



Douglas Partners
Geotechnics | Environment | Groundwater

Report on
Preliminary Site Investigation

Proposed Aged Care Facility Redevelopment
1 – 11 Emerald Street
Emu Plains NSW

Prepared for
Uniting Care Ageing

Project 84503.00
November 2014

Integrated Practical Solutions



Document History

Document details

Project No.	84503.00	Document No.	1
Document title	Preliminary Site Investigation		
Site address	1 – 11 Emerald Street, Emu Plains NSW		
Report prepared for	Uniting Care Ageing		
File name	\\Dpsydfp02\projects\84503.00 EMU PLAINS, Proposed Aged Care Facility RCB\Docs\Env Report\84503_Emu Plains_PSI_Final.docx		

Document status and review

Revision	Prepared by	Reviewed by	Date issued
0	Kate Sargent	Paul Gorman	6 November 2014

Distribution of copies

Revision	Electronic	Paper	Issued to
0	1	0	Mr John Phillpott, Uniting Care Ageing

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

	Signature	Date
Author		6 November 2014
Reviewer		6 November 2014



Douglas Partners Pty Ltd
 ABN 75 053 980 117
www.douglaspartners.com.au
 96 Hermitage Road
 West Ryde NSW 2114
 PO Box 472
 West Ryde NSW 1685
 Phone (02) 9809 0666
 Fax (02) 9809 4095

Abbreviations

ABC	ambient background concentration
ACL	added contaminant limits
AEC	area of environmental concern
As	arsenic
BaP	benzo(a)pyrene
BaP TEQ	benzo(a)pyrene toxic equivalent
bgl	below ground level
BTEX	benzene, toluene, ethyl benzene, xylenes
Cd	cadmium
CLM Act	Contaminated Land Management Act
COC	chain of custody
Cr	chromium
Cr(III)	chromium with oxidation state III (stable in normal environments)
Cr(VI)	chromium with oxidation state VI (typically not stable in normal environments)
CRC Care	Co-operative Research Centre for Contamination Assessment and Remediation of the Environment
CSM	conceptual site model
Cu	copper
DA	development application
DCE	dichloroethene
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DECCW	NSW Department of Environment, Climate Change and Water (now superceded)
DP	Douglas Partners
D.P.	Deposited Plan
DQI	data quality indicator
DQO	data quality objective
DSI	detailed site (contamination) investigation
EIL	ecological investigation levels
ELS	Envirolab Services Pty Ltd
EPA	NSW Environment Protection Authority
ESL	ecological screening level
F1	TPH fraction C6-C10
F2	TPH fraction >C10-C16
F3	TPH fraction >C16-C34
F4	TPH fraction >C34-C40
ha	hectares
Hg	mercury
HIL	heath investigation level
HSL	health screening level
m	metre
mg/kg	milligrams per kilogram
N/A	not applicable
NATA	National Association of Testing Authorities
ND(nd)	not detected above the practical quantitation limit
NHMRC	National Health and Medical Research Council

NEPC	National Environment Protection Council
NEPM	National Environmental Protection (Assessment of Site Contamination) Measure
Ni	nickel
NL	not limiting
OCP	organochlorine pesticides
OEH	NSW Office of Environment and Heritage
PAH	polycyclic aromatic hydrocarbons
Pb	Lead
PCB	polychlorinated biphenyls
pH	unit measure of acidity/ alkalinity
PID	photoionisation detector
POEO Act	Protection of the Environment Operations Act
PSI	preliminary site investigation
PQL	practical quantitation limit
QA	quality assurance
QA/QC	quality assurance/ quality control
QC	quality control
RPD	relative percentage difference
SAC	site assessment criteria
SAQP	sampling and analysis quality plan
TEQ	toxicity equivalency quotient
TPH	total petroleum hydrocarbons
TRH	total recoverable hydrocarbons
US EPA	United States Environmental Protection Agency
VOC	volatile organic compounds
Zn	zinc
%	percent
<	less than
≤	equal to or less than
>	greater than
≥	equal to or greater than

Executive Summary

This report presents the results of a preliminary site investigation (PSI) for contamination undertaken for a proposed redevelopment of an existing aged care facility at 1 – 11 Emerald Street, Emu Plains NSW (the 'Site'). The investigation was undertaken in accordance with Douglas Partners' proposal dated 10 September 2014.

The brief provided by the client indicates that the new development may include up to three levels of residential aged care bed facilities, individual living units and support facilities. Up to one basement level is being considered, although not confirmed, as well as associated paving and landscaping reconfigurations.

The objectives of the PSI were to assess the potential for contamination of the site based on past and present site uses, provide preliminary soil contamination information, and to comment on the need for further investigation and/or management of contamination (if required).

The site is identified as Lot 16 in deposited plan 232740, Lot 1 in deposited plan 650543, Lot 9 in deposited plan 230580 and Lots 3 and 4 in deposited plan 758387. The street address is 1 – 11 Emerald Street, Emu Plains NSW, and is located approximately 57 km west of the Sydney CBD. The site is located within Penrith City Council local government area (LGA), Parish of Strathdon, County of Cook. The site is an irregular shaped parcel covering an area of approximately 1.8 ha.

Reference to the Sydney 1:100 000 Geological Series Sheet indicates that the site is underlain by Quaternary Sediments of the Cranebrook Formation. This is a fluvial deposit comprising sand, silt and clay. The site is relatively flat. The anticipated groundwater flow direction is to the south, south east towards the Nepean River.

The desktop study identified that the site has been used as a market garden/open space until sometime during the 1970s, after which the site was developed into an aged care facility. A church (Emu Plains Uniting Church) has been present on the eastern portion of the site since the early 1800s.

The potential sources of contamination at the site have been identified as fill (likely to be minimal), asbestos and lead paint used in construction materials, and possible pesticides used throughout landscaped and former market gardening areas. There appeared to overall be a low potential for contamination across the site as a result of the desktop study. It is also noted that no regulatory notices existed for the site under any of the publically accessible databases or matters arising under the CLM Act.

A total of eight (8) bores were drilled systematically across the accessible areas of the site in order to recover soil samples for chemical testing. All results for the soil analysis were within the adopted site assessment criteria (SAC). One location (BH3/0.2) had a detectable level of TPH C16-34 and C34-40, but was within the adopted SAC. No ACM or fibres in soil were found during the investigation.

The PSI consisted of a limited sampling programme and did not include sample points within the footprints of the existing buildings. Prior to any redevelopment works DP recommends that a Detailed Site Investigation (DSI) be undertaken following the demolition of the existing buildings. The objective of the DSI would be primarily to assess post-demolition surface conditions (e.g. presence of asbestos) and to more comprehensively assess the nature of the fill beneath the buildings.

It is concluded that the site is suitable for continued use as a residential aged care facility, and would be suitable for the proposed development subject to implementation of the above recommendation.

Table of Contents

	Page
1. Introduction	1
2. Scope of Works	1
2.1 Desktop Study and Site Walkover	1
2.2 Fieldwork	2
2.3 Reporting	3
3. Site Identification and Location	3
3.1 Site Identification	3
3.2 Site Location	3
4. Geology, Topography and Hydrogeology	3
4.1 Geology and Topography	3
4.2 Groundwater	3
4.3 Acid Sulphate Soils	4
5. Site History	4
5.1 Aerial Photograph Record	4
5.2 Historical Title Deed Records	5
5.3 NSW WorkCover Dangerous Goods Database	7
5.4 Council Section 149 (2 and 5) Planning Certificates	8
5.5 Regulatory Notices Search	8
6. Site Inspection	9
7. Preliminary Conceptual Site Model	10
7.1 Potential Contamination Sources and Contaminants of Concern	10
7.2 Potential Receptors	11
7.2.1 Human Health Receptors	11
7.2.2 Environmental Receptors	11
7.3 Potential Pathways	12
7.4 Summary of Preliminary CSM	12
8. Fieldwork	14
8.1 Soil Sampling Locations and Rationale	14
8.2 Drilling Methods	14
8.3 Soil Sampling Procedures	14
8.4 Analytical Rationale	15
9. Assessment Criteria	15

9.1	Soils	15
9.1.1	Health-based Investigation Levels (Non-Petroleum Chemical Contaminants).....	15
9.1.2	Ecological Investigation Levels	16
9.1.3	Ecological Screening Levels – Petroleum Hydrocarbons	18
9.1.4	Petroleum Contaminants (Health Screening Levels and Management Limits)	18
9.1.5	Asbestos	20
9.2	Contaminants with No Assessment Criteria	20
10.	Fieldwork Observations.....	20
11.	Results Summary	21
12.	Discussion	23
12.1	Desktop Study.....	23
12.2	Contaminants in Soil	23
13.	Recommendations and Conclusions	23
14.	Limitations	23
Appendix A:	Drawings	
Appendix B:	Groundwater Bore Details	
Appendix C:	Aerial Photographs	
Appendix D:	Historical Title Deed Search	
Appendix E:	WorkCover Search	
Appendix F:	Section 149 (2&5) Certificate	
Appendix G:	Site Photographs	
Appendix H:	DQOs/DQIs and Calculations	
Appendix I:	Borehole Logs	
Appendix J:	Laboratory Reports	

Preliminary Site Investigation

Aged Care Facility Redevelopment

1 – 11 Emerald Street, Emu Plains NSW

1. Introduction

This report presents the results of a preliminary site investigation (PSI) for contamination undertaken for a proposed redevelopment of an existing aged care facility at 1 – 11 Emerald Street, Emu Plains NSW (the 'Site'). The investigation was commissioned by Mr John Phillpott of Uniting Care Ageing (the 'Client') and was undertaken in accordance with Douglas Partners' proposal dated 10 September 2014.

The brief provided by the client indicates that the new development may include up to three levels of residential aged care bed facilities, individual living units and support facilities. Up to one basement level is being considered, although not confirmed, as well as associated paving and landscaping reconfigurations. It is understood that the site covers an approximate area of 1.8 hectares (ha).

The objectives of the PSI were to assess the potential for contamination of the site based on past and present site uses, and to comment on the need for further investigation and/or management of contamination (if required).

The investigation included utilisation of information and samples collected from eight soil bores conducted as part of a combined environmental and geotechnical investigation. The geotechnical investigation has been reported separately (DP project 84503.00, Geotechnical Investigation). The details of the environmental fieldwork and findings of the PSI are presented in this report together with comments and recommendations.

2. Scope of Works

The scope of the PSI involved a desktop study and site walkover to identify potential contaminants of concern (presented in Sections 3 – 8 of this report) and limited intrusive fieldwork for assessment of actual contaminant levels in soil (presented in Sections 9 – 12 of this report). The works comprised the following:

2.1 Desktop Study and Site Walkover

- Identification of the property – street address and property descriptions(s), name and address of the owner;
- Search of the current and historical titles and deposited plans to identify previous owners and associated potentially contaminating activities;
- Review of historical aerial photographs;

- Search of the contaminated lands register for notices issued under the *Contaminated Lands Management Act 1997* (the CLM Act), and the public register of notices and licences issued under the *Protection of the Environment Operations Act 1997* (POEO Act);
- Conduct a search of the NSW Office of Water database for groundwater bores in the vicinity of the site;
- Search the WorkCover database records of any current or historical Dangerous Goods Licences;
- Obtain and review Section 149 (2) and (5) planning certificates for the lots that form the site; and
- Review general site information, including geographical and hydrogeological information.

