Final Report

Phase 1 and Preliminary Phase 2 ESA:

17 - 21 Parramatta Road, Lidcombe, NSW 2141

7 SEPTEMBER 2009

Prepared for

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Table of Contents

Executive Summary v

1 Introduction 1

1.1 Background 1

1.2 Objectives 1

1.3 Scope of Works 2

1.3.1 Phase 1 ESA 2

1.3.2 Phase 2 ESA 3

1.4 Phase 1 Interviews 3

2 Site Description 4

2.1 Site Location and Ownership 4

2.2 Land Use and Planning Issues 4

2.2.1 Flooding 4

2.3 Surrounding Land Use 4

2.4 Site Layout and Infrastructure 5

2.5 Site Operations and Process Description 5

3 Environmental Setting 6

3.1 Topography 6

3.2 Site Geology 6

3.3 Site Hydrology and Hydrogeology 6

3.4 Sensitive Receptors 7

3.5 NSW DECC Contaminated Sites Register 7

3.6 NSW DECC Environmental Protection Licence 7

4 Site History 8

4.1 Anecdotal History 8

4.2 Historical Aerial Photographs 8

4.3 Historical Certificates of Title 9

4.4 Dangerous Goods Review 10

4.5 Summary of Site History Information 11

5 Potential Soil and/or Groundwater Contamination Issues 12

5.1 Materials Handling and Storage 12

5.1.1 Storage Tanks 12

5.1.2 Other Chemical Use and Storage 12
5.1.3 Soil Fill Material 12
5.2 Water Management 12
5.2.1 Water Supply and Use 12
5.2.2 Wastewater Management 13
5.3 Waste Management 13
5.4 Asbestos Containing Materials 13
5.5 Polychlorinated Biphenyls (PCBs) 13
5.6 Previous Environmental Investigations 13
5.7 Potential Off-site Sources of Contamination (Current and Historical) 14
5.8 Summary of Potential Areas of Concern 14
6 Phase 2 Environmental Site Assessment Methodology 15
6.1 Background 15
6.2 Soil Investigation 15
6.3 Acid Sulphate Soils Investigation 16
7 Results 17
7.1 Specific Site Geology 17
7.2 Field and Laboratory Analytical Data 17
7.2.1 Applicable Assessment Criteria 17
7.2.2 Analytical Program 19
7.2.3 Analytical Data Validation 19
7.3 Soil Analytical Results 20
7.3.1 TPH and BTEX compounds 20
7.3.2 Selected Inorganics 21
7.3.3 PAHs 21
7.3.4 Asbestos 21
7.3.5 Material Classification 21
7.3.6 Acid Sulphate Soils 22
8 Conclusions, Recommendations and Limitations 23
8.1 Phase 1 ESA 23
8.2 Phase 2 ESA 23

8.3 Limitations 24

9 References 26

Tables - in Text

Table 4-1 Historical Aerial Photographs 8

Table 4-2 Summary of Historical Certificates of Title 10

Table 5-1 Summary of Potential Areas of Concern 14

Table 6-1 Soil Investigation Activity Summary 15

Table 6-2 Acid Sulphate Soils Investigation Activity Summary 16

Table 7-1 General Local Geological Details 17

Table 7-2 Action Criteria based on ASS soil analysis 18

Tables - Attached

Table 1 Soil Analytical Results

Table 2 Acid Sulphate Soils Analytical Results

Figures

Figure 1 Site Locality map

Figure 2 Site Layout

Figure 2 Aerial View of Site

Figure 3 Locations of Soil Bores and Monitoring Wells

Appendices

Appendix A Certificates of Title

Appendix B Section 149 Certificates

Appendix C WorkCover, NSW

Appendix D NSW DECC Contaminated Land Search

Appendix E Groundwater Bore Records

Appendix F Soil Bore Logs

Appendix G Monitoring Wells Logs

Appendix H Data Validation Reports

Appendix I Laboratory Reports

Abbreviations

Abbreviation	Description
AASS	Actual Acid Sulphate Soil
ACM	Asbestos Containing Material
AMP	Asbestos Management Plan
ASS	Acid Sulphate Soil
EANC	Excess Acid Neutralising Capacity
DECC, NSW	Department of the Environment and Climate Change[1]
DNR	Department of Natural Resources
DP	Deposited Plan
CBD	Central Business District
ESA	Environmental Site Assessment
GPS	Geographical Positioning System
mbgl	Metres below ground level
m btoc	Metres below top of casing
MS	Matrix Spike
NEPC	National Environment Protection Council
NSW	New South Wales
PASS	Potential Acid Sulphate Soil
PID	Photo-Ionisation Detector
PCOC	Potential Contaminants of Concern
SPOCAS	Suspension Peroxide Oxidation Combined Acidity and Sulphate
SEPP 55	State Environmental Planning Policy No. 55
TAA	Titratable Actual Acidity
TCLP	Toxicity Characteristics Leaching Procedure
URS	URS Australia Pty Ltd
USCS	Unified Soil Classification System
UST	Underground Storage Tank
VOC	Volatile Organic Chemicals

[1] As of the 27 July 2009, DECC is now called the Department of Environment, Climate Change & Water (DECCW).

Executive Summary

URS Australia Pty Ltd (URS) was commissioned by Costco Wholesale (Australia) Pty Ltd (Costco) to undertake a Phase 1 and Limited Phase 2 Environmental Site Assessment (ESA) of the property located at 17-21 Parramatta Road, Lidcombe, New South Wales (NSW), Australia. The objective of the preliminary environmental investigations was to assess the potential for contamination associated with historical and current land use at the site as part of an acquisition due diligence , as well as to support a planning application for a commercial retail development at 17-21 Parramatta Road, Lidcombe, NSW. The requirements of the Department of Planning's Director-General and Auburn Council in regard to a commercial retail development included consideration of SEPP 55 and the need for an Acid Sulphate Management Plan. These matters are addressed in the report.

The Limited Phase 2 investigation was for the assessment of soil conditions in context of ongoing site use and/or excavation of the site for redevelopment purposes and characterisation of the excavated materials for off-site disposal and/or site reuse. The scope of works for the Phase 1 and 2 ESAs did not include assessment of potential for groundwater contamination

A materiality threshold was not set for significant environmental issues and a review of planning approvals for the site was not included in the scope of works.

The Phase 1 ESA was based on a desk top review of third party, available site and historic environmental records; a site walkover reconnaissance and interviews with site representatives.

The ESA comprised a Phase 1 background study to gather information on the operational and historical activities on the site, and a Phase 2 soil analytical program. The street address of 17-21 Parramatta Road comprises of two Lots and Deposited Plan (DP) numbers. The current Certificates of Title indicate that Lot 1 in DP 214452 and Lot 1 in DP 522225 are owned by Tallen Pty Limited (Tallen). Only Lot 1 in DP 214452 (property proposed for redevelopment) was subject to a Phase 1 and Limited Phase 2 ESA. Lot 1 in DP 522225 is occupied by Hertz Rental and was not accessed during the Phase 1 and Limited Phase 2 ESA.

The site, which is substantially covered by a warehouse building, is operated by BevChain (part owned by Linfox) and provides warehousing and distribution services to the brewing industry. It is understood from historical Certificates of Title searches that previous site occupants have included the Goodyear Tyre Company and Hastings Deering Building Limited.

Phase 1 ESA Results and Conclusion

The Phase 1 ESA identified the following four areas of concern with respect to potential site contamination:

- Imported backfill/ landscaping material used to level up the site during initial site development;
- One former 10,000 litre underground storage tank (UST) and one former 5,000 litre UST. The location of the 5,000 litre UST could not be confirmed, however, it is likely that it was in close proximity to the 10,000 litre UST which was near the existing guardhouse. These tanks were reportedly removed in 1996;
- Asbestos containing materials within the site buildings; and
- Potential vehicle wash bay located on the Hertz Rentals site (Lot 1 in DP 522225). Access to these Lots was not possible during the site inspection. A visual inspection was conducted from the footpath adjacent to Parramatta Road.

Phase 2 ESA Results and Conclusion

The Limited Phase 2 ESA field investigations were restricted by the current site operations. Based on the preliminary environmental investigations, laboratory soils chemical results indicate that:

- The concentration of nominated analytes in soils underneath the site are below adopted soil investigation levels appropriate to commercial/industrial land use;
- Fragments of asbestos containing sheeting were found at one sampling location, however, no asbestos fibres were detected in the soil samples analysed;
- The fill materials underneath the site would be classified as General Solid Waste (non putrescible) for off-site disposal purposes; and
- In relation to acid sulphate soil (ASS) conditions, potential acid sulphate soil with minimal buffering capacity is present within the assumed old Haslams Creek alignment.

It is recommended that:

- The finding of fragments of asbestos during drilling (at SB03), warrants development of an asbestos management plan prior to site redevelopment work;
- Further investigations are required in areas to be excavated within the footprint of the new building to quantify the volume of ASS to be managed during construction and an ASS management plan should be developed prior to excavation works; and
- Additional investigations be undertaken to confirm the preliminary findings when unrestricted access to the building area is allowed.

1

Introduction

1.1 Background

URS Australia Pty Ltd (URS) was engaged by Costco Wholesale (Australia) Pty Ltd (Costco) to conduct a Phase 1 and Limited Phase 2 Environmental Site Assessment (ESA) of the site located at 17-21 Parramatta Road, Lidcombe, New South Wales (NSW).

URS understands that Costco intends to purchase the subject property and has commissioned the Phase 1 and Limited Phase 2 ESA as part of an acquisition due diligence, as well as to support a planning application for a commercial retail development. The site is operated by BevChain (part owned by Linfox) and is currently used to store and distribute alcoholic beverages. It is understood from historical Certificates of Title searches that previous site occupants have included the Goodyear Tyre Company and Hastings Deering Building Limited.

The site is located in an industrial and commercial area of Lidcombe, NSW adjacent to Parramatta Road. Historical data indicates that the site was constructed on undeveloped land in the early 1960s. The site comprises one main warehouse building with internal de-mountable units. Administration offices are on the ground and first floor of the western elevation. A disused gatehouse is located in the south-west corner of the site. The main warehouse dominates the site. Awnings to the western and eastern elevations provide cover to the loading docks. A small car park is located in the western corner of the site in front of the entrance to the office. Parking for articulated trucks and trailers is located to the northern part of the site. A one-way system for vehicle movement operates around the main warehouse.

The Phase 1 ESA is based on a desktop review of available information, a site walkover reconnaissance and a review of available records. The Limited Phase 2 ESA is based upon limited soil sampling and groundwater monitoring undertaken at the site during the period 29 May 2009 to 10 August 2009.

1.2 Objectives

The objective of the Phase 1 was to establish the potential for soil and groundwater contamination associated with historical and current uses at the site as part of an acquisition due diligence program including:

- Assessing the presence of hazardous substances on-site including redundant chemicals, asbestos containing materials and polychlorinated biphenyls (PCBs); and
- Assessing activities on and off-site which may have resulted in significant contamination by hazardous materials or wastes on site?

The objective of the Phase 2 ESA was to investigate potential soil contamination issues identified during the Phase 1 ESA which may be associated with historical or current on and off-site site operations including:

- Characterisation of soil/fill material for ongoing industrial site land use; and
- Characterisation of soil/fill material for potential excavation and/or disposal as part of the proposed redevelopment.

1.3 Scope of Works

1.3.1 Phase 1 ESA

The scope of work for this Phase 1 ESA consisted of the following components:

- Review of current and historical Certificates of Title to provide a history of ownership and land use.
- Review of the following third party documents:
  - Aerial photographs – selected historical aerial photographs of the site available for review from the Department of Lands to provide evidence of the history of development of the site and indications of potential sources of contamination.
  - Section 149 Certificates (2) and (5) issued under the Environmental Planning and Assessment Act 1979 by Auburn Council (Council) to confirm zoning and restrictions on approved land uses and Council's knowledge of contamination.
  - Details of groundwater bores registered on the groundwater bore database maintained by the New South Wales (NSW) Natural Resource Atlas (www.nratlas.nsw.gov.au) and located within 500 metres (m) of the site.
  - Published topographical, geological and soil maps of the area.
  - The database managed by the NSW Department of the Environment and Climate Change (DECC[2])) for information on notices issued by the NSW EPA under the Protection of the Environment Operations Act 1997 and the Contaminated Land Management Act 1997.
  - Historic Licences for the Keeping of Dangerous Goods issued by WorkCover NSW.
- Review of available site records.
- Site inspection - A site inspection of Lot 1 in Deposited Plan (DP) 214452 owned by Tallen Pty Limited (Tallen) and occupied by BevChain was undertaken to provide further information, via visual inspection, of potential sources and areas of significant environmental liability. Site inspection excluded detailed inspection of Lot 1 in DP 522225 owned by Tallen and occupied by Hertz Rentals. The site inspection focused on the following:
  - Areas of operational processes including waste management, water management, the condition of the site surfaces and buildings and the presence of electrical transformers on site.
  - Areas of potential landfilling.
  - Potential impacts of neighbouring land uses.
  - Sensitivity of the receiving environment.
  - Visual inspection of building materials was undertaken and potential asbestos containing materials were visually identified. The Phase 1 ESA did not constitute an asbestos survey and no samples were collected during the Phase 1 ESA.

A "drive-by" inspection of neighbouring property Lot 1 in DP 522225 was also conducted to identify the presence and proximity of sensitive receptors which could be significantly impacted upon by the site, and off-site operations which could have a significant negative impact on the site.

The scope of the Phase 1 ESA did not include an assessment of compliance with environmental licences/permits held by the site or with other environmental regulatory requirements.

[2] As of the 27 July 2009, DECC is now called the Department of Environment, Climate Change & Water (DECCW).

1.3.2 Phase 2 ESA

To meet the objectives of the ESA URS undertook the following scope of work:

- Reviewing service drawings and Costco's development plans to gain a preliminary appreciation of the site constraints and the likely form of the redevelopment proposed;
- Drilling of up to forty soil bores targeting potential impacted areas to a nominal depth of 3 m below ground level or until natural soil was encountered. Logs were be prepared for each test pit/hole noting the lithology and presence , if any, of anthropogenic material including potential asbestos containing materials;
- Collection of representative soil samples from soil bore locations, including quality control samples, and analysis of soil samples for selected inorganics (arsenic, cadmium, chromium, copper, lead, nickel, zinc and mercury), Total Petroleum Hydrocarbons (TPH) /BTEX and Polycyclic Aromatic Hydrocarbons (PAH) An allowance was also included for testing for asbestos fibres where fragments of potential asbestos containing material are observed. Allowance was included for testing all soil samples for the selected inorganics and TPH/BTEX and 50% of soil samples for PAHs and asbestos fibres;
- Mapping of all soil sample locations as appropriate using Geographical Positioning System (GPS) or by measurement with reference to site features;
- Making good bore locations by backfilling with excavated material and concrete cuttings or intrusions through other hardstand with similar materials;
- Characterisation of soil material to be excavated during site redevelopment for off-site disposal; and
- Assessment of soil samples for presence of acid sulphate soils.

The Phase 1 and Limited Phase 2 ESA scope is considered to be in accord with a Preliminary Site Investigation as outlined in State Environmental Planning Policy (SEPP 55).

The scope for geotechnical investigations is presented in a separate report on geotechnical investigations.

1.4 Phase 1 Interviews

URS held discussions with representative(s) of the site who have knowledge of the history of operations. The aim of these discussions was to gain knowledge of current and historical activities on the site that may have resulted in contamination of soil and/or groundwater at the site.

Discussions were held with Mr Steven Glasovac of BevChain (Site Supervisor) who has been working at the site for one year.

2

Site Description

2.1 Site Location and Ownership

The sites is located approximately 15 kilometres west of Sydney Central Business District (CBD) in Lidcombe North and within the Auburn Council area (see Figure 1).

The site is located at 17-21 Parramatta Road, Lidcombe, NSW and occupies an area of approximately 2.5 hectares. The property is described as Lot 1 in Deposited Plan (DP) 522225 and Lot 1 in DP 214452 as shown in site location plan presented on Figure 2.

The current Certificates of Title indicate that Lot 1 in DP 214452 and Lot 1 in DP 522225 are owned by Tallen Pty Limited (Tallen). A copy of the current Certificate of Titles is included in Appendix A.

The Lots are understood to be arranged as follows:

- Lot 1 in DP 214452 – Occupied by BevChain (the site)
- Lot 1 in DP 522225 – Occupied by Hertz Rental for car parking

Only one Lot in DP 214452 (the site) was accessed and inspected in detail for the Phase 1 ESA. Lot 1 in DP 522225 is occupied by Hertz Rental and was not accessed during the Phase 1 ESA. However, a visual observation was conducted from the footpath adjacent to Parramatta Road of Lot 1 in DP 522225.

A plan of the site's layout (Adapted from: Frankham Engineering Surveys Pty Ltd, Site Plan, 209077, dated 9 April 2009) showing the general site layout is provided as Figure 2.

An aerial view of the site location is shown in Figure 3.

2.2 Land Use and Planning Issues

Planning Certificates issued on 18 May 2009 under Section 149 (2) and (5) of the Environmental Planning and Assessment Act 1979 for the site state that Auburn City Council is the local government authority and the site is Zoned 4(c) Industrial Enterprise under the Auburn City Council Local Environmental Plan 2000.

The Section 149 Certificate (2) indicates the following with respect to contamination:

- The land is not affected by matters arising under Section 59 (2) of the Contaminated Land Management Act 1997, i.e. the site is not within land declared to be an investigation area or remediation site under Part 3 of the Act. The land is not subject to an investigation order or remediation order nor subject of a voluntary investigation proposal or a site audit statement.

No information with respect to contamination was provided in Section 149 Certificate (5). Copies of the Council Section 149 certificates are presented in **Appendix B**.

2.2.1 Flooding

The Section 149 Certificate (2) states that "development on the land or part of the land for any other purpose is subject to flood related development controls".

2.3 Surrounding Land Use

The subject site is located in an industrial and commercial area on Parramatta Road, Lidcombe, NSW. Surrounding land use includes:

North:	Directly adjacent to the northern boundary is Haslams Creek. Haslams Creeks is a concrete lined channel that flows to Parramatta River. The former Olympic Village, now residential properties, is located between 200m to 300m further north of the site. To the north-east of the site is the M4 Western Motorway.
South	Parramatta Road is located directly to the south of the site. Beyond Parramatta Road is Lidcombe Power Centre. Lidcombe Power Centre consists of retail units and undercover car parking. Residential properties are located beyond Hastings Street to the south.
East	The M4 Western Motorway is located to the north-east of the site. Neighbouring properties to the east include Hertz Rentals (4WD vehicles, trucks and minibuses) and Plush homewares store. Further east is the Sydney Olympic Park.
West	Beyond Haslams Creek to the west of the site are retail stores including 'Bunnings Warehouse' and 'Repco'.

Access to the adjacent properties was not obtained for inspection purposes.

2.4 Site Layout and Infrastructure

The site covers an area of approximately 2.5 hectares. The external areas comprise sealed areas used for truck movement, parking and storage. A small strip of vegetation is located between the southern wall of the warehouse and the site boundary. The site is accessed via Parramatta Road to the south. One entrance/exit is located in the south-west corner of the site and one exit is located on the south-east corner of the site.

The site comprises the following:

- The main warehouse is located in the centre of the site. The warehouse comprises first floor offices amenities and plant room to the western wall and a small de-mountable office located in the north-east corner. The remainder of the building is an open plan warehouse with loading docks located on the west and east elevations.
- A disused gatehouse (approximately 10 m2) located in the south-west corner of the site; and
- Truck/trailer parking to the north of the site.

Lot 1 in DP 522225 occupied by Hertz Rentals was not accessed as part of the Phase 1 ESA but was observed to consist of hard standing for small van and small truck parking. Buildings on this Lot appeared to comprise of a vehicle wash bay and de-mountable offices.

2.5 Site Operations and Process Description

The site provides warehousing and distribution services to the brewing industry. Alcoholic beverages are delivered by truck in boxes or metal kegs and stored within the main warehouse. Orders are packed according to specific customer requirements before distribution off-site. Administration offices are located to the west of the main warehouse.

No environmental licences are known to be held by the site.

3

Environmental Setting

The physical setting and environmental characteristics of the subject property are based on URS' site reconnaissance and obtained from the following sources:

- Parramatta River Topographic Map, 2002;
- Sydney Geological Series Sheet, 1983;
- Sydney Soil Landscape Series Sheet, 1966;
- Prospect/Parramatta River Acid Sulfate Soil Risk Map, 1997
- Department of Natural Resource's (DNR's) database of registered groundwater bores ;
- NSW Department of Environment and Climate Change (DECC) on-line public register.

3.1 Topography

The site is comprised of sealed concrete and bitumen and generally appeared level. Site management did not have knowledge on the construction of the site.

The site elevation is recorded as between 10 to 20 metres Australian Height Datum (mAHD) (Source: Parramatta River Topographic Map Series, 1:25 000, Sheet 9130-3-N Third Edition, 2002).

The surrounding area was generally flat with a slight slope to the east along Parramatta Road.

The site soil landscape is mapped as level to gently undulating alluvial floodplain draining Wianamatta Group shales. Limitations of the soil type are localised flooding, high soil erosion hazard, saline subsoils, seasonal water logging and very low soil fertility (Source: Sydney Soil Landscape Series Sheet 9130, 1:100 000).

3.2 Site Geology

According to the Geological Survey of NSW Sydney Geological Map, 1:100 000, Geological Series 9130, 1983, the site is underlain by the Ashfield Shale comprising black and dark gray shale and laminate of the Wianamatta Group. This is expected to be underlain by the medium to coarse-grained quartz sandstone, very minor shale, and laminate layers of the Hawkesbury Sandstone.

There is no known occurrence of acid sulphate soil related to the site. The Australian Soil Resource Information System infers that management activities are not likely to be affected by acid sulphate materials (Source: Australian Soil Resource Information System: www.asris.csiro.au).

3.3 Site Hydrology and Hydrogeology

A man-made section of Haslams Creek is situated approximately 6m north and west of the site. A tributary of the Haslams Creek is located approximately 100 m to the north. Haslams Creek flows northwards into Homebush Bay, which discharges into the Parramatta River.

Site management was unable to provide details on the flow of site drainage. It is expected that surface water drainage flows to Haslams Creek to the north and west of the site.

Stormwater collected from the warehouse was observed to be diverted directly to in-ground stormwater drains. Surface water drains were observed to be located around the perimeter of the hard stand areas of the site. URS considers surface water vulnerability to be low, given the directed stormwater drainage and limited surface water drainage on site.

A search of the Department of Natural Resources (DNR) database of registered groundwater bores identified no registered groundwater within 500 m of the site. The groundwater bore search records are provided in **Appendix E**.

The depth to groundwater in the vicinity of the site is unknown. Groundwater flow direction would likely be to the north, following local topography towards Haslams Creek.

3.4 Sensitive Receptors

The site is located within an industrial and commercial area of Lidcombe, NSW. The following sensitive receptors are located within 1 kilometre (km) of the site:

- Haslams Creek is located adjacent to the north and western site boundaries.
- Residential areas are located approximately 200 m to the south of the site beyond Parramatta Road and approximately 100 to 200 m to the north of the site beyond Haslams Creek.

Homebush Bay is located approximately 3 km to the north-east of the site.

3.5 NSW DECC Contaminated Sites Register

A search of the NSW Department of Environment and Climate Change (DECC[3])) on-line register was undertaken on 25 May 2009 for contaminated land notices (issued under the Contaminated Land Management Act 1997). The search indicated that the DECC does not hold any records relating to contamination of the site or immediately adjacent sites. DECC contaminated lands records are provided in **Appendix D**.

A number of current and former notices apply to the area of land between 1 km and 2 km to the north-east of the site. The area is known as the Sydney Olympic Park (SOP) and was the venue of the Sydney 2000 Olympic Games. Historically this large piece of land had been used for uncontrolled landfilling for many years prior to its development as the Games venue. This resulted in wide spread contamination of the area. Assessment of the contamination began in the late 1980's and site remediation began in the early 1990's.

3.6 NSW DECC Environmental Protection Licence

It is considered based on URS' understanding of the activities undertaken at the site that BevChain does not require an environment protection licence for the site.

[3] As of the 27 July 2009, DECC is now called the Department of Environment, Climate Change & Water (DECCW).

4

Site History

A review of the site history was undertaken to determine the historical use of the site, to identify activities with the potential to contaminate soil and/or groundwater at the site.

The history of the subject site and adjacent properties was compiled through the following sources:

- Anecdotal history provided by site representatives;
- Select historical aerial photographs provided by NSW Department of Lands;
- Historical Certificates of Title, provided and reviewed by Ausearch Pty Ltd; and
- Site records relating to historic dangerous goods storage, requested from WorkCover NSW.

4.1 Anecdotal History

Steven Glasovac, BevChain Site Supervisor, was interviewed during the site visit. Steven has reportedly been at the site for one year and was unable to provide anecdotal information concerning past uses of the site. However, the Site Supervisor reported that BevChain has occupied the site for the past 5 years and that no environmental incidents had occurred in the last year.

4.2 Historical Aerial Photographs

Historical aerial photographs of the site taken in 1951, 1961, 1978, 1986, 1996 and 2005 were obtained from the Department of Lands and reviewed to assess the history of development of the site. The review of the aerial photographs indicated the following:

Table 4-1 Historical Aerial Photographs

Date	Comment
May 1951	A single residential style property is evident to the centre of the site. The remainder of the site appears to be grass land. Haslams Creek is shown to the north and west of the site. Parramatta Road is evident to the south of the site. An industrial building was evident to the south of Parramatta Road with residential style properties evident beyond the industrial building. The areas to the north-east and north-west of the site were undeveloped grassland with sporadic trees and bushes.
1961	The site appeared to be undeveloped grassland. The single residential style property identified in the 1951 photograph had been removed. Industrial style buildings had been developed to the west of Haslams Creek. A rectangular style industrial building had been constructed on land immediately to the western boundary of the site. Foundations for a second building on the neighbouring site running parallel to Parramatta Road appeared to be underway. Development of industrial buildings had occurred to the south-west of the site.
May 1978	The site had been developed and appeared similar to its current (May 2009) layout. One large warehouse structure dominated the centre of the site. Awnings were visible to the western and eastern elevations. Two small structures were evident to the south-west entrance of the site. It is believed one of these structures is the current (May 2009) gatehouse. Development had increased significantly around the site. Two rectangular buildings on land immediately to the western boundary and identified in the 1961 photograph had been constructed. Three large warehouse structures had been constructed to the north-east of the site, the nearest approximately 200m from the site boundary. A large unused dirt road was evident to the northern boundary of the site. It is believed this was the construction phase of what would become the M4 motorway. Two bridges associated with the unsealed road were evident to the north of the site boundary.

Date	Comment
August 1986	The site appeared similar to its current (May 2009) layout. The unsealed road identified in the May 1978 photograph had been constructed and was shown to be a two lane road in either direction. The surrounding land use appeared to be relatively unchanged.
September 1996	The site appeared similar to its current (May 2009) layout. Only one small structure believed to be the current (May 2009) gate house was evident adjacent to the south-west entrance to the site. The surrounding land use appeared to be relatively unchanged.
December 2005	The site appeared similar to its current (May 2009) layout. The surrounding land use appeared to be relatively unchanged.

4.3 Historical Certificates of Title

A review of historical Certificates of Title was undertaken by Ausearch Pty Ltd on behalf of URS. The historical Certificates of Title are provided in **Appendix A**.

Lot 1 in DP 214452

Prior to consolidation of ownership in 1952 and 1953 Lot 1 in DP 214452 comprised the following:

- Part of the site of Hezlet Street;
- Part of the site of Haslams Creek;
- Common law title land held in the name of Alfred Cheetham Retired Insurance Superintendent;
- Land in Volume 5336 Folio 6 held in the name of Alfred Cheetham;
- Land in Volume 4605 Folio 98 held in the name of the Sydney Meat Preserving Company Limited from circa 1922 to 1949 then International Harvester Company of Australia Limited; and
- Land in Volume 5326 Folio 143 later Volume 6129 Folio 216 held in the name of the Metropolitan Meat Industry Board.

By various instruments circa 1942 the above referenced parcels (Lot 1 in DP 214452) excluding Volume 5326 Folio 143 later Volume 6129 Folio 216 were acquired by the Minister for Public Works.

By various instruments circa 1952 and 1953 the above referenced parcels were transferred by the Minister for Public Works and the Metropolitan Meat Industry Board to Hastings Deering Building Limited.

Subsequent ownership is shown in Table 4-2.

4 Site History

Table 4-2 Summary of Historical Certificates of Title

Land Description	Certificate of Title	Proprietor	Period of Ownership
Lot 1 in DP 214452	Bk. 1497 No. 396 Bk. 1915 No. 702 Volume 4605 Folio 98 Volume 5326 Folio 143 Volume 5336 Folio 6 Volume 6129 Folio 216 Volume 6496 Folio 194 Volume 6521 Folio 134 Volume 9284 Folio 179 Folio 1/214452	Hastings Deering Building Limited	1952 to October 1962
		Australian Mutual Provident Society -	October 1962 to August 1990
		Ruxan Pty Limited	August 1990 to March 1994
		Tallen Pty Limited	March 1994 to Date
Lot 1 in DP 522225	Volume 5326 Folio 143 Volume 6129 Folio 216 Volume 6496 Folio 194 Volume 9284 Folio 180 Volume 10470 Folio 120 Folio 1/522225	The Metropolitan Meat Industry Commissioner *later* The Metropolitan Meat Industry Board	Circa 1942 to February 1952
		Hastings Deering Building Limited	February 1952 to June 1967
		Australian Mutual Provident Society	June 1967 to August 1990
		Ruxan Pty Limited.	August 1990 to March 1994
		Tallen Pty Limited	March 1994 to Date

The historical Certificates of Title indicated the following registered Leases over parts of the site:

Lot 1 in DP 214452

- G762909 – 1957 to Hastings Deering Services Ltd.
- J811512 – 1964 to the Goodyear Tyre and Rubber Company (Australia) Limited
- U317548 – 1994 (also Lot DP 522225) to Hasbro Australia Pty limited and Kenner Parker Australia Limited later HAS Australia Pty Limited and Hasbro Australia Pty Ltd now Walker Corporation Pty Limited.

4.4 Dangerous Goods Review

URS submitted a request to WorkCover NSW for records relating to the storage of dangerous goods at Lot 1 DP214452 on 12 May 2009 (Appendix C). The records received by URS on 19 May 2007 indicated:

- A 'Registration of Premises for the Keeping of Inflammable Liquid and/or Dangerous Goods' form, dated 16 September 1964, stated the occupier as The Goodyear Tyre and Rubber Co (Australia) Ltd. The form indicated that the site had one dangerous goods Depot. An underground storage tank (UST) (Depot 1) was listed as having 1,000 gallon [approximately 4,546 Litres (L)] storage capacity containing mineral spirits. No site layout plan was available.
- A 'Registration of Premises for the Keeping of Inflammable Liquid and/or Dangerous Goods' form, dated 31 October 1975, stated the occupier as The Goodyear Tyre and Rubber Co (Australia) Ltd. The form indicated that the site had two dangerous goods Depots. An underground storage tank (UST) (Depot 1) was listed as having 10,000L storage capacity containing mineral spirits. Depot 2

was listed as another UST with a 5,000L storage capacity containing mineral spirits. No site layout plan was available.

- A 'Pump Proposal Form' stamped 5 November 1975 stated the occupier as The Goodyear Tyre and Rubber Co (Australia) Ltd. The form was for the installation of a UST with a storage capacity of 10,000L. A sketch on the proposal indicated the tank location to be approximately 30ft (approximately 9m) from a guardhouse and that a concrete slab was required over the tank. The pump was stated to be located 10ft (approximately 3m) from the UST. The form indicated that the product to be used was "M/S Super".
- A 'Dangerous Goods Act 1975 Contractor's Certificate Underground Storage Tanks' dated 6 February 1996 indicated that Clarrendy Pty Ltd. of Terranora, NSW removed one 5,000L UST and one 10,000L UST.

In summary the information indicates the presence of the following storage tanks:

- One 1,000 gallon (approximately 4,546L) UST tank installed in 1964;
- One 10,000L UST tank registered in 1975;
- One 5,000L UST, unknown location but believed to be in close proximity to the 10,000L UST registered in 1975;
- A proposal to install a 10,000L UST in the vicinity of the guardhouse in 1975;
- Certificate to confirm the removal of one 5,000L and one 10,000L USTs in 1996.

4.5 Summary of Site History Information

The current Site Supervisor was unable to provide a history of the site. The site is currently used to warehouse and distribute alcoholic beverages.

The historic aerial photographs indicate that the site was constructed between 1961 and 1978 on what appeared to be undeveloped land. A single residential style property stood on the site between 1951 and 1961 but was removed. The site appears to have remained relatively unchanged from when the current buildings on site were constructed.

The historical Certificates of Title indicated that the site was owned by The Metropolitan Meat Industry Commissioner later The Metropolitan Meat Industry Board, Hastings Deering Building Limited, The Australian Mutual Provident Society, Ruxan Pty Ltd and is currently owned by Tallen Pty Ltd.

A review of the records held by WorkCover NSW for the site in relation to dangerous goods storage indicates that two USTs have been present near the guardhouse on Lot 1 DP214452 since at least 1964. Information supplied by WorkCover indicates that the two USTs were later removed from in 1996.

5

Potential Soil and/or Groundwater Contamination Issues

This Section provides a summary of site operations with respect to potential sources of soil and/or groundwater contamination on Lot 1 in DP 214452.

5.1 Materials Handling and Storage

5.1.1 Storage Tanks

There was no visual evidence of underground or aboveground storage tanks and the Site Supervisor was not aware of any USTs. An email dated 11 May 2009 from Patrick Noone (Managing Director Costco Wholesale, Australia) to David Smith (URS) indicated that there was no knowledge of USTs on site and that the land owner did not have any information concerning USTs.

A search request to WorkCover NSW for information on licences to keep Dangerous Goods indicated that the site formerly contained one 10,000L UST and one 5,000L UST. A certificate under the Dangerous Goods Act 1975 indicated that the tanks were removed in 1996 by Clarrendy Pty Ltd. A map attached to the search records showed that the 10,000L UST tank was located within 30ft (approximately 9m) of the guard house and adjacent to the site boundary. It is likely that the guard house noted in the records is the same structure as the current (May 2009) gatehouse. Historical aerial photographs confirm that the current (May 2009) gate house has been in the same location since the site was developed in the early 1960's.

5.1.2 Other Chemical Use and Storage

Materials on site were observed to include the following:

- Alcoholic beverages including bottles of wine, aluminium cans of beer and pre-mixed spirits stored in cardboard boxes on wooden pallets;
- 50L kegs of various types of beer stored on wooden pallets;
- Approximately fifteen 200L white plastic drums containing pre-mixed alcohol solution;
- Approximately twenty-nine Class 2 LPG canisters in a secured cage to the east of the main warehouse used for powering fork lifts trucks on site;
- Two 15L containers of water biocide treatment (Hydro 255) located on the air handling equipment on the first floor of the main warehouse.

5.1.3 Soil Fill Material

The north-western boundary of the site (DP214452) shows that the site was levelled up using imported soil/fill material during site development. Since the backfill/landscaping material was imported, the material is regarded as a potential source of soil contamination.

5.2 Water Management

5.2.1 Water Supply and Use

The site is supplied with potable water from the Sydney Water Corporation (Sydney Water) mains water supply.

Water is used for the following purposes:

- Domestic water.
- The fire suppression system for the warehouse is mains fed and is backed up with a booster pump.

5.2.2 Wastewater Management

Currently, stormwater runoff from roofs and most paved areas is discharged directly to an underground piped stormwater drainage system which is expected to drain to Haslams Creek. There are approximately 10 surface water drains around the perimeter of the hard standing area. Stormwater runoff is not contained or monitored.

Spillages containing alcohol were reportedly cleaned up and discharged to the municipal sewer. Domestic waste is reported to discharge to sewer. A sewer diagram was not available during the site visit.

No significant issues associated with water supply and use was noted during the site assessment.

5.3 Waste Management

The following waste storage areas were observed during the site assessment:

- Timber from broken pallets and plastic wrap (1 x 3m3 bin) located in the main warehouse reportedly removed by JJ Richards.
- General waste (plastic and domestic) (1 x 3 m3 bin). General waste was reportedly removed from site by JJ Richards for disposal at landfill.

5.4 Asbestos Containing Materials

Due to the construction age of the buildings asbestos containing materials (ACMs) are likely to be present in the structures on site. An asbestos re-inspection report conducted by Parsons Brinkerhoff and dated May 2008 was available and viewed on site. The report confirmed the presence of ACMs on site. The report confirmed that asbestos cement sheeting was present in the main warehouse roof and other locations. The report recommended that an asbestos management plan (AMP) be developed and implemented and that identified ACMs be labelled.

The Phase 1 ESA does not include an asbestos survey.

5.5 Polychlorinated Biphenyls (PCBs)

There was no evidence of PCB containing transformer oils on the site.

5.6 Previous Environmental Investigations

The BevChain Site Supervisor was not aware of any previous soil or groundwater investigations or environmental audits that had been undertaken at the site.

5.7 Potential Off-site Sources of Contamination (Current and Historical)

Based upon a review of the historical maps, databases and regulatory information, there were no potential off-site sources of contamination identified from properties that are located directly adjacent to the site. Due to the nature of this ESA, no contact was made directly with the regulators or the operators of the adjacent Hertz Rentals on Lot 1 in DP 5222225 in relation to Lot 1 in DP214452 occupied by BevChain.

A potential vehicle wash bay was noted on the Hertz Rentals property (Lot 1 in DP 5222225) and was observed from the footpath adjacent to the Parramatta Road. Access to the adjacent Lots was not possible during the site inspection.

5.8 Summary of Potential Areas of Concern

The following is a summary of the potential sources of soil or groundwater contamination identified during the site inspection, information from interviews with BevChain personnel and the review of historical data.

Table 5-1 Summary of Potential Areas of Concern

Item No.	Potential Area of Concern	Potential Chemicals of Concern
1	Two former underground storage tanks with capacities of 10,000L and 5,000L and potentially located within 30ft of the gatehouse and adjacent to the site boundary.	Total petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), benzene, toluene, ethyl xylene, xylenes (BTEX).
2	Asbestos containing materials to the site buildings.	Chrysotile (white) asbestos, Amosite (brown) asbestos and crocidolite (blue) asbestos
3	Potential vehicle wash bay located on Lot 1 in DP 522225 occupied by Hertz Rental.	Total petroleum hydrocarbons, detergents and oils.

6

Phase 2 Environmental Site Assessment Methodology

6.1 Background

The objective of this Phase 2 ESA was to assess the Potential areas of concern identified in the Phase 1 ESA and characterise the contamination status of the underlying soil profile at the site as a result of current or historical operations at the site. The scope of this ESA does not include groundwater assessments. The geotechnical assessment of the site is presented in a separate report.

6.2 Soil Investigation

As part of this Phase 2 ESA, a soil investigation was performed on site in the areas predominantly outside, as well as inside the warehouse. Details of the soil investigation are summarised in the following table. Intrusive works were carried out during weekends in order to avoid disrupting site operations during week days. The locations of soil bores were selected with consideration of the results of the Phase 1 investigation which identified three areas of potential contamination. The locations of the soil bores are presented on **Figure 3**.

Table 6-1 Soil Investigation Activity Summary

Activity	Details
Date of Field Activities	29 and 31 May 2009 13 and 14 June 2009 4 July 2009
Service Location	"Dial Before You Dig" underground utility location service was used to obtain electricity, gas and optic fibre plans. Water and sewer plans were obtained from Sydney Water. Stormwater plans were obtained from Auburn Council. An independent subcontractor (Darryl Critcher) was engaged to identify underground services (RDE – Radio Detection Equipment) at all locations prior to any intrusive works commencing. Final drilling locations were marked at least 3 m from all identified services.
Drilling	All drilling locations were cleared using hand augering to 1.0 m below ground surface as per URS – Pre-Drilling Protocol. Mechanical drilling was undertaken using an E50 drilling rig, an XD drilling rig and a Hydrapower drilling rig. Drilling was carried out to a nominated depth of 3 m or until natural soil was encountered. Two soil bores (SB01 and SB02) were inaccessible with a mechanical drilling rig, hence were hand augered until refusal.
Soil Logging	Soil classifications and descriptions are based on Unified Soil Classification System (USCS). Soil descriptions for the lithology encountered during drilling are presented in the bore logs in **Appendix F**.
Sampling Methodology	Samples were collected from soil cuttings to the termination of drilling. Samples were first placed in a clean laboratory supplied zip-lock plastic bag and field head space screened using a portable photo-ionisation detector for presence of volatile organic compounds (VOCs). After the screening, the selected samples were placed in clean, laboratory-supplied acid washed solvent rinsed glass jars.
Sample Preservation	Samples were stored on ice, in an esky whilst conducting the field work and during transit to the laboratory.
Disposal of Soil Cuttings	Soil cuttings were used to backfill the drilled bores with excess material being drummed in 205 L drums and disposed of by a waste disposal contractor, Volman Enterprises, in accordance with NSW legislation.
Borehole Abandonment	One soil bore (SB03) was abandoned and reinstated by backfilling after asbestos fragments were encountered at 0.3 m below ground surface.

6.3 Acid Sulphate Soils Investigation

In view of the realigned course of the Haslams Creek, variation was made to the scope by Costco through their Civil and Structural Engineering Consultants (Seattle Structural) to commission URS to investigate suspected acid sulphate soils (ASS). The assessment of the ASS was also a requirement for the redevelopment of the site from the Director General in the Department of Planning. Details of the monitoring well installations are summarised in the following table. The locations of monitoring wells are presented on **Figure 4**.

Table 6-2 Acid Sulphate Soils Investigation Activity Summary

Activity	Details
Date of Field activities	25 and 26 July 2009 1 and 2 August 2009
Service Location	After plans on services had been obtained through the "Dial Before You Dig" search, a cable locating subcontractor was engaged to search for underground services at all locations prior to any intrusive works commencing. Final drilling locations were marked at least 3 m from all identified services.
Selection of drilling locations	Locations were selected outside the warehouse for health and safety reasons. Based on the plan provided to URS by Costco for the realigned creek channel, two test bores MW01D and MW02D were marked within the presumed corridor of the old channel and MW3D and MW4D were marked in areas that were part of geotechnical investigations (see Figure 3).
Drilling	A further 8 bores were drilled at 4 locations during the weekend of 25 July and 1 August 2009, and 4 shallow and 4 deep groundwater monitoring wells were installed at these locations. The bore locations are presented on **Figure 4**. Shallow bores were drilled to a nominated depth of 6 m and deep bores to 15 m depending on ground conditions.
Soil Logging	Soil classifications and descriptions are based on Unified Soil Classification System (USCS). Soil descriptions for the lithology encountered during drilling are presented in the bore logs in **Appendix G**.
Sampling Methodology	Samples of suspected ASS were collected from soil cuttings during drilling. Six samples were collected, three each from MW1D and MW2D. Soil profiles from the other 2 locations, MW3D and MW4D, did not present suspected ASS characteristics (greyish to black colour and the rotten egg odour) and hence were not sampled.
Sample Preservation	Samples were placed in clean laboratory supplied zip-lock plastic bags. They were immediately placed in an esky before being placed in a deep freezer within an hour of sampling. The samples were submitted to the laboratory in a frozen state.
Disposal of Soil Cuttings	Soil cuttings and waste water were drummed in 205 L drums and disposed of by John Volman of Volman Enterprises, a waste disposal contractor in accordance with NSW legislation.

7

Results

7.1 Specific Site Geology

Based on the drilling conducted during this investigation, the geological details are summarised below.

Table 7-1 General Local Geological Details

Depth (mbgl)	Lithology
0.0 - 0.15	Concrete / Bitumen with road base material
0.15 - 1.5	FILL: Sand, brown, medium grained, no odour with minor clay inclusions in some places
1.5 - 5.0	CLAY: Greyish brown clay, gravelly in some places with minor ironstone rock fragments, medium plasticity
5.0 - 6.5	SHALE: Completely weathered shale, grey
6.5 - 15	SHALE: Fractured to fresh, grey

Boreholes were drilled to depths ranging from 0.8 m to 15.0 m and the soil profile layers are variable in depth across the site. Generally, concrete or bitumen with road base is present at the surface. Below this is a brown sand fill which is underlain by greyish brown clay, gravelly in some places with minor ironstone rock fragments. Underlying the clay is weathered shale which then grades into fractured and fresh shale.

7.2 Field and Laboratory Analytical Data

7.2.1 Applicable Assessment Criteria

Soil Investigation Levels

The soils investigations levels (SILs) adopted for assessment of the soil analytical results for the Phase 2 ESA are discussed below. The adopted ILs are summarised in Table 1. Where necessary, calculation of 95% Upper Confidence Limit (UCL) of the arithmetic average concentration to establish if the adopted criteria are still exceeded was applied.

NEPM Health Based Investigation Levels

The National Environment Protection Council (NEPC, 1999) provides risk-based Health Investigation Levels (HIL) for selected organic and inorganic chemicals in soils. Different levels are provided for a variety of exposure settings including residential, open-space / parks / recreational and commercial / industrial land uses. The NEPM HILs have been developed to be protective of human health and do not take into account environmental concerns. URS considers the NEPM HIL Level F (commercial/industrial) to provide appropriate investigation levels for the site. The NEPM HIL F guideline concentrations for PAHs and selected inorganics are presented in Table 1.

NSW EPA Guidelines

In lieu of reliable threshold concentrations set for benzene, toluene, ethylbenzene, total xylenes and unspeciated total petroleum hydrocarbons (TPH) within the NEPC (1999) NEPM, the NSW EPA Guidelines for Assessing Service Station Sites (1994) threshold concentrations has been adopted as

7 Results

the investigation levels for these analytes. The NSW EPA sensitive land use guideline concentrations for BTEX and unspeciated total petroleum hydrocarbons are presented in Table 1.

Statistical Assessment

Where laboratory analytical results are above the adopted investigation levels, a statistical assessment of the laboratory results was performed. If the 95 % Upper Confidence Limit (UCL) of the mean concentration for the contaminant of concern is less than the adopted investigation level, then the data set for that population is considered to meet the investigation requirements. Individual concentrations should however, be less than 250% of the adopted remediation guideline and the standard deviation should be less than 50% of the adopted remediation guideline.

Waste disposal Levels

Off-site Waste Disposal Guidelines

According to the Protection of the Environment Operations Act 1997, disposal of solid waste (excavated soils) generated during site development require pre-classification of the material to ensure environmental and human health risks associated with the material are managed appropriately. Classification was completed for the site PCOC with reference to the threshold concentrations provided in the DECC, NSW (2008) Waste Classification Guidelines: Part 1: Classifying Waste

Acid Sulphate Soils Investigation Criteria

The “Acid Sulphate Soils Assessment Guidelines” (Stone et al., 1998) outline the action criteria triggering the need for a management plan. The criteria are based on the percentage of oxidisable sulphur for broad categories of soil types. The action criteria are differentiated on the basis of soil textural characteristics and are shown in the table below.

Table 7-2 Action Criteria based on ASS soil analysis

Type of Material		Action Criteria if 1 to 1000 tonnes		Action Criteria if more than 1000 tonnes	
		Existing + Potential Acidity		Existing + Potential Acidity	
Texture Range	**Approximate clay content** *(%<0.002mm)*	**Sulphur Trail** *% S oxidisable (oven-dry basis)*	**Acid Trail** *mol H^+ / **tonne** (oven-dry basis)*	**Sulphur Trail** *% S oxidisable (oven-dry basis)*	**Acid Trail** *mol H^+ / **tonne** (oven-dry basis)*
Coarse Texture: Sands to loamy sand	≤ 5	0.03	18	0.03	18
Medium texture: Sandy loams to light clays	5-40	0.06	36	0.03	18
Fine texture: Medium to heavy clays and silty clays	≥ 40	0.1	62	0.03	18

Disturbances of soils that exceed these action criteria should only commence after preparation of management plan and development consent.

7 Results

7.2.2 Analytical Program

Soil Sampling

A total of 27 soil bores were drilled and sampled, 23 outside the warehouse and 4 inside the warehouse (see sampling plan and attached logs). A total of 38 representative primary soil samples and 8 quality control samples were collected and submitted to the laboratory for analysis. No samples were collected from SB03 because asbestos fragments were encountered at a depth of 0.3 m in the sand fill material and the bore was abandoned.

The soil samples submitted to ALS Laboratories Pty Ltd (ALS) for the following analysis:

- 38 soil samples for TPH fractions and BTEX compounds;
- 38 soil samples for selected inorganics (arsenic, cadmium, chromium, copper, lead, nickel, zinc and mercury);
- 16 soil samples for PAHs; and
- 20 soil samples for Asbestos fibres.

Quality assurance and quality control (QA/QC) samples were collected during each sampling event. This included 6 field duplicates, 6 rinsate blank and 6 field blank which were submitted to ALS, and 2 spilt samples (field triplicates) which were submitted to Envirolab Services Pty Ltd (Envirolab) for analysis.

Acid Sulphate Soil Sampling

Two test bores MW01D and MW02D were drilled within the presumed old Haslams Creek corridor (see Figure 4). Six soil samples (3 from each location) were collected and submitted to ALS Laboratories Pty Ltd (ALS) for assessment of Acid Sulfate Soils (ASS) using the Suspension Peroxide Oxidation Combined Acidity and Sulphate method (SPOCAS). Soil profiles from the other two locations, MW3D and MW4D, located outside the presumed old channel, did not present suspected ASS characteristics and were not sampled. Further assessment of the site will be required in order to delineate and quantify the volume of ASS likely to be excavated/disturbed during site redevelopment.

7.2.3 Analytical Data Validation

Analytical data validation is the process of assessing whether data are in compliance with method requirements and project specifications. The primary objectives of this process are to ensure that data of known quality are reported, and to identify if the data can be used to fulfil the overall project objectives.

The data validation guidelines adopted are based on data validation guidance documents published by the United States Environmental Protection Agency (US EPA). These include the US EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Data Review, June 2008; US EPA Contract Laboratory Program for National Functional Inorganic Data Review, October 2004; and the US EPA Guidance on Environmental Data Verification and Data Validation, November 2002. The process involves the checking of analytical procedure compliance and an assessment of the accuracy and precision of analytical data from a range of quality control measurements, generated from both the field sampling and analytical programs.

Specific elements that have been checked and assessed for this project include:

- preservation and storage of samples upon collection and during transport to the laboratory;
- ample holding times;
- use of appropriate analytical and field sampling procedures;
- required limits of reporting;
- frequency of conducting quality control measurements;
- rinsate and field blank results;
- laboratory blank results;
- field duplicate and triplicate results;
- laboratory duplicate results;
- matrix spike (MS) results;
- surrogates spike results;
- review of chromatograms; and
- the occurrence of apparently unusual or anomalous results, e.g., laboratory results that appear to be inconsistent with field observations or measurements.

Specific elements that have been checked and assessed for this project are detailed in **Appendix H**.

Analytical Data Quality

Data validation reports for the analytical data prepared on a batch by batch basis are attached in **Appendix G**.

On the basis of the analytical data validation procedure employed, the overall quality of the soil analytical data produced is considered to be of an acceptable standard for interpretive use. However, the following points should be noted:

- Zinc was detected in some field blank samples and rinsate blank samples. These concentrations were reconfirmed by the laboratory. It is possible that zinc was present in the rinsate water supplied by the laboratory. These detections should not effect the overall data quality as they are an order of magnitude lower than detections in the primary samples;
- Envirolab may not report laboratory duplicate and matrix samples recoveries on smaller jobs; and
- Level of reporting raised for toluene due to ambient background levels in the laboratory.

A more detailed data validation summary for these batches is attached in Appendix H.

7.3 Soil Analytical Results

The results of analyses are provided in the attached laboratory reports and are summarised in the attached **Table 1**.

7.3.1 TPH and BTEX compounds

Results for TPH fractions show that concentrations were either below the respective laboratory detection limits or adopted investigation levels except for sample SB10_1.0_13/07/09 which contained a calculated total concentration of TPH (C_{10}–C_{36} fraction) of 1050 mg/kg which is marginally above the adopted investigation level of 1000 mg/kg. No indications of potential contamination were noted around this location during Phase 1 investigations and also during intrusive sampling. A statistical assessment was performed on the TPH results across the site. The 95% UCL result (191 mg/kg) was less than the investigation guideline (1000 mg/kg) and hence the data set met the investigation criteria.

7 Results

Results for BTEX compounds show that all concentrations were below the respective laboratory detection limits.

7.3.2 Selected Inorganics

The concentrations of selected inorganics, including: arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc were either below the respective laboratory detection limits or the adopted investigation levels in all soil samples analysed.

7.3.3 PAHs

The concentrations of total PAHs and the individual PAH, benzo[a]pyrene (B[a]P), were either below the respective laboratory detection limits or the adopted investigation levels in all soil samples analysed. However, there were exceedances of respective LORs in one sample collected at SB12. This sample was collected at a depth of 1.9 m bgl and comprised of moist soft silty clay, dark grey in colour.

7.3.4 Asbestos

The 20 samples analysed for asbestos did not indicate the presence of asbestos fibres in the soils tested. However, in view of the uncovering of fragments of asbestos at SB03, a management plan for asbestos should be developed before the start of redevelopment work at the site.

7.3.5 Material Classification

According to the Protection of the Environment Operations Act 1997, disposal of solid waste (excavated soils) generated during site redevelopment require pre-classification of the material to ensure environmental and human health risks associated with the material are managed appropriately

Concentrations of the selected inorganics, TPH/BTEX compounds and PAHs and the individual PAH, (B[a]P), in all samples analysed were below the threshold criteria for classification of the soil/fill materials for off-site disposal as General Solid Waste with the exception of sample SB12_1.9_30/05/09.

The B[a]P concentrations in soil sample SB12_1.9_30/05/09 (2.2 mg/kg), exceeded the maximum threshold criteria of 0.8 mg/kg for classification of material as General Solid Waste without undertaking TCLP testing. This sample was therefore nominated for TCLP testing followed by analysis for B[a]P to allow comparison of the combined total and leachable B[a]P concentrations against the maximum threshold criteria of 10 mg/kg (total) and 0.04 mg/L (leachable) B[a]P, for classification of the waste as General Solid Waste. The leachable B[a]P analysis result for the sample (presented in Table 1) was <0.0005 mg/L and below the General Solid Waste threshold value (0.04 mg/L). Hence the material can be classified for off-side disposal as General Solid Waste.

Asbestos impacted soils (if present) would be classified as a Special Waste and require AS1 licensed contractors to excavate and dispose of the materials using appropriate precautions as described in the WorkCover NSW requirements.

7 Results

7.3.6 Acid Sulphate Soils

Laboratory testing (SPOCAS) was carried out on six soil samples and the results are presented in Table 2. As no information is available as to the volume of soil which is proposed to be disturbed the most conservative trigger value has been assumed of 0.03%S Equivalent Sulphur (existing + potential acidity). The results indicate that:

Actual Acidity

- pHKCl results indicate no actual acidity in any sample analysed except for sample MW02D_2.9_26/07/09 which returned a pH_{KCl} of 4.1, indicating the presence of some limited AASS at this location; however
- Titratable Actual Acidity (TAA) values were reported in three samples with a range of 0.02-0.06%S at depths of between 1.8 and 4.0 m below ground level, indicative of some actual acidity.

Potential Acidity

- pH_{OX} results indicate decreases in pH as a result of oxidation for all samples except MW01D_3.5-25/7/09 (which showed an increase); generally pH_{OX} results are expected to be lower than pH_{KCl} for PASS material. The pH_{OX} values ranged from 2.1 – 6.9 pH units. Indicatively a pH_{OX} of less than 3 suggests PASS, which was noted at 6 m below ground level in MW01D and 4.6 m in MW02D. Additionally it was noted in both soil bores that the pH_{OX} values continually decreased with depth indicating an increase in the presence of PASS with depth;
- A similar trend was observed with the Peroxide Oxidisable Sulfur – sulphur units (S_{POS}) values which ranged from 0.05 to 2.19 %S. This parameter is indicative of the "potential" of the soil to generate acid. The S_{POS} increased with depth at both locations, further indicating an increasing presence of PASS with depth; and
- Net Acid Soluble Sulfur (S_{NAS}) was reported less than laboratory limit of reporting (LOR) for only one sample (MW02D_2.9_26/07/09). This parameter provides an estimate of the insoluble sulphur content (indicator of PASS) of the soil.

Net Neutralising Capacity

- Excess Acid Neutralising Capacity (EANC) is indicative of some buffering capacity present in these samples and was observed only in one sample at MW01D_3.5_25/07/09 (0.03%S).

Net Acidity

- The Net acidity values were recorded for five samples out of the total six samples which range from 0.08 – 2.09%S; and
- The Liming rate calculated for these samples range from 4 - 98 kg lime /tonne.

8

Conclusions, Recommendations and Limitations

A preliminary investigation of the site has been undertaken in accord with SEPP 55 and associate guidelines, as well as to support a planning application for a commercial retail development. The conclusions and recommendations of the preliminary investigation are provided below.

8.1 Phase 1 ESA

The Phase 1 ESA identified the following four areas of concern with respect to potential site contamination:

- Imported backfill/ landscaping material used to level up the site during initial site development;
- One former 10,000 litre underground storage tank (UST) and one former 5,000 litre UST. The location of the 5,000 litre UST could not be confirmed, however, it is likely that it was in close proximity to the 10,000 litre UST near the existing guardhouse. These tanks were reportedly removed in 1996;
- Asbestos containing materials within the site buildings; and
- Potential vehicle wash bay located on the Hertz Rentals site (Lot 1 in DP 522225). Access to these Lots was not possible during the site inspection. A visual inspection was conducted from the footpath adjacent to Parramatta Road.

8.2 Phase 2 ESA

The Limited Phase 2 ESA field investigations were restricted by the current site operations. Based on the preliminary environmental investigations, laboratory soils chemical results indicate that:

- The concentration of nominated analytes in soils underneath the site are below adopted soil investigation levels appropriate to commercial/industrial land use;
- Fragments of asbestos containing sheeting were found at one sampling location, however, no asbestos fibres were detected in the soil samples analysed;
- The fill materials underneath the site would be classified as General Solid Waste (non putrescible) for off-site disposal purposes; and
- In relation to acid sulphate soil conditions, potential acid sulphate soil, with minimal buffering capacity, is present in soils occurring within the assumed old Haslams Creek alignment.

It is recommended that:

- The finding of fragments of asbestos during drilling (at SB03), warrants development of an asbestos management plan prior to site redevelopment work;
- Further investigations are required in areas to be excavated within the footprint of the new building to quantify the volume of ASS to be managed during construction and an ASS management plan should be developed prior to excavation works; and
- Additional investigations be undertaken to confirm the preliminary findings when unrestricted access to the building area is allowed.

8.3 Limitations

The conclusions and all information in this Report is provided strictly in accordance with and subject to the following limitations and recommendations:

a) This Report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by URS for use of any part of this Report in any other context.
b) This conclusion is based solely on the available information and findings contained in this Report.
c) This conclusion is based solely on the scope of work agreed between URS and Costco and described in section 1.3 ("Scope of Works") of this Report.
d) This Report has been prepared for the sole benefit of Costco and neither the whole nor any part of this Report may be used or relied upon by any party other than Costco.
e) This Report is dated 7 September 2009 and is based on the conditions encountered during the site investigations conducted, and information reviewed, from 29 May 2009 to 24 August 2009. URS accepts no responsibility for any events arising from any changes in site conditions or in the information reviewed that have occurred after the completion of the site investigations.
f) The investigations carried out for the purposes of the Report have been undertaken, and the Report has been prepared, in accordance with normal prudent practice and by reference to applicable environmental regulatory authority and industry standards, guidelines and assessment criteria in existence at the date of this Report.
g) Where this Report indicates that information has been provided to URS by third parties, URS has made no independent verification of this information except as expressly stated in the Report.
h) URS has tested only for those chemicals specifically referred to in this Report. URS makes no statement or representation as to the existence (or otherwise) of any other chemicals.
i) Except as otherwise specifically stated in this Report, URS makes no warranty or representation as to the presence or otherwise of asbestos and/or asbestos containing materials ("ACM") on the site. If fill has been imported on to the site at any time, or if any buildings constructed prior to 1970 have been demolished on the site or materials from such buildings disposed of on the site, the site may contain asbestos or ACM. Without limiting the generality of sub-clauses (h) and (m), even if asbestos was tested for and those test results did not reveal the presence of asbestos at specific points of sampling, asbestos may still be present at the site if fill has been imported at any time, or if any buildings constructed prior to 1970 have been demolished on the site or materials from such buildings disposed of on the site.
j) No investigations have been undertaken into any off-site conditions, or whether any adjoining sites may have been impacted by contamination or other conditions originating from this site.
k) Preliminary Investigations undertaken in respect of this Report are limited to areas accessed on site outside and inside the warehouse building.
l) Investigations undertaken in respect of this Report are constrained by the particular site conditions, mainly the restrictive normal site operations and services. As a result, not all relevant site features and contamination may have been identified in this Report.
m) Subsurface conditions can vary across a particular site and cannot be exhaustively defined by the investigations described in this Report. It is unlikely therefore that the results and estimations expressed in this Report will represent conditions at any location removed from the specific points of sampling.
n) A site which appears to be unaffected by contamination at the time the Report was prepared may later, due to natural phenomena or human intervention, become contaminated.

8 Conclusions, Recommendations and Limitations

o) Except as specifically stated above, URS makes no warranty, statement or representation of any kind concerning the suitability of the site for any purpose or the permissibility of any use, development or re-development of the site.

p) Use, development or re-development of the site for any purpose may require planning and other approvals and, in some cases, environmental regulatory authority and accredited site auditor approvals. URS offers no opinion as to whether the current use has any or all approvals required, is operating in accordance with any approvals, the likelihood of obtaining any approvals for development or redevelopment of the site, or the conditions and obligations which such approvals may impose, which may include the requirement for additional environmental works.

q) URS makes no determination or recommendation regarding a decision to provide or not to provide financing with respect to the site.

9

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Tables

Table 1. Soil Analytical Results
17-21 Parramatta Road, Lidcombe, NSW
URS Job No. 43217997

Location					SB01_0.5	SB02_0.7	SB04_0.8	SB04_3.0	SB05-1.5	SB06-0.9	SB06-4.5	SB07-1.1	SB07-1.1	SB08-0.9	SB09-0.9	SB09-2.8	SB09-2.8	SB09-2.8	SB10-1.0	SB10-3.0
Date Sampled					29/05/2009	29/05/2009	29/05/2009	29/05/2009	14/06/2009	13/06/2009	13/06/2009	31/05/2009	31/05/2009	14/06/2009	14/06/2009	14/06/2009	14/06/2009	14/06/2009	13/06/2009	13/06/2009
Sample Type					PS	PS	PS	PS	PS	PS	PS	PS	FD	PS	PS	PS	FD	FT	PS	PS
Primary Sample ID					SB01_0.5_29/05/09	SB02_0.7_29/05/09	SB04_0.8_29/05/09	SB04_3.0_29/05/09	SB05_1.5_14/06/09	SB06_0.9_13/06/09	SB06_4.5_13/06/09	SB07_1.1_31/05/09	QC103_31/05/09	SB08_0.9_14/06/09	SB09_0.9_14/06/09	SB09_2.8_14/06/09	QC105_14/06/09	QC205_14/06/09	SB10_1.0_13/06/09	SB10_3.0_13/06/09
				Contaminant Thresholds																
Analyte	**LOR**	**Units**	**Soil ILs**	**General Solid Waste (1)**	**Restricted Solid Waste (1)**															
Total Petroleum Hydrocarbons																				
C6-C9 fraction	10	mg/kg	**65**	- -	- -	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<25	<10	<10
C10-C14 fraction	50	mg/kg	-	- -	- -	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15-C28 fraction	100	mg/kg	-	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	**700**	<100
C29-C36 fraction	100	mg/kg	-	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	**350**	<100
C10-C36 Fraction	Calculated	mg/kg	**1000**	- -	- -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1050**	-
BTEX Compounds																					
Benzene	0.2	mg/kg	- -	**10**	**40**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	0.5	mg/kg	- -	**288**	**1152**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	mg/kg	- -	**600**	**2400**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5
m&p-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5
o-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5
Total Xylene	Calculated	mg/kg	- -	**1000**	**4000**	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Inorganics					**-**																
Arsenic	5	mg/kg	**500**	- -	- -	<5	**11**	**7**	<5	**9**	**14**	**6**	**7**	**8**	**8**	**6**	<5	**5**	**<4**	**10**	<5
Cadmium	1	mg/kg	**100**	- -	- -	<1	<1	<1	<1	<1	<1	<1	<1	**1**	<1	<1	<1	<1	<0.5	**5**	<1
Chromium (III)	2	mg/kg	**500**	- -	- -	**9**	**12**	**9**	**5**	**21**	**10**	**9**	**31**	**22**	**15**	**14**	**6**	**7**	**3**	**26**	**5**
Copper	5	mg/kg	**5000**	- -	- -	**6**	**20**	**14**	**7**	**5**	**130**	**87**	<5	<5	**10**	**6**	<5	**10**	**3**	**88**	**59**
Lead	5	mg/kg	**1500**	- -	- -	**24**	**84**	**28**	**8**	**41**	**18**	**45**	**13**	**17**	**13**	**12**	**6**	**8**	**4**	**92**	**7**
Mercury (inorganic)	0.1	mg/kg	**75**	- -	- -	**0.2**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Nickel	2	mg/kg	**3000**	- -	- -	<2	<2	**2**	<2	**2**	**2**	**2**	<2	<2	<2	<2	<2	<2	<1	**40**	<2
Zinc	5	mg/kg	**35000**	- -	- -	**15**	**55**	**32**	**8**	**29**	**16**	**33**	**31**	**360**	**9**	**7**	<5	<5	2	**292**	<5
Polycyclic Aromatic Hydrocarbons				- -	- -																
Acenaphthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Acenaphthylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Benzo(a)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Benzo(a)pyrene	0.5	mg/kg	**5**	**0.8**	**3.2**	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.05	NA	<0.5
B(a)P TCLP	0.5	µg/l	- -	0.04mg/l (2) / 10mg/kg (3)	0.16mg/l / 23mg/kg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo(b)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Benzo(g,h,i)perylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Benzo(k)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.2	NA	<0.5
Chrysene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Dibenzo(a,h)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Fluorene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Indeno(1,2,3,cd)pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Naphthalene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Phenanthrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.1	NA	<0.5
Total PAHs	Calculated	mg/kg	**100**	- -	- -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content																					
Moisture Content	1	%	-	- -	- -	**20.9**	**11.4**	**12.4**	**18.4**	**25.2**	**15.4**	**20.1**	**23**	**20.9**	**19.6**	**19.5**	**15.7**	**16.1**	NA	**16.1**	**15.5**
Asbestos																					
Asbestos			- -	- -	- -	ND	NA	ND	NA	ND	ND	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA

Legend:

Exceeds Soil Investigation Levels
Exceeds General Solid Waste Investigation Levels
Exceeds Restricted Solid Waste Investigation Levels

(1) - NSW DECC 2008- NSW, Department of Climate Change, Waste Classifcation Guidelines 2008, Part 1: Classifying Wastes.
(2) - Leachable B[a]P concentrations
(3) - Combined total B[a]P concentration
PS = Primary Sample
FD = Field Duplicate
FT - Field Triplicate
ND - No Fibres Detected
NA - Not Analysed
- - No investigation level
LOR - Limit of reporting

Prepared by: HM
Checked by: JS

Table 1. Soil Analytical Results
17-21 Parramatta Road, Lidcombe, NSW
URS Job No. 43217997

Location					SB11-3.0	SB11-3.0	SB12_0.9	SB12_1.9	SB13_0.8	SB13_0.8	SB13_0.8	SB13_3.0	SB14_1.1	SB15-0.8	SB16-0.9	SB16-4.5	SB17-2.0	SB18_1.5	SB18_1.5	SB18_3.0
Date Sampled					14/06/2009	13/06/2009	30/05/2009	30/05/2009	30/05/2009	30/05/2009	30/05/2009	30/05/2009	30/05/2009	13/06/2009	14/06/2009	14/06/2009	14/06/2009	29/05/2009	29/05/2009	29/05/2009
Sample Type					PS	FD	PS	PS	PS	FD	FT	PS	PS	PS	PS	PS	PS	PS	FD	PS
Primary Sample ID					SB11_3.0_14/06/09	QC104_13/06/09	SB12_0.9_30/05/09	SB12_1.9_30/05/09	SB13_0.8_30/05/09	QC101_30/05/09	QC201_30/05/09	SB13_3.0_30/05/09	SB14_1.1_30/05/09	SB15_0.8_13/06/09	SB16_0.9_14/06/09	SB16_4.5_14/06/09	SB17_2.0_14/06/09	SB18_1.5_29/05/09	QC100_29/05/09	SB18_3.0_29/05/09
				Contaminant Thresholds																
Analyte	LOR	Units	Soil ILs	General Solid Waste (1)	Restricted Solid Waste (1)															
Total Petroleum Hydrocarbons																				
C6-C9 fraction	10	mg/kg	**65**	- -	- -	<10	<10	<10	<10	<10	<10	<25	<10	<10	<10	<10	<10	<10	<10	<10
C10-C14 fraction	50	mg/kg	-	- -	- -	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15-C28 fraction	100	mg/kg	-	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29-C36 fraction	100	mg/kg	-	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10-C36 Fraction	Calculated	mg/kg	**1000**	- -	- -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX Compounds																				
Benzene	0.2	mg/kg	- -	**10**	**40**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	0.5	mg/kg	- -	**288**	**1152**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	mg/kg	- -	**600**	**2400**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m&p-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylene	Calculated	mg/kg	- -	**1000**	**4000**	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Inorganics					-															
Arsenic	5	mg/kg	**500**	- -	- -	<5	<5	<5	**5**	<5	<5	**7**	<5	<5	<5	<5	**13**	<5	**6**	**7**	**7**
Cadmium	1	mg/kg	**100**	- -	- -	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (III)	2	mg/kg	**500**	- -	- -	**9**	**4**	**8**	**16**	**5**	**4**	**15**	**5**	**2**	<2	**3**	**10**	**3**	**15**	**15**	**13**
Copper	5	mg/kg	**5000**	- -	- -	**6**	**47**	**9**	**16**	**6**	<5	**9**	**9**	<5	**47**	<5	**8**	<5	**11**	**13**	**11**
Lead	5	mg/kg	**1500**	- -	- -	**6**	**7**	**18**	**70**	**9**	**9**	**18**	**10**	<5	**5**	<5	**16**	<5	**13**	**13**	**11**
Mercury (inorganic)	0.1	mg/kg	**75**	- -	- -	<0.1	<0.1	<0.1	**0.3**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	2	mg/kg	**3000**	- -	- -	<2	<2	**2**	**3**	<2	<2	3	<2	<2	<2	**3**	**3**	<2	**6**	**3**	<2
Zinc	5	mg/kg	**35000**	- -	- -	**5**	<5	**27**	**52**	**9**	**9**	**14**	**6**	<5	**11**	**8**	**13**	<5	**14**	**10**	<5
Polycyclic Aromatic Hydrocarbons				- -	- -															
Acenaphthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Acenaphthylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**0.8**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Benzo(a)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**2.6**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Benzo(a)pyrene	0.5	mg/kg	**5**	**0.8**	**3.2**	NA	<0.5	NA	**2.2**	<0.5	<0.5	<0.05	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
B(a)P TCLP	0.5	µg/l	- -	0.04mg/l (2) / 10mg/kg (3)	0.16mg/l / 23mg/kg	N/A	N/A	N/A	<0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzo(b)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**2.6**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Benzo(g,h,i)perylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**1.3**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Benzo(k)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**1.2**	<0.5	<0.5	<0.2	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Chrysene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**1.9**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Dibenzo(a,h)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**4.2**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Fluorene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Indeno(1,2,3,cd)pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**1**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Naphthalene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Phenanthrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**2.8**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	**3.8**	<0.5	<0.5	<0.1	NA	NA	NA	<0.5	NA	<0.5	<0.5	<0.5	NA
Total PAHs	Calculated	mg/kg	**100**	- -	- -	-	-	-	**24.4**	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content																				
Moisture Content	1	%	-	- -	- -	**18.2**	**15.2**	**14.2**	**18.3**	**8.2**	**16.7**	**10**	**17.3**	**5.7**	**2.2**	**5.7**	**20.4**	**7.5**	**14.6**	**17.7**	**14.6**
Asbestos																				
Asbestos			- -	- -	- -	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	NA	ND

Legend:

Exceeds Soil Investigation Levels
Exceeds General Solid Waste Investigation Levels
Exceeds Restricted Solid Waste Investigation Levels

(1) - NSW DECC 2008- NSW, Department of Climate Change, Waste Classifcation Guidelines 2008, Part 1: Classifying Waste
(2) - Leachable B[a]P concentrations
(3) - Combined total B[a]P concentration
PS = Primary Sample
FD = Field Duplicate
FT - Field Triplicate
ND - No Fibres Detected
NA - Not Analysed
- - No investigation level
LOR - Limit of reporting

Table 1. Soil Analytical Results
17-21 Parramatta Road, Lidcombe, NSW
URS Job No. 43217997

Location						SB19-0.5	SB19-3.5	SB20-3.0	SB21-3.0	SB22-0.8	SB22-3.0	SB23-1.0	SB24_1.5	SB24_3.0	SB25_1.0	SB25_4.0	SB25_4.0	SB26_1.5	SB27_0.8
Date Sampled						14/06/2009	14/06/2009	14/06/2009	14/06/2009	31/05/2009	31/05/2009	14/06/2009	4/07/2009	4/07/2009	4/07/2009	4/07/2009	4/07/2009	4/07/2009	4/07/2009
Sample Type						PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	FD	PS	PS
Primary Sample ID						SB19_0.5_14/06/09	SB19_3.5_14/06/09	SB20_3.0_14/06/09	SB21_3.0_14/06/09	SB22_0.8_31/05/09	SB22_3.0_31/05/09	SB23_1.0_14/06/09	SB24_1.5_4/07/09	SB24_3.0_4/07/09	SB25_1.0_4/07/09	SB25_4.0_4/07/09	QC106_4/07/09	SB26_1.5_4/07/09	SB27_0.8_4/07/09
				Contaminant Thresholds															
Analyte	LOR	Units	Soil ILs	General Solid Waste (1)	Restricted Solid Waste (1)														
Total Petroleum Hydrocarbons																			
C6-C9 fraction	10	mg/kg	**65**	- -	- -	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10-C14 fraction	50	mg/kg	**-**	- -	- -	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15-C28 fraction	100	mg/kg	**-**	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29-C36 fraction	100	mg/kg	**-**	- -	- -	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10-C36 Fraction	Calculated	mg/kg	**1000**	- -	- -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX Compounds																			
Benzene	0.2	mg/kg	- -	**10**	**40**	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	0.5	mg/kg	- -	**288**	**1152**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	mg/kg	- -	**600**	**2400**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m&p-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	0.5	mg/kg	- -	- -	- -	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylene	Calculated	mg/kg	- -	**1000**	**4000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics					**-**														
Arsenic	5	mg/kg	**500**	- -	- -	<5	<5	**8**	<5	**7**	<5	<5	**6**	**12**	<5	**5**	**6**	**6**	**10**
Cadmium	1	mg/kg	**100**	- -	- -	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (III)	2	mg/kg	**500**	- -	- -	**4**	**7**	**13**	**2**	**34**	**2**	**11**	**13**	**46**	**5**	**8**	**10**	**18**	**40**
Copper	5	mg/kg	**5000**	- -	- -	**7**	<5	**6**	<5	**6**	**6**	<5	**33**	**6**	<5	**12**	**11**	**8**	**8**
Lead	5	mg/kg	**1500**	- -	- -	**7**	**6**	**8**	**7**	**11**	**16**	**10**	**29**	**22**	**9**	**26**	**27**	**10**	**18**
Mercury (inorganic)	0.1	mg/kg	**75**	- -	- -	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	2	mg/kg	**3000**	- -	- -	**6**	<2	<2	<2	<2	<2	<2	**13**	<2	<2	**3**	**3**	<2	<2
Zinc	5	mg/kg	**35000**	- -	- -	**10**	<5	<5	<5	<5	<5	<5	**49**	<5	**12**	**121**	**95**	<5	<5
Polycyclic Aromatic Hydrocarbons				- -	- -														
Acenaphthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Acenaphthylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Benzo(a)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Benzo(a)pyrene	0.5	mg/kg	**5**	**0.8**	**3.2**	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
B(a)P TCLP	0.5	µg/l	- -	0.04mg/l (2) / 10mg/kg (3)	0.16mg/l / 23mg/kg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Benzo(b)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Benzo(g,h,i)perylene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Benzo(k)fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Chrysene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Dibenzo(a,h)anthracene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Fluoranthene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Fluorene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Indeno(1,2,3,cd)pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Naphthalene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Phenanthrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Pyrene	0.5	mg/kg	- -	- -	- -	NA	<0.5	NA	<0.5	NA	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5	NA
Total PAHs	Calculated	mg/kg	**100**	- -	- -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content																			
Moisture Content	1	%	**-**	- -	- -	**2.3**	**16.7**	**17**	**16.9**	**22**	**11.9**	**16**	**18**	**24.4**	**9.9**	**11.3**	**12.3**	**15.9**	**22.2**
Asbestos																			
Asbestos			- -	- -	- -	ND	NA	ND	NA	ND	ND	ND	ND	NA	NA	ND	ND	NA	ND

Legend:

Exceeds Soil Investigation Levels
Exceeds General Solid Waste Investigation Levels
Exceeds Restricted Solid Waste Investigation Levels

(1) - NSW DECC 2008- NSW, Department of Climate Change, Waste Classifcation Guidelines 2008, Part 1: Classifying Waste
(2) - Leachable B[a]P concentrations
(3) - Combined total B[a]P concentration
PS = Primary Sample
FD = Field Duplicate
FT - Field Triplicate
ND - No Fibres Detected
NA - Not Analysed
- - No investigation level
LOR - Limit of reporting

Prepared by: HM
Checked by: JS

Table 2. Acid Sulphate Soils Analytical Results
17-21 Parramatta Road, Lidcombe, NSW
URS Job No. 43217997

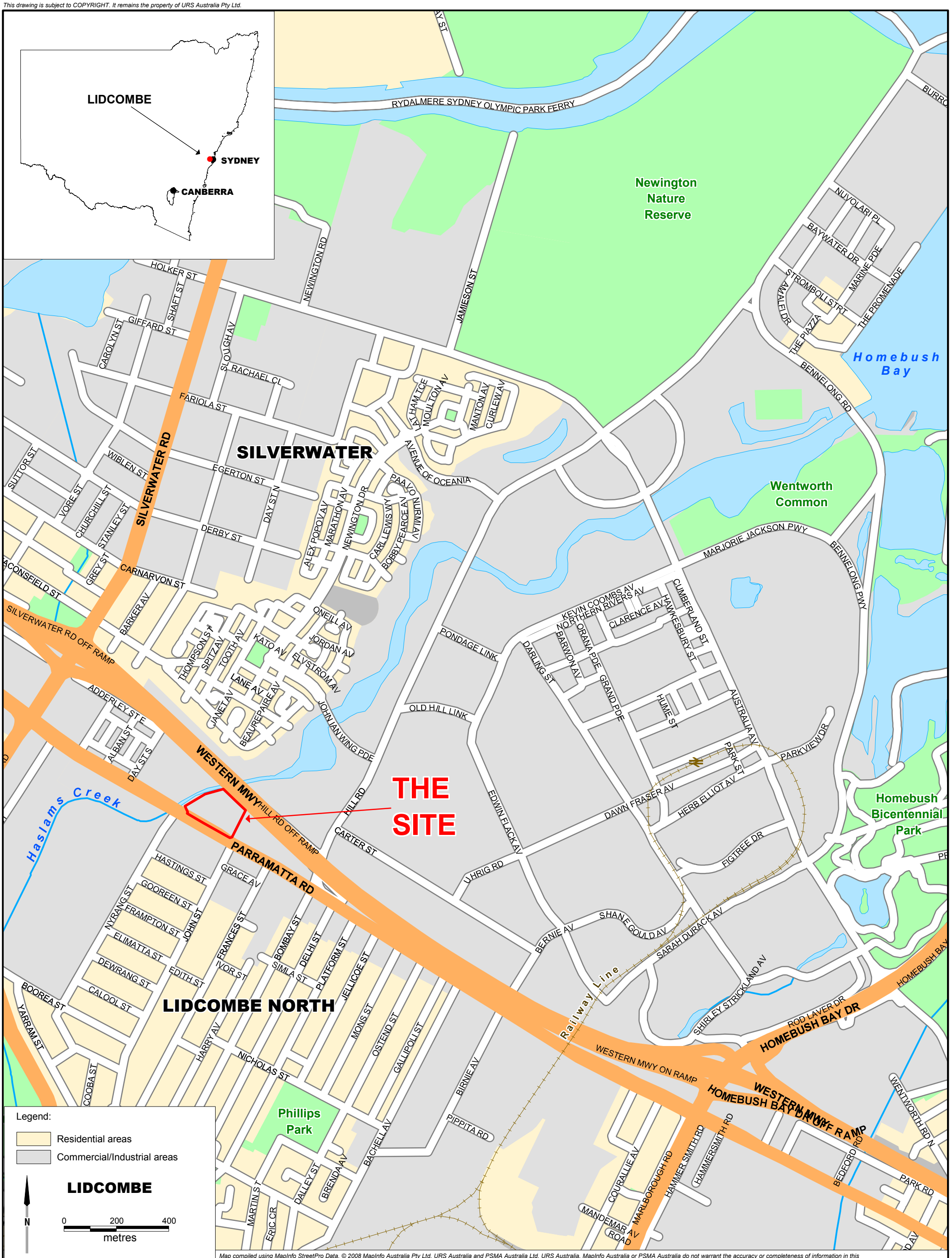
Primary Sample Location			MW01D_3.5_25/07/09	MW01D_4.0_25/07/09	MW01D_6.0_25/07/09	MW02D_1.8_26/07/09	MW02D_2.9_26/07/09	MW02D_4.6_26/07/09
Sample ID			MW01D_3.5_25/07/09	MW01D_4.0_25/07/09	MW01D_6.0_25/07/09	MW02D_1.8_26/07/09	MW02D_2.9_26/07/09	MW02D_4.6_26/07/09
Date Sampled			25/07/2009	25/07/2009	25/07/2009	26/07/2009	26/07/2009	26/07/2009
Sample Type			PS	PS	PS	PS	PS	PS
Analyte grouping/Analyte	LOR	Units						
EA029-A: pH Measurements								
pH KCl (23A)	0.1	pH Unit	**5.7**	**5.4**	**5.3**	**5.4**	**4.1**	**6.7**
pH OX (23B)	0.1	pH Unit	**6.9**	**4.8**	**2.9**	**4.2**	**3.9**	**2.1**
EA029-B: Acidity Trail								
Titratable Actual Acidity (23F)	2	mole H+ / t	**6**	**20**	**11**	**14**	**39**	<2
Titratable Peroxide Acidity (23G)	2	mole H+ / t	<2	**102**	**268**	**102**	**52**	**1280**
Titratable Sulfidic Acidity (23H)	2	mole H+ / t	<2	**82**	**257**	**88**	**13**	**1280**
sulfidic - Titratable Actual Acidity (s-23F)	0.02	% pyrite S	<0.02	**0.03**	<0.02	**0.02**	**0.06**	<0.02
sulfidic - Titratable Peroxide Acidity (s-23G)	0.02	% pyrite S	<0.02	**0.16**	**0.43**	**0.16**	**0.08**	**2.04**
sulfidic - Titratable Sulfidic Acidity (s-23H)	0.02	% pyrite S	<0.02	**0.13**	**0.41**	**0.14**	**0.02**	**2.04**
EA029-C: Sulfur Trail								
KCl Extractable Sulfur (23Ce)	0.02	% S	<0.02	<0.02	**0.02**	<0.02	**0.04**	**0.1**
Peroxide Sulfur (23De)	0.02	% S	<0.02	**0.05**	**0.58**	**0.16**	**0.08**	**2.28**
Peroxide Oxidisable Sulfur (23E)	0.02	% S	<0.02	**0.05**	**0.56**	**0.16**	**0.04**	**2.19**
acidity - Peroxide Oxidisable Sulfur (a-23E)	10	mole H+ / t	<10	**33**	**348**	**98**	**25**	**1360**
EA029-D: Calcium Values								
KCl Extractable Calcium (23Vh)	0.02	% Ca	**0.1**	**0.16**	**0.04**	**0.08**	<0.02	**0.15**
Peroxide Calcium (23Wh)	0.02	% Ca	**0.12**	**0.2**	**0.08**	**0.12**	**0.02**	**0.2**
Acid Reacted Calcium (23X)	0.02	% Ca	**0.03**	**0.04**	**0.04**	**0.05**	<0.02	**0.04**
acidity - Acid Reacted Calcium (a-23X)	10	mole H+ / t	**14**	**19**	**20**	**24**	<10	**23**
sulfidic - Acid Reacted Calcium (s-23X)	0.02	% S	**0.02**	**0.03**	**0.03**	**0.04**	<0.02	**0.04**
EA029-E: Magnesium Values								
KCl Extractable Magnesium (23Sm)	0.02	% Mg	**0.03**	**0.04**	**0.06**	**0.03**	**0.03**	**0.11**
Peroxide Magnesium (23Tm)	0.02	% Mg	**0.03**	**0.04**	**0.09**	**0.04**	**0.03**	**0.12**
Acid Reacted Magnesium (23U)	0.02	% Mg	<0.02	<0.02	**0.03**	<0.02	<0.02	<0.02
Acidity - Acid Reacted Magnesium (a-23U)	10	mole H+ / t	<10	<10	**23**	<10	<10	<10
sulfidic - Acid Reacted Magnesium (s-23U)	0.02	% S	<0.02	<0.02	**0.04**	<0.02	<0.02	<0.02
EA029-F: Excess Acid Neutralising Capacity								
Excess Acid Neutralising Capacity (23Q)	0.02	% CaCO3	**0.08**	-	-	-	-	-
acidity - Excess Acid Neutralising Capacity (a-23Q)	10	mole H+ / t	**17**	-	-	-	-	-
sulfidic - Excess Acid Neutralising Capacity (s-23Q)	0.02	% S	**0.03**	-	-	-	-	-
EA029-G: Retained Acidity								
Net Acid Soluble Sulfur (20Je)	0.02	% S	-	-	-	-	**0.02**	-
acidity - Net Acid Soluble Sulfur (a-20J)	10	mole H+ / t	-	-	-	-	<10	-
sulfidic - Net Acid Soluble Sulfur (s-20J)	0.02	% pyrite S	-	-	-	-	<0.02	-
HCl Extractable Sulfur (20Be)	0.02	% S	-	-	-	-	**0.06**	-
EA029-H: Acid Base Accounting								
ANC Fineness Factor	0.5		**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**
Net Acidity (sulfur units)	0.02	% S	<0.02	**0.08**	**0.58**	**0.18**	**0.12**	**2.09**
Net Acidity (acidity units)	10	mole H+ / t	<10	**52**	**359**	**111**	**74**	**1300**
Liming Rate	1	kg CaCO3/t	<1	**4**	**27**	**8**	**6**	**98**

Legend
PS : Primary Sample
LD : Laboratory Duplicate
LOR - Limit of Reporting
- : Not analysed

URS

Prepared by: HM
Checked by: JS

Figures



Client: COSTCO WHOLESALE AUSTRALIA PTY. LTD	Project: PHASE 1 AND LIMITED PHASE 2 ENVIRONMENTAL SITE ASSESSMENT, 17-21 PARRAMATTA ROAD, LIDCOMBE, NSW	Title: **SITE LOCALITY MAP**
URS	Drawn: AO / Approved: JS / Date: 07/09/2009	Figure: 1
	Job No: **43217997** / File No: 43217997.001.wor	

N

HASLAMS CREEK

WESTERN MWY

WESTERN MWY

Guard House

1//DP214452

1//DP522225

26//DP586063

PARRAMATTA RD

1/1//DP1083643

1//DP574894

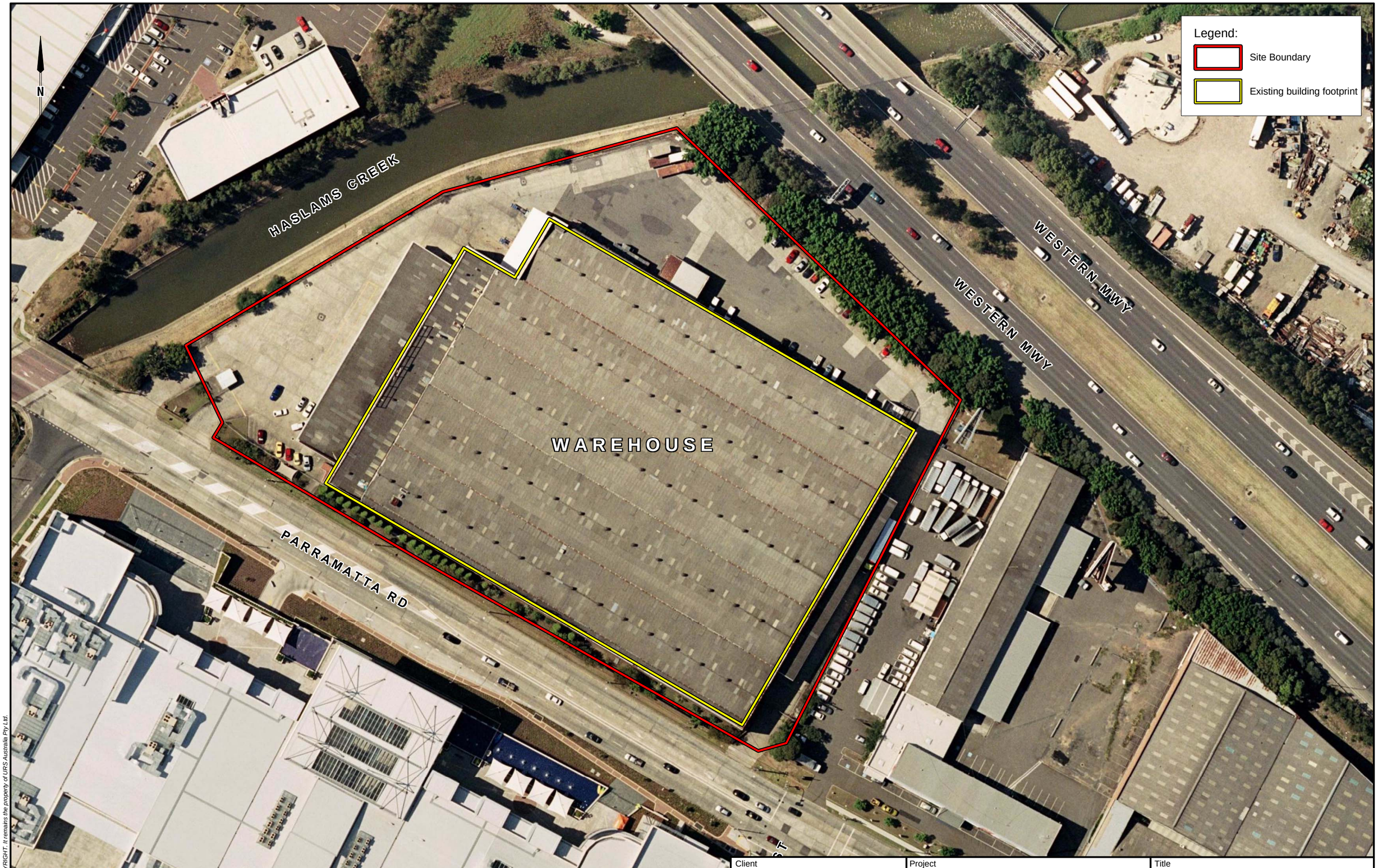
1/5//DP225456

0 40.00

metres

Issued

Client: COSTCO WHOLESALE AUSTRALIA PTY. LTD	Project: PHASE 1 AND LIMITED PHASE 2 ENVIRONMENTAL SITE ASSESSMENT, 17-21 PARRAMATTA ROAD, LIDCOMBE, NSW		Title: **SITE LAYOUT**
URS	Drawn: AO	Approved: JS	Date: 07/09/2009	Figure: **2**
	Job No: **43217997**	File No: 43217997.004.wor	



Client
COSTCO WHOLESALE AUSTRALIA PTY. LTD

URS

Project
PHASE 1 AND LIMITED PHASE 2 ENVIRONMENTAL SITE ASSESSMENT, 17-21 PARRAMATTA ROAD, LIDCOMBE, NSW

Drawn: AO	Approved: JS	Date: 07/09/2009
Job No: **43217997**	File No: 43217997.002.wor	

Title
AERIAL VIEW OF SITE

Figure: **3**

N

HASLAMS CREEK

WESTERN MWY

WESTERN MWY

PARRAMATTA RD

Inferred Old Creek Corridor

SB13
SB15
SB12
SB11
SB09
SB10
SB14
SB17
SB8
MW1D
SB16
SB07
SB25
SB19
SB06
SB18
MW2D
SB20
SB05
MW04D
SB04
SB21
SB26
SB03
SB24
SB27
SB22
SB02
SB23
SB01
MW03D

Legend:

- Environmental Boreholes
- Geotechnical Boreholes
- Existing Building Footprint
- Site Boundary

0 40.00
metres

Client: COSTCO WHOLESALE AUSTRALIA PTY. LTD	Project: PHASE 1 AND LIMITED PHASE 2 ENVIRONMENTAL SITE ASSESSMENT, 17-21 PARRAMATTA ROAD, LIDCOMBE, NSW		Title: **LOCATION OF SOIL BORES AND MONITORING WELLS**
URS	Drawn: AO	Approved: JS	Date: 07/09/2009
	Job No: **43217997**	File No: 43217997.003.wor	Figure: **4**

A

Appendix A Certificates of Title

ry 1941 and entered the 3rd day of April 1941 at 12 o'clock noon.

T. Wells
Registrar General.

Grant of Easement in favour of The Sydney County Council (as set out therein) affecting parts of the land above described coloured pink and coloured pink hatched purple in plan hereon.

T. Wells
Registrar General.

5507 Lease dated the 10th day of August 1943 from the Metropolitan Meat Industry Commissioner to The Colonial Wholesale Meat Co. Pty. Limited of part of the premises known as the State Abattoir and Meat Works at Homebush Bay. Produced and entered the [illegible] of August 1943 at 30 minutes past 11 o'clock in the forenoon.

T. Wells
Registrar General.

3526 Lease dated the [illegible] day of February 1947 from The Metropolitan Meat Industry Commissioner to Willcox Mofflin Limited of part of land within described. Produced the [illegible] day of March 1947 and entered the 1[illegible] day of August 1947 at 10 o'clock in the forenoon.

T. Wells
Registrar General.

3158 Lease dated the 20th day of January 1948 from The Metropolitan Meat Industry Commissioner to Commonwealth Broadcasting Corporation Pty. Limited of part of the land within described. Produced the [illegible] of March 1948 and entered the 25th day of May 1948 at 12 o'clock

T. Wells
Registrar General.

3745 Grant of Easement in favour of The Sydney County Council affecting that part of the land above described shown by brown colour and brown colour hatched purple in the plan hereon.

T. Wells
Registrar General.

07232 Lease dated the 15th day of September 1948 from The Metropolitan Meat Industry Commissioner to Barnes [illegible] Company Pty. Limited of part of the land within described. Produced the 15th day of October 1948 and entered the 3rd day of June 1949 at 12 o'clock noon.

T. Wells
Registrar General.

[illegible]06 Lease dated the 3rd day of August 1948 from The Metropolitan Meat Industry Commissioner to Intercontinental Packers Pty. Limited of part of the land within described. Produced the 23rd day of December 1948 and entered the 19th day of October 1949 at 12 o'clock noon.

Registrar General.

The within mentioned LEASE No. G[illegible] has expired by effluxion of time.
Dated 6th February 1951 No. F409[illegible]

T. Wells

No. F4902 Lease dated [illegible]
from the said the Metropolitan Meat Industry Commissioner to [illegible]
Produced [illegible] and entered [illegible] 19[illegible]
at 12 o'clock in the [illegible] noon.

T. Wells
REGISTRAR GENERAL

No F16993 TRANSFER and GRANT dated 4th August 1949 from the said The Metropolitan Meat Industry Commissioner to The Sydney County Council of an easement (as fully set out in said Instrument) affecting that part of the land within described shown by the cross hatched [illegible] in the plan hereon.
Produced 28th August 1950 and entered 28th February 1951 at 12 o'clock noon.

Registrar General

The within mentioned lease No D544454 has been surrendered by operation of law by reason of fresh lease dated [illegible] December 1950 dated 19th April, 1951 vide F377265

Registrar General

No F 371266 [illegible] dated 15th [illegible]
from the said [illegible]
to Intercontinental [illegible]
[illegible]
[illegible]
Produced 12th January 1954 and entered [illegible] April [illegible]
[illegible] o'clock noon

Registrar General

No. F051423 Application [illegible] The Metropolitan Meat Industry Board
Produced 18th [illegible]
at [illegible] past 12 o'clock

T. Wells
REGISTRAR GENERAL