



ENVIRONMENTAL INVESTIGATION SERVICES

## REPORT

TO

**TELSTRA CORPORATION LIMITED**

ON

**STAGE 1 ENVIRONMENTAL SITE ASSESSMENT**

FOR

**PROPOSED MIXED-USE DEVELOPMENT**

AT

**122 BRONTE ROAD, BONDI JUNCTION**

**2 JUNE 2015**

**REF: E28302Krpt rev1**



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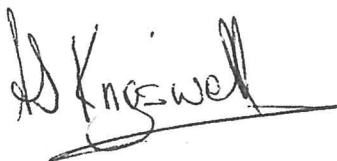
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## **EXECUTIVE SUMMARY**

Charter Keck Cramer on behalf of Telstra Corporation Ltd ('the Client') commissioned EIS to undertake a Stage 1 Environmental Site Assessment (ESA) for the proposed sale of the property at part 122 Bronte Road, Bondi Junction. At the time of this assessment the site was occupied by a single-storey brick and cement-rendered building, adjoining a three-storey brick building to the north of the site. The majority of the site building was used as a parking area for the telephone exchange operating in the adjoining building. The floor of the parking area was concrete-paved. The future use of the land may include a mixed use / commercial / high density residential development. The assessment objectives were to identify the areas of environmental concern (AEC); prepare a preliminary conceptual site model (PCSM); establish whether a Stage 2 investigation is required; and comment on the suitability of the site for a future use.

An assessment of the site's history indicated that it has been used for commercial activities since at least 1887, being first used as a post office and then also as a telephone exchange. The current site building was constructed in the 1920s. An underground fuel storage tank was located in the southern corner of the site from at least 1963. The tank may have been subsequently replaced with a newer tank at some stage and may remain on-site. Areas of environmental concern (AEC) include fill material, historic commercial use, the fuel storage facilities and hazardous building materials. Potential contaminants of concern (PCC) include heavy metals, petroleum hydrocarbons, BTEX, PAHs, pesticides, PCBs and asbestos. Potential human receptors include site occupants and workers.

As a preliminary soil contamination screening, soil samples were collected from three boreholes drilled for a concurrent geotechnical investigation conducted by JK Geotechnics, and analysed for a selection of potential contaminants of concern. The subsurface conditions encountered generally consisted of concrete pavement, a small quantity of fill material to a depth of approximately 0.4m, underlain by natural sandy soil and shallow sandstone bedrock. Sampling was not undertaken in inaccessible areas of the site such as within the rooms in the south-western section of the building, including the room containing the suspected UST.

The analytical results were compared to site assessment criteria (SAC) which were established with reference to appropriate guidelines and regulations for medium-density residential development. The results were below the SAC with the exception of lead and PAHs in one fill soil sample in the north-east of the site. It is likely that the source of the contamination is slag and ash that was noted to be present within the fill material. The contamination is considered to pose a moderate risk to potential human receptors, who may be exposed to the contaminants via the exposure pathways of dermal contact, ingestion and inhalation via dust. A preliminary waste classification indicated that the majority of the soil was classified as General Solid Waste, with one soil sample classified as Restricted Solid Waste.

The assessment has identified the following data gaps:

- Areas within the rooms in the south side of the site, including where the UST may be located, have not been assessed;
- An assessment of groundwater has not been undertaken; and
- The extent of the Restricted Solid Waste associated with BH1 has not been assessed.

Based on the scope of works undertaken, EIS are of the opinion that the PCC identified at the site pose a moderate risk to the receptors. EIS consider that the site can be made suitable for the proposed development provided that the following recommendations are implemented to address the data gaps and to minimise the risks:

- Undertake a Stage 2 ESA to address the data gaps identified in Section 10.3;
- Prepare a Remediation Action Plan (RAP) to outline remedial measures for the site;
- Prepare a Validation Assessment (VA) report on completion of remediation.

In the event unexpected conditions are encountered during development work or between sampling locations that may pose a contamination risk, all works should stop and an environmental consultant should be engaged to inspect the site and address the issue.

The conclusions and recommendations should be read in conjunction with the limitations presented in the body of the report.



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## ABBREVIATIONS

Ambient Background Concentrations	ABC
Added Contaminant Limits	ACL
Asbestos Containing Material	ACM
Australian Drinking Water Guidelines	ADWG
Area of Environmental Concern	AEC
Australian Height Datum	AHD
Asbestos Health Screening Levels	ASL
Acid Sulfate Soil	ASS
Above Ground Storage Tank	AST
Below Ground Level	BGL
Bureau of Meteorology	BOM
Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene	BTEXN
Cation Exchange Capacity	CEC
Contaminated Land Management	CLM
Construction Management Plan	CMP
Chain of Custody	COC
Contaminant of Primary Concern	CoPC
Conceptual Site Model	CSM
Data Quality Indicator	DQI
Data Quality Objective	DQO
Detailed Site Investigation	DSI
Ecological Assessment Criteria	EAC
Ecological Investigation Levels	EILs
Ecological Screening Level	ESL
Environmental Management Plan	EMP
Excavated Natural Material	ENM
Environmental Protection Agency	EPA
Environmental Site Assessment	ESA
Ecological Screening Level	ESL
Fibre Cement Fragments	FCF
General Approvals of Immobilisation	GAI
General Solid Waste	GSW
Health Investigation Level	HILs
Hardness Modified Trigger Values	HMTV
Health Screening Level	HSLs
International Organisation of Standardisation	ISO
Lab Control Spike	LCS
Light Non-Aqueous Phase Liquid	LNAPL
Local Government Authority	LGA
Map Grid of Australia	MGA
National Association of Testing Authorities	NATA
National Environmental Protection Measure	NEPM
Organochlorine Pesticides	OCP
Organophosphate Pesticides	OPP
Polycyclic Aromatic Hydrocarbons	PAH

## ABBREVIATIONS

Potential Contaminants of Concern	PCC
Photo-ionisation Detector	PID
Practical Quantitation Limit	PQL
Preliminary Site Investigation	PSI
Quality Assurance	QA
Quality Control	QC
Remediation Action Plan	RAP
Relative Percentage Difference	RPD
Restricted Solid Waste	RSW
Site Assessment Criteria	SAC
Sampling, Analysis and Quality Plan	SAQP
Site Audit Statement	SAS
Site Audit Report	SAR
Specific Contamination Concentration	SCC
Standard Penetration Test	SPT
Semi-Volatile Organic Compounds	sVOC
Standard Sampling Procedure	SSP
Standard Water Level	SWL
Standard Sampling Procedure	SSP
Trip Blank	TB
Toxicity Characteristic Leaching Procedure	TCLP
Total Recoverable Hydrocarbons	TRH
Trip Spike	TS
Upper Confidence Limit	UCL
United States Environmental Protection Agency	USEPA
Underground Storage Tank	UST
Virgin Excavated Natural Material	VENM
Volatile Organic Compounds	VOC
Volatile Organic Chlorinated Compound	VOCC
Workplace, Health and Safety	WHS

## **1      INTRODUCTION**

Charter Keck Cramer on behalf of Telstra Corporation Ltd ('the Client') commissioned Environmental Investigation Services (EIS)<sup>1</sup> to undertake a Stage 1 Environmental Site Assessment (ESA) for the sale of the property at part 122 Bronte Road, Bondi Junction. The site location is shown on Figure 1 and the assessment was confined to the proposed area to be sold ('the Site') as shown on Figure 2.

A geotechnical investigation was undertaken in conjunction with this assessment by JK Geotechnics<sup>2</sup>. The results of the investigation are presented in a separate report (Ref. 28302Srpt, dated 5 May, 2015<sup>3</sup>). This report should be read in conjunction with the JK report.

### **1.1      Potential Future Use of the Site**

The potential future use of the Site (subject to Council / Authority approval) is likely to be a mixed use / commercial / high density residential development that may include retention of the portion of the current building fronting onto Birrell Street and Bronte Road.

### **1.2      Objectives**

The assessment objectives were to:

- Identify the areas of environmental concern (AEC);
- Prepare a preliminary conceptual site model (PCSM); and
- Comment on whether additional environmental investigations and / or management are required.

### **1.3      Scope of Work**

The assessment was undertaken generally in accordance with an EIS proposal (Ref: EP8894K) of 9 April 2015 and written acceptance from the Client.

The scope of work included the following:

- A review of site information including background and site history information;
- A site inspection to identify Areas of Environmental Concern (AEC);
- Preparation of a Preliminary Conceptual Site Model (PCSM);
- Design and implementation of a sampling, analysis and quality plan (SAQP);
- Interpretation of the analytical results against the adopted Site Assessment Criteria (SAC);
- Data Quality Assessment;
- A Tier 1 Risk Assessment and review of the Preliminary Conceptual Site Model; and
- Preparation of a report presenting the results of the assessment.

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<sup>1</sup> Environmental consulting division of Jeffery & Katauskas Pty Ltd (J&K)

<sup>2</sup> Geotechnical consulting division of J&K

<sup>3</sup> Referred to as JK Geotechnical Investigation



The report was prepared with reference to regulations and guidelines outlined in the table below. Individual guidelines are also referenced within the text of the report.

Table 1-1: Guidelines

Guidelines/Regulations
Contaminated Land Management Act 1997 <sup>4</sup>
State Environmental Planning Policy No.55 – Remediation of Land 1998 <sup>5</sup>
Guidelines for Consultants Reporting on Contaminated Sites 2011 <sup>6</sup>
Guidelines for the NSW Site Auditor Scheme, 2nd Edition 2006 <sup>7</sup>
National Environmental Protection (Assessment of Site Contamination) Measure 1999 as amended 2013 <sup>8</sup>

## **2** **SITE INFORMATION**

### **2.1** **Background**

#### **2.1.1** **JK Geotechnical Investigation (JK, 5 May 2015<sup>9</sup>)**

Three boreholes were drilled across the site as shown in the attached Figure 2. Relevant details such as the subsurface conditions encountered have been summarised later in this report.

<sup>4</sup> NSW Government Legislation, (1997), *Contaminated Land Management Act 1997*. (referred to as CLM Act 1997)

<sup>5</sup> NSW Government, (1998), *State Environmental Planning Policy No. 55 – Remediation of Land*. (referred to as SEPP55)

<sup>6</sup> NSW Office of Environment and Heritage (OEH), (2011), *Guidelines for Consultants Reporting on Contaminated Sites*. (referred to as Reporting Guidelines 2011)

<sup>7</sup> NSW DEC, (2006), *Guidelines for the NSW Site Auditor Scheme, 2<sup>nd</sup> ed.* (referred to as Site Auditor Guidelines 2006)

<sup>8</sup> National Environment Protection Council (NEPC), (2013), *National Environmental Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)*. (referred to as NEPM 2013)

<sup>9</sup> JK Geotechnics (2015) *Geotechnical Investigation for Proposed Mixed-Use Development at 122 Bronte Road, Bondi Junction, NSW* (Ref: 28302Srpt, dated 5 May 2015)

## **2.2      Site Identification**

Table 2-1: Site Identification

Current Site Owner:	Telstra Corporation Limited
Site Address:	122 Bronte Road, Bondi Junction
Lots & Deposited Plan:	Lots 5, 6 & 7 DP185
Current Land Use:	Commercial
Proposed Land Use:	Mixed-use / Commercial / High Density Residential
Local Government Authority (LGA):	Waverley Council
Current Zoning:	SP2 Infrastructure
Site Area (approx.):	635m <sup>2</sup>
RL (AHD in m) (approx.):	83m-85m
Geographical Location (approx.):	S: 33° 53' 45.5"      E: 151° 15' 5"
Site Location Plan:	Figure 1
Sample Location Plan:	Figure 2

## **2.3      Site Location and Regional Setting**

The site is located in a mixed residential and commercial area of Bondi Junction. The site is bounded by Bronte Road to the west, Birrell Street to the south and Adams Lane to the east.

## **2.4      Topography**

The site is located within a region of undulating topography towards the base of a south-west facing hill which falls towards Centennial Park.

## **2.5      Site Inspection**

A walkover inspection of the site was undertaken on 17 April 2015. The inspection was limited to accessible parts of the site and did not include an inspection of all interior areas. At the time of the inspection the site was occupied by a single-storey brick and cement-rendered building, adjoining a three-storey brick building to the north of the site. The majority of the site building was used as a

parking area for the telephone exchange operating in the adjoining building. The floor of the parking area was concrete-paved with minor cracking in some areas.

A number of unused rooms were located along the south-western edge of the building fronting Bronte Road and Birrell Street. An emergency power room was located in the southern corner of the building. An historical site plan from the 1960s indicates that the room contained a diesel fuel tank which may still be present. A sub-floor pit was located along the northern wall of the parking area and was accessed via a manhole.

## **2.6      Surrounding Land Use**

The immediate surrounds included the following land uses:

- North – residential;
- South – Birrell Street; mixed-use commercial and residential properties;
- East – Adams Lane; residential; and
- West – Bronte Road; mixed-use commercial and residential.

## **2.7      Underground Services**

The 'Dial Before You Dig' (DBYD) plans were reviewed for the assessment. Major services which could pose a potential migratory pathway were not identified at the site.

## **2.8      Regional Geology**

A review of the regional geological map of Sydney (1983), indicates that the site is underlain by Hawkesbury Sandstone, which typically consists of medium to coarse grained quartz sandstone with minor shale and laminite lenses.

## **2.9      Acid Sulfate Soil Risk**

The site is not located in an acid sulfate soil risk area.

## **2.10    Hydrogeology**

A review of groundwater bore records available on the NSW Office of Water<sup>10</sup> (NOW) online database was undertaken. The search was limited to registered bores located within a radius of approximately 500m of the site. The search did not identify any registered bores within the search area.

A review of the regional geology and groundwater bore information indicates that the subsurface condition at the site is expected to consist of residual soils overlying relatively shallow bedrock. The occurrence of groundwater that could be utilised as a resource for beneficial use is considered to be relatively low under such conditions. A perched aquifer in the subsurface may be present.

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<sup>10</sup> <http://www.waterinfo.nsw.gov.au/gw/> accessed on 25/5/15

### 2.11 Receiving Water Bodies

Surface water bodies were not identified in the immediate vicinity of the site. The closest surface water body is Model Yacht Pond located approximately 900m to the south-west of the site in Centennial Park. Due to the distance from the site it is not considered to be a potential receptor.

### 2.12 Local Meteorology

Sydney has an oceanic climate with warm summers and mild winters. The weather is moderated by proximity to the ocean. Rainfall is spread throughout the year and is generally heavier from January through to June.

The meteorological data for Sydney Observatory weather station available on the Bureau of Meteorology (BOM<sup>11</sup>) website has been summarised in the table below. This data is considered to be most representative for this site.

Table 2-2: Summary of Local Meteorology

Category	Low	High
Mean Maximum Temperatures (°C)	16.3°	25.9°
Mean Minimum Temperature (°C)	8.1°	18.8°
Mean Rainfall (mm)	68.3mm	132.0mm

## 3 SITE HISTORY INFORMATION

### 3.1 Review of Historical Aerial Photographs

Historical aerial photographs available at the NSW Department of Lands were reviewed for the assessment. A summary of the relevant information is presented in the following table:

Table 3-1: Summary of Historical Aerial Photos

Year	Details
1930	The site appeared to be occupied by a building similar in appearance to the building occupying the site at the time of this investigation. The adjoining lots to the north were also occupied by buildings.
1943 <sup>12</sup>	The site appeared to be occupied by the same building occupying the site at the time of this investigation. The adjoining lots to the north were also occupied by buildings.
1951	The site appeared similar to its appearance in the 1943 photograph.

<sup>11</sup> [http://www.bom.gov.au/climate/averages/tables/cw\\_066062.shtml](http://www.bom.gov.au/climate/averages/tables/cw_066062.shtml) visited on 25/5/15.

<sup>12</sup> <https://six.maps.nsw.gov.au/wps/portal/SIXViewer>, visited on 25/5/15



Year	Details
1961	The site appeared similar to its appearance in the 1951 photograph.
1970	The site appeared similar to its appearance in the 1961 photograph. The adjoining lots to the north appeared to have undergone development with a larger building replacing the previous building.
1978	The site appeared similar to its appearance in the 1970 photograph.
1986	The site appeared similar to its appearance in the 1978 photograph.
1994	The site appeared similar to its appearance in the 1986 photograph.
2004	The site appeared similar to its appearance in the 1994 photograph and similar to its appearance during the current investigation.

### **3.2 Review of Land Title Records**

Land title records were reviewed for the assessment. Copies of the title records are attached in the appendices.

The title records indicate the following:

- From 1886 to 1964 the site was owned by the Crown or the Minister for Public Works;
- From 1964 to 1985 the site was owned by the Commonwealth of Australia;
- From 1985 to 2002 the site was owned by the Australia Telecommunications Commission; and
- The site has been owned by Telstra Corporation Limited since 2002.

### **3.3 Review of Waverley Council Information**

#### **3.3.1 Publically Accessible Information**

Council records available under the access to public information were reviewed for the assessment. The council records indicate the following:

- The site was purchased in 1882 for a post office that opened in 1887. The building also accommodated the area's first telephone exchange.
- The post office moved in 1914, leaving the site operating as a telephone exchange.
- The one-storey brick building on the subject site was constructed in the 1920s. Major internal alterations were conducted in 1926 when the telephone exchange was converted from manual to automatic.
- The three-storey building on the adjoining site to the north was constructed in the 1960s.



### 3.3.2 Section 149 Planning Certificate

The s149 (2 and 5) planning certificate was reviewed for the assessment. A copy of the certificate is attached in the appendices.

A summary of the relevant information is outlined below:

- The land contains an item of Environmental Heritage;
- The site is not deemed to be:
  - significantly contaminated;
  - subject to a management order;
  - the subject of an approved voluntary management proposal; or
  - subject to an on-going management order under the provisions of the CLM Act 1997; and
- The site is not subject to a Site Audit Statement (SAS).

### 3.4 WorkCover Records

WorkCover records were reviewed for the assessment. A copy of the WorkCover document is contained in the appendices. The search did not identify any licences to store dangerous goods including underground fuel storage tanks (USTs) or above ground storage tanks (ASTs) at the site. However we note that a UST is known to have been present on the site during the 1960s and is still likely to be present (see Section 3.6).

### 3.5 NSW EPA Records

The NSW EPA records available online were reviewed for the assessment. A summary of the relevant information is provided in the following table:

Table 3-2: Summary of NSW EPA Online Records

Source	Details
CLM Act 1997 <sup>13</sup>	There were no notices for the site under Section 58 of the Act.
NSW EPA List of Contaminated Sites <sup>14</sup>	The site is not listed on the NSW EPA register.
POEO Register <sup>15</sup>	There were no notices for the site on the POEO register.

<sup>13</sup> <http://www.epa.nsw.gov.au/prclmapp/searchregister.aspx>, visited on 25/5/15

<sup>14</sup> <http://www.epa.nsw.gov.au/clm/publiclist.htm>, visited on 25/5/15

<sup>15</sup> <http://www.epa.nsw.gov.au/prpoeoapp/>, visited on 25/5/15

### **3.6 Historical Site Plans**

A number of historical site plans were obtained. Copies of selected plans are contained in the appendices.

- A plan from 1963 indicates that a diesel fuel tank was located in the emergency power room located in the south of the site. The plan also indicates that a power room and battery room were located along the Birrell Street side of the building. The area of the site currently used for car parking was used as an equipment room.
- A plan from 1964 indicates that there were plans to replace the fuel tank with a new fuel tank. The plans indicate that vinyl asbestos tiles were located within the power room, battery room, locker room and lunch room.
- A plan from 1988 indicates that some internal modifications had been made to the equipment room, with some of the area being used for car parking and the remainder used for equipment storage and as a locker room.

### **3.7 Summary of Site History Information**

A summary of the historical land uses is presented below. The land uses and time periods listed are based on a weight of evidence assessment of the site history documentation and observations made during the site inspection.

- The site has been used for commercial activities since at least 1887, being first used as a post office and then also as a telephone exchange.
- The current site building was constructed in the 1920s.
- An underground fuel storage tank (UST) was located in the southern corner of the site from at least 1963. The tank may have been subsequently replaced with a newer tank at some stage. The UST may be still on-site.

### **3.8 Integrity of Site History Information**

The majority of the site history information has been obtained from government organisations as outlined above. The veracity of the information from these sources is considered to be relatively high. A certain degree of information loss can be expected given the age of the development; the gap between aerial photographs; and a lack of detailed information prior to the 1900s.

#### 4 PRELIMINARY CONCEPTUAL SITE MODEL (PCSM)

The areas of environmental concern (AEC) identified below are based on a review of the site information outlined previously in this report. The (AEC) can either be a point source or widespread areas impacted by current or historical activities.

Table 4-1: Preliminary Conceptual Site Model

<u>Areas of Environmental Concern / Extent</u>	<u>Potential Contaminants of Concern</u>	<u>Potential Exposure Pathway and Media</u>	<u>Potential Receptors</u>
<u>Fill Material – Entire Site</u> The site appears to have been filled to achieve existing levels. The fill may have been imported from various sources and can contain elevated concentrations of contaminants.	Heavy metals, TRH, BTEXN, PAHs, OCPs, OPPs, PCBs and asbestos	<u>Direct Contact</u> – dermal contact; ingestion; and inhalation of dust, vapours and fibres.  <u>Media</u> - soil, groundwater and vapour.	<u>Human Receptors</u> – Site occupants; visitors; development and maintenance workers; and off-site occupants.  <u>Environmental Receptors</u> – None identified in the vicinity of the site.
<u>Fuel Storage Facilities</u> – The emergency room in the southern section of the site has been used for the storage of fuel in an underground storage tank (UST). Leakage and spillage of petroleum hydrocarbons could have resulted in site contamination.	Lead, TRH, BTEXN, PAHs and VOCs	<u>Direct Contact</u> – dermal contact; ingestion; and inhalation of dust and vapours.  <u>Media</u> - soil, groundwater and vapour.	<u>Human Receptors</u> – As above.  <u>Environmental Receptors</u> – As above.
<u>On-Site Commercial Use</u> – The site has been used for commercial use including car parking. Leakage and spillage of petroleum hydrocarbons may have resulted in site contamination.	Lead, TRH, BTEXN, PAHs and VOCs	<u>Direct Contact</u> – dermal contact; ingestion; and inhalation of dust and vapours.  <u>Media</u> - soil, groundwater and vapour.	<u>Human Receptors</u> – As Above  <u>Environmental Receptors</u> – As above.

Areas of Environmental Concern / Extent	Potential Contaminants of Concern	Potential Exposure Pathway and Media	Potential Receptors
<p><u>Hazardous Building Material</u> – The building on-site appears to have been constructed in the 1920s. Hazardous building materials were used for construction purposes during this period. Historical site plans indicate that vinyl asbestos tiles were used throughout the building. The material can pose a potential contamination source during demolition/development.</p>	<p>Asbestos, lead and PCBs</p>	<p><u>Direct Contact</u> – dermal contact; ingestion; and inhalation of dust and fibres.</p> <p><u>Media</u> – soil and air.</p>	<p><u>Human Receptors</u> – As Above</p> <p><u>Environmental Receptors</u> – As above.</p>



## 5 SAMPLING, ANALYSIS AND QUALITY PLAN

### 5.1 Data Quality Objectives (DQO)

The NEPM 2013 defines the DQO process as a seven-step iterative planning tool used to define the type, quantity and quality of data needed to inform decisions relating to the environmental condition of the site. The DQO process is detailed in the US EPA document *Guidance on systematic planning using the data quality process (2006<sup>16</sup>)* and the NSW DEC document *The Guidelines for the NSW Site Auditor Scheme, 2nd Edition (2006<sup>17</sup>)*. These seven steps are applicable to this assessment as summarised in the table below:

Table 5-1: DQOs – Seven Steps

Step	Input
State the Problem	<p>The PCSM has identified AEC at the site which may pose a risk to the site receptors. An intrusive investigation is required to assess the risk and comment on the suitability of the site for the proposed development or intended land use.</p> <p>The EIS project team will include: project principal (PP) and/or project associate (PA); project engineer/scientist (PE); and field engineer/scientist (FE) as outlined in the quality recorded checklist maintained for the project in accordance with our ISO 9001 certification.</p>
Identify the Decisions/ Goal of the Study	<p>The data collection is project specific and has been designed based on the following information:</p> <ul style="list-style-type: none"> <li>• Review of site information including site history;</li> <li>• AEC, PCC, receptors, pathways and media identified in the PCSM;</li> <li>• Development of Site Assessment Criteria (SAC) for each medium; and</li> <li>• The use of decision statements outlined below:</li> </ul> <ol style="list-style-type: none"> <li>1) Statistical analysis will be used to assess the laboratory data against the SAC. The following criteria will be adopted: <ul style="list-style-type: none"> <li>➤ The 95% Upper Confidence Limit (UCL) value of the arithmetic mean concentration of each contaminant should be less than the SAC;</li> <li>➤ The standard deviation (SD) of the results must be less than 50% of the SAC; and</li> <li>➤ No single value exceeds 250% of the relevant SAC.</li> </ul> </li> <li>2) Statistical calculations will not be undertaken if all results are below the SAC; and</li> <li>3) Statistical calculations will not be undertaken on the following: <ul style="list-style-type: none"> <li>➤ Health Screening Levels (HSLs) – elevated point source contamination associated with petroleum hydrocarbons can pose a vapour risk to receptors;</li> <li>➤ Ecological Investigation Levels (EILs) – elevated EILs can pose a potential point source ecological risk; and</li> </ul> </li> </ol>

<sup>16</sup> US EPA, (2006), *Guidance on Systematic Planning using the Data Quality Objectives Process*. (referred to as US EPA 2006)

<sup>17</sup> NSW DEC, (2006), *Guidelines for the NSW Site Auditor Scheme, 2<sup>nd</sup> ed.* (referred to as Site Auditor Guidelines 2006)



Step	Input
	<ul style="list-style-type: none"> <li>➤ Groundwater Investigation Levels (GILs) – elevated GILs can indicate a wider groundwater contamination risk.</li> </ul>
Identify Information Inputs	<p>The following information will be collected:</p> <ul style="list-style-type: none"> <li>• Soil samples based on subsurface conditions;</li> <li>• The SAC will be designed based on the criteria outlined in NEPM 2013. Other criteria will be used as required and detailed in this report;</li> <li>• The samples will be analysed in accordance with the analytical methods outlined in NEPM 2013;</li> <li>• Field screening information (i.e. PID data, presence of hydrocarbons etc.) will be taken into consideration in selecting the analytical schedule; and</li> <li>• Any additional information that may arise during the field work will also be used as data inputs.</li> </ul>
Define the Study Boundary	<p>The sampling will be confined to the site boundaries as shown in Figure 2.</p> <p>Fill has been identified as an AEC. The source of fill has not been established. Fill is considered to be heterogeneous material with PCC occurring in random pockets or layers. The presence of PCC in between sampling points cannot be measured.</p> <p>The areas excluded from the investigation are outlined in the data gaps.</p>
Develop the analytical approach (or decision rule)	<p>The following acceptable limits will be adopted for the data quality assessment:</p> <ul style="list-style-type: none"> <li>• The following acceptance criteria will be used to assess the RPD results: <ul style="list-style-type: none"> <li>➤ results &gt; 10 times the practical quantitation limit (PQL), RPDs &lt; 50% are acceptable;</li> <li>➤ results between 5 and 10 times PQL, RPDs &lt; 75% are acceptable;</li> <li>➤ results &lt; 5 times PQL, RPDs &lt; 100% are acceptable; and</li> <li>➤ An explanation is provided if RPD results are outside the acceptance criteria.</li> </ul> </li> <li>• Acceptable concentrations in Trip Blank (TB) samples. Non-compliance to be documented in the report;</li> <li>• The following acceptance criteria will be used to assess the primary laboratory QA/QC results. Non-compliance to be documented: <ul style="list-style-type: none"> <li>➤ <u>RPDs</u>: <ul style="list-style-type: none"> <li>- Results that are &lt; 5 times the PQL, any RPD is acceptable; and</li> <li>- Results &gt; 5 times the PQL, RPDs between 0-50% are acceptable;</li> </ul> </li> <li>➤ <u>LCS recovery and matrix spikes</u>: <ul style="list-style-type: none"> <li>- 70-130% recovery acceptable for metals and inorganics;</li> <li>- 60-140% recovery acceptable for organics; and</li> <li>- 10-140% recovery acceptable for VOCs;</li> </ul> </li> <li>➤ <u>Surrogate spike recovery</u>: <ul style="list-style-type: none"> <li>- 60-140% recovery acceptable for general organics; and</li> <li>- 10-140% recovery acceptable for VOCs;</li> </ul> </li> <li>➤ <u>Blanks</u>: All less than PQL.</li> </ul> </li> </ul>

Step	Input
Specify the performance or acceptance criteria	<p>NEPM 2013 defines decision errors as '<i>incorrect decisions caused by using data which is not representative of site conditions</i>'. This can arise from errors during sampling or analytical testing. A combination of these errors is referred to as '<i>total study error</i>'. The study error can be managed through the correct choice of sample design and measurement.</p> <p>Decision errors can be controlled through the use of hypothesis testing. The test can be used to show either that the baseline condition is false or that there is insufficient evidence to indicate that the baseline condition is false.</p> <p>The null hypothesis is an assumption that is assumed to be true in the absence of contrary evidence. In this case, for example, the PCC identified in the PCSM are considered to pose a risk to receptors unless proven not to. The null hypothesis has been adopted for this assessment.</p>
Optimise the design for obtaining data	The most resource-effective design will be used in an optimum manner to achieve the assessment objectives.

## 5.2 Soil Sampling Plan and Methodology

The soil sampling plan and methodology adopted for this assessment are outlined in the table below:

Table 5-2: Soil Sampling Plan and Methodology

Aspect	Input
Sampling Density	The NSW EPA Contaminated Sites Sampling Design Guidelines (1995 <sup>18</sup> ) recommend a sampling density for an environmental assessment based on the size of the investigation area. The guideline provides a minimum number of sampling points required for the investigation on a systematic sampling pattern. The guidelines recommend sampling from a minimum of five evenly spaced sampling points for this site with an area of approximately 635m <sup>2</sup> . Samples for this investigation were obtained from three sampling points as shown on the attached Figure 2. This is 60% of the minimum sampling density recommended by the EPA.
Sampling Plan	The sampling locations were placed on a systematic plan with a grid spacing of approximately 15m-20m between sampling locations. A systematic plan was considered suitable to address potential contaminants associated with the fill material.
Exclusion Areas (Data Gaps)	<p>Sampling was not undertaken in inaccessible areas of the site such as within the rooms in the south-western section of the building, including the room containing the suspected UST.</p> <p>These areas have been excluded from the investigation.</p>

<sup>18</sup> NSW EPA, (1995), *Contaminated Sites Sampling Design Guidelines*. (referred to as EPA Sampling Design Guidelines 1995)

Aspect	Input
Sampling Equipment	<p>Soil samples were obtained on 17 April 2015 in accordance with the standard sampling procedure (SSP) attached in the appendices.</p> <p>The sample locations were drilled using the following equipment as shown on the borehole logs attached in the appendices:</p> <ul style="list-style-type: none"> <li>A hydraulically operated drill rig equipped with spiral flight augers. Soil samples were obtained from a Standard Penetration Test (SPT) sampler or directly from the auger when conditions did not allow use of the SPT sampler.</li> </ul>
Sampling Collection and Field QA/QC	<p>Soil samples were collected from the fill and natural profiles based on field observations. The sampling depths are shown on the logs attached in the appendices. During sampling, soil at selected depths was split into primary and duplicate samples for field QA/QC analysis. Samples were placed in glass jars with plastic caps and teflon seals with minimal headspace. Samples for asbestos analysis were placed in zip-lock plastic bags.</p> <p>Sampling personnel used disposable nitrile gloves during sampling activities. The samples were labelled with the job number, sampling location, sampling depth and date in accordance with the SSP.</p>
Field PID Screening for VOCs	<p>A portable photoionisation detector (PID) was used to screen the samples for the presence of VOCs and to assist with selection of samples for hydrocarbon analysis. The sensitivity of the PID is dependent on the organic compound and varies for different mixtures of hydrocarbons. Some compounds give relatively high readings and some can be undetectable even though present in identical concentrations. The portable PID is best used semi-quantitatively to compare samples contaminated by the same hydrocarbon source. The PID is calibrated before use by measurement of an isobutylene standard gas. All the PID measurements are quoted as parts per million (ppm) isobutylene equivalents.</p> <p>PID screening for VOCs was undertaken on soil samples using the soil sample headspace method. VOC data was obtained from partly filled zip-lock plastic bags following equilibration of the headspace gases.</p>
Decontamination and Sample Preservation	<p>The decontamination procedure adopted during sampling is outlined in the SSP. Where applicable, the sampling equipment was decontaminated using a scrubbing brush and potable water and Decon 90 solution (phosphate free detergent) followed by rinsing with potable water.</p> <p>Soil samples were preserved by immediate storage in an insulated sample container with ice in accordance with the SSP. On completion of the fieldwork, the samples were delivered in the insulated sample container to a NATA-registered laboratory for analysis under standard COC procedures.</p>

### 5.3 Analytical Schedule

The analytical schedule is outlined in the following table:

Table 5-3: Analytical Schedule

PCC	Fill Samples	Natural Soil Samples
Heavy Metals	4	1
TRH/BTEXN	4	1
PAHs	4	1
OCPs/OPPs	3	-
PCBs	3	-
Asbestos	3	-
TCLP Metals	3	-
TCLP PAHs	3	-

#### 5.3.1 Laboratory Analysis

The samples were analysed by the NATA-accredited laboratory using the analytical methods detailed in Schedule B(3) of NEPM 2013. Reference should be made to the laboratory reports attached in the appendices for further details.

Table 5-4: Laboratory Details

Samples	Laboratory	Report References
All primary samples and field QA/QC samples including intra-laboratory duplicates and trip blanks	Envirolab Services Pty Ltd NSW, NATA Accreditation Number – 2901 (ISO/IEC 17025 compliance)	126766, 126766A



## 6 SITE ASSESSMENT CRITERIA (SAC)

The SAC adopted for the assessment are outlined in the table below. The SAC have been derived from the NEPM 2013 and other guidelines as applicable. The guideline values for individual contaminants are presented in the attached report tables.

Table 6-1: SAC Adopted for this Investigation

Guideline	Applicability
Health Investigation Levels (HILs) (NEPM 2013)	The HIL-B criteria for 'residential with accessible soil' have been adopted for this assessment.
Health Screening Levels (HSLs) (NEPM 2013)	The HSL-B criteria for 'residential with accessible soil' have been adopted for this assessment.
Asbestos in Soil	The 'presence/absence' of asbestos in soil has been adopted as the assessment criterion for the Preliminary Site Investigation (PSI).
Waste Classification (WC) Criteria	The criteria outlined in the NSW EPA Waste Classification Guidelines - Part 1: Classifying Waste (2014 <sup>19</sup> ) have been adopted to classify the material for off-site disposal.

## 7 INVESTIGATION RESULTS

### 7.1 Subsurface Conditions

A summary of the subsurface conditions encountered during the investigation is presented in the table below. Reference should be made to the borehole logs attached in the appendices for further details.

Table 7-1: Summary of Subsurface Conditions

Profile	Description
Pavement	Concrete pavement was encountered in all three boreholes to depths ranging from 130mm-150mm.
Fill	Fill material was encountered beneath the pavement in boreholes BH1 and BH2 and extended to depths of 0.4m to 0.45m respectively. The fill material was generally comprised of silty sand and contained inclusions of ash, slag and charcoal.
Natural Soil	Natural sandy soil was encountered beneath the pavement in BH3 and beneath the fill material in BH1 and BH2.

<sup>19</sup> NSW EPA, (2014), *Waste Classification Guidelines, Part 1: Classifying Waste*. (referred to as Waste Classification Guidelines 2014)



Profile	Description
Bedrock	Sandstone bedrock was encountered beneath the natural sand at depths ranging from 0.2m to 0.45m below ground level.
Groundwater	Groundwater seepage was not encountered in the boreholes during drilling. All boreholes remained dry on completion of drilling and a short time after.

## 7.2 Field Screening

A summary of the field screening results is presented in the table below.

Table 7-2: Summary of Field Screening

Aspect	Details (m in bgl)
PID Screening of Soil Samples for VOCs	PID soil sample headspace readings are presented in the attached report tables and the COC documents attached in the appendices. All results were less than 1ppm equivalent isobutylene which indicates a lack of PID detectable VOCs.

## 7.3 Soil Laboratory Results

The soil laboratory results are compared to the relevant SAC in the attached report tables. Statistical calculations undertaken on the results using ProUCL (version 5) are attached in the appendices. A summary of the results assessed against the SAC is presented below.

Table 7-3: Summary of Soil Laboratory Results

Analyte	Results Compared to SAC
Heavy Metals	<p><b><u>HILs:</u></b></p> <p>All heavy metal results were below the HIL-B criteria with the exception of lead in sample BH1 (0.15m-0.25m). The concentration of lead detected was 2900mg/kg, exceeding the SAC of 1200mg/kg.</p> <p><b><u>Summary of Statistical Calculation:</u></b></p> <p>No lead results were above 250% of the SAC. The 95% UCL was calculated using the lead data from the fill soil samples. The 95% UCL for lead was 2580mg/kg which was above the HIL-B criterion of 1200mg/kg. The Standard Deviation (SD) was greater than 50% of the SAC.</p> <p><b><u>WC:</u></b></p> <p>All heavy metal results were less than the CT1 criteria with the exception of lead in three samples and mercury in two samples as shown in Table C. TCLP leachates were prepared from the samples and analysed for lead and/or mercury as required. The results were less than the TCLP1 criteria with the exception of lead in sample BH1 (0.15m-0.25m) as shown in Table D,</p>

Analyte	Results Compared to SAC
	in which the concentration detected exceeded the TCLP1 criterion but was less than the TCLP2 criterion.
TRH	<p><b><u>HSLs:</u></b> All TRH results were below the HSL-B criteria.</p> <p><b><u>WC:</u></b> All TRH results were less than the relevant CT1 and SCC1 criteria.</p>
BTEXN	<p><b><u>HSLs:</u></b> All BTEXN results were below the HSL-B criteria.</p> <p><b><u>WC:</u></b> All BTEX results were less than the relevant CT1 and SCC1 criteria.</p>
PAHs	<p><b><u>HILs:</u></b> All PAH results were below the HIL-B criteria with the exception of benzo(a)pyrene TEQ in sample BH1 (0.15m-0.25m). The concentration detected was 10mg/kg which exceeded the SAC of 4mg/kg.</p> <p><b><u>Summary of Statistical Calculation:</u></b> No results were above 250% of the SAC. The 95% UCL was calculated using the benzo(a)pyrene TEQ data from the fill soil samples. The 95% UCL was 9.2mg/kg which was above the HIL-B criterion of 4mg/kg. The Standard Deviation (SD) was greater than 50% of the SAC.</p> <p><b><u>HSLs:</u></b> All naphthalene results were below the HSL-B criteria.</p> <p><b><u>WC:</u></b> All total PAH results were less than the relevant CT1 and SCC1 criteria. Three samples contained benzo(a)pyrene concentrations which exceeded the CT1 criterion but were less than the SCC1 criterion. TCLP leachates were prepared from the three samples and analysed for PAHs. The benzo(a)pyrene results were less than the TCLP1 criterion.</p>
OCPs & OPPs	<p><b><u>HILs:</u></b> All OCP and OPP results were below the HIL-B criteria.</p> <p><b><u>WC:</u></b> All OCP and OPP results were less than the relevant CT1 and SCC1 criteria.</p>
PCBs	<p><b><u>HILs:</u></b> All PCB results were below the HIL-B criterion.</p> <p><b><u>WC:</u></b> All PCB results were less than the SCC1 criterion.</p>

Analyte	Results Compared to SAC
Asbestos	Asbestos was not detected in the samples analysed for the investigation.

## 8 DATA QUALITY ASSESSMENT

As part of the data quality assessment the following data quality indicators (DQIs) were assessed: precision, accuracy, representativeness, completeness and comparability, as outlined in the table below. Reference should be made to the appendices for an explanation of the individual DQI.

Table 8-1: Assessment of DQIs

Completeness
<p><u>Field Considerations:</u></p> <ul style="list-style-type: none"> <li>The investigation was designed as a preliminary soil screening and sampling was confined to accessible areas of the site (see Figure 2);</li> <li>Samples were obtained from various depths based on the subsurface conditions encountered at the sampling locations. All samples were recorded on the borehole logs. All sampling points are shown on the attached Figure 2;</li> <li>The investigation was undertaken by trained staff in accordance with the SSP; and</li> <li>Documentation maintained during the field work is attached in the appendices where applicable.</li> </ul> <p><u>Laboratory Considerations:</u></p> <ul style="list-style-type: none"> <li>Selected samples were analysed for a range of PCC;</li> <li>All samples were analysed by a NATA-registered laboratory in accordance with the analytical methods outlined in NEPM 2013;</li> <li>Appropriate analytical methods and PQLs were used by the laboratory;</li> <li>Appropriate sample preservation, handling, holding time and COC procedures were adopted for the investigation.</li> </ul>
Comparability
<p><u>Field Considerations:</u></p> <ul style="list-style-type: none"> <li>The investigation was undertaken by trained staff in accordance with the SSP; and</li> <li>Consistency was maintained during sampling in accordance with the SSP.</li> </ul> <p><u>Laboratory Considerations:</u></p> <ul style="list-style-type: none"> <li>All samples were analysed in accordance with the analytical methods outlined in NEPM 2013;</li> <li>Appropriate PQLs were used by the laboratory for all analysis;</li> <li>All primary, intra-laboratory duplicates and other QA/QC samples were analysed by the same laboratory; and</li> <li>The same units were used by the laboratory for all of the analyses.</li> </ul>

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## Representativeness

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### Field Considerations:

- The investigation was designed to obtain appropriate media encountered during the field work as outlined in the SAQP. Dust and/or vapour sampling was outside the scope of this assessment; and
- All media identified in the SAQP was sampled.

### Laboratory Considerations:

- All samples were analysed in accordance with the SAQP.

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## Precision

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### Field Considerations:

- The investigation was undertaken in accordance with the SSP.

### Laboratory Considerations:

- Analysis of field QA/QC samples including intra-laboratory duplicates and trip blanks (TB) as outlined below;
- The field QA/QC frequency adopted for the investigation is outlined below;
- Calculation of the Relative Percentage Difference (RPD) from the primary and duplicate results (the RPD calculation equation is outlined in the attached appendices);
- Assessment of RPD results against the acceptance criteria outlined in **Section 5.1**.

### Intra-laboratory RPD Results:

Soil samples were analysed at a frequency of 20% of the primary samples:

- DUP2 is a soil duplicate of primary sample BH2 (0.15-0.25).

The intra-laboratory results are presented in the attached report tables. The results indicated that field precision was acceptable. The RPD values for a range of individual PAHs and heavy metals were outside the acceptance criteria. Values outside the acceptable limits have been attributed to sample heterogeneity and the difficulties associated with obtaining homogenous duplicate samples of heterogeneous matrices. As both the primary and duplicate sample results were less than the SAC, the exceedances are not considered to have had an adverse impact on the data set as a whole.

### Trip Blank (TB):

One soil trip blank was analysed for BTEX at a frequency of one blank per batch of volatiles. The results are presented in the attached report tables. The results were all less than the PQLs.

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## Accuracy

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### Field Considerations:

- The investigation was undertaken in accordance with the SSP.

### Laboratory Considerations:

- The analytical quality assessment adopted by the laboratory was in accordance with the NATA and NEPM 2013 requirements as outlined in the analytical reports;



- A review of the reports indicates that the analytical results were generally within the acceptance criteria adopted by the laboratory.

## 9 **PRELIMINARY WASTE CLASSIFICATION OF SOIL FOR OFF-SITE DISPOSAL**

The preliminary waste classification of soil for off-site disposal is summarised in the following table:

Table 9-1: Preliminary Waste Classification

Site Extent / Material Type	Classification	Disposal Option
Fill material over the majority of the site with the exception of the area around BH1	General Solid Waste (non-putrescible) (GSW)	A NSW EPA landfill licensed to receive the waste stream. The landfill should be contacted to obtain the required approvals prior to commencement of excavation.
Shallow fill material in the vicinity of BH1 (subject to a further assessment to better assess the extent of the RSW)	Restricted Solid Waste (non-putrescible) (RSW)	The material can be disposed of to a licensed NSW EPA landfill capable of receiving the waste stream. The landfill should be contacted to obtain the required approvals prior to commencement of excavation.

## 10 **TIER 1 RISK ASSESSMENT AND REVIEW OF PCSM**

For a contaminant to represent a risk to a receptor, the following three conditions must be present:

1. Source – The presence of a contaminant;
2. Pathway – A mechanism or action by which a receptor can become exposed to the contaminant; and
3. Receptor – The human or ecological entity which may be adversely impacted following exposure to contamination.

If one of the above components is missing, the potential for adverse risks is relatively low.

The assessment has identified the following contamination issue at the site:

- **Lead and PAH contamination in shallow fill material in the north-east of the site:**

Sample BH1 (0.15m-0.25m) contained concentrations of lead and benzo(a)pyrene TEQ that exceeded the site assessment criteria. Benzo(a)pyrene TEQ is a measure of the toxicity of eight carcinogenic PAHs relative to benzo(a)pyrene. The fill material in BH1 was noted to contain slag and ash. It is likely that the source of the contamination is the slag and ash. The contamination is considered to pose a moderate risk to potential human receptors, who may be exposed to the contaminants via the exposure pathways of dermal contact, ingestion and inhalation via dust.

A fill sample collected directly below the contaminated sample, at a depth of 0.3m-0.4m, contained concentrations of lead and PAHs that were below the site assessment criteria.

## **10.1     Extent of Contamination**

### **10.1.1     Known Extent**

The soil analysis was designed as a preliminary contamination screening, with four fill samples and one natural soil sample analysed. Based on the available data, the soil contamination appears to be confined to the fill material at the site. Contamination above the site assessment criteria may be confined to the area around BH1, however additional soil analysis should be undertaken to confirm this.

### **10.1.2     Unknown Extent**

Sampling was not undertaken in the rooms along the south-western side of the building. There is a moderate potential for soil and groundwater contamination associated with the underground storage tank in the south of the site.

### **10.1.3     Hazardous Building Materials in Existing Buildings**

An Asbestos containing materials survey was undertaken in 2013. The findings and an asbestos materials register are provided in the following report:

Asbestos Containing Materials Survey  
Property Number: 44240  
Property name: Waverley TE  
Property Address: Bronte Road, Bondi Junction, NSW 2024  
Prepared by Edge Group Pty Ltd dated 7 August 2013

## **10.2     Fate and Transport of Contaminants**

The potential fate and transport of PCC identified at the site is summarised in the following table:

Table 10-1: Fate and Transport of PCC

<b>PCC/CoPC</b>	<b>Fate and Transport</b>
Non-volatile contaminants including: metals and heavy fraction PAHs	With the exception of asbestos, non-volatile contaminants are predominantly confined to the soil and groundwater medium. The mobility of these contaminants varies depending on: the nature and type of contaminant present (e.g. leachability, viscosity etc.); soil type/porosity; surface water infiltration; groundwater levels; and the rate of groundwater movement.
<b>Presence of Ash and Slag</b>	

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**PCC/CoPC**

**Fate and Transport**

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Non-volatile contaminants associated with ash and slag waste (some heavy metals, heavy fraction PAHs, and sometimes heavy fraction TPHs) are bound within a relatively insoluble matrix. Slag and ash is usually formed as a by-product of combustion at high temperatures which 'locks in' the contaminants within the matrix.

**Site Conditions**

The potential for surface water infiltration is very limited at the subject site which would reduce the migration potential for certain contaminants. The presence of paved surfaces in the surrounding areas can also limit the migration potential for non-volatile contaminants.

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**10.3     Data Gaps**

The assessment has identified the following data gaps:

- Areas within the rooms in the south side of the site, including where the UST may be located, have not been assessed;
- An assessment of groundwater has not been undertaken; and
- The extent of the RSW associated with BH1 has not been assessed.

**11        CONCLUSION**

EIS consider that the report objectives outlined in **Section 1.2** have been addressed.

Based on the scope of works undertaken, EIS are of the opinion that the PCC identified at the site pose a moderate risk to the receptors. EIS consider that the site can be made suitable for future mixed use / commercial and high-density residential development provided that the following recommendations are implemented to address the data gaps and to minimise the risks:

1. Undertake a Stage 2 ESA to address the data gaps identified in Section 10.3;
2. Prepare a Remediation Action Plan (RAP) to outline remedial measures for the site; and
3. Prepare a Validation Assessment (VA) report on completion of remediation;

In the event that unexpected conditions are encountered during development work or between sampling locations that may pose a contamination risk, all works should stop and an environmental consultant should be engaged to inspect the site and address the issue.



## 11.1 Regulatory Requirement

The regulatory requirements applicable for the site are outlined in the following table:

Table 11-1: Regulatory Requirement

Guideline	Applicability
Duty to Report Contamination 2009 <sup>20</sup>	At this stage, EIS consider that there is no requirement to notify the NSW EPA of the site contamination. After successful implementation of the Stage 2 ESA and the RAP, the site contamination is unlikely to meet the Notification Triggers.
POEO Act 1997	Section 143 of the POEO Act 1997 states that if waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed of in an appropriate manner.
UPSS Regulation 2008	<p>The regulation states that 'A storage system must not be used unless groundwater monitoring wells are installed on the storage site' and that the wells should be located 'with a view to maximising the likelihood that the wells will intercept contaminated groundwater'. Installation of groundwater wells and subsequent monitoring is a requirement for new and existing underground fuel storage systems as of 1 June 2008.</p> <p>Under the regulation and the AS4976-2008<sup>21</sup>, all storage systems must be removed from the site in compliance with Section 5 of the standards. In-situ abandonment should only be considered in special circumstances, e.g. where removal will cause serious risks to adjoining tanks, underground structures and adjoining buildings. Approval from the applicable authorities (i.e. WorkCover, Council, NSW EPA) may be required under these circumstances.</p>
Work Health and Safety Code of Practice 2011 <sup>22</sup>	Sites contaminated with asbestos become a 'workplace' when work is carried out there and require a register and asbestos management plan.
Dewatering Consent	In the event groundwater is intercepted during excavation works, dewatering may be required. Council, NSW Office of Water (NOW) and other relevant approvals (from discharge authorities like Sydney Water etc.) should be obtained prior to the commencement of dewatering.

<sup>20</sup> NSW Department of Environment and Climate Change, (2009), *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997*. (referred to as Duty to Report Contamination 2009)

<sup>21</sup> Standards Australia, (2008), *The Removal and Disposal of Underground Petroleum Storage Tanks*. (referred to as AS4976-2008)

<sup>22</sup> WorkCover NSW, (2011), *WHS Regulation: Code of Practice – How to Manage and Control Asbestos in the Workplace*.



## 12 LIMITATIONS

The report limitations are outlined below:

- EIS accepts no responsibility for any unidentified contamination issues at the site. Any unexpected problems/subsurface features that may be encountered during development works should be inspected by an environmental consultant as soon as possible;
- Previous use of this site may have involved excavation for the foundations of buildings, services, and similar facilities. In addition, unrecorded excavation and burial of material may have occurred on the site. Backfilling of excavations could have been undertaken with potentially contaminated material that may be discovered in discrete, isolated locations across the site during construction work;
- This report has been prepared based on site conditions which existed at the time of the investigation; scope of work and limitation outlined in the EIS proposal; and terms of contract between EIS and the client (as applicable);
- The conclusions presented in this report are based on investigation of conditions at specific locations, chosen to be as representative as possible under the given circumstances, visual observations of the site and immediate surrounds and documents reviewed as described in the report;
- Subsurface soil and rock conditions encountered between investigation locations may be found to be different from those expected. Groundwater conditions may also vary, especially after climatic changes;
- The investigation and preparation of this report have been undertaken in accordance with accepted practice for environmental consultants, with reference to applicable environmental regulatory authority and industry standards, guidelines and the assessment criteria outlined in the report;
- Where information has been provided by third parties, EIS has not undertaken any verification process, except where specifically stated in the report;
- EIS has not undertaken any assessment of off-site areas that may be potential contamination sources or may have been impacted by site contamination, except where specifically stated in the report;
- EIS accept no responsibility for potentially asbestos containing materials that may exist at the site. These materials may be associated with demolition of pre-1990 constructed buildings or fill material at the site;
- EIS have not and will not make any determination regarding finances associated with the site;
- Additional investigation work may be required in the event of changes to the proposed development or land use. EIS should be contacted immediately in such circumstances;
- Material considered to be suitable from a geotechnical point of view may be unsatisfactory from a soil contamination viewpoint, and vice versa; and
- This report has been prepared for the particular project described and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

## **LIST OF IN-TEXT TABLES**

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## **IMPORTANT INFORMATION ABOUT THIS REPORT**

These notes have been prepared by EIS to assist with the assessment and interpretation of this report.

### **The Report is based on a Unique Set of Project Specific Factors**

This report has been prepared in response to specific project requirements as stated in the EIS proposal document which may have been limited by instructions from the client. This report should be reviewed, and if necessary, revised if any of the following occur:

- The proposed land use is altered;
- The defined subject site is increased or sub-divided;
- The proposed development details including size, configuration, location, orientation of the structures or landscaped areas are modified;
- The proposed development levels are altered, e.g. addition of basement levels; or
- Ownership of the site changes.

EIS/J&K will not accept any responsibility whatsoever for situations where one or more of the above factors have changed since completion of the assessment. If the subject site is sold, ownership of the assessment report should be transferred by EIS to the new site owners who will be informed of the conditions and limitations under which the assessment was undertaken. No person should apply an assessment for any purpose other than that originally intended without first conferring with the consultant.

### **Changes in Subsurface Conditions**

Subsurface conditions are influenced by natural geological and hydrogeological process and human activities. Groundwater conditions are likely to vary over time with changes in climatic conditions and human activities within the catchment (e.g. water extraction for irrigation or industrial uses, subsurface waste water disposal, construction related dewatering). Soil and groundwater contaminant concentrations may also vary over time through contaminant migration, natural attenuation of organic contaminants, ongoing contaminating activities and placement or removal of fill material. The conclusions of an assessment report may have been affected by the above factors if a significant period of time has elapsed prior to commencement of the proposed development.

### **This Report is based on Professional Interpretations of Factual Data**

Site assessments identify actual subsurface conditions at the actual sampling locations at the time of the investigation. Data obtained from the sampling and subsequent laboratory analyses, available site history information and published regional information is interpreted by geologists, engineers or environmental scientists and opinions are drawn about the overall subsurface conditions, the nature and extent of contamination, the likely impact on the proposed development and appropriate remediation measures.

Actual conditions may differ from those inferred, because no professional, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from predictions. Nothing can be done to prevent the unanticipated, but steps can be taken to help minimise the impact. For this reason, site owners should retain the services of their consultants throughout the development stage of the project, to identify variances, conduct additional tests which may be needed, and to recommend solutions to problems encountered on site.

### **Assessment Limitations**

Although information provided by a site assessment can reduce exposure to the risk of the presence of contamination, no environmental site assessment can eliminate the risk. Even a rigorous professional assessment may not detect all contamination on a site. Contaminants may be present in areas that were not surveyed or sampled, or may migrate to areas which showed no signs of contamination when sampled. Contaminant analysis cannot possibly cover every type of contaminant which may occur; only the most likely contaminants are screened.



#### **Misinterpretation of Site Assessments by Design Professionals**

Costly problems can occur when other design professionals develop plans based on misinterpretation of an assessment report. To minimise problems associated with misinterpretations, the environmental consultant should be retained to work with appropriate professionals to explain relevant findings and to review the adequacy of plans and specifications relevant to contamination issues.

#### **Logs Should not be Separated from the Assessment Report**

Borehole and test pit logs are prepared by environmental scientists, engineers or geologists based upon interpretation of field conditions and laboratory evaluation of field samples. Logs are normally provided in our reports and these should not be re-drawn for inclusion in site remediation or other design drawings, as subtle but significant drafting errors or omissions may occur in the transfer process. Photographic reproduction can eliminate this problem, however contractors can still misinterpret the logs during bid preparation if separated from the text of the assessment. If this occurs, delays, disputes and unanticipated costs may result. In all cases it is necessary to refer to the rest of the report to obtain a proper understanding of the assessment. Please note that logs with the 'Environmental Log' header are not suitable for geotechnical purposes as they have not been peer reviewed by a Senior Geotechnical Engineer.

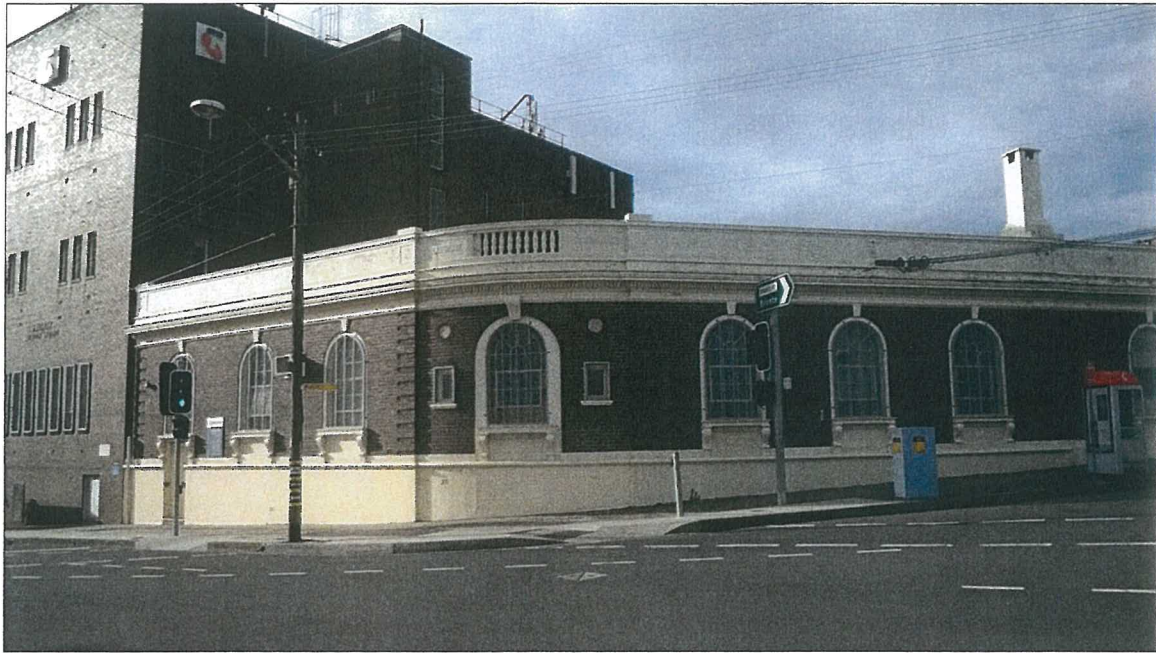
To reduce the likelihood of borehole and test pit log misinterpretation, the complete assessment should be available to persons or organisations involved in the project, such as contractors, for their use. Denial of such access and disclaiming responsibility for the accuracy of subsurface information does not insulate an owner from the attendant liability. It is critical that the site owner provides all available site information to persons and organisations such as contractors.

#### **Read Responsibility Clauses Closely**

Because an environmental site assessment is based extensively on judgement and opinion, it is necessarily less exact than other disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. To help prevent this problem, model clauses have been developed for use in written transmittals. These are definitive clauses designed to indicate consultant responsibility. Their use helps all parties involved recognise individual responsibilities and formulate appropriate action. Some of these definitive clauses are likely to appear in the environmental site assessment, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to any questions.



## SITE PHOTOGRAPHS



**Plate 1:** the site viewed from across the intersection of Bronte Road and Birrell Street to the south.

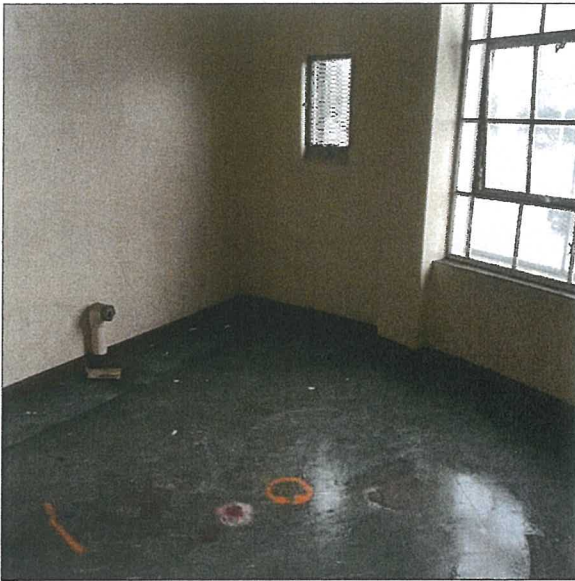


**Plate 2:** the interior of the building viewed towards the car park entrance on Adams Lane.

**Plate 3:** the western side of the building showing the entrance to the car park from Adams Lane.



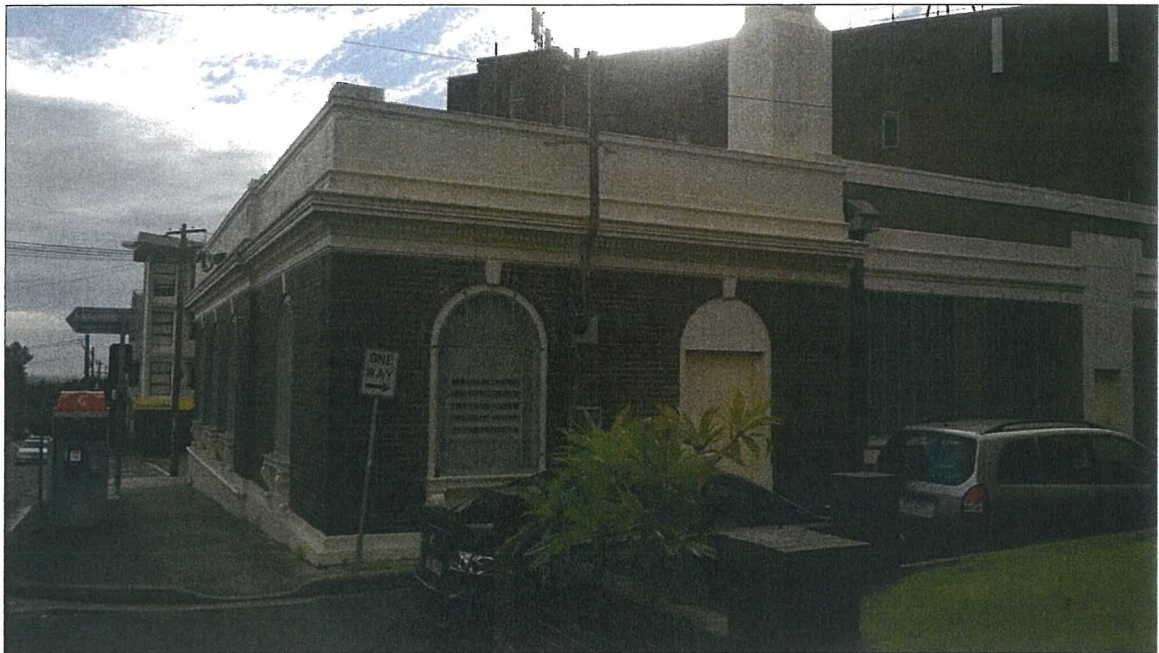




**Plate 4:** the small room on the south-western the corner of the building ("extension to locker



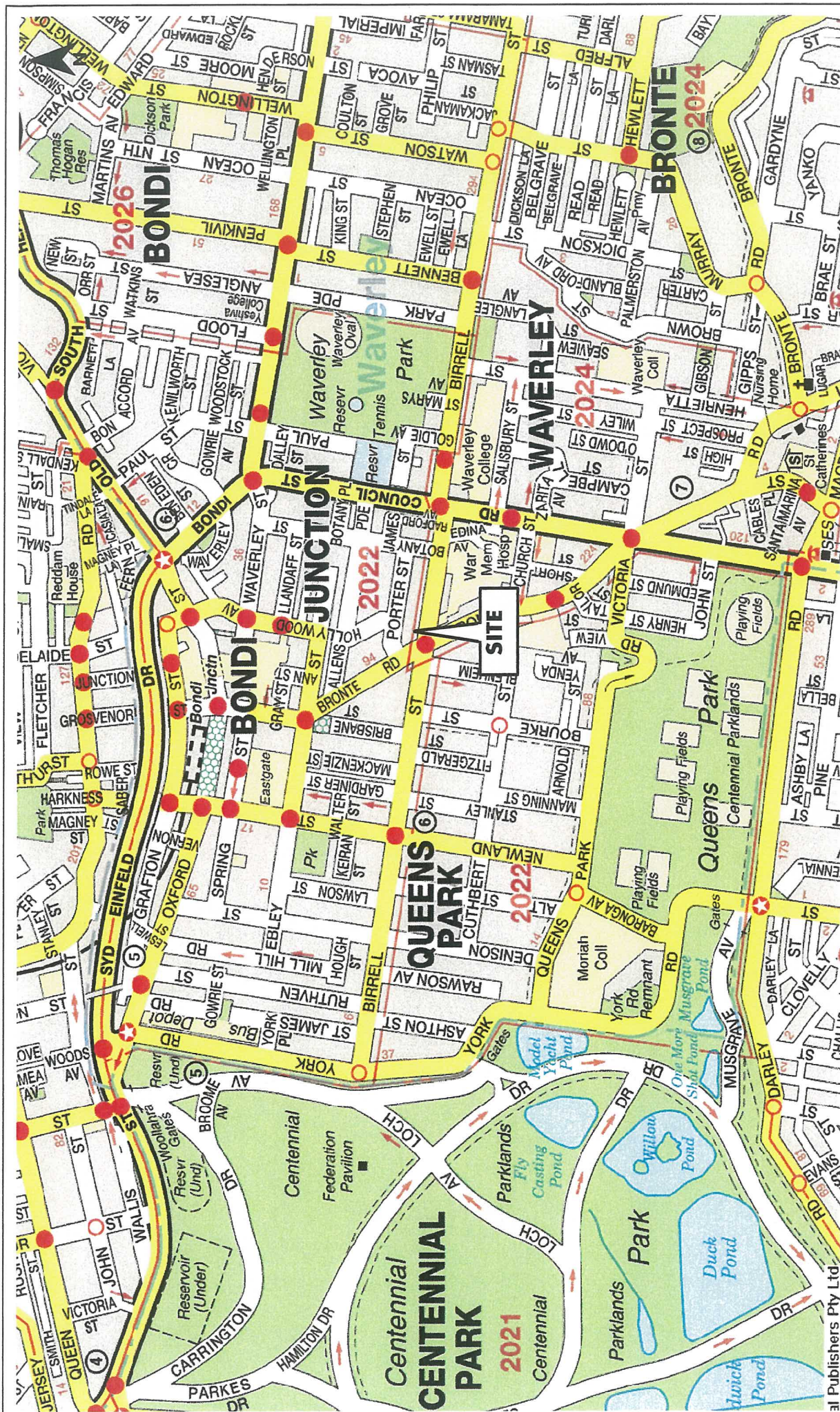
**Plate 5:** the sub floor pit on the northern side of building.



**Plate 6:** the southern corner of the building, with Adams Lane in the foreground.

**REPORT FIGURES**

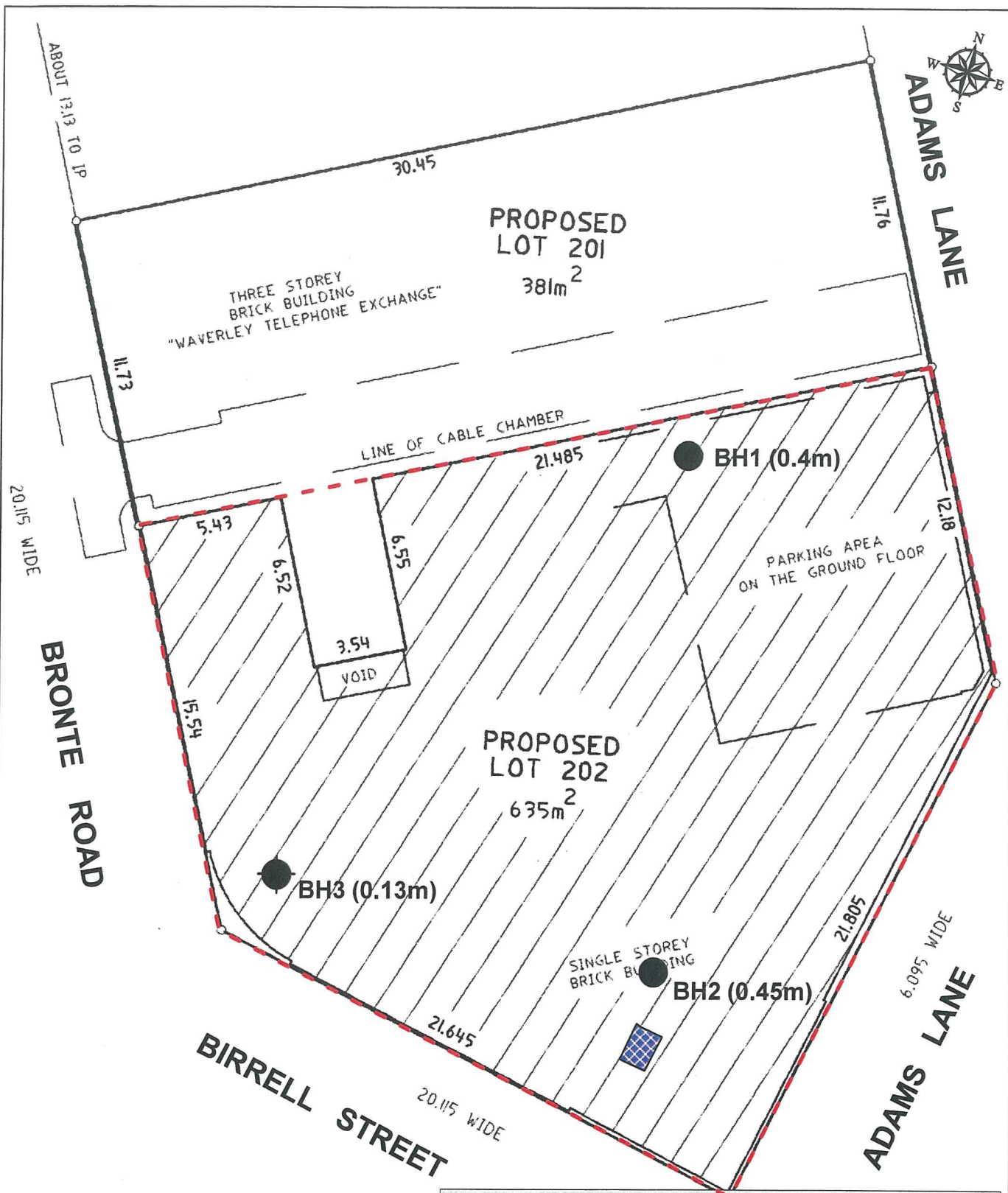




<p>Project Number: <b>E28302K</b></p>	<p>Title: <b>SITE LOCATION PLAN</b></p>
<p>Figure: <b>1</b></p>	<p>Address: <b>122 BRONTE ROAD, BONDI JUNCTION, NSW</b></p>
<p><b>EIS</b> ENVIRONMENTAL INVESTIGATION SERVICES</p>	

NOTES:  
Figure 1 has been recreated from UBD on disc (version 7.1) and <http://maps.six.nsw.gov.au/>.  
Figure is not to scale. UBD Map ref: 257 E5  
Reference should be made to the report text for a full understanding of this plan.





SCALE (m)



**NOTES:**

Figure 2 has been recreated from Figure 1 in JK Geotechnics report number 28302Srpt.

The borehole locations presented on this plan have been established from site measurements only and should not be construed as survey points.

Reference should be made to the report text for a full understanding of this plan.

**LEGEND:**

- - - Approximate site boundary
- **BH1 (0.4m)** Borehole location, number and depth of fill (m)
- Approximate location of suspected UST

**EIS**

ENVIRONMENTAL  
INVESTIGATION  
SERVICES

Project Number:

E28302K

Title:

BOREHOLE LOCATION PLAN

Figure:

2

Address:

122 BRONTE ROAD,  
BONDI JUNCTION, NSW

**LABORATORY SUMMARY TABLES**

**TABLE A**  
**SOIL LABORATORY RESULTS COMPARED TO HILs**  
All data in mg/kg unless stated otherwise

PQL - EnviroLab Services		HEAVY METALS										PAHs					ORGANOCHLORINE PESTICIDES (OCPs)					OP PESTICIDES (OPPs)		TOTAL PCBs		ASBESTOS FIBRES				
Site Assessment Criteria (SAC) <sup>1</sup>		Arsenic	Cadmium	Chromium VI <sup>2</sup>	Copper	Lead	Mercury	Nickel	Zinc	Total PAHs	B(a)P TEQ <sup>3</sup>	HCB	Endosulfan	Methoxychlor	Aldrin & Dieldrin	DDT, DDD & DDE	Heptachlor	Chlorpyrifos												
500		4	0.4	1	1	1	0.1	1	1	-	400	4	15	400	500	10	0.1	0.1	0.1	0.1	0.1	1	100							
Sample Reference	Sample Depth	Sample Description																												
BH1	0.15-0.25	Fill: silty sand										6	2	6	2300	2900	13	12	920	77	10									
BH1	0.3-0.4	Fill: silty sand										LPQL	2	4	490	1000	5.5	5	730	24	3.5	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	Not detected
BH2	0.15*-0.25	Fill: silty sand										LPQL	0.7	3	14	32	0.2	1	1500	1.6	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH2	0.35-0.45	Fill: silty sand										LPQL	LPQL	3	37	120	0.5	2	490	12	1.9	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	Not detected	
BH3	0.15-0.25	Sand										LPQL	LPQL	2	1	10	LPQL	LPQL	10	LPQL	LPQL	NA	NA	NA	NA	NA	NA	Not detected		
Total Number of Samples		5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	0							
Maximum Value		6	2	6	2300	2900	13	12	1500	77	10	0	0	0	0	0	0	0	0	0	0	0	NC							
Statistical Analysis on Fill Samples																														
Number of Fill Samples <sup>4</sup>		NC	NC	NC	NC	4	NC	NC	NC	NC	NC	4	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
Mean Value <sup>4</sup>		NC	NC	NC	NC	1013	NC	NC	NC	NC	5.13	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
Standard Deviation <sup>4</sup>		NC	NC	NC	NC	1332.0	NC	NC	NC	NC	4.3	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
% UCL <sup>4</sup>		NC	NC	NC	NC	95%	NC	NC	NC	NC	95%	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			
UCL Value <sup>4</sup>		NC	NC	NC	NC	2580	NC	NC	NC	NC	9.216	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC			

**Explanation:**

1 - Site Assessment Criteria (SAC): NEPM 2013, HIL-B: 'Residential with minimal opportunities for soil access; including dwellings with fully/permanently paved yards like high-rise buildings'

2 - The results are for: Total Chromium which includes Chromium III and VI. For initial screening purposes, we have assumed that the samples contain only Chromium VI unless demonstrated otherwise by additional analysis.

3 - B(a)P TEQ - Benzo(a)pyrene Toxicity Equivalence Quotient has been calculated based on 8 carcinogenic PAHs and their Toxic Equivalence Factors (TEFs) outlined in NEPM 2013

4 - Statistical calculation undertaken using ProUCL version 5.0 (USEPA). Statistical calculation has only been undertaken using data from fill samples

Concentration above the SAC	VALUE	Standard deviation exceeds data assessment criteria	VALUE
<b>Abbreviations:</b>			
PAHs: Polycyclic Aromatic Hydrocarbons			
B(a)P: Benzo(a)pyrene			
UCL: Upper Level Confidence Limit on Mean Value			
HILs: Health Investigation Levels			
NA: Not Analysed			
PQL: Practical Quantitation Limit			
NC: Not Calculated			
LPQL: Less than PQL			
OPP: Organophosphorus Pesticides			
OCP: Organochlorine Pesticides			
NEPM: National Environmental Protection Measure			
PCBs: Polychlorinated Biphenyls			

**Abbreviations:**

- PAHs: Polycyclic Aromatic Hydrocarbons  
B(a)P: Benzo(a)pyrene  
PQL: Practical Quantitation Limit  
LPQL: Less than PQL  
OPP: Organophosphorus Pesticides  
OCP: Organochlorine Pesticides  
PCBs: Polychlorinated Biphenyls
- UCL: Upper Level Confidence Limit on Mean Value  
HILs: Health Investigation Levels  
NA: Not Analysed  
NC: Not Calculated  
NSL: No Set Limit  
SAC: Site Assessment Criteria  
NEPM: National Environmental Protection Measure

- Explanation:**
- 1 - Site Assessment Criteria (SAC): NEPM 2013, HIL-B: Residential with minimal opportunities for soil access; including dwellings with fully/permanently paved yards like high-rise buildings\*  
2 - The results are for Total Chromium which includes Chromium III and VI. For initial screening purposes, we have assumed that the samples contain only Chromium VI unless demonstrated otherwise by additional analysis.  
3 - B(a)P TEQ - Benzo(a)pyrene Toxicity Equivalence Quotient has been calculated based on 8 carcinogenic PAHs and their Toxic Equivalence Factors (TEFs) outlined in NEPM 2013  
4 - Statistical calculation undertaken using ProUCL version 5.0 (USEPA). Statistical calculation has only been undertaken using data from fill samples

Concentration above the SAC

Standard deviation exceeds data assessment criteria

VALUE

TABLE B  
SOIL LABORATORY RESULTS COMPARED TO HSLs  
All data in mg/kg unless stated otherwise

PQL - EnviroLab Services		C <sub>6</sub> -C <sub>10</sub> (F1)	>C <sub>10</sub> -C <sub>16</sub> (F2)	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	PID <sup>2</sup>
HSL Land Use Category <sup>1</sup>		25	50	0.2	0.5	1	3	1	
Sample Reference	Sample Depth	Sample Description	Depth Category	Soil Category	HIGH DENSITY RESIDENTIAL				
BH1	0.15-0.25	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	0.3
BH1	0.3-0.4	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	0.1
BH2	0.15*-0.25	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	0.1
BH2	0.35-0.45	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	0.1
BH3	0.15-0.25	Sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	0.0
Total Number of Samples		5	5	5	5	5	5	5	5
Maximum Value		LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0.3

Explanation:

1 - Site Assessment Criteria (SAC): NEPM 2013

2 - Field PID values obtained during the investigation

Concentration above the SAC

The guideline corresponding to the elevated value is highlighted in grey in the Site Assessment Criteria Table below

VALUE

Abbreviations:

UCL: Upper Level Confidence Limit on Mean Value

NC: Not Calculated

QCL: Practical Quantitation Limit

NA: Not Analysed

NA: Not Analysed

LPQL: Less than PQL

NEPM: National Environmental Protection Measure

SITE ASSESSMENT CRITERIA

PQL - EnviroLab Services		C <sub>6</sub> -C <sub>10</sub> (F1)	>C <sub>10</sub> -C <sub>16</sub> (F2)	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	
HSL Land Use Category <sup>1</sup>		25	50	0.2	0.5	1	3	1	
HIGH DENSITY RESIDENTIAL									
Sample Reference	Sample Depth	Sample Description	Depth Category	Soil Category					
BH1	0.15-0.25	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	40	3
BH1	0.3-0.4	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	40	3
BH2	0.15*-0.25	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	40	3
BH2	0.35-0.45	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	40	3
BH3	0.15-0.25	Sand	0m to < 1m	Sand	45	110	0.5	40	3



TABLE C  
SOIL LABORATORY RESULTS COMPARED TO WASTE CLASSIFICATION GUIDELINES  
All data in mg/kg unless stated otherwise

Sample Reference	Sample Depth	Sample Description	HEAVY METALS							PAHs		OC/OP PESTICIDES				Total PCBs	C <sub>10</sub> -C <sub>14</sub>			BTEX COMPOUNDS			ASBESTOS FIBRES				
			Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total PAHs	B(a)P	Total Endosulfans	Chlorpyrifos	Total Moderately Harmful <sup>2</sup>		Total Scheduled <sup>3</sup>	C <sub>9</sub> -C <sub>9</sub>	C <sub>10</sub> -C <sub>14</sub>	TRH C <sub>15</sub> -C <sub>18</sub>	C <sub>9</sub> -C <sub>10</sub>	Total C <sub>10</sub> -C <sub>18</sub>		Benzene	Toluene	Ethyl benzene	Xylenes
PQL - Enrichlab Services			4	0.4	1	1	1	0.1	1	1	-	0.05	0.1	0.1	0.1	0.1	0.1	25	50	100	100	250	0.2	0.5	1	3	100
General Solid Waste CT1 <sup>1</sup>			100	20	100	NSL	100	4	40	NSL	200	0.8	60	4	250	<50	<50	650	NSL	100	100	10,000	10	288	600	1,000	-
General Solid Waste SCC1 <sup>1</sup>			500	100	1900	NSL	1500	50	1050	NSL	200	10	108	7.5	250	<50	<50	650	NSL	100	100	10,000	18	518	1,080	1,800	-
Restricted Solid Waste CT2 <sup>1</sup>			400	80	400	NSL	400	16	160	NSL	800	3.2	240	16	1000	<50	<50	2600	NSL	40	40	40,000	40	1,152	2,400	4,000	-
Restricted Solid Waste SCC2 <sup>1</sup>			2000	400	7600	NSL	6000	200	4200	NSL	800	23	432	30	1000	<50	<50	2600	NSL	72	72	40,000	72	2,073	4,320	7,200	-
BH1 0.15-0.25 Fill: silty sand BH1 0.3-0.4 Fill: silty sand BH2 0.15 <sup>+</sup> -0.25 Fill: silty sand BH2 0.35-0.45 Fill: silty sand BH3 0.15-0.25 Sand Total Number of samples Maximum Value			6	2	6	2300	2900	13	12	920	77	7.2	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	300	240	540	LPQL	LPQL	LPQL	LPQL	Not detected
	LPQL	2	4	490	1000	5.5	5	5	5	730	24	2.5	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
	LPQL	0.7	3	14	32	0.2	1	0.2	1	1500	1.6	0.2	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	Not detected	
	LPQL	3	37	120	0.5	2	0.5	2	490	12	1.3	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	Not detected	
	LPQL	LPQL	2	1	10	LPQL	10	LPQL	10	LPQL	10	LPQL	NA	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA
Total Number of samples Maximum Value	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	5	5	5	5	5	5	5	5	5	0
	6	2	6	2300	2900	13	12	12	1500	77	7.2	0	0	0	0	0	0	0	0	300	240	540	0	0	0	0	NC

Explanation:

<sup>1</sup> - NSW EPA Waste Classification Guidelines (2014)

<sup>2</sup> - Assessment of Total Moderately Harmful pesticides includes: Dichlorovos, Dimethoate, Fenitrothion, Ethion, Malathion and Parathion

<sup>3</sup> - Assessment of Total Scheduled pesticides includes: HBC, alpha-BHC, gamma-BHC, beta-BHC, Heptachlor, Aldrin, Heptachlor Epoxide, gamma-Chlordane, alpha-chlordane, pp-DDD, pp-DDT, Endrin Aldehyde

Concentration above the CTI

Concentration above SCC1

Concentration above the SCC2

Abbreviations:

PAHs: Polycyclic Aromatic Hydrocarbons

B(a)P: Benzo(a)pyrene

PQL: Practical Quantitation Limit

LPQL: Less than PQL

PID: Photoionisation Detector

PCBs: Polychlorinated Biphenyls

UCL: Upper Level Confidence Limit on Mean Value

NA: Not Analysed

NC: Not Calculated

NSL: No Set Limit

SAC: Site Assessment Criteria

THR: Total Recoverable Hydrocarbons

CT: Contaminant Threshold

SCC: Specific Contaminant Concentration

HILs: Health Investigation Levels

NEPM: National Environmental Protection Measure

BTEX: Monocyclic Aromatic Hydrocarbons

**TABLE D**  
**SOIL LABORATORY TCLP RESULTS**  
All data in mg/L unless stated otherwise

	Lead	Mercury	B(a)P
PQL - Envirolab Services	0.03	0.0005	0.001
TCLP1 - General Solid Waste <sup>1</sup>	5	0.2	0.04
TCLP2 - Restricted Solid Waste <sup>1</sup>	20	0.8	0.16
TCLP3 - Hazardous Waste <sup>1</sup>	>20	>0.8	>0.16
Sample Reference	Sample Depth	Sample Description	
BH1	0.15-0.25	Fill: silty sand	12 LPQL LPQL
BH1	0.3-0.4	Fill: silty sand	2.4 LPQL LPQL
BH2	0.35-0.45	Fill: silty sand	0.2 NA LPQL
<b>Total Number of samples</b>			3 2 3
<b>Maximum Value</b>			12 LPQL LPQL

**Explanation:**

1 - NSW EPA Waste Classification Guidelines (2014)

General Solid Waste

VALUE

Restricted Solid Waste

VALUE

Hazardous Waste

VALUE

**Abbreviations:**

PQL: Practical Quantitation Limit

LPQL: Less than PQL

B(a)P: Benzo(a)pyrene

NC: Not Calculated

NA: Not Analysed

TCLP: Toxicity Characteristics Leaching Procedure

**TABLE E**  
**SOIL INTRA-LABORATORY DUPLICATE RESULTS & RPD CALCULATIONS**  
All results in mg/kg unless stated otherwise

SAMPLE	ANALYSIS	Envirolab PQL	INITIAL	REPEAT	MEAN	RPD %
Sample Ref = BH2 (0.15-0.25) Dup Ref = DUP2  Envirolab Report: #126766	Arsenic	4	LPQL	LPQL	NC	NC
	Cadmium	0.4	0.7	0.5	0.6	33
	Chromium	1	3	3	3.0	0
	Copper	1	14	21	17.5	40
	Lead	1	32	58	45.0	58
	Mercury	0.1	0.2	0.3	0.3	40
	Nickel	1	1	1	1.0	0
	Zinc	1	1500	920	1210.0	48
	Naphthalene	0.1	LPQL	LPQL	NC	NC
	Acenaphthylene	0.1	LPQL	LPQL	NC	NC
	Acenaphthene	0.1	LPQL	LPQL	NC	NC
	Fluorene	0.1	LPQL	LPQL	NC	NC
	Phenanthrene	0.1	LPQL	0.3	NC	NC
	Anthracene	0.1	LPQL	0.1	NC	NC
	Fluoranthene	0.1	0.2	0.9	0.6	127
	Pyrene	0.1	0.3	0.9	0.6	100
	Benzo(a)anthracene	0.1	0.1	0.5	0.3	133
	Chrysene	0.1	0.1	0.5	0.3	133
	Benzo(b,j,k)fluoranthene	0.2	0.3	1	0.7	108
	Benzo(a)pyrene	0.05	0.2	0.58	0.4	97
	Indeno(123-cd)pyrene	0.1	0.1	0.4	0.3	120
	Dibenzo(ah)anthracene	0.1	LPQL	LPQL	NC	NC
	Benzo(ghi)perylene	0.1	0.1	0.4	0.3	120
	TRH C <sub>6</sub> -C <sub>10</sub> (F1)	25	LPQL	LPQL	NC	NC
	TRH >C <sub>10</sub> -C <sub>16</sub> (F2)	50	LPQL	LPQL	NC	NC
	TRH >C <sub>16</sub> -C <sub>34</sub> (F3)	100	LPQL	LPQL	NC	NC
	TRH >C <sub>34</sub> -C <sub>40</sub> (F4)	100	LPQL	LPQL	NC	NC
	Benzene	0.5	LPQL	LPQL	NC	NC
	Toluene	0.5	LPQL	LPQL	NC	NC
	Ethylbenzene	1	LPQL	LPQL	NC	NC
	m+p-xylene	2	LPQL	LPQL	NC	NC
	o-xylene	1	LPQL	LPQL	NC	NC

**Explanation:**

The RPD value is calculated as the absolute value of the difference between the initial and repeat results divided by the average value expressed as a percentage. The following acceptance criteria will be used to assess the RPD results:

- Results > 10 times PQL = RPD value <= 50% are acceptable
- Results between 5 & 10 times PQL = RPD value <= 75% are acceptable
- Results < 5 times PQL = RPD value <= 100% are acceptable

If result is LPQL then 50% of the PQL is used for the calculation

RPD Results Above the Acceptance Criteria

VALUE

**Abbreviations:**

PQL: Practical Quantitation Limit  
LPQL: Less than PQL  
NA: Not Analysed  
NC: Not Calculated

OCP: Organochlorine Pesticides  
OPP: Organophosphorus Pesticides  
PCBs: Polychlorinated Biphenyls  
TRH: Total Recoverable Hydrocarbons

**TABLE F**  
**SUMMARY OF FIELD QA/QC RESULTS**

ANALYSIS	Envirolab PQL		TB <sup>5</sup> 17/04/2015 #126766 mg/kg
	mg/kg	µg/L	
Benzene	1	1	LPQL
Toluene	1	1	LPQL
Ethylbenzene	1	1	LPQL
m+p-xylene	2	2	LPQL
o-xylene	1	1	LPQL

**Explanation:**

<sup>5</sup> Sample type (sand)

Values above PQLs/Acceptance criteria

**VALUE**

**Abbreviations:**

PQL: Practical Quantitation Limit

TB: Trip Blank

LPQL: Less than PQL

NA: Not Analysed

NC: Not Calculated



## **Appendix A: Site Information including Site History**

**Land Title Records**

# ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)

ABN 82 147 943 842

P.O. Box 149  
Yagoona NSW 2199

Telephone: +612 9644 1679  
Mobile: 0412 169 809  
Facsimile: +612 8076 3026  
Email: [alsearch@optusnet.com.au](mailto:alsearch@optusnet.com.au)

15<sup>th</sup> April, 2015

ENVIRONMENTAL INVESTIGATION SERVICES  
PO BOX 976,  
NORTH RYDE BC NSW 1670

Attention: Rob Muller,

RE: 122 Bronte Road,  
Bondi Junction  
Job No. E28302K

Note 1:	Lot 5	Section 2	DP 185	(page 1)
Note 2:	Lots 6 & 7	Section 2	DP 185	(page 3)

Note 1:

## Current Search

Folio Identifier 5/2/185 (title attached)  
DP 185 (plan attached)  
Dated 13<sup>th</sup> April, 2015  
Registered Proprietor:  
**TELSTRA CORPORATION LIMITED**

**Title Tree**  
**Lot 5 Section 2 DP 185**

Folio Identifier 5/2/185

Certificate of Title Volume 774 Folio 160

\*\*\*\*

**Summary of proprietor(s)**  
**Lot 5 Section 2 DP 185**

Year	Proprietor
	<b>(Lot 5 Section 2 DP 185)</b>
2002 – todate	Telstra corporation Limited
1989 – 2002	Australia Telecommunications Commission
	<b>(Lot 5 Section 2 DP 185 – Area 7 ¼ Perches – CTVol 774 Fol 160)</b>
1985 – 1989	Australia Telecommunications Commission
1964 – 1985	The Commonwealth of Australia
1886 – 1964	Her Most Gracious Majesty Queen Victoria

\*\*\*\*



**Note 2:**

**Current Search**

Folio Identifier Auto Consol 686-47 (title attached)

Lots 6 & 7 Section 2 DP 185 (plan attached)

Dated 13<sup>th</sup> April, 2015

Registered Proprietor:

**TELSTRA CORPORATION LIMITED**

**Title Tree**

**Lots 6 & 7 Section 2 DP 185**

Folio Identifier Auto Consol 686-47

Certificate of Title Volume 686 Folio 47

\*\*\*\*

**Summary of proprietor(s)**

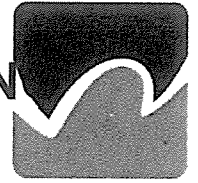
**Lots 6 & 7 Section 2 DP 185**

<b>Year</b>	<b>Proprietor</b>
	<b>(Lots 6 &amp; 7 Section 2 DP 185 – A/C 686-47)</b>
2002 – todate	Telstra corporation Limited
1989 – 2002	Australia Telecommunications Commission
	<b>(Lots 6 &amp; 7 Section 2 DP 185 – Area 18 ¾ Perches – CTVol 686 Fol 47)</b>
1985 – 1989	Australia Telecommunications Commission
1964 – 1985	The Commonwealth of Australia
1884 – 1964	Her Honourable the Minister for Public Works

\*\*\*\*

**Section 149 Certificates**

# PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979



**WAVERLEY**  
COUNCIL

Jeffery & Katauskas Eis  
115 Wicks Rd  
MACQUARIE PARK NSW 2113

Cert. No.32301  
Date: 15 April 2015  
Receipt No. 1535932  
Your reference: E28302K RM:9966

Property location      **122 Bronte Road, BONDI JUNCTION NSW 2022**

Parcel description:    **Lot 3 Sec2 DP 185, Lot 4 Sec2 DP 185, Lot 5 Sec2 DP 185, Lot  
6 Sec2 DP 185, Lot 7 Sec2 DP 185**

Owner:                    **Telstra Corporation Limited**  
  
                                 **C/- Jones Lang Lasalle**  
                                 **PO Box 805**  
                                 **SOUTH MELBOURNE VIC 3205**

[The next page is page 2]

**Waverley Council | ABN: 12 502 583 608**

PO Box 9, Bondi Junction NSW 1355 | DX 12006 Bondi Junction

PHONE **9369 8000** | FAX **9387 1820**

EMAIL [waver@waverley.nsw.gov.au](mailto:waver@waverley.nsw.gov.au) | WEB [www.waverley.nsw.gov.au](http://www.waverley.nsw.gov.au)



In accordance with the requirements of section 149 of the Environmental Planning and Assessment Act 1979 (as amended), the following prescribed matters relate to the land at the date of this certificate.

**ITEM 1**

**Names of relevant planning instruments and DCPs**

- (1) The name of each environmental planning instrument that applies to the carrying out of development on the land.

The following environmental planning instruments apply to the carrying out of development on the land:

Waverley LEP 2012 - Gazetted: 26 October 2012

- SEPP No. 4 Development Without Consent and Miscellaneous Complying Development
- SEPP No. 6 Number of Storeys in a Building
- SEPP No. 14 Coastal Wetlands
- SEPP No. 19 Bushland in Urban Areas
- SEPP No. 22 Shops and Commercial Premises
- SEPP No. 32 Urban Consolidation (Redevelopment of Urban Land)
- SEPP No. 33 Hazardous and Offensive Development
- SEPP No. 50 Canal Estates
- SEPP No. 55 Remediation of Land
- SEPP No. 64 Advertising and Signage
- SEPP No. 65 Design Quality of Residential Flat Development
- SEPP No. 70 Affordable Housing (Revised Schemes)
- SEPP No. 71 Coastal Protection
- SEPP (Affordable Rental Housing) 2009
- SEPP (Building Sustainability Index: BASIX) 2004
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Housing for Seniors or People with a Disability) 2004
- SEPP (Infrastructure) 2007
- SEPP (Major Development) 2005
- SEPP (Temporary Structures) 2007
- SREP (Sydney Harbour Catchment)

Any enquiries regarding these SEPPs should be directed to the Department of Planning and Environment on: **(02) 9228 6333** or <http://www.planning.nsw.gov.au>

- (2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Director-General has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved).

The following proposed environmental planning instruments apply to the carrying out of development on the land:

- Proposed Competition SEPP

Note: Any enquiries regarding these SEPPs should be directed to the Department of Planning and Environment on: **(02) 9228 6333** or <http://www.planning.nsw.gov.au>

- (3) The name of each development control plan that applies to the carrying out of development on the land.

The following development control plan (DCP) applies to the land:

- Waverley DCP 2012 Amendment No. 3

- (4) In this clause, proposed environmental planning instrument includes a planning proposal for a LEP or a draft environmental planning instrument.

## ITEM 2

### Zoning and land use under relevant LEPs

---

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a SEPP or proposed SEPP) that includes the land in any zone (however described):

- (a) the identity of the zone, whether by reference to a name (such as "Residential Zone" or "Heritage Area") or by reference to a number (such as "Zone No 2(a)"),
- (b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent,
- (c) the purposes for which the instrument provides that development may not be carried out within the zone except with development consent,
- (d) the purposes for which the instrument provides that development is prohibited within the zone,

Waverley LEP 2012 - Gazetted: 26 October 2012

#### Zone SP2 Infrastructure

##### 1 Objectives of zone

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

##### 2 Permitted without consent

Nil

##### 3 Permitted with consent

Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose

##### 4 Prohibited

Any development not specified in item 2 or 3

- (e) whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed,

The land is **not** subject to any development standards that fix minimum land dimensions for the erection of a dwelling house.

- (f) whether the land includes or comprises critical habitat,

The land does **not** comprise critical habitat.

- (g) whether the land is in a conservation area (however described),

The land is **not** within a Heritage Conservation Area.

- (h) whether an item of environmental heritage (however described) is situated on the land.

The land **contains** an Item of Environmental Heritage.

- The land contains a Heritage Item - General identified in Waverley Local Environmental Plan 2012.

#### ITEM 2A

---

##### **Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006**

To the extent that the land is within any zone (however described) under:

- (a) Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or
- (b) A Precinct Plan (within the meaning of the 2006 SEPP), or
- (c) A proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,

the particulars referred to in clause 2(a)-(h) in relation to that land (with a reference to "the instrument" in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).

The land is **not** subject to the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

#### ITEM 3

---

##### **Complying development**

- (1) The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1) (c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
- (2) The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A (1) (c) to (e), (2), (3) and (4), 1.18 (1) (c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.
- (3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

##### **General Housing Code**

Complying development under the General Housing Code **may not** be carried out on the land. The land is affected by specific land exemption:

- land contains a Heritage Item.

##### **Rural Housing Code**

There are no lands within the Waverley Council area that are affected by this Code.

##### **Housing Alterations Code**

Complying development under the Housing Alterations Code **may not** be carried out on the land. The land is affected by specific land exemption:

- land contains a Heritage Item.

#### General Development Code

Complying development under the General Development Code **may not** be carried out on the land. The land is affected by specific land exemption:

- land contains a Heritage Item.

#### Commercial and Industrial Alterations Code

Complying development under the Commercial and Industrial Alteration Code **may not** be carried out on the land. The land is affected by specific land exemptions:

- land contains a Heritage Item.

#### Commercial and Industrial (New Buildings and Additions) Code

Complying development under the Commercial and Industrial (New Building and Additions) Code **may not** be carried out on the land. The land is affected by specific land exemptions:

- land contains a Heritage Item.

#### Subdivisions Code

Complying development under the Subdivisions Code **may not** be carried out on the land. The land is affected by specific land exemptions:

- land contains a Heritage Item.

#### Demolition Code

Complying development under the Demolition Code **may not** be carried out on the land. The land is affected by specific land exemption:

- land contains a Heritage Item.

#### Fire Safety Code

Complying development under the Fire Safety Code **may not** be carried out on the land. The land is affected by specific land exemptions:

- land contains a Heritage Item.

Disclaimer: If a restriction applies to the land, the restriction may not apply to all of the land. Council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

Complying development may be able to be carried out on the land provided it meets the requirements and standards of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

## ITEM 4

### Coastal protection

---

Whether or not the land is affected by the operation of section 38 or 39 of the Coastal Protection Act 1979, but only to the extent that the council has been so notified by the Department of Services, Technology and Administration.

The land is **not** affected by Sections 38 or 39 of the Coastal Protection Act 1979.



**ITEM 4A**

**Certain information relating to beaches and coasts**

---

- (1) In relation to a coastal council - whether an order has been made under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (within the meaning of that Act) on the land (or on public land adjacent to that land), except where the council is satisfied that such an order has been fully complied with.

**No.**

- (2) In relation to a coastal council:

- (a) Whether the council has been notified under section 55x of the Coastal Protection Act 1979 that temporary coastal protection works (within the meaning of that Act) have been placed on the land (or on public land adjacent to that land), and

**No.**

- (b) If works have been so placed-whether the council is satisfied that the works have been removed and the land restored in accordance with that Act.

**Not applicable.**

- (3) (Repealed)

**ITEM 4B**

**Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works**

---

In relation to a coastal council - whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

**No.**

Note "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.

**ITEM 5**

**Mine subsidence**

---

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961.

The land is **not** proclaimed to be a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961.

**ITEM 6**

**Road widening and road realignment**

---

Whether or not the land is affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993, or
- (b) any environmental planning instrument, or
- (c) any resolution of the council.

The land is **not** affected by any road widening or road realignment under Division 2 of Part 3 of the Roads Act 1993, or any environmental planning instrument or any resolution of the Council.

**ITEM 7**

**Council and other public authority policies on hazard risk restrictions**

---

Whether or not the land is affected by a policy:

- (a) adopted by the council, or
- (b) adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council,

that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

- (a) The land is **not** affected by a policy adopted by Council that restricts the development of land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).
- (b) The land is **not** affected by a policy adopted by another public authority and notified to the Council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the Council, that restricts the development of land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

**ITEM 7A**

**Flood related development controls information**

---

- (1) Whether or not development on that land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.

The land is **not** subject to flood related development controls for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing).

- (2) Whether or not development on that land or part of the land for any other purpose is subject to flood related development controls.

The land is **not** subject to flood related development controls.

- (3) Words and expressions in this clause have the same meanings as in the instrument set out in the Schedule to the Standard Instrument (Local Environmental Plans) Order 2006.

**ITEM 8**

**Land reserved for acquisition**

---

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 27 of the Act.

The land is **not** affected by any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 that provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act.

---

**ITEM 9**

**Contributions plans**

The name of each contributions plan applying to the land.

Waverley Council Development Contribution Plan 2006 (Amendment No.6).

---

**ITEM 9A**

**Biodiversity certified land**

If the land is biodiversity certified land (within the meaning of Part 7AA of the Threatened Species Conservation Act 1995), a statement to that effect.

The land is **not** biodiversity certified land under Part 7AA of the Threatened Species Conservation Act 1995.

---

**ITEM 10**

**Biobanking agreements**

If the land is land to which a biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995 relates, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Director-General of the Department of Environment, Climate Change and Water).

Council has **not** been notified of any biobanking agreement under Part 7A of the Threatened Species Conservation Act 1995 relating to the land.

---

**ITEM 11**

**Bush fire prone land**

If any of the land is bush fire prone land (as defined in the Act), a statement that all or, as the case may be, some of the land is bush fire prone land.

If none of the land is bush fire prone land, a statement to that effect.

The land is **not** bush fire prone land (as defined in the Act).

---

**ITEM 12**

**Property vegetation plans**

If the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies, a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act).

Council has **not** been notified of any property vegetation plans under the Native Vegetation Act 2003 applying to the land.

ITEM 13

**Orders under Trees (Disputes Between Neighbours) Act 2006**

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order).

No.

ITEM 14

**Directions under Part 3A**

If there is a direction by the Minister in force under section 75P (2) (c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect, a statement to that effect identifying the provision that does not have effect.

There is **no** direction under Part 3A.

ITEM 15

**Site compatibility certificates and conditions for seniors housing**

If the land is land to which State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 applies:

- (a) a statement of whether there is a current site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
- (i) the period for which the certificate is current, and
  - (ii) that a copy may be obtained from the head office of the Department of Planning, and

Council has **not** been notified of any site compatibility certificate and conditions for seniors housing.

- (b) a statement setting out any terms of a kind referred to in clause 18 (2) of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.

Council has **not** been notified of any site compatibility certificate and conditions for seniors housing.

ITEM 16

**Site compatibility certificates for infrastructure**

A statement of whether there is a valid site compatibility certificate (infrastructure), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:

- (a) the period for which the certificate is valid, and
- (b) that a copy may be obtained from the head office of the Department of Planning.

Council has **not** been notified of any site compatibility certificate for infrastructure.



#### ITEM 17

---

##### Site compatibility certificates and conditions for affordable rental housing.

- (1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:
- (a) the period for which the certificate is current, and
  - (b) that a copy may be obtained from the head office of the Department of Planning.

Council has **not** been notified of any site compatibility certificate and condition for affordable rental housing.

- (2) A statement setting out any terms of a kind referred to in clause 17(1) or 38 (1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 that have been imposed as a condition of consent to a development application in respect of the land.

Council has **not** been notified of any site compatibility certificate and condition for affordable rental housing.

#### ITEM 18

---

##### Paper subdivision information

- (1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.

Council is **not** aware of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.

- (2) The date of any subdivision order that applies to the land.

Council is **not** aware of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.

- (3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.

#### ITEM 19

---

##### Site verification certificates

A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:

- (a) the matter certified by the certificate, and

**Note.** A site verification certificate sets out the Director-General's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land—see Division 3 of Part 4AA of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

- (b) the date on which the certificate ceases to be current (if any), and

- (c) that a copy may be obtained from the head office of the Department of Planning and Infrastructure.

Council has **not** been notified of any site verification certificates.

**Note:** The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) that the land to which the certificate relates is significantly contaminated land within the meaning of that Act-if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,

**No.**

- (b) that the land to which the certificate relates is subject to a management order within the meaning of that Act-if it is subject to such an order at the date when the certificate is issued,

**No.**

- (c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act-if it is the subject of such an approved proposal at the date when the certificate is issued,

**No.**

- (d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act-if it is subject to such an order at the date when the certificate is issued,

**No.**

- (e) that the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act-if a copy of such a statement has been provided at any time to the local authority issuing the certificate.

**No.**

**Note:** Section 26 of the Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009 provides that a planning certificate must include advice about any exemptions under section 23 or authorisation under section 24 of that Act if the council is provided with a copy of the exemption or authorisation by the Co-ordinator General under that Act.

This land is **not** subject to an Order under Section 23 or authorisation under Section 24 of the Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009 for the carrying out of development.

Information provided under S.149 (2) is in accordance with the matters prescribed under Schedule 4 of the *Environmental Planning and Assessment Regulation 2000* and is provided only to the extent that the Council has been notified by the Department of Public Works or Department of Planning.

For the purpose of s.149 (5) of the *Environmental Planning and Assessment Act, 1979*, the following additional information is provided with relation to development applications which have been determined.

**PLANNING CERTIFICATE UNDER  
SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

Page: 12

When information pursuant to Section 149 (5) is requested, the Council is under no obligation to furnish any of the information supplied herein pursuant to that Section.

No development consents have been granted by Council over the past 5 years relevant to this particular lot.

Additional Information Section 149 (5)

The land is **not** affected by any additional site specific information in accordance with Section 149(5) of the Environmental Planning and Assessment Act, 1979.

Council draws your attention to Section 149 (6) which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5).

The absence of any reference to any matters affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.

Please contact the Council's Planning & Environmental Services Department for further information about any instruments or affectations referred to in the Certificate.

---



.....  
**ARTHUR KYRON  
GENERAL MANAGER**