2.2 Fieldwork

- Conduct a site walkover and record observations;
- Utilise two geotechnical bores to collect environmental soil samples. The bores were extended to a depth of 5.2 m below ground level (bgl);
- Drilling of an additional six shallow environmental bores using a hand auger to a maximum depth of 1.2 mbgl;
- Collection of soil samples from the geotechnical and environmental test bores at broadly regular intervals and based on potential indicators of contamination, such as staining or olfactory signs;
- Screening of all samples using a calibrated photo-ionisation detector (PID) for volatile organic compounds (VOC);
- Despatch of 9 selected samples to a NATA accredited laboratory for analysis of the following contaminants of concern (COC):
 - o Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc) – 9 samples
 - o Total recoverable hydrocarbons (TRH) – 9 samples
 - o Monocyclic aromatic hydrocarbons (benzene, ethylbenzene, toluene, xylenes [BTEX]) – 9 samples;
 - o Polycyclic aromatic hydrocarbons (PAH) – 9 samples
 - o Phenols – 9 samples
 - o Volatile organic compounds (VOC) – 2 samples
 - o Organochlorine pesticides (OCP) – 9 samples
 - o Asbestos – 9 samples
 - o QA/QC samples (1 trip spike and 1 trip blank analysed for TRH and BTEX, 1 intra-laboratory replicate analysed for metals and PAH);
- An additional two samples were sent to the laboratory and analysed for electrical conductivity (EC), chlorides and sulphides.

2.3 Reporting

This PSI report has been prepared, detailing the findings of the investigation with limited soil sampling, fieldwork methodology, results of the assessment, a discussion of the analytical results and recommendations for further work (if required). The report has been prepared in general accordance with NSW EPA endorsed guidelines.

3. Site Identification and Location

3.1 Site Identification

The site is identified as Lot 16 in deposited plan 232740, Lot 1 in deposited plan 650543, Lot 9 in deposited plan 230580 and Lots 3 and 4 in deposited plan 758387. The street address is 1 – 11 Emerald Street, Emu Plains NSW. The site is located within Penrith City Council local government area (LGA), Parish of Strathdon, County of Cook. The site is an irregular shaped parcel covering an area of approximately 1.8 ha.

3.2 Site Location

The site is located approximately 57 km west of the Sydney CBD (see site plan, Appendix A). The site is bordered by the Great Western Highway to the north, Emerald Street to the east, Emu Plains primary school to the south and residential and Troy Street to the west.

4. Geology, Topography and Hydrogeology

4.1 Geology and Topography

Reference to the Sydney 1:100 000 Geological Series Sheet indicates that the site is underlain by Quaternary Sediments of the Cranebrook Formation. This is a fluvial deposit comprising sand, silt and clay.

The Department of Lands NSW 2 m Contour Index Map indicates that the site is relatively flat.

4.2 Groundwater

A search of the NSW Office of Water database (previously held by the Department of Natural Resources) was conducted on 2 October 2014 for any registered water bores within a 1 km radius of the site. Work summaries were available for six of the bores and full details are supplied in Appendix B.

Details of the six bores are as follows:

- GW075124 was identified as a test bore for the town water supply, no standing water level (SWL) was recorded;
- GW075126 was identified as a monitoring bore, no SWL was recorded;
- GW110572 was identified as a monitoring bore, no SWL was recorded;
- GW110573 was identified as a monitoring bore, no SWL was recorded;
- GW075129 was identified as a monitoring bore, no SWL was recorded;
- GW100011 was identified as a recreational bore, with a SWL of 7.00 m bgl.

The anticipated groundwater flow direction is to the south, south east towards the Nepean River.

4.3 Acid Sulphate Soils

Based on a review of the NSW Acid Sulphate Soils Map the site does not appear to be in an area of potential acid sulphate soils (ASS). No areas of ASS were identified nearby.

5. Site History

A review of the site history was based on historical aerial photographs, historical title deeds, a WorkCover dangerous goods search, a search for regulatory notices (issued under the CLM Act 1997 and POEO Act 1997), and a review of Council's Section 149 (2 and 5) planning certificates.

5.1 Aerial Photograph Record

Historical aerial photographs for the years 1947, 1961, 1970, 1982, 2002 and 2009 were obtained from the NSW Department of Lands Office, Google Earth and SixViewer websites. These photographs were studied in order to identify the likely past uses and changes to the site, particularly those of a potentially contaminating nature. The findings are summarised below and the photographs are provided in Appendix C.

- | | |
|------|--|
| 1947 | The site is largely open space and market gardens. A church is located on the eastern boundary, adjacent to Emerald Street. The surrounding area is also largely comprised of market gardens. |
| 1961 | The site and surrounding area is largely unchanged since the 1947 photograph. |
| 1970 | The market gardens are gone and the site is largely paddock and still contains the church. Market gardens in the surrounding areas are disappearing and a number of buildings have been constructed. |

- 1982 The aged care facility has been constructed, the church remains. Buildings across the site appear to be low rise. More houses and buildings are located within the surrounding area.
- 2002 The site is largely covered by buildings and hardstand, with some courtyard and landscaped areas having been added since 1982. The surrounding area appears to be largely residential.
- 2009 The site is largely unchanged since 2002.

5.2 Historical Title Deed Records

A historical title deeds search was undertaken for the site. Searches were undertaken by Mr Mark Groll of Legal Liaison Searching Services. Tables 1A to 1E below summarises the reported title deed information and possible site uses are indicated. A full copy is provided in Appendix D.

Table 1A: Lot 16, Deposited Plan 232740 (Edinglassie Village)

Date of Acquisition	Registered Proprietor(s) & Occupations	Possible Site Use
04.10.1876 (1887 to 1925)	George Walker (Farmer)	Agricultural/Market Gardens
09.03.1925 (1925 to 1965)	Percy George Walker (Orchardist) - & his deceased estate	Agricultural/Market Gardens
21.10.1965 (1965 to 1968)	Benwerrin Contracting Pty Limited	Open Space
16.08.1968 (1968 to 1969)	Kennard E. King & Co Pty Limited	Open Space
28.07.1969 (1969 to 1977)	Caroline Mary Rowlings (Dress Maker) Sheila Eileen King (Married Woman)	Open Space
10.10.1977 (1977 to date)	# The Uniting Church in Australia Property Trust (N.S.W.)	Nursing Home / Retirement Village / Church

Denotes Current Registered Proprietor

Leases: - NIL

Easements: 27.09.1972 – Easement for Stormwater Drainage six feet wide (M 809648 & D.P. 556154)

Table 1B: Lot 9, Deposited Plan 230580

Date of Acquisition	Registered Proprietor(s) & Occupations	Possible Site Use
04.10.1876 (1887 to 1925)	George Walker (Farmer)	Agricultural/Market Gardens
09.03.1925 (1925 to 1965)	Percy George Walker (Orchardist) - & his deceased estate	Agricultural/Market Gardens
21.10.1965 (1965 to 1968)	Benwerrin Contracting Pty Limited	Open Space
16.08.1968 (1968 to 1969)	Kennard E. King & Co Pty Limited	Open Space
28.07.1969 (1969 to 1977)	Caroline Mary Rowlings (Dress Maker) Sheila Eileen King (Married Woman)	Open Space
10.10.1977 (1977 to date)	# The Uniting Church in Australia Property Trust (N.S.W.)	Nursing Home / Retirement Village / Church

Denotes Current Registered Proprietor

Leases: - NIL Easements: - NIL

Table 1C: Lot 1 Deposited Plan 650543 (Wesleyan Methodist Chapel)

Date of Acquisition	Registered Proprietor(s) & Occupations	Potential Site Use
07.02.1872 (1872 to 1889)	Reverend Stephen Rabone Reverend George Hurst Reverend Benjamin Chapman	Agricultural/Market Gardens/Church
23.12.1889 (1889 to 1972)	William Lucas (also others) (Trustees for Church Purposes)	Agricultural/Market Gardens/Church
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Nursing Home / Retirement Village / Church

Denotes Current Registered Proprietor

Leases: - NIL Easements: - NIL

Table 1D: Lot 3, Deposited Plan 758387 (Edinglassie Retirement Village)

Date of Acquisition	Registered Proprietor(s) & Occupations	Possible Site Use
07.02.1872 (1872 to 1889)	Reverend Stephen Rabone Reverend George Hurst Reverend Benjamin Chapman	Agricultural/Market Gardens/Church
23.12.1889 (1889 to 1972)	William Lucas (also others) (Trustees for Church Purposes)	Agricultural/Market Gardens/Church
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Nursing Home / Retirement Village / Church

Denotes Current Registered Proprietor

Leases: - NIL Easements: - NIL

Table 1E: Lot 4 Section 21 Deposited Plan 758387 (Edinglassie Village)

Date of Acquisition	Registered Proprietor(s) & Occupations	Possible Site Use
27.02.1931	Dedicated for Methodist School Site	Agricultural/Market Gardens/Church
26.05.1931 (1931 to 1931)	Henry Lucas (also others) (Trustees for Church Purposes)	Agricultural/Market Gardens/Church
22.06.1931 (1931 to 1972)	William Kessell Hall (also others) (Trustees for Church Purposes)	Agricultural/Market Gardens/Church
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Nursing Home / Retirement Village / Church

Denotes Current Registered Proprietor

Leases: - NIL Easements: - NIL

The site has historically been used as agricultural land (largely market gardens / orchards) and as church grounds until the 1970s. The site appears to have then been redeveloped into an aged care home (with the church remaining) during the mid to late 1970s to early 1980s.

5.3 NSW WorkCover Dangerous Goods Database

A search of the NSW WorkCover Dangerous Goods database indicated that no dangerous goods were stored on the site. The WorkCover Certificate is provided in Appendix E.

5.4 Council Section 149 (2 and 5) Planning Certificates

The Section 149 (2 and 5) planning certificates were obtained from Penrith City Council for Lot 16 in DP232740, Lot 1 in DP650543, Lot 9 in DP230580, and Lots 3 and 4 DP758387. The certificates are dated 30 September 2014 and are provided in Appendix F.

The certificates indicate that all five lots are zoned as Zone No. 2(c) Residential (Low-Medium Density). Under the Penrith City Council Local Environment Plan 1998, the objectives of this zone are to:

- To reinforce the importance of natural landscape settings and area with conservation value
- To protect the character of traditional cottage development and streetscapes
- To consolidate population and housing densities
- To expand housing choices by allowing multi-unit housing with a single storey appearance
- To promote a variety of housing types or forms upon the site of each proposed development
- To allow a range of compatible non-residential uses.

In regard to contaminated land, no applicable matters arise under the *Contaminated Land Management Act*, 1997 (CLM Act).

5.5 Regulatory Notices Search

The EPA publishes records of contaminated sites under section 58 of the CLM Act on a public database accessed via the internet. The notices relate to investigation and/or remediation of site contamination considered to be significantly contaminated under the definition in the CLM Act. More specifically the notices cover the following:

- Actions taken by the EPA under sections 15, 17, 19, 21, 23, 26 or 28 of the CLM Act;
- Actions taken by the EPA under sections 35 or 36 of the Environmentally Hazardous Chemicals Act 1985;
- Site audit statements provided to the EPA under section 52 of the CLM Act on sites subject to an in-force remediation order.

A search of the public database on the 13 October 2014 indicated that the subject site is not listed (Appendix G).

It should be noted that the EPA record of notices for contaminated land does not provide a record of all contaminated land in NSW.

There are no properties that have been listed as contaminated sites and notified to the EPA within Emu Plains, however these are significant distance from the site and have no bearing on the contamination status of the site.

The NSW EPA also issues environmental protection licenses under Section 308 of the POEO Act. The register contains:

- Environmental protection licenses;
- Applications for new licenses and to transfer or vary existing licenses;
- Environment protection and noise control licenses;
- Convictions in prosecutions under the POEO Act;
- The result of civil proceedings;
- License review information;
- Exemptions from the provisions of the POEO Act or Regulation;
- Approvals granted under Clause 9 of the POEO (Control of Burning) Regulation;
- Approvals granted under Clause 7a of the POEO (Clean Air) Regulation.

A search of the public register indicates that no license exist for the subject site. Four notices were issued for properties in Emu Plains. These were to:

- Boral Roofing in Mackellar Street for concrete works;
- Rocla Pipeline Products in Old Bathurst Road for concrete works;
- Boral Emu Plains Quarry in Railway Street for crushing, grinding or separating; and
- No Fuss Liquid Waste in Smith Street for non-thermal treatment of hazardous and other waste.

6. Site Inspection

The site walkover was completed by an environmental scientist from DP on 26 September 2014. Key observations from the site walkover are summarised below. Photographs are attached in Appendix G.

- The site was observed to be generally flat with a slight slope towards the south west. Shallow soil mounds had been created around the northeast side of the site (presumably for drainage purposes) as well as for garden areas around the site (Photo 1);
- An old historic church was noted adjacent Emerald Drive on the east side of site, circa 1800s (Photo 2);
- A plaque on the administration building entrance indicated the site was opened in 1982 (Photo 3);
- The site is an aged care facility which offers varying levels of care from high care to independent premises;
- The site was observed to have a small substation located in the eastern portion of the site, towards Emerald Street (Photo 4, Drawing 1);
- The site had a large amount of stormwater drains throughout its external garden and path areas (Photo 5). All drains were generally observed to be clean without staining. A large underground water or sewer pipe was also observed running along the southern boundary of the site (Photo 6);
- The facility was fitted with a large kitchen (Photo 7). Staff indicated there was no known greasetrapp for the kitchen or site. It was indicated, any oils used in fryers etc in the kitchen are changed by an external contractor;

- A workshop was observed in the southwest corner of the site. Staff indicated wood and metal works are undertaken in the workshop, however, no access was possible at the time of inspection. A Dangerous Goods sign on the door of the workshop indicated storage of flammable liquid (Photo 8 and Photo 9);
- Concrete across the site was generally observed to be in good condition with limited staining;
- Chemical stores were observed throughout the facility (Photo 10). No particular chemicals of concern were observed and all chemical stores were in an ordered condition. It was indicated to DP by staff that caustic may be used for cleaning of bed pans however the product could not be confirmed;
- Staff at the site were unaware of any chemical Manifests (or comprehensive list of material safety data sheets) or Hazardous Building Materials Register that exist for the site;
- Although no suspected hazardous building materials were observed, a hazardous building materials inspection was part of the project scope and it is possible given the age of the site that some may exist.

7. Preliminary Conceptual Site Model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how a site became contaminated and how potential receptors may be exposed to contamination either in the present or in the future i.e. it enables an assessment of the potential source – pathway – receptor linkages.

7.1 Potential Contamination Sources and Contaminants of Concern

Based on the current investigation, the following potential sources of contamination and associated contaminants of potential concern (COPC) have been identified (Table 2).

Table 2: Potential Contamination Sources and COPC

Potential Source	Description of Potential Contaminating Activity	COPC
Imported fill of unknown origin	Fill may have been used for site levelling and landscaping and was encountered to shallow depths in the bores	Common contaminants associated with fill are metals, TRH, BTEX, PAH, PCB, OCP, OPP, phenol and asbestos
Building Materials	Based on the age of the buildings it is possible that hazardous materials such as asbestos containing materials (ACM) and lead paint may be present	Asbestos, lead

Potential Source	Description of Potential Contaminating Activity	COPC
Market gardens, orchards, grounds and garden maintenance	Pesticides and herbicides may have historically and currently been used on landscaped areas across the site, and during the market gardening period	OCP, OPP, metals
Substation	The substation has the potential to contain PCBs	PCBs
Chemical stores	The sort of chemicals used across the site is unknown, however it is noted that chemical stores exist on the grounds. Chemicals are most likely to be fuels and cleaning agents	Actual chemicals stored are unknown, assume may be caustic in nature for cleaning purposes. TRH, BTEX, PAH, VOC

The identified potential contamination sources (S) are represented as follows:

- S1 Fill
- S2 Building materials
- S3 Pesticide application
- S4 Substation
- S5 Chemicals / fuels

7.2 Potential Receptors

7.2.1 Human Health Receptors

- R1 – current site users (workers, visitors and residents of aged care facility)
- R2 – construction and maintenance workers
- R3 – final end users (workers, visitors and residents of aged care facility)
- R4 – land users in adjacent areas (residential and commercial)

7.2.2 Environmental Receptors

- R5 – groundwater
- R6 – surface water (urban canals draining to the Nepean River)
- R7 – ecology

7.3 Potential Pathways

Potential pathways for contamination include the following:

- P1 – direct contact with soil (ingestion and dermal)
- P2 – inhalation of dust and/or vapours
- P3 – leaching of contaminants and vertical migration into groundwater
- P4 – Surface water runoff
- P5 – lateral migration of groundwater
- P6 – direct contact with groundwater (ingestion and dermal)

7.4 Summary of Preliminary CSM

A 'source-pathway-receptor' approach has been used to assess the potential risks of harm being caused to human, water or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways. The possible pathways between the above sources (S1 to S5) and receptors (R1 to R7) are provided in Table 3 below.

Table 3: Preliminary Conceptual Site Model

Source	Transport Pathway	Receptor	Risk Management Action Recommended
S1: Fill Metals, TRH, BTEX, PAH, PCB, OCP, OPP, phenol and asbestos S2: Building Materials Asbestos, lead S3: Pesticides OCP, OPP, metals S4: Substation PCBs S5: Chemicals and Fuels TRH, BTEX, PAH, VOC	P1: Direct contact with soil (ingestion and dermal)	R1: Current site users R2: Construction and maintenance workers R3: Future users R7: Ecology	An intrusive investigation is required to quantify and characterise possible contamination including chemical testing of the soils
	P2: Inhalation of dust and vapours	R1: Current site users R2: Construction and maintenance workers R3: Future users R4: Adjacent land users	An intrusive investigation is required to quantify and characterise possible contamination including chemical testing of the soils and groundwater. Construction also needs to be carried out with minimal dust generation
	P3: Leaching of contaminants and vertical migration into groundwater	R5: groundwater R6: surface water R7: ecology	An investigation is required to ascertain the actual presence of a source and potential for vertical migration (i.e. soil properties).
	P4: Surface water runoff	R6: surface water R7: ecology	An investigation is required to assess the potential for surface water to contain contaminants.
	P5: Lateral migration to groundwater	R5: groundwater R7: ecology	An investigation is required to ascertain the actual presence of a source and potential for vertical migration (i.e. soil properties).
	P6: Direct contact with groundwater	R2: Construction and maintenance workers R3: Future users R4: Adjacent land users R7: Ecology	An investigation is required to assess whether groundwater at the site is or has the potential to become contaminated.

8. Fieldwork

Due to the preliminary nature of this investigation, the soil sampling programme involved only limited soil sampling and testing at non-targeted locations across accessible areas of the site. The number of samples was not in compliance with the NSW EPA's *Sampling Design Guidelines* 1995 (EPA 1995) for a site of this size, which recommends 27 to 28 sampling locations, as a minimum.

The PSI has been devised broadly in accordance with the seven step data quality objective (DQO) process as specified in Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure* 1999, as amended 2013 (NEPC 2013). The DQO process is outlined in Appendix H. Field and laboratory procedures were assessed against data quality indicators (DQIs) also presented in Appendix H.

8.1 Soil Sampling Locations and Rationale

Environmental fieldwork, including drilling and soil sampling was conducted on the 26 September 2014, simultaneously with DP's geotechnical investigation. The results of the geotechnical investigation are reported separately. Samples were collected from eight boreholes (BH1 – BH8).

Selected soil samples were analysed for a range of COPCs, as described in Section 7. These samples were selected based on site observations (odour, staining etc), PID readings and their location within the subsoil strata (i.e. fill or natural).

Borehole test locations are shown on Drawing 1, Appendix A.

8.2 Drilling Methods

Drilling was undertaken using a truck-mounted drill rig fitted with solid flight augers for two locations, BH1 and BH2 to a maximum depth of 5.2 m bgl, and a hand auger for locations BH3 – BH8 to a maximum depth of 1.2 m bgl. Borehole logs are provided in Appendix I.

The boreholes were backfilled and/or reinstated with concrete.

8.3 Soil Sampling Procedures

Environmental sampling was performed according to standard operating procedures outlined in the DP *Field Procedures Manual*. All sampling data was recorded on borehole logs presented in Appendix I and selected samples for laboratory analysis were recorded on DP chain-of-custody (COC) sheets. The general soil sampling procedure comprised:

- Decontamination of re-useable sampling equipment using a 3% solution of phosphate free detergent (Decon 90) and distilled water prior to collecting each sample or use of disposable sampling equipment;
- Use of disposable sampling equipment including disposable nitrile gloves and disposable groundwater tubing;

- Transfer of samples into laboratory-prepared glass jars and capping immediately with Teflon lined lids;
- Labelling of sampling containers with individual and unique identification, including project number sample location and sample depth;
- Field screening of replicate soil samples collected in sealed plastic bags for Total Photoionisable Compounds (TOPIC) using a calibrated photoionisation detector (PID); and
- Placement of sample containers and bags into a cooled, insulated and sealed container for transport to the laboratory.

EnviroLab Services Pty Ltd, accredited by NATA, was employed to conduct the sample analysis. The laboratory is required to carry out in-house QC procedures.

8.4 Analytical Rationale

The analytical scheme was designed to obtain an indication of the potential presence and possible distribution of identified contaminants of concern based on information obtained for past and present activities and features within the site. The COPC as identified in Section 7 are TRH, BTEX, PAH, metals, VOC, phenols, asbestos, OCP, and PCB. The samples selected for analysis comprised predominantly fill, being the medium most likely to contain contaminants (if present).

9. Assessment Criteria

The assessment criteria have been sourced from the National Environment Protection Council (NEPC) *National Environment Protection Measure (Assessment of Site Contamination)* 1999, as amended 2013 (NEPC 2013).

The site assessment criteria (SAC) comprise health-based investigation levels (HILs), health screening levels (HSLs), Ecological Investigation Levels (EILs), Ecological Screening Limits (ESLs) and management limits for TRH. The laboratory Practical Quantitation Limit (PQL) has also been adopted as a screening level for some contaminants.

9.1 Soils

9.1.1 Health-based Investigation Levels (Non-Petroleum Chemical Contaminants)

Table 4 shows the HILs that have been adopted by NEPC (2013) Schedule B1, Table 1A(1) for assessing the human health risk from a contaminant via relevant pathways of exposure as detailed in the CSM (Section 7), and for a residential form of development with accessible soils (HIL A). Table 4 only includes contaminants analysed in this assessment and not the full list provided in NEPC (2013).

Table 4: Health Investigation Levels for Soil Contaminants

Contaminant	HIL A (mg/kg)
Metals and Inorganics	
Arsenic	100
Cadmium	20
Chromium (VI)	100
Copper	6000
Lead	300
Mercury (inorganic)	40
Nickel	400
Zinc	7400
PAH	
Carcinogenic PAH (as Benzo(a)pyrene TEQ)	3
Total PAH	300
Phenols	
Phenol	3000
OCP	
DDT+DDE+DDD	240
Aldrin + Dieldrin	6
Chlordane	50
Endosulfan (total)	270
Endrin	10
Heptachlor	6
HCB	10
Methoxychlor	300
Other Pesticides	
Chlorpyrifos	160
Other Organics	
PCB	1

9.1.2 Ecological Investigation Levels

Ecological Investigation Levels (EIL) have been derived for selected metals and organic compounds and are applicable for assessing risk to terrestrial ecosystems (NEPC, 2013). EIL depend on specific soil physiochemical properties and land use scenarios and generally apply to the top 2 m of soil, which corresponds to the root zone and habitation zone of many species. The EIL is determined for a contaminant based on the sum of the ambient background concentration (ABC) and an added contaminant limit (ACL). The ABC of a contaminant is the soil concentration in a specific locality that is the sum of naturally occurring background levels and the contaminants levels that have been introduced from diffuse or non-point sources (e.g. motor vehicle emissions). The ACL is the added concentration (above the ABC) of a contaminant above which further appropriate investigation and evaluation of the impact on ecological values is required.

The EIL is calculated using the following formula:

$$\text{EIL} = \text{ABC} + \text{ACL},$$

The ABC is determined through direct measurement at an appropriate reference site (preferred) or through the use of methods defined by Olszowy et al *Trace element concentrations in soils from rural and urban areas of Australia*, Contaminated Sites monograph no. 4, South Australian Health Commission, Adelaide, Australia 1995 (Olszowy, 1995) or Hamon et al, *Geochemical indices allow estimation of heavy metal background concentrations in soils*, Global Biogeochemical Cycles, vol. 18, GB1014, (Hamon, 2004). ACL is based on the soil characteristics of pH, CEC and clay content.

EIL (and ACLs where appropriate) have been derived in NEPC (2013) for only a short list of contaminants comprising As, Cu, Cr (III), DDT, naphthalene, Ni, Pb and Zn. An *Interactive (Excel) Calculation Spreadsheet* may be used for calculating site-specific EIL for these contaminants, and has been provided in the ASC NEPM Toolbox available on the SCEW (Standing Council on Environment and Water) website (<http://www.scew.gov.au/node/941>).

The adopted EIL, derived from Tables 1B(1) to 1B(5), Schedule B1 of NEPC (2013) the *Interactive (Excel) Calculation Spreadsheet* are shown in the following Table 5. The following site specific data and assumptions have been used to determine the EILs:

- a protection level of 80% has been adopted;
- the EILs will apply to the top 2 m of the soil profile;
- given the likely source of soil contaminants i.e. historical site use as open space/market gardens and potential fill, the contamination is considered as “aged” (>2 years);
- ABCs have been derived using the *Interactive (Excel) Calculation Spreadsheet* using input parameters of aged soil for the State in which the site is located, and low for traffic volumes;
- Site specific pH, and CEC values have been used as input parameters in the *Interactive (Excel) Calculation Spreadsheet*. Based on median pH and CEC values for clay and sand collected across the site, the soil profile (in the upper layers) has an average pH of 8.9 and CEC of 13.5 cmol/kg. The Calculation Spreadsheet is included in Appendix H.

Table 5: Ecological Investigation Levels (EIL) in mg/kg

	Analyte	EIL	Comments
Metals	Arsenic	100	Adopted pH of 8.9 and CEC of 13.5 cmol _c /kg]; assumed clay content [10%] for aged soil
	Copper	220	
	Nickel	210	
	Chromium III	410	
	Lead	1100	
	Zinc	590	
PAH	Naphthalene	170	
OCP	DDT	180	

9.1.3 Ecological Screening Levels – Petroleum Hydrocarbons

Ecological Screening Levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. ESL apply to the top 2 m of the soil profile as for EIL.

ESL have been derived in NEPC (2013) for petroleum fractions F1 to F4 as well as BTEX and Benzo(a)pyrene. Site specific data and assumptions as summarised in Table 6 have been used to determine the ESL. The adopted ESL, from Table 1B(6), Schedule B1 of NEPC (2013) are shown in Table 7.

Table 6: Inputs to the Derivation of ESL

Variable	Input	Rationale
Depth of ESL application	Top 2 m of the soil profile	The top 2 m depth below ground level corresponds to the root zone and habitation zone of many species.
Land use	Urban residential and public open space	
Soil Texture	Coarse	

Table 7: Ecological Screening Levels (ESL) in mg/kg

	Analyte	ESL	Comments
TRH	C6 – C10 (less BTEX) [F1]	180*	All ESLs are low reliability apart from those marked with * which are moderate reliability
	>C10-C16 (less Naphthalene) [F2]	120*	
	>C16-C34 [F3]	300	
	>C34-C40 [F4]	2800	
BTEX	Benzene	50	
	Toluene	85	
	Ethylbenzene	70	
	Xylenes	105	
PAH	Benzo(a)pyrene	0.7	

9.1.4 Petroleum Contaminants (Health Screening Levels and Management Limits)

Health Screening Levels

Table 8 shows the HSLs for petroleum hydrocarbon compounds adopted from NEPC (2013) Schedule B1, Table 1A(3) and are based on the exposure to petroleum hydrocarbons through the dominant vapour inhalation exposure pathway only (*i.e.* not direct contact to soils). The screening levels are adopted given the exposure risk as detailed in the CSM (Section 7). The proposed development

incorporates residential space potentially occupying the ground floor. Thus, the relevant and adopted HSLs are HSL A & B, Low – high density residential.

The HSLs are based on overlying soil type and depth. HSLs for both sand and clay have been included here based on the materials encountered on site (refer to Section 10), and results were assessed against the appropriate HSL based on the depth of the detected contamination and the predominant soil type.

Direct contact HSLs have not been included as NEPC (2013) Schedule B1 Section 2.4.11 states that HSLs for direct contact are significantly higher than most other soil screening levels and are unlikely to become drivers for further investigation or site management.

Table 8: Soil Health Screening Levels for Vapour Intrusion

Contaminant	Soil Type	HSL A (mg/kg)			
		depth 0m to <1m	depth 1m to <2m	depth 2m to 4m	depth 4m+
Toluene	Sand	160	220	310	540
Ethylbenzene		55	NL	NL	NL
Xylenes		40	60	95	170
Naphthalene		3	NL	NL	NL
Benzene		0.5	0.5	0.5	0.5
TRH C ₆ -C ₁₀ less BTEX [F1]		45	70	110	200
TRH >C ₁₀ -C ₁₆ less Naphthalene [F2]		110	240	440	NL
Toluene	Clay	390	NL	NL	NL
Ethylbenzene		NL	NL	NL	NL
Xylenes		95	210	NL	NL
Naphthalene		4	NL	NL	NL
Benzene		0.6	0.7	1	2
TRH C ₆ -C ₁₀ less BTEX [F1]		40	65	100	190
TRH >C ₁₀ -C ₁₆ less Naphthalene [F2]		230	NL	NL	NL

Note: NL – “Not limiting” to human health for the proposed land use for vapour intrusion from petroleum hydrocarbons

Management Limits (TPH Only)

NEPC (2013) Table 1B(7) provides ‘management limits’ for TPH fractions, which are applied after consideration of relevant HSLs. The management limits have been adopted to avoid or minimise the following potential effects of petroleum hydrocarbons:

- Formation of light non-aqueous phase liquids (LNAPL);
- Fire and explosive hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services by hydrocarbons.

The presence of site TPH contamination at the levels of the management limits does not imply that there is no need for administrative notification or controls in accordance with jurisdictional

requirements. The adopted management limits are shown in Table 9 and have been selected based on the CSM (Section 7).

Management limits for coarse material is presented in Table 9 due to the presence of both clayey and sandy soils at the site, however, management limits for coarse soil textures are adopted as the first level for comparison as this is more conservative of the two.

Table 9: Management Limits for TPH Fractions in Soil

TPH Fraction	Soil Texture	Management Limit Residential, Parkland, Open Space (mg/kg)
C ₆ -C ₉	Coarse	700
>C ₁₀ -C ₁₆	Coarse	1,000
>C ₁₆ -C ₃₄	Coarse	2,500
>C ₃₄ -C ₄₀	Coarse	10,000

9.1.5 Asbestos

Presence/ absence testing for asbestos has been conducted as a screening assessment. If asbestos or indicators of asbestos (e.g. significant inclusions of building debris) are observed, further assessment and/ or management for asbestos in accordance with NEPC (2013) will be recommended.

9.2 Contaminants with No Assessment Criteria

Where no guidance is provided in NEPC (2013) for a specific analyte, the PQL has been used as the initial screening criteria.

If concentrations are recorded above the PQL, reference criteria were to be sourced from other national and international guidance as relevant and use to determine the significance of the detected analyte.

The referenced criteria are provided in the results summary tables (Section 11, Laboratory Results).

10. Fieldwork Observations

The subsurface conditions encountered in the boreholes are presented in the borehole logs in Appendix I.

A summary of the typical sequence of subsurface conditions encountered at site is presented below:

Filling: Asphaltic concrete at both boreholes BH 1 to BH2 to 0.05 m depth. No asphalt at BH3 to BH8. Grey and brown silty fine to coarse sand filling below the asphaltic concrete to 0.3 m. Grey gravelly clay/ripped shale filling below the silty sand filling to 0.7 m in BH2. Brown silty sand followed by clay at the other locations.

Fluvial Sediments: Interbedded layers of very stiff and hard silty and silty sandy clay and medium dense and dense silty and clayey sand encountered below the filling layers in both boreholes. Boreholes refused on river gravels at 5.2 m depth in BH1, 3.7 m depth in BH2, 0.7 m depth in BH3, and 1.0 m depth in BH5A. Target depth reached at other locations.

No free groundwater was observed during auger drilling at any of the borehole locations.

The PID field screening results were all <1 ppm.

11. Results Summary

The results of the laboratory analysis undertaken are presented in Table 10. The full NATA laboratory reports, together with COC and sample receipt documentation are provided in Appendix J.

Table 10: Summary of Laboratory Results - All Samples

Sample ID			Sampled Date	Fill/ Natural	Applicable Soil Type ^b	Metals (total)								TRH					BTEX				PAH				Total Phenolics	OCP ^c	PCB	Asbestos		
						Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	C6-C10 less BTEX (F1)	>C10-C16-NAPHTHALENE (F2)	C6-C10	>C ₁₀ -C ₁₆	>C16-C34	>C34-C40	Benzene	Toluene	Ethylbenzene	Xylene Total	naphthalene	B(a)P	B(a)P TEQ					Total +ve PAH ^c	
BH		Depth				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	
Laboratory Results																																
BH1	/	0.2	26/09/2014	Fill	Sand	<4	<0.4	24	12	13	<0.1	21	32	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH2	/	0.5	26/09/2014	Fill	Clay	4	<0.4	14	29	9	<0.1	21	56	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	0.2	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH3	/	0.2	26/09/2014	Fill	Sand	<4	<0.4	8	8	22	<0.1	5	43	<25	<50	<25	<50	290	140	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH4	/	0.1	26/09/2014	Topsoil	Sand	9	<0.4	17	19	20	<0.1	5	29	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH5A	/	0.3	26/09/2014	Fill	Sand	<4	<0.4	11	36	13	<0.1	6	31	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH5B	/	0.5	26/09/2014	Fill	Sand	4	<0.4	11	33	15	<0.1	14	66	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH6	/	0.3	26/09/2014	Natural	Sand	<4	<0.4	11	7	9	<0.1	6	30	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BD2/260914	/	0.3	26/09/2014	Natural	Sand	8	<0.4	11	6	7	<0.1	5.5	27	-	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	NIL	-	-	-	-	
BH7	/	0.2	26/09/2014	Natural	Clay	<4	<0.4	10	8	26	<0.1	5	29	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
BH8	/	0.5	26/09/2014	Fill	Clay	<4	<0.4	13	9	21	<0.1	6	23	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.05	<0.5	NIL	<5	ND	ND	NAD	
TS	/	-	26/09/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118%	118%	118%	118%	-	-	-	-	-	-	-	-	
TB	/	-	26/09/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	
	/																															
Guideline Criteria																																
Site Assessment Criteria & Reference Levels																																
HIL A ^a					-	100	20	100	6,000	300	40	400	7,400	-	-	-	-	-	-	-	-	-	-	-	-	3	300	3000	- ^e	1	-	
HSL A, 0 to <1m ^d					Sand	-	-	-	-	-	-	-	-	45	110	-	-	-	-	0.5	160	55	40	3	-	-	-	-	-	-	-	-
HSL A Vapour Screening Levels 0 to <1m ^f					Sand	-	-	-	-	-	-	-	-	180	130	-	-	-	-	1	1300	330	220	0.8	-	-	-	-	-	-	-	-
Management Limit ^g					Coarse	-	-	-	-	-	-	-	-	700	1000	-	-	2,500	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
EIL ^h					-	100	-	410	220	1100	-	210	590	-	-	-	-	-	-	-	-	-	-	170	-	-	-	-	-	180	-	-
ESL, 0 to < 2m ⁱ					Coarse	-	-	-	-	-	-	-	-	180	120	-	-	300	2800	50	85	70	105	-	0.7	-	-	-	-	-	-	-

- Notes
- a *National Environment Protection (Assessment of Site Contamination) Measure 2013* (as amended). Health investigation levels for Residential with garden/accessible soil (HIL A)
- b Overlying material applying for HSL and management limit. Coarse soil type adopted on conservative basis
- c Sum of detectable, or where none detected, less than the PQL of the majority of compounds
- d *National Environment Protection (Assessment of Site Contamination) Measure 2013* (as amended). Health screening levels for vapour intrusion Residential with garden/accessible soil (HSL A)
- e Various available, not listed as not detected above PQL (refer Table 4 in report text)
- f Co-operative Research Centre (CRC) for Contamination Assessment and Remediation of the Environment (CARE), Technical Report Series No. 10, *Health screening levels for petroleum hydrocarbons in soil and groundwater health screening level, vapour intrusion*. September 2011 (CRC CARE Series 10).
- g *National Environment Protection (Assessment of Site Contamination) Measure 2013 (as amended)* . Table 1 B(7) Management Limits for TPH fractions F1-F4 in soil for coarse soil texture and residential
- h *National Environment Protection (Assessment of Site Contamination) Measure 2013 (as amended)* . Ecological investigation Levels Tables 1B(1) to 1B(5) residential.
- i *National Environment Protection (Assessment of Site Contamination) Measure 2013 (as amended)* . Ecological Screening Levels Table 1B(6), Schedule B1
- Not defined/ not analysed/ not applicable

Acronyms	
B(a)P	Benzo(a)pyrene
B(a)P TEQ	Benzo(a)pyrene toxic equivalent
BTEX	Benzene, toluene, ethyl benzene, total xylenes
HIL	Health investigation level
HSL	Health screening level
NAD	No asbestos detected at the limit of reporting (0.1g/kg)
N/A	Not applicable
NL	"Not limiting" to human health for the proposed land use for vapour intrusion from petroleum hydrocarbons
OCP	Organochlorine pesticides
OPP	Organophosphorus pesticides
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyls
PQL	Practical quantitation limit
TRH	Total recoverable hydrocarbons, including total petroleum hydrocarbons (TPH)

12. Discussion

12.1 Desktop Study

The desktop study identified that the site has been used as a market garden/open space until sometime during the 1970s. A church (Emu Plains Uniting Church) has been present on the eastern portion of the site since the early 1800s. The site was developed for aged care sometime during the 1970s. These features were apparent in the historical aerial photographs and title records.

A review of the geological and topographical features maps have indicated that the site is underlain by sand, silt and clay, and is relatively flat. It is inferred that the groundwater flow direction would be south south east towards the Nepean River. No regulatory notices existed for the site under any of the publically accessible databases or matters arising under the CLM Act.

The desktop study and site walkover indicated potential COPC included fill (likely to be minimal), asbestos and lead paint used in construction materials, and possible pesticides used throughout landscaped areas. There appeared to overall be a low potential for contamination across the site as a result of the desktop study.

12.2 Contaminants in Soil

All results for the soil analysis across the site were within the adopted SAC. One location (BH3/0.2) had a detectable level of TPH C16-34 and C34-40, but was within the adopted criteria.

No ACM or fibres in soil were found during the investigation.

13. Recommendations and Conclusions

The PSI consisted of a limited sampling programme and did not include sample points within the footprints of the existing buildings. Prior to any redevelopment works DP recommends that a Detailed Site Investigation (DSI) be undertaken following the demolition of the existing buildings. The objective of the DSI would be primarily to assess post-demolition surface conditions (e.g. presence of asbestos) and to more comprehensively assess the nature of the fill beneath the buildings.

It is concluded that the site is suitable for continued use as a residential aged care facility, and would be suitable for the proposed development subject to implementation of the above recommendation.

14. Limitations

Douglas Partners (DP) has prepared this report for this project at 1 – 11 Emerald Street, Emu Plains in accordance with DP's proposal dated 10 September 2014 and acceptance received from Mr John Phillpott of UnitingCare Ageing. The work was carried out under DP's conditions of Engagement. This report is provided for the exclusive use of UnitingCare Ageing for the specific project and purpose as described in the report. It should not be used by or relied upon for other projects or purposes on

the same or other site or by a third party. DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are considered to be indicative of the sub-surface conditions on the site only to the depths investigated at the specific sampling and/or testing locations, and only at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

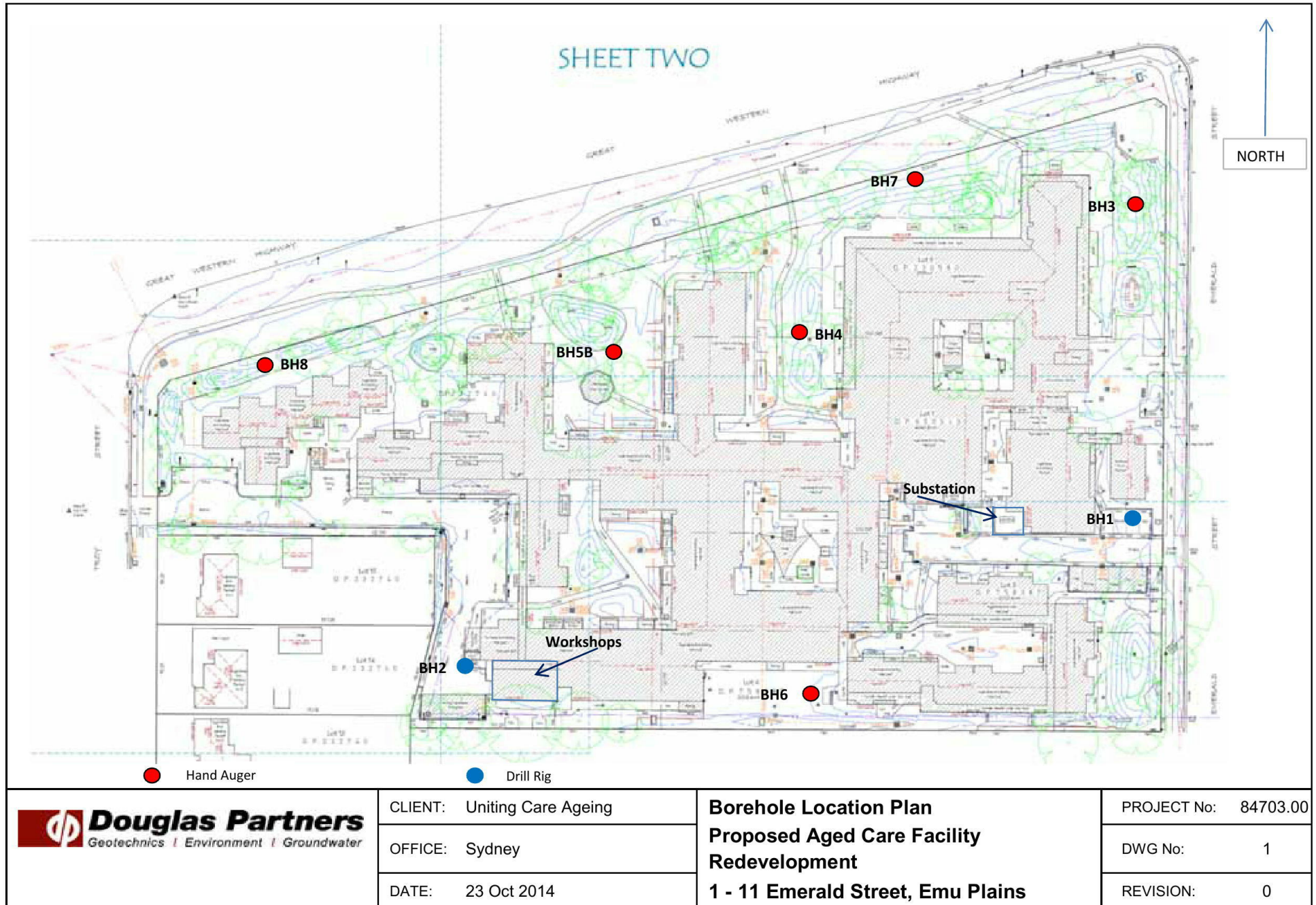
This report must be read in conjunction with all the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Douglas Partners Pty Ltd

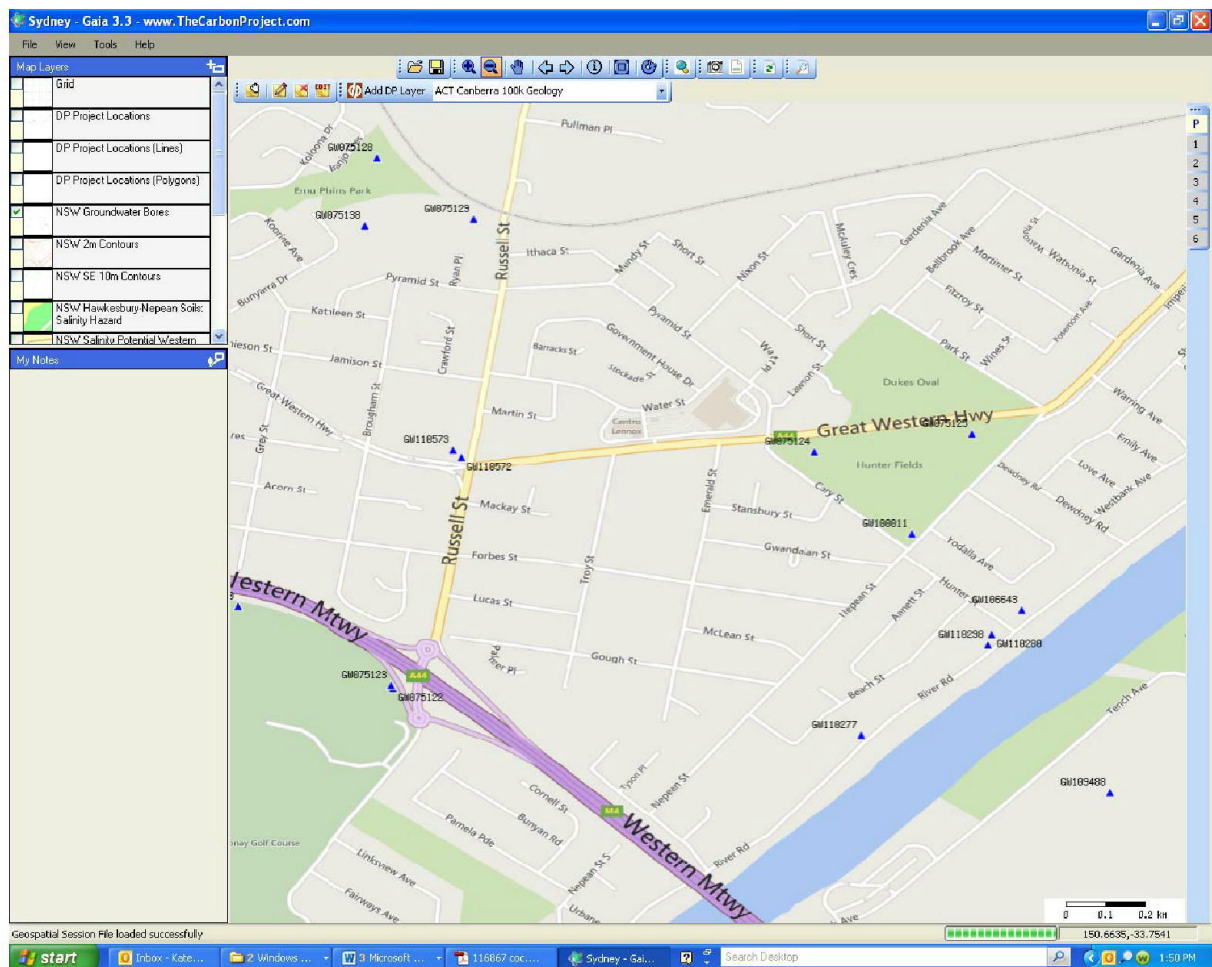
Appendix A

Drawings



Appendix B

Groundwater Bore Logs



Appendix C

Aerial Photographs



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

1947 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 1

REVISION: 0



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

1961 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 2

REVISION: 0



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

1970 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 3

REVISION: 0



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

1982 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 4

REVISION: 0



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

2002 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 5

REVISION: 0



CLIENT: Uniting Care Ageing

OFFICE: Sydney

DATE: 15 Oct 2014

2009 Aerial Photograph

PSI with Limited Sampling

Emerald Street, Emu Plains NSW

PROJECT No: 84503.00

PLATE No: 6

REVISION: 0

Appendix D

Historical Title Deeds

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

Summary of Owners Report

LPI

Sydney

Address: - 1 to 11 Emerald Street, Emu Plains

Description: - Lot 16 D.P. 232740, Lot 9 D.P. 230580, Lot 1 D.P. 650543

Also

Lots 3 & 4 Section 21 D.P. 758387

As regards Lot 16 D.P. 232740

Part of this land is used as a Retirement Village under the Retirement Villages Act 1999 known as Edinglassie Village
(Vide AF 531063, plan annexed – 07.09.2010)

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
04.10.1876 (1887 to 1925)	George Walker (Farmer)	Vol 287 Fol's 5 to 8 (inclusive)
09.03.1925 (1925 to 1965)	Percy George Walker (Orchardist) - & his deceased estate (Transmission Application not investigated)	Vol 287 Fol's 5 to 8 (inclusive)
21.10.1965 (1965 to 1968)	Benwerrin Contracting Pty Limited	Vol 287 Fol's 5 to 8 (inclusive) Now Vol 10544 Fol 55
16.08.1968 (1968 to 1969)	Kennard E. King & Co Pty Limited	Vol 10544 Fol 55
28.07.1969 (1969 to 1977)	Caroline Mary Rowlings (Dress Maker) Sheila Eileen King (Married Woman)	Vol 10544 Fol 55
10.10.1977 (1977 to date)	# The Uniting Church in Australia Property Trust (N.S.W.)	Vol 10544 Fol 55 Now 16/232740

Denotes Current Registered Proprietor

Leases: - NIL

Easements: -

- 27.09.1972 – Easement for Stormwater Drainage six feet wide (M 809648 & D.P. 556154)

As regards Lot 9 D.P. 230580

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
04.10.1876 (1887 to 1925)	George Walker (Farmer)	Vol 287 Fol's 5 to 8 (inclusive)
09.03.1925 (1925 to 1965)	Percy George Walker (Orchardist) - & his deceased estate (Transmission Application not investigated)	Vol 287 Fol's 5 to 8 (inclusive)
21.10.1965 (1965 to 1968)	Benwerrin Contracting Pty Limited	Vol 287 Fol's 5 to 8 (inclusive) Now Vol 10424 Fol 144

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

Search continued as regards Lot 9 D.P. 230580

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
16.08.1968 (1968 to 1969)	Kennard E. King & Co Pty Limited	Vol 10424 Fol 144
28.07.1969 (1969 to 1977)	Caroline Mary Rowlings (Dress Maker) Sheila Eileen King (Married Woman)	Vol 10424 Fol 144
10.10.1977 (1977 to date)	# The Uniting Church in Australia Property Trust (N.S.W.)	Vol 10424 Fol 144 Now 9/230580

Denotes Current Registered Proprietor

Leases: - NIL

Easements: - NIL

As regards Lot 1 D.P. 650543

Dedicated as a site for the erection of a Wesleyan Methodist Chapel

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
07.02.1872 (1872 to 1889)	Reverend Stephen Rabone Reverend George Hurst Reverend Benjamin Chapman	Vol 140 Fol 192
23.12.1889 (1889 to 1972)	William Lucas (also others) (Trustees for Church Purposes)	Vol 140 Fol 192
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Vol 140 Fol 192 Now 1/650543

Denotes Current Registered Proprietor

Leases: - NIL

Easements: - NIL

As regards Lot 3 Section 21 D.P. 758387

Dedicated as a site for the erection of a Wesleyan Methodist Ministers Residence

Part of this land is used as a Retirement Village under the Retirement Villages Act 1999 known as Edinglassie Village
(Vide AF 531063, plan annexed – 07.09.2010)

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
07.02.1872 (1872 to 1889)	Reverend Stephen Rabone Reverend George Hurst Reverend Benjamin Chapman	Vol 140 Fol 193
23.12.1889 (1889 to 1972)	William Lucas (also others) (Trustees for Church Purposes)	Vol 140 Fol 193

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

Search continued as regards Lot 3 Section 21 D.P. 758387

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Vol 140 Fol 193 Now 3/21/758387

Denotes Current Registered Proprietor

Leases: - NIL

Easements: - NIL

As regards Lot 4 Section 21 D.P. 758387

Part of this land is used as a Retirement Village under the Retirement Villages Act 1999 known as Edinglassie Village (Vide AF 531063, plan annexed – 07.09.2010)

The early title to this land was Crown Title

We are aware of the following: -

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
27.02.1931	Dedicated for Methodist School Site	
26.05.1931 (1931 to 1931)	Henry Lucas (also others) (Trustees for Church Purposes)	Vol 4481 Fol 206
22.06.1931 (1931 to 1972)	William Kessell Hall (also others) (Trustees for Church Purposes)	Vol 4481 Fol 206
12.12.1972 (1972 to date)	# Methodist Church (N.S.W.) Property Trust Now # The Uniting Church in Australia Property Trust (N.S.W.)	Vol 4481 Fol 206 Now 1/650543

Denotes Current Registered Proprietor

Leases: - NIL

Easements: - NIL

Yours Sincerely
Mark Groll
30 September 2014
(Ph: 0412 199 304)



Email: grolly1@bigpond.net.au

Locality : EMU PLAINS

Cadastral Records Enquiry Report

Requested Parcel : Lot 9 DP 230580

LGA : PENRITH

Parish : STRATHDON

Identified Parcel : Lot 9 DP 230580

County : COOK



Copyright (c) Land and Property Information. Map Projection : MGA Zone 56

Form 1
 D.P. 232740 OFFICE USE ONLY.

PLAN OF SUBDIVISION OF LOT 8 IN D.P. 230580

Registered: **D.P. 232740**
 C.A. 17528 of 7-3-1967
 This System: **Torrens**
 Purpose: **Subdivision**
 Ref. Map: **Town of Emu**
 City: **COOK** Scale: **100 feet to an inch**

Map Sheet: **Perth**
 Town or Locality: **Emu Plains**
 Parish: **Strathgordon**

WARNING. Plan Drawing only to appear in this space.

WARNING. Plan Drawing only to appear in this space.

WARNING. Plan Drawing only to appear in this space.

CONVERSION TABLE ADDED BY
 REGISTRAR GENERAL'S DEPARTMENT

DP 232740

FEET	INCHES	METRES
1	0	0.3048
2	0	0.6096
3	0	0.9144
4	0	1.2192
5	0	1.5240
6	0	1.8288
7	0	2.1336
8	0	2.4384
9	0	2.7432
10	0	3.0480
11	0	3.3528
12	0	3.6576
13	0	3.9624
14	0	4.2672
15	0	4.5720
16	0	4.8768
17	0	5.1816
18	0	5.4864
19	0	5.7912
20	0	6.0960
21	0	6.4008
22	0	6.7056
23	0	7.0104
24	0	7.3152
25	0	7.6200
26	0	7.9248
27	0	8.2296
28	0	8.5344
29	0	8.8392
30	0	9.1440
31	0	9.4488
32	0	9.7536
33	0	10.0584
34	0	10.3632
35	0	10.6680
36	0	10.9728
37	0	11.2776
38	0	11.5824
39	0	11.8872
40	0	12.1920
41	0	12.4968
42	0	12.8016
43	0	13.1064
44	0	13.4112
45	0	13.7160
46	0	14.0208
47	0	14.3256
48	0	14.6304
49	0	14.9352
50	0	15.2400
51	0	15.5448
52	0	15.8496
53	0	16.1544
54	0	16.4592
55	0	16.7640
56	0	17.0688
57	0	17.3736
58	0	17.6784
59	0	17.9832
60	0	18.2880
61	0	18.5928
62	0	18.8976
63	0	19.2024
64	0	19.5072
65	0	19.8120
66	0	20.1168
67	0	20.4216
68	0	20.7264
69	0	21.0312
70	0	21.3360
71	0	21.6408
72	0	21.9456
73	0	22.2504
74	0	22.5552
75	0	22.8600
76	0	23.1648
77	0	23.4696
78	0	23.7744
79	0	24.0792
80	0	24.3840
81	0	24.6888
82	0	24.9936
83	0	25.2984
84	0	25.6032
85	0	25.9080
86	0	26.2128
87	0	26.5176
88	0	26.8224
89	0	27.1272
90	0	27.4320
91	0	27.7368
92	0	28.0416
93	0	28.3464
94	0	28.6512
95	0	28.9560
96	0	29.2608
97	0	29.5656
98	0	29.8704
99	0	30.1752
100	0	30.4800
101	0	30.7848
102	0	31.0896
103	0	31.3944
104	0	31.6992
105	0	32.0040
106	0	32.3088
107	0	32.6136
108	0	32.9184
109	0	33.2232
110	0	33.5280
111	0	33.8328
112	0	34.1376
113	0	34.4424
114	0	34.7472
115	0	35.0520
116	0	35.3568
117	0	35.6616
118	0	35.9664
119	0	36.2712
120	0	36.5760
121	0	36.8808
122	0	37.1856
123	0	37.4904
124	0	37.7952
125	0	38.1000
126	0	38.4048
127	0	38.7096
128	0	39.0144
129	0	39.3192
130	0	39.6240
131	0	39.9288
132	0	40.2336
133	0	40.5384
134	0	40.8432
135	0	41.1480
136	0	41.4528
137	0	41.7576
138	0	42.0624
139	0	42.3672
140	0	42.6720
141	0	42.9768
142	0	43.2816
143	0	43.5864
144	0	43.8912
145	0	44.1960
146	0	44.5008
147	0	44.8056
148	0	45.1104
149	0	45.4152
150	0	45.7200
151	0	46.0248
152	0	46.3296
153	0	46.6344
154	0	46.9392
155	0	47.2440
156	0	47.5488
157	0	47.8536
158	0	48.1584
159	0	48.4632
160	0	48.7680
161	0	49.0728
162	0	49.3776
163	0	49.6824
164	0	49.9872
165	0	50.2920
166	0	50.5968
167	0	50.9016
168	0	51.2064
169	0	51.5112
170	0	51.8160
171	0	52.1208
172	0	52.4256
173	0	52.7304
174	0	53.0352
175	0	53.3400
176	0	53.6448
177	0	53.9496
178	0	54.2544
179	0	54.5592
180	0	54.8640
181	0	55.1688
182	0	55.4736
183	0	55.7784
184	0	56.0832
185	0	56.3880
186	0	56.6928
187	0	56.9976
188	0	57.3024
189	0	57.6072
190	0	57.9120
191	0	58.2168
192	0	58.5216
193	0	58.8264
194	0	59.1312
195	0	59.4360
196	0	59.7408
197	0	60.0456
198	0	60.3504
199	0	60.6552
200	0	60.9600
201	0	61.2648
202	0	61.5696
203	0	61.8744
204	0	62.1792
205	0	62.4840
206	0	62.7888
207	0	63.0936
208	0	63.3984
209	0	63.7032
210	0	64.0080
211	0	64.3128
212	0	64.6176
213	0	64.9224
214	0	65.2272
215	0	65.5320
216	0	65.8368
217	0	66.1416
218	0	66.4464
219	0	66.7512
220	0	67.0560
221	0	67.3608
222	0	67.6656
223	0	67.9704
224	0	68.2752
225	0	68.5800
226	0	68.8848
227	0	69.1896
228	0	69.4944
229	0	69.7992
230	0	70.1040
231	0	70.4088
232	0	70.7136
233	0	71.0184
234	0	71.3232
235	0	71.6280
236	0	71.9328
237	0	72.2376
238	0	72.5424
239	0	72.8472
240	0	73.1520
241	0	73.4568
242	0	73.7616
243	0	74.0664
244	0	74.3712
245	0	74.6760
246	0	74.9808
247	0	75.2856
248	0	75.5904
249	0	75.8952
250	0	76.2000
251	0	76.5048
252	0	76.8096
253	0	77.1144
254	0	77.4192
255	0	77.7240
256	0	78.0288
257	0	78.3336
258	0	78.6384
259	0	78.9432
260	0	79.2480
261	0	79.5528
262	0	79.8576
263	0	80.1624
264	0	80.4672
265	0	80.7720
266	0	81.0768
267	0	81.3816
268	0	81.6864
269	0	81.9912
270	0	82.2960
271	0	82.6008
272	0	82.9056
273	0	83.2104
274	0	83.5152
275	0	83.8200
276	0	84.1248
277	0	84.4296
278	0	84.7344
279	0	85.0392
280	0	85.3440
281	0	85.6488
282	0	85.9536
283	0	86.2584
284	0	86.5632
285	0	86.8680
286	0	87.1728
287	0	87.4776
288	0	87.7824
289	0	88.0872
290	0	88.3920
291	0	88.6968
292	0	89.0016
293	0	89.3064
294	0	89.6112
295	0	89.9160
296	0	90.2208
297	0	90.5256
298	0	90.8304
299	0	91.1352
300	0	91.4400
301	0	91.7448
302	0	92.0496
303	0	92.3544
304	0	92.6592
305	0	92.9640
306	0	93.2688
307	0	93.5736
308	0	93.8784
309	0	94.1832
310	0	94.4880
311	0	94.7928
312	0	95.0976
313	0	95.4024
314	0	95.7072
315	0	96.0120
316	0	96.3168
317	0	96.6216
318	0	96.9264
319	0	97.2312
320	0	97.5360
321	0	97.8408
322	0	98.1456
323	0	98.4504
324	0	98.7552
325	0	99.0600
326	0	99.3648
327	0	99.6696</

Plan Form 3--TO BE USED WHERE IT IS INTENDED TO DEDICATE PUBLIC ROADS OR PUBLIC RESERVES OR CREATE DRAINAGE RESERVES, EASEMENTS, OR RESTRICTIONS AS TO USER.

DIAGRAM B
NOT TO SCALE
GREAT WESTERN RD

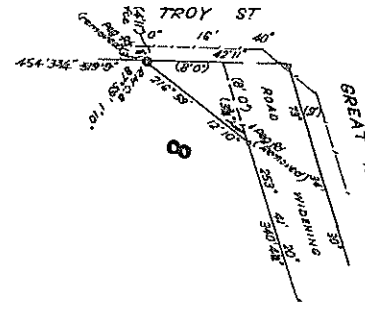


DIAGRAM C
NOT TO SCALE
GREAT WESTERN ROAD

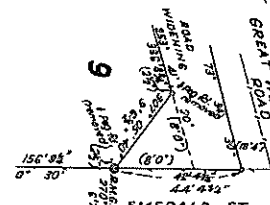
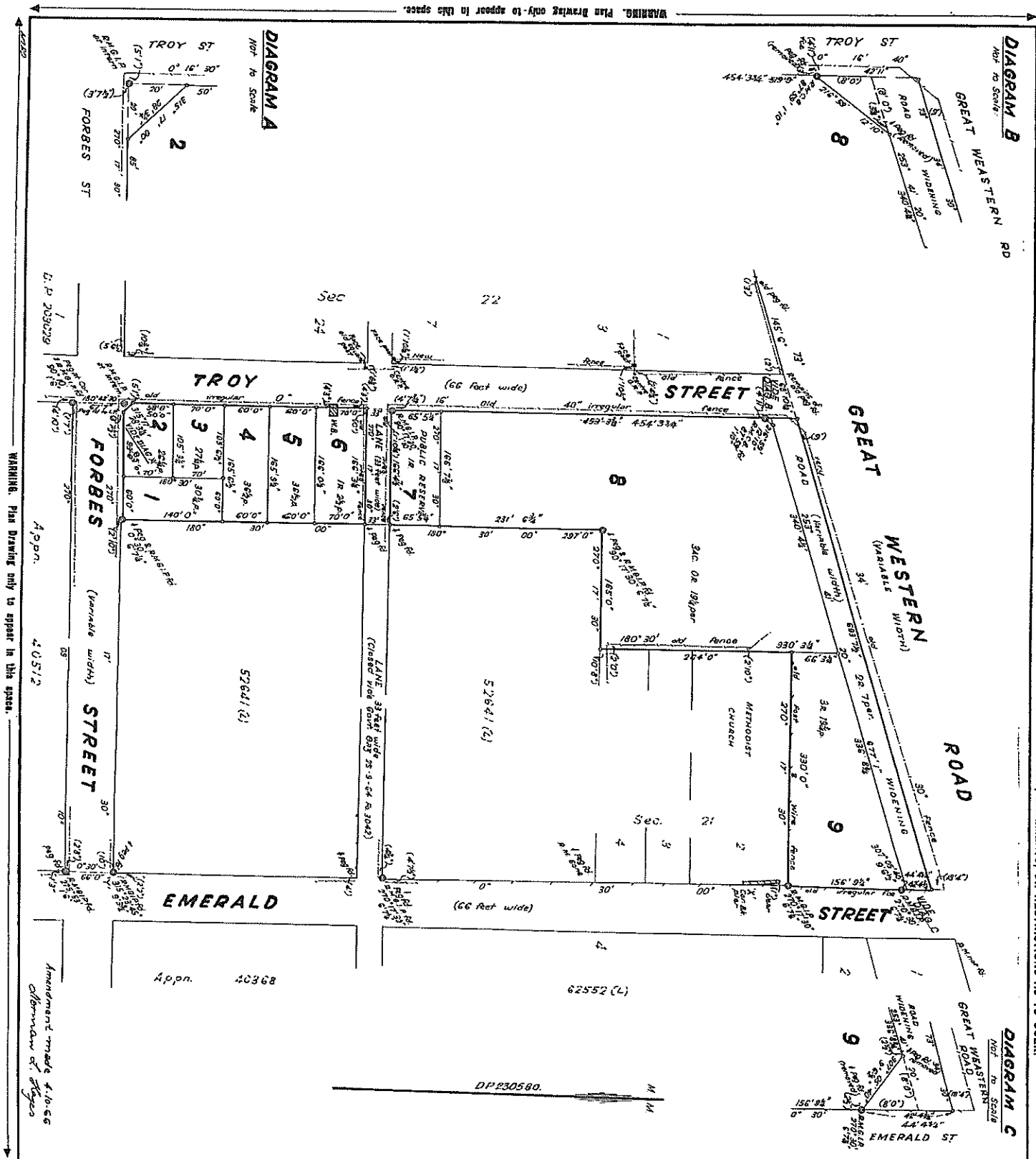
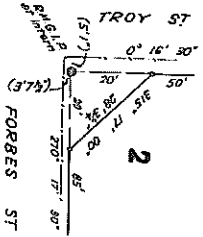


DIAGRAM A
NOT TO SCALE



DP230580. (E) Registered: Doc 12-10-1965 CA: 1752 of 8-6-1966 This System: Torrens Old System Purpose: Subdivision Ref. Map: TOWN EMU Lot Plan: CO.		PLAN OF LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 20
---	--	--

62431

0.6330280

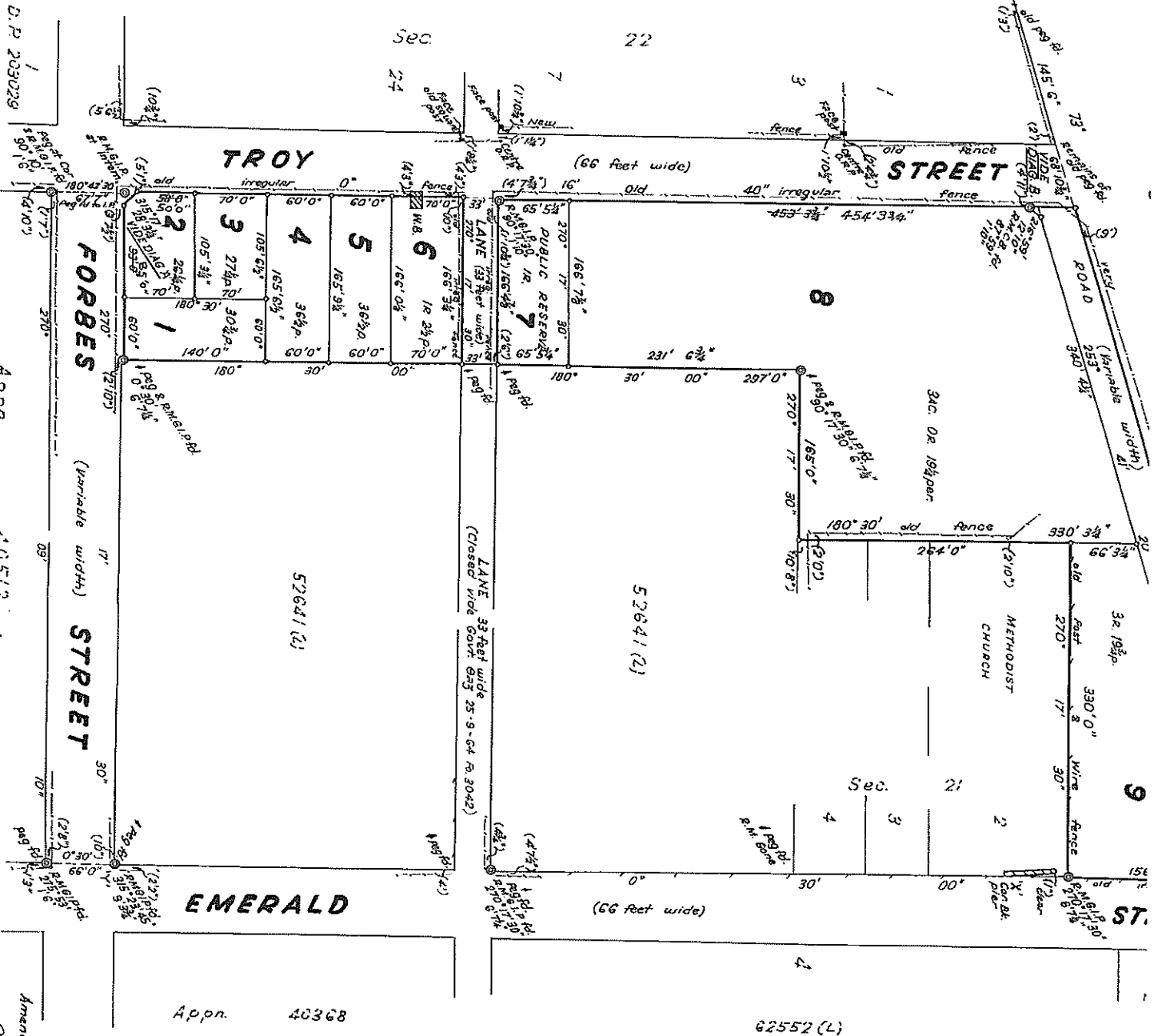
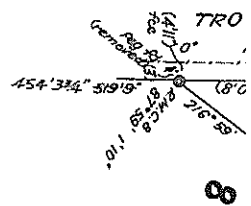
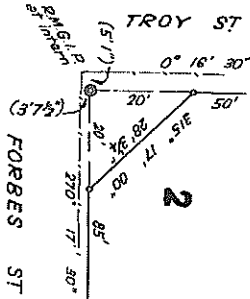
13.991

WARNING. Plan Drawing only to appear in this space.

DIAGRAM A

Not to Scale

DP 230580 (E)



WARNING. Plan Drawing only to appear in this space.

A.P.N.

40512

Amendment made 4.10.66
 by [illegible]

DP 230580.

156' 9 1/2"
 0° 30'

DIAGRAM B

Not to Scale

RD

DP 230580 (E)

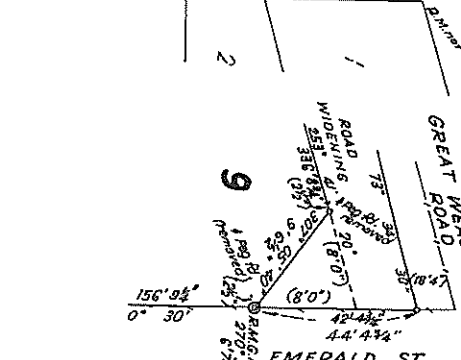
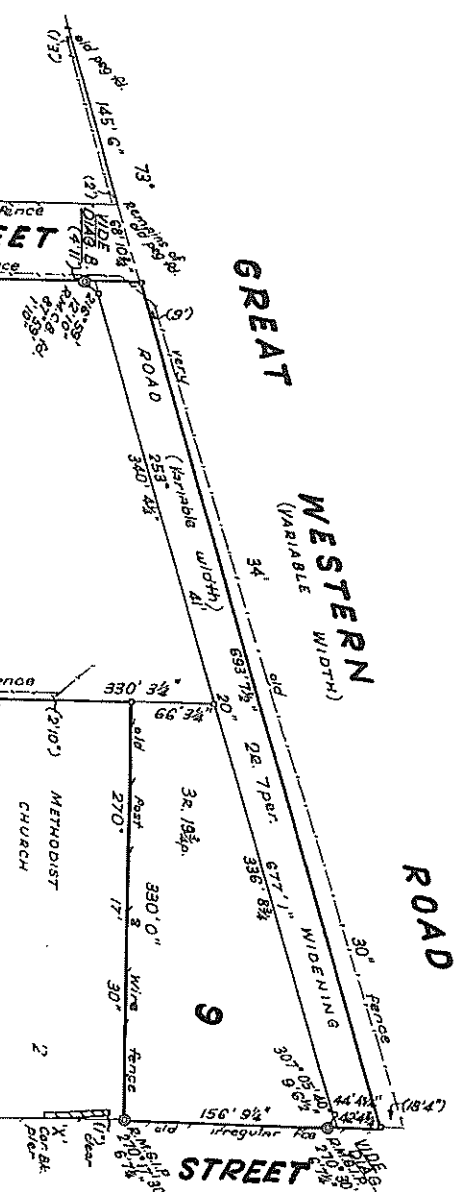
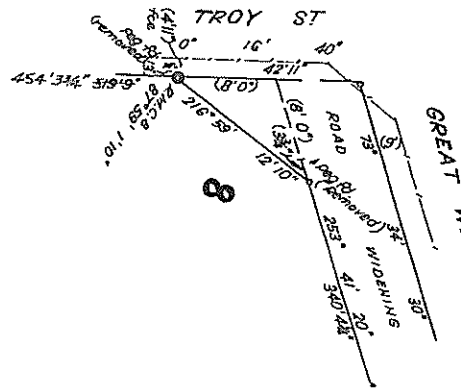
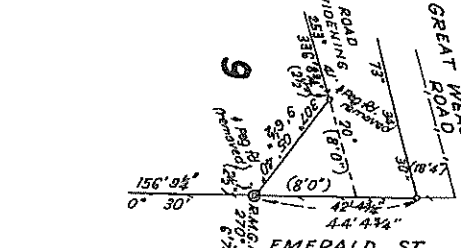


DIAGRAM C

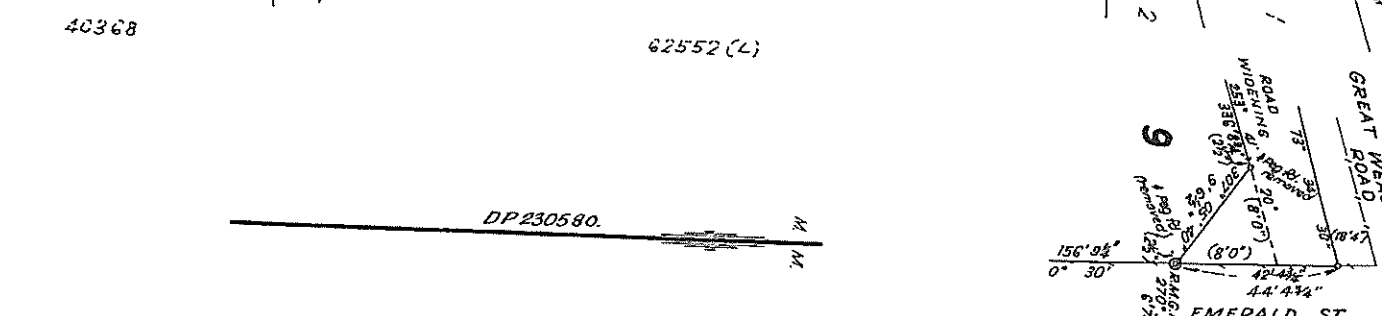
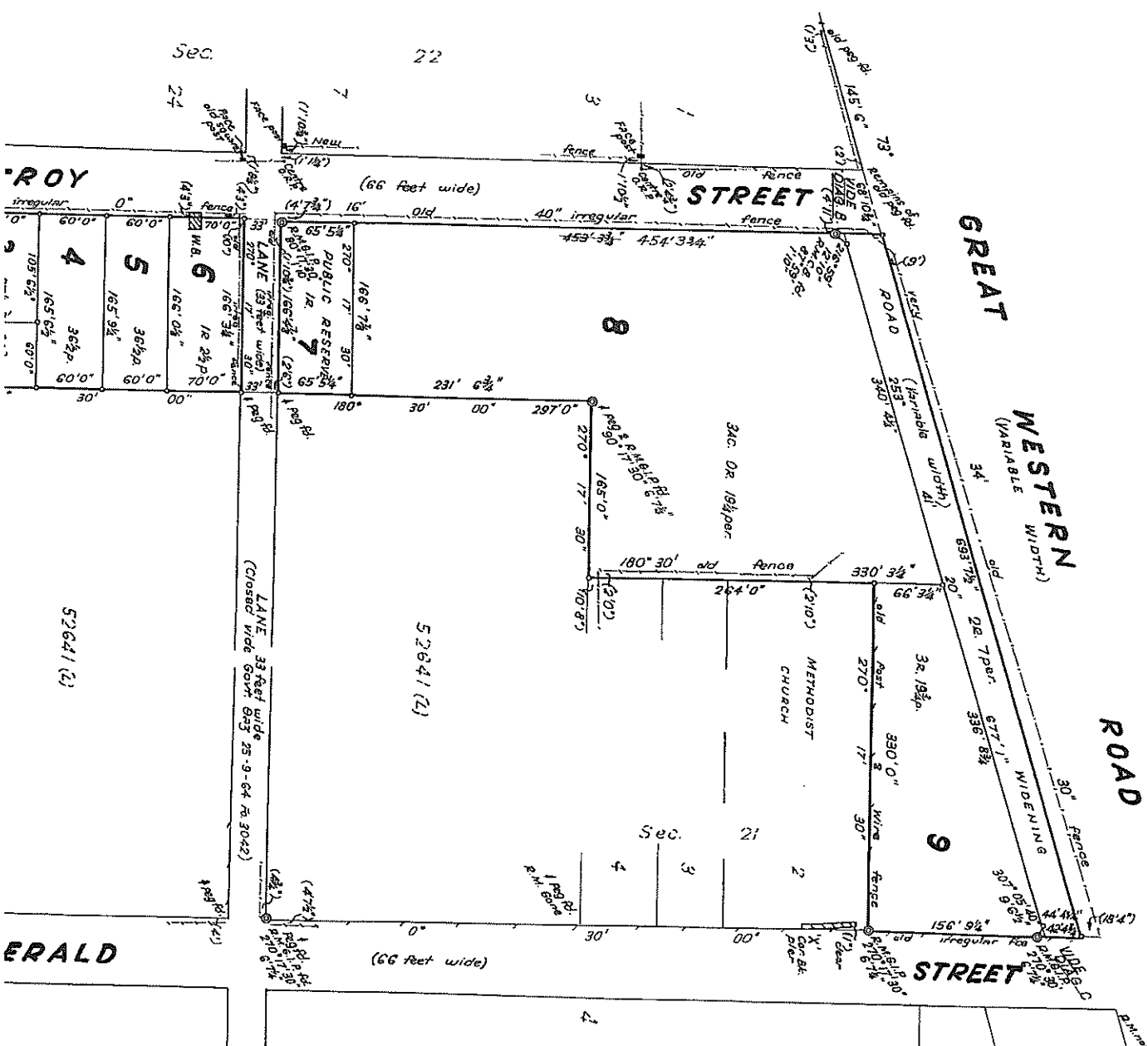
Not to Scale



WARNING: Plan Drawing only to appear in this space.

DIAGRAM A

Not to Scale

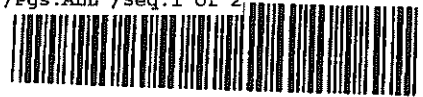


Jonathