 5.1: Review of the Conceptual Site Model

Element of CSM	Consultant	Auditor Opinion
Contaminant source and mechanism	Point sources including: <ul style="list-style-type: none"> - 8 x potential USTs and associated infrastructure - The sump pit - Oil/water separator - Sewer pump - Surface staining in south-east near JBS_MW4 Also fill impacted by asbestos across the site	The identified sources of contamination are reasonable, however, there are several potential contamination sources that are not referred to including the truck wash, potential hazardous building materials and stockpiled materials. The Auditor notes that, based on the presence of hardstand across the site there is the potential for unidentified point sources to be present below the hardstand and concrete slabs. This data gap is to be assessed during the development as described in Section 6.

Element of CSM	Consultant	Auditor Opinion
Affected media	Soil, groundwater and soil vapour.	The identified affected media are appropriate.
Receptor identification	Current and future commercial site users on-site and surrounding the site Construction workers during redevelopment and future intrusive workers Alexandra Canal	The identified human and ecological receptors are appropriate. It is understood that there will be limited areas of exposed soils following redevelopment and therefore risk to terrestrial ecological receptors is not considered relevant. Growing media will need to be imported for the landscaped set back area.
Exposure pathways	Inhalation of vapours Inhalation of asbestos fibres and particulates Ingestion and dermal contact Uptake by aquatic ecological receptors in Alexandra Canal	The identified exposure pathways are reasonable.
Presence of preferential pathways for contaminant movement	No easements are noted in the vicinity of the site and preferential pathways are considered unlikely.	The Auditor notes that preferential pathways for migration of groundwater may be present in the subsurface in areas of more permeable fill material or subsurface infrastructure such as existing and historical drainage lines and service trenches.
Potentially complete source-pathway-receptor (SPR) linkages requiring remediation or management	The CSM in the RAP identified potentially complete SPR linkages as being exposure of construction workers to contaminated soil and groundwater through dermal, ingestion and vapour inhalation pathways. The risk to future site users from soil contamination in landscaped areas of the site following development was also identified as a potentially complete SPR linkage. Potentially complete ecological exposure pathways were identified as migration of impacted groundwater into the adjacent marine/estuarine environment of Alexandra Canal and uptake by ecological receptors. Additionally, plants established within future on-site areas of plantings could potentially be exposed to impacted soils and/or shallow groundwater.	The identified SPR linkages in the RAP are considered reasonable. The contaminants present are generally non-volatile and are suitable to be retained onsite underneath capping to prevent access by occupants to site fill. Ongoing management will be required for works below the capping. It is likely that growing media will be imported for future landscaped areas, and hence the risk to future ecological receptors on the site is low. The risk of migration of contamination in groundwater to the canal is potentially complete and requires further assessment and remediation of identified point sources of groundwater contamination to mitigate the potential for off-site migration.
Evaluation of data gaps	JBS&G identified the following data gaps/uncertainties in the CSM: <ul style="list-style-type: none"> - Additional waste characterisation of material to be removed from the site is required, including TCLP analysis - The extent of asbestos in fill has not been fully characterised and additional asbestos investigations may be required to inform the nature of asbestos exposure controls required for the development works in accordance with SafeWork NSW and to refine the extent of soils that may require on-going management 	The Auditor agrees with the data gaps identified. In addition, there is uncertainty with regards to the source and extent of TRH impacts in the vicinity of well JBS_MW4. JBS&G have included measures in the RAP to address the data gaps and uncertainties during the remediation program as discussed in Section 6.

Element of CSM	Consultant	Auditor Opinion
	<ul style="list-style-type: none"> - Where future excavation works extend to a depth of groundwater, further confirmatory sampling for PASS will be required to inform appropriate management procedures for these materials - There is the potential for additional unidentified sources of contamination to be present below hardstand at the site (e.g. additional USTs, sumps or pits) 	

5.1 Auditor’s Opinion

In the Auditor’s opinion, the CSM in the RAP is a reasonable representation of the contamination at the site. Data gaps and uncertainties have been identified in relation to the full extent and volume of contaminated soils that will require remediation, however, the existing data set is sufficient to inform the remediation strategy and contingencies have been included in the RAP to address the uncertainty.

The Auditor agrees that additional sampling of soils for off-site disposal should be completed for waste classification purposes and that measures for management of PASS will need to be implemented for excavations that extend below the water table.

The remediation and validation works reviewed herein are considered adequate to address the identified risks to human health and the environment under a commercial/industrial land use scenario based on the CSM.

6. EVALUATION OF PROPOSED REMEDIATION

6.1 Remediation Required

Based on the investigations previously completed by JBS&G, the contaminants of concern that require remediation have been summarised in Table 6.1. Soil has been identified as being impacted by bonded asbestos, TRH and PCBs and USTs, sumps and other subsurface infrastructure remain in-situ. The preferred remediation options are also summarised in Table 6.1 and include excavation and off-site disposal of infrastructure and contaminated soils and capping and containment.

Remedial works are proposed following removal and disposal of hazardous building materials, demolition of the buildings and lawful removal of material off-site. The extent of removal of hardstand required is currently uncertain and may be limited to areas where removal of infrastructure is required and to chase out impacted media.

The lateral and vertical extent of excavation for remediation purposes will be limited by the requirement to maintain the integrity of neighbouring structures, particularly the canal wall along the southern site boundary, but also the buildings of adjacent properties and Burrows Road. JBS&G note in the RAP that specialist geotechnical and/or structural engineering advice will be required to inform safe excavation requirements and that excavations will only proceed to the extent that they do not undermine the structural integrity of any neighbouring structures as informed by the specialist’s recommendations.

An unexpected finds protocol and a program of sampling to address data gaps is included in the RAP that will address soil and groundwater underlying current buildings and structures and along the down gradient boundary with Alexandra Canal. JBS&G have identified that the extent of ACM in fill is not clear but is likely to be associated with building demolition waste observed in most borehole locations, hence ACM is anticipated to be present in fill across the site.

Table 6.1: Remediation Required and Preferred Options

Description	Extent of Remediation Required	Preferred Options
Asbestos Contaminated Soil	Lateral: Extent of site where fill materials are present Vertical: extent of fill between 0.2 and 0.9 mbgl	Cap and contain insitu
USTs (8) and associated infrastructure	Lateral: Extent of impacted soils surrounding the various USTs – full extent uncertain Vertical: Chase out of impacted soils below USTs to extent practicable likely >2.0 mbgl	Excavation and off-site disposal of USTs and infrastructure Stockpiling and bioremediation of TRH impacted soils on-site
Other subsurface infrastructure including interceptor, sumps and sewer pump and grossly impacted soils	Lateral: Extent of infrastructure and surrounding impacted soils Vertical: Depth infrastructure, generally <1.0 mbgl	Excavation and off-site disposal of infrastructure Stockpiling and sampling and remediation via bioremediation on-site or off-site disposal to a licensed waste facility
PCB impacted soils in vicinity of JBS_MW3	Lateral: Uncertain, anticipated to be 5 m x 5 m Vertical: Depth of fill, approximately 0.6 mbgl	Excavation and off-site disposal to a licensed waste facility
Petroleum hydrocarbon impacted groundwater	Vicinity of USTs and JBS_MW4	Removal of point sources of contamination through excavation and off-site disposal as outlined above and monitored natural attenuation (MNA)

6.2 Evaluation of RAP

The Auditor has assessed the RAP by comparison with the checklist included in NSW EPA (2020) *Consultants Reporting on Contaminated Land*. The RAP was found to address the required information, as detailed in Table 6.2, below.

Table 6.2: Evaluation of Remedial Action Plan

Remedial Action Plan	Auditor Comments
<p><i>Remedial Goal</i></p> <p>The objective of the remediation is to remove risks posed by the identified contamination issues, such that the site is made suitable for the proposed commercial development. It is a further objective to undertake works, in accordance with applicable guidelines and legislation, in a manner which is concordant with the principles of ecologically sustainable development (ESD).</p>	<p>In the Auditor's opinion, this goal is considered appropriate.</p>
<p><i>Discussion of the Extent of Remediation Required</i></p> <p>Remediation required for each area was discussed within the RAP (See Table 6.1 above)</p>	<p>The Auditor notes that there is some uncertainty with regards to the extent and volumes of contaminated soil associated with the USTs and other point sources that may require remediation via bioremediation. However, there is sufficient space at the site to accommodate additional soils for bioremediation and contingencies for off-site disposal of excess soils are also included in the RAP.</p> <p>The Auditor notes that chase out of impacted soils in proximity to the canal wall is unlikely to be practical to the full extent. If residual contamination is to remain adjacent to the canal wall, validation of the site will need to demonstrate that residual impacts do not present an ongoing risk to receptors. The requirement for additional insitu remediation of</p>

Remedial Action Plan	Auditor Comments
	<p>contamination that cannot be removed through excavation or containment and poses an ongoing risk to receptors will need to be addressed based on validation results and documented in a remedial works plan (RWP) for review by the Auditor, if required.</p> <p>The assumption that all fill materials may contain ACM is considered a practical approach based on the proposed remediation method of cap and containment.</p>
<p><i>Remedial Options</i></p> <p>Remedial options were assessed for soil and groundwater remediation and included for soil, on-site treatment, off-site treatment, insitu management and off-site disposal.</p> <p>Considered options for removal of hydrocarbons for groundwater included multiphase extraction (MPE), insitu chemical oxidation, air sparging and soil vapour extraction, total fluids pumping, passive skimming, monitored natural attenuation (MNA) and hydraulic containment.</p>	<p>The Auditor considers that an appropriate range of options were considered.</p>
<p><i>Selected Preferred Option and Rationale</i></p> <p>Preferred option was discussed within the RAP and a discussion of the applicability of potential options was provided.</p> <p>The preferred option for dealing with point sources of contamination such as USTs, fuel lines, bowsers, sumps and pits was excavation and off-site disposal.</p> <p>The preferred remediation option for hydrocarbon impacted soils was bioremediation on-site. In coming to this determination, JBS&G reviewed the requirements of the NSW EPA (2014) <i>Best Practice Note: Landfarming</i> and determined that bioremediation was a viable remediation option for TRH impacted soils as there was considered to be sufficient space to landfarm the anticipated volume of TRH impacted soils (650 m³ on a 0.8 ha site) and the type and level of contamination (TRH < 80,000 mg/kg) was considered amenable to bioremediation by landfarming and the anticipated timeframe for landfarming (6 weeks) was acceptable. JBS&G note that contingency actions are available to allow landfarming rates to be accelerated (i.e. increased turning of soils, addition of bioremediation additives).</p> <p>The preferred remediation option for asbestos impacted soils was management through capping insitu and ongoing management through an asbestos management plan (AMP). This was considered feasible given the commercial site use and requirement for hardstand across most of the site following redevelopment.</p> <p>For PCB impacted soils, the preferred option was off-site disposal so that ongoing management of this contamination was not required.</p> <p>For groundwater contaminated by petroleum hydrocarbons, the preferred remediation option was MNA following removal of the point sources of contamination as described above.</p> <p>The RAP notes that if unidentified or more extensive contamination is identified than anticipated, then further review of the remediation options may be required, however, it is likely that most forms of contamination can be dealt with through excavation and off-site disposal or capping and containment.</p>	<p>The Auditor considers the preferred options selected for remediation of soils and groundwater to be appropriate. It is noted that if bioremediation of hydrocarbon impacted fill containing asbestos is required, then asbestos controls will need to be implemented during the bioremediation works.</p> <p>The contingency remediation options are acceptable. If more extensive groundwater contamination is identified than anticipated, or soil contamination that cannot be excavated due to structural constraints, the remediation options should be reviewed to ensure any residual risks to receptors are low and acceptable.</p>
<p><i>Description of Remediation to be Undertaken</i></p> <p>Ground Penetrating Radar (GPR) survey following building demolition on a 2 m grid across the site to attempt to identify USTs and other sources of potential contamination.</p>	<p>The proposed remediation strategy is acceptable.</p> <p>It is noted that should the existing hardstand be retained in areas of the site, sufficient investigation/validation data will be required to confirm that the potential for unidentified</p>

Remedial Action Plan	Auditor Comments
<p>Removal of hardstand and surface inspection (on 2 m x 2 m grid) for ACM and unidentified contamination</p> <p>Inspection of any concrete to be recycled for ACM</p> <p>Delineation of TRH impacts in vicinity of JBS-MW4 through test pitting in surrounding area and analysis of soil samples for TRH and BTEX (7 test pits as shown on Figure 7 of the RAP) followed by excavation of extent of impacted soils for bioremediation</p> <p>Excavation of PCB impacted soils in vicinity of sewer pump (approx. 5 x 5 x 0.6 m) and off-site disposal</p> <p>Decommissioning and removal of infrastructure (sump, sewer pump, interceptor and USTs) and off-site disposal. Excavation and chase out of impacted soils and bioremediation.</p> <p>Bioremediation of soils is to be undertaken in a designated landfarming area with approx. 650 m³ of soils spread over a maximum area of approximately 500 m², with the maximum height not exceeding 0.5 m.</p> <p>Controls to prevent sediment run-off will be placed around all landfarm piles. Impacted soils be turned on a weekly frequency for a period of four to six weeks with weekly inspections by JBS&G and validation sampling. Suitable bioremediated material will be used as backfill on-site. Material considered not suitable for reuse on-site (i.e. materials unable to be bioremediated) will be classified in accordance with EPA (2014) prior to off-site disposal.</p> <p>Where possible, fill and natural soils (that require bioremediation) are to be segregated, handled and managed separately to minimise the extent of asbestos related management controls.</p> <p>Constraints on excavation and stockpiling are outlined in Section 6.3.7 of the RAP, including the requirements for assessment and management (where required) of ASS/PASS in saturated natural soils and geotechnical constraints associated with excavations adjacent to the canal wall.</p> <p>Onsite containment of remaining fill through placement of a marker layer overlain by 100 mm thickness of clean capping material overlain by concrete or hardstand (roads/paths). In areas of landscaping, a minimum of 0.5 m of soil cover, or 1.5 m in tree pit zones, except adjacent to the canal wall where restrictions on excavation depth to retain structural integrity of the wall may limit the capping thickness to a minimum of 0.1 m of clean topsoil over the marker layer. In service pits, marker layer at least 150 mm below service and backfill with clean material. Marker layer is not required below pile foundations. The marker layer shall consist of a bright orange coloured non-woven polyester continuous filament or PET (such as nonwoven geotextiles) or similar with a minimum density of approximately 150 grams per square metre (or equivalent).</p> <p>Establishment of a monitoring well network for MNA of TRH in groundwater. As a minimum, four groundwater wells on the down gradient boundary with the canal are proposed to be installed. However, it is noted that additional wells may be required based on the results of soil remediation activities. Where additional installation of wells is required, the location and construction of these wells will be determined by the Environmental Consultant at the time of installation to ensure that the remedial objectives are met and with due consideration of the future operational site layout.</p>	<p>contamination to remain that could pose an ongoing risk to receptors is low and acceptable.</p> <p>It is noted that the extent of excavation will be constrained by site boundaries and the need to maintain the integrity of the canal wall. Contingency remediation options are to be considered if validation sampling indicates an unacceptable risk from residual contamination.</p> <p>The reduction in capping thickness within proximity of the canal wall or other structures due to the requirement to maintain structural integrity of these features is acceptable based on the proposed commercial site use and given a marker layer will be placed over residual soils and the area capped with a minimum 100 mm of clean topsoil and managed under an environmental management plan (EMP) (see discussion table below).</p>
<p><i>Proposed Validation Criteria</i></p> <p>Section 7.4 of the RAP provides the validation criteria for soils and groundwater which are based on Health Investigation Levels (HIL), Health Screening Levels (HSL), Ecological Investigation Levels (EIL) and Ecological Screening Levels (ESL) established in</p>	<p>Acceptable.</p>

Remedial Action Plan	Auditor Comments
<p>accordance with Schedule B1 of NEPM (2013) for commercial/industrial site use.</p> <p>The capping system is to be installed in accordance with the RAP with provision of photos and survey data to confirm installation.</p>	
<p><i>Proposed Validation Testing</i></p> <p>Validation testing requirements are included in Section 7 of the RAP.</p> <p>The proposed validation testing is summarised by the Auditor in Table 6.3 below.</p>	<p>The proposed validation testing is considered generally acceptable, however, the Auditor notes that:</p> <ul style="list-style-type: none"> • Analysis of soil samples from test pits completed to delineate TRH impacts encountered at JBS_MW4 should also include analysis of PAH, metals and PCBs to characterise fill in this area where limited sampling has been completed previously • Materials excavated from below 2.0 mbgl must be assessed for PASS prior to bioremediation • Validation sampling of the excavation for removal of PCB impacted soils should also include analysis of lead and lead leachability to characterise fill remaining in this area • Imported materials must be inspected during importation by the Contractor, and any materials not meeting the description given in the provided documentation or exhibiting signs of contamination are to be rejected.
<p><i>Contingency Plan if Selected Remedial Strategy Fails</i></p> <p>The remedial strategy has a low risk of failure, as validation failure would lead to further excavation or containment.</p> <p>Contingency procedures are provided for the unexpected finds and it is noted that review of remediation options will be required if contamination cannot be remediated through off-site disposal or containment.</p>	<p>In the Auditor’s opinion, the remediation strategy has a low risk of failure as contamination that poses a risk will be disposed off-site or contained on-site. In the event that groundwater contamination is considered to pose a risk to receptors following removal of point sources, such that MNA is not considered a sufficient remediation option, a review of remediation options will be completed. Similarly, if significant soil contaminant mass is to remain due to excavation constraints, contingency remediation options may need to be considered and documented in a RWP for Auditor review and approval.</p> <p>The Auditor considers that the procedure for handling unexpected finds, which includes stopping work and identification of materials by an environmental consultant is appropriate and practical and can be implemented within the proposed remediation strategy.</p>
<p><i>Interim Site Management Plan (before remediation)</i></p> <p>The site is currently covered by hardstand and no interim management is proposed.</p>	<p>Acceptable.</p>
<p><i>Site Management Plan (operation phase) including stormwater, soil, noise, dust, odour and OH&S</i></p> <p>The RAP outlines the minimum site management requirements for the remediation works, including soil and water management, stockpile and landfarm management, noise, odour and dust control, excavation dewatering management, waste disposal and transport, occupational health and safety (OH&S), site security and community consultation.</p>	<p>Acceptable. The Site Management Plan will need to consider the requirements of the Asbestos Management Plan (AMP) and the ASSMP.</p>

Remedial Action Plan	Auditor Comments
<p><i>Remediation Schedule and Hours of Operation</i> To be determined by the conditions of consent.</p>	Appropriate.
<p><i>Contingency Plans to Respond to Site Incidents</i> It is noted that a health and safety plan must be developed that includes contingencies for incidents that may arise during the works, however, specific contingency actions are not specified in the RAP. An unexpected finds protocol is included.</p>	Acceptable. The Auditor notes that the RAP does not include specific site incident contingency plans but does outline the management requirements that are applicable to the proposed works. An unexpected finds protocol is included and is adequate for the works.
<p><i>Licence and Approvals</i> Details of the regulatory approvals and licences required are documented in the RAP (Section 11). JBS&G note that the works are classified as category 2 under the SEPP 55 (now the Resilience and Hazards SEPP). The proposed remediation/validation activities are not required to be licensed under the <i>Protection of the Environment Operation Act 1997</i>. Excavation, onsite remediation and removal of asbestos impacted soils are required to be conducted by a Class A (Friable) or B (Bonded) Asbestos Removal licensed contractor. Wastes are to be classified in accordance with NSW EPA (2014). An appropriately licensed landfill should be selected and the material tracked from the site to the landfill. The Council Development Control Plan (DCP) provides a number of environmental and site management provisions required to be employed during remediation works. These will require to be adopted as minimum standards for the environmental management of remediation works.</p>	Acceptable.
<p><i>Contacts/Community Relations</i> Contacts details for key personnel are not provided but are to be updated once a remediation contractor is appointed. Owners and/or occupants of premises adjoining the site will be notified at least seven days prior to the commencement of remedial works. Any community concerns or queries are to be directed to the site manager. The site manager will notify the site owner of any community queries or concerns so that the site owner will direct an appropriate person to address the community query or concern.</p>	Acceptable.
<p><i>Staged Progress Reporting</i> The RAP indicates that staged remediation and validation may be required.</p>	Acceptable. If staged validation reporting is completed, review of interim validation reports and EMP will be completed by the Auditor and documented as interim audit advice.
<p><i>Long Term Environmental Management Plan</i> A Long Term Environmental Management Plan (LTEMP) has been proposed which will identify capped asbestos-impacted areas and identify any requirements for ongoing groundwater monitoring. The LTEMP will require appropriate OH&S for works that penetrate the marker layer and recommend that any workplans in the future consider the potential for the contaminants of concern. The specific requirements for ongoing monitoring of groundwater shall be determined following receipt of validation data and advised within the LTEMP. It is not stated who will be responsible for ensuring implementation of the LTEMP.</p>	The Auditor recommends that the LTEMP be made legally enforceable by requiring implementation as a condition of planning consent.
<p><i>Waste Management</i> Material requiring disposal from the site will be classified in accordance with the NSW EPA Waste Classification Guidelines (EPA 2014). All materials excavated and removed from the site as part of the remediation shall be disposed in accordance with</p>	Acceptable.

Remedial Action Plan	Auditor Comments
<p>the <i>Protection of the Environment Operations Act 1997</i> and to a facility legally able to accept the material, under the waste classification assigned.</p> <p>Disposal dockets for each individual off-site waste disposal load must be provided to the Principal and to the Remediation Consultant by the Contractor to demonstrate appropriate off-site disposal of waste occurred for site validation purposes.</p> <p>For material tracking and transport of materials affected by asbestos, the requirements of <i>Work Health and Safety Act 2011</i> and <i>Work Health and Safety Regulation (2017)</i>, <i>How to Manage and Control Asbestos in the Workplace: Code of Practice</i>, October 2018, <i>Safe Work Australia, Managing Asbestos in or on Soil</i>, 2014, <i>WorkCover</i> and the EPA (2014) are also required to be met.</p>	

Table 6.3: Proposed Validation Testing

Item	Aspect	Sampling Frequency	Analytes
Delineation of TRH impacts around location JBS_MW4	Test pitting around JBS_MW4	Completion of 7 test pits and sampling every change in lithology or every 1.0 m.	TRH, BTEXN
Excavation of point sources	Excavations formed by the removal of contaminated soils as identified in Table 6.1.	<p>Sampling of base of excavation at 1 / 100 m² (10 m grid) minimum 2 samples per excavation and minimum 2 samples per UST removed. Sampling of walls at 1 / 4 m for each distinctive material type of each vertical metre.</p> <p>Soils within the walls and base of the open excavation shall be field screened (in accordance with the requirements of the ASSMP) for ASS – where the results indicate the potential for PASS materials to be oxidised in the period following excavation pending validation results, the environmental consultant shall give direction to the contractor to backfill the excavation.</p>	TRH, BTEXN And PCBs and lead in area surrounding JBS_MW3
Excavation of point sources	Excavations formed by the removal of contaminated soils as a result of an unexpected find	<p>Sampling of base of excavation at 1 / 100 m² (10 m grid) minimum 2 samples per excavation and minimum 2 samples per UST removed. Sampling of walls at 1 / 10 m for each distinctive material type of each vertical metre, minimum 4 samples.</p> <p>Soils within the walls and base of the open excavation shall be field screened (in accordance with the requirements of the ASSMP) for ASS – where the results indicate the potential for PASS materials to be oxidised in the period following excavation pending validation results, the environmental consultant shall give direction to the contractor to backfill the excavation.</p>	To be determined based on nature of impact
Bioremediated soils	Sampling of bioremediated soil stockpiles for reuse on-site	1 sample per 25 m ³ minimum 3 samples per stockpile.	TRH, BTEXN
Validation of Capping System	Capped areas	The boundaries and reduced levels of each capped area will be surveyed by a registered/licensed surveyor prior to the placement of the marker layer and following placement of capping layers to demonstrate capping thickness. Visual site inspection is to be completed by the environmental consultant.	-

Item	Aspect	Sampling Frequency	Analytes
Groundwater	Assessment of MNA	<p>Assessment of MNA will be undertaken by sampling of all monitoring wells available within the monitoring network following remediation (minimum of four proposed wells on the down gradient site boundary). Requirements for long term monitoring of groundwater is to be documented in the LTEMP, however, the RAP notes that biannual sampling and analysis of available monitoring wells is anticipated.</p> <p>Prior to the availability of five rounds of data, assessment of primary lines of evidence shall be by qualitative assessment of the analytical data set. With the availability of five or more rounds, analysis data sets shall be assessed to determine a statistically significant trend.</p> <p>On the basis of the results, revision of the requirements for ongoing monitoring will potentially be made to the LTEMP.</p> <p>It is proposed that assessment of MNA shall be undertaken until such time that concentrations of contaminants in all monitoring wells are below the adopted assessment criteria in three consecutive rounds; or concentrations are found by statistical analysis to be reducing, or assessment of secondary indicators of natural attenuation supports the occurrence of natural attenuation in at least three consecutive sampling events.</p>	TRH, BTEXN, MNA indicators (nitrate, sulphate, ferrous iron and methane).
Imported materials	Quarried VENM and VENM products	Confirmation of VENM status prior to importation. No testing required, inspection on-site to confirm material consistent with documentation.	-
	Imported VENM	Minimum of 3 samples per source site / material type to 500 m ³ then 1 sample per 500 m ³ thereafter.	TRH, BTEX, PAH, metals, OCPs, PCBS, asbestos (500 ml)
	Material subject to a NSW EPA Resource Recovery Order/Exemption	Confirmation by the supplier that the material meets the terms of the order. Then environmental consultant sampling at a minimum of 3 samples per source site / material type to 500 m ³ then 1 sample per 500 m ³ thereafter, prior to importation	TRH, BTEX, PAH, metals, OCPs, PCBS, asbestos (500 ml)

6.3 Auditor's Opinion

In the Auditors' opinion, the proposed remediation works are appropriate. If adequately implemented, the RAP should be able to ensure that the site is suitable for the proposed land use through the removal of point sources of contamination, removal of TRH and PCB contaminated soils and containment of asbestos impacted soils with management through a LTEMP. Successful validation will be required to confirm this. It is noted that the RAP assumes ACM is present within fill across the site and as such capping of the whole site is proposed. In the event that areas of the site are not to be capped, validation of residual soils for asbestos should be completed in accordance with the methodology outlined in NEPM 2013 for quantification of asbestos in soils to confirm these areas are suitable for use without the requirement for capping.

Offsite disposal is an appropriate contingency strategy should unidentified contamination be encountered or if bioremediation of soils is unsuccessful in the required timeframe. Management of groundwater contamination through removal of primary sources and ongoing assessment of MNA is an appropriate strategy based on the current data set. Should any unexpected finds be encountered that change the CSM or, should access constraints limit the remediation of significant sources of soil and groundwater contamination through excavation and off-site disposal, the requirements for insitu soil or

groundwater remediation should be reviewed. This requirement will be assessed through the audit process.

7. CONCLUSIONS AND RECOMMENDATIONS

Site investigations have identified fill material impacted by asbestos (as ACM) and localised areas of soil contaminated by TRH and PCBs associated with point sources. The Auditor considers that the investigations to date are sufficient to characterise the main contamination issues at the site and assess remediation options. The full extent of soil contamination requiring remediation has not been confirmed, however, steps to be taken to close data gaps are included in the RAP.

The remediation approach recommended in the RAP of excavation and off-site disposal of point sources of contamination and capping and containment of asbestos impacted soils with management through a LTEMP is considered adequate to manage the identified contamination, subject to successful implementation of the RAP and preparation of a validation report. Review of the remediation requirements for groundwater may be required if any significant unexpected finds are encountered that change the CSM or if access constraints limit the remediation of significant sources of groundwater contamination through excavation and off-site disposal, and an amended RAP may be required if additional remediation or management of soil or groundwater is required. This will be reviewed as part of the Audit.

After successful implementation of the RAP, including any amendments, a Site Audit Statement and accompanying Site Audit Report is to be prepared assessing the suitability of the site for the proposed use, including the appropriateness of the LTEMP.

The Auditor makes the following recommendations:

- The RAP is to be implemented during redevelopment of the site, including consideration of Auditor comments in Table 6.2 of this IAA.
- A validation report is to be prepared at the completion of remediation and redevelopment of the site documenting the results of inspections and testing undertaken in accordance with the RAP. The validation report is to be reviewed by the Auditor. If staged validation is required, interim validation reporting and LTEMP preparation may be required and should be reviewed by the Auditor.
- The LTEMP must be agreed with Council and reviewed by the Auditor. It is recommended that implementation of the LTEMP be made a condition of planning consent for the development.

8. LIMITATIONS

This interim audit advice was conducted on behalf of LOGOS Development Management Pty Ltd for the purpose of assessing the suitability and appropriateness of a remedial action plan (RAP). This summary report may not be suitable for other uses.

The Auditor has relied on the documents referenced in Section 1 in preparing the Auditor's opinion. The consultants included limitations in their reports. This interim audit advice must also be subject to those limitations. The Auditor has prepared this document in good faith but is unable to provide certification outside of areas over which the Auditor had some control or is reasonably able to check. If the Auditor is unable to rely on any of those documents, the conclusions of this interim audit advice could change.

It is not possible to present all data which could be of interest to all readers of this interim audit advice. Readers are referred to the referenced reports for further data. Users of this document should satisfy

themselves concerning its application to, and where necessary seek expert advice in respect to, their situation.

* * *

Consistent with the NSW EPA requirement for staged 'signoff' of sites that are the subject of progressive assessment, remediation and validation, I advise that:

- This advice letter does not constitute a Site Audit Report or Site Audit Statement.
- At the completion of the remediation and validation I will provide a Site Audit Statement and supporting documentation.
- This interim advice will be documented in the Site Audit Report.

Yours faithfully
Ramboll Australia Pty Ltd




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EPA Accredited Site Auditor 1903

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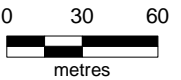
Attachments: 1 Site Location
2 Site Features
3 Sample Location Plan



Legend
 Approximate Site Boundary



Job No: 63126
 Client: Logos
 Version: R01 Rev A Date 24/05/2022
 Drawn By: AB Checked By: RH

Scale 1:3,000 

 0 30 60
 metres

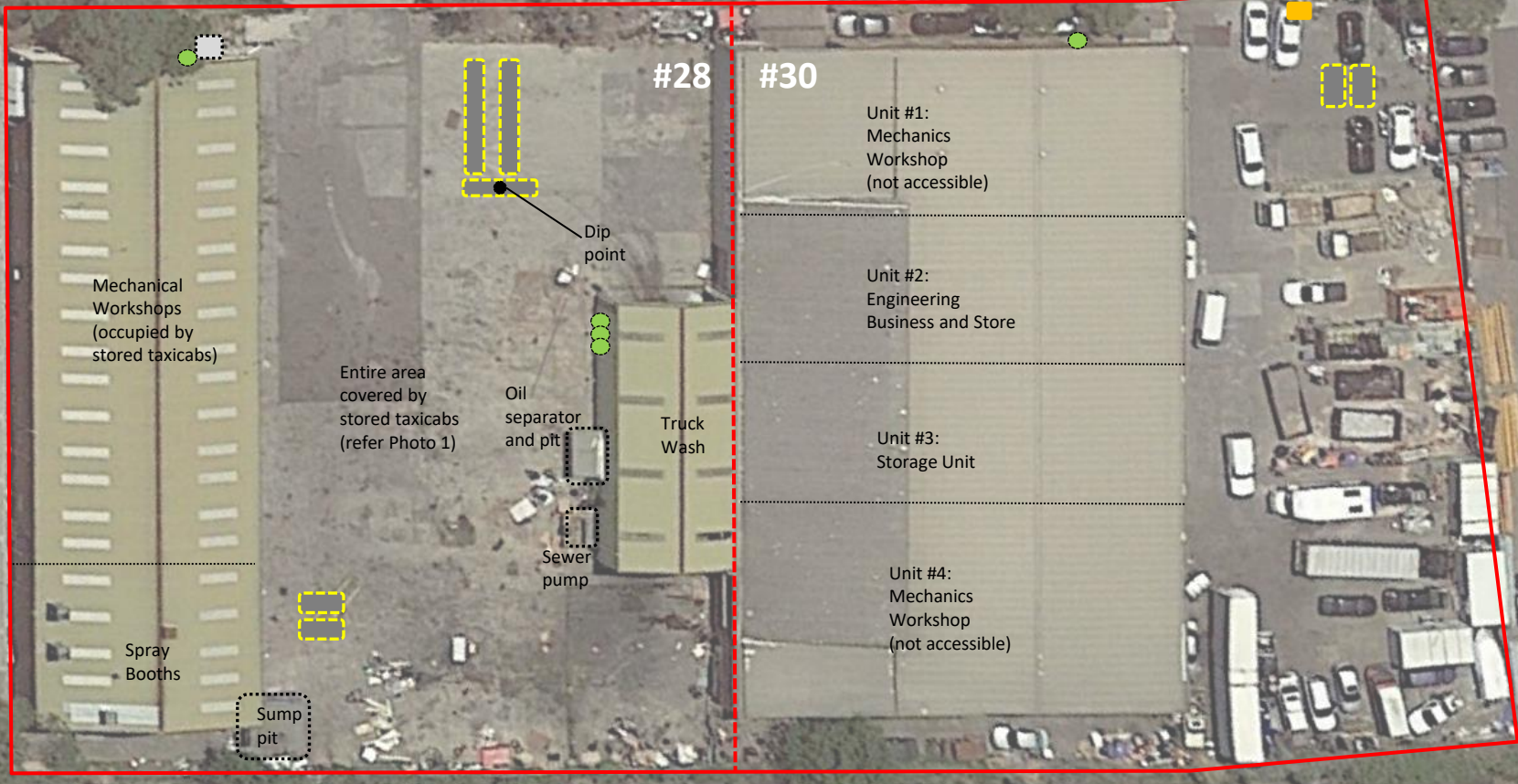
Coord. Sys. GDA 1994 MGA Zone 56

**28-30 Burrows Rd,
 St Peters, NSW**
SITE LOCATION

FIGURE 1

File Name: N:\Projects\Logos\63126 St Peters SEARs\GIS\Maps\R01 Rev A\63126_01_SiteLocation.mxd
 Reference:

Burrows Road



Alexandra Canal

- Site boundary
- Probable UST
- Possible UST
- Vent Pipe for UST
- Remnants of Fuel Bowser

Not to scale
Added features are approximate



Source: Google Earth 2020



Project #:
SES_566

Title:
Due Diligence – Contamination Assessment

Figure 2:
Site Layout

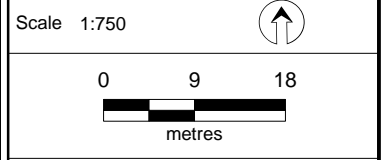
Address:
28-30 Burrows Road, St Peters NSW



- Legend**
- Approximate Site Boundary
 - Sample Locations**
 - Borehole / Monitoring Well, SES (2020)
 - Borehole, SES (2020)
 - ⊕ Monitoring Well, JBSG (2021)
 - ▲ Soil Vapour, JBSG (2021)
 - Site Features**
 - Shipping Containers - Storage
 - Probable UST
 - Site Features



Job No: 62110
 Client: Logos
 Version: R01 Rev A Date 26/11/2021
 Drawn By: RH Checked By: MN



Coord. Sys. GDA 1994 MGA Zone 56

**28-30 Burrows Rd,
 St Peters, NSW**

SAMPLING LOCATIONS

FIGURE 3

File Name: N:\Projects\Logos\62110 St Peters DD\GIS\Maps\R01 Rev A\62110_03_SamplingLocations.mxd
 Reference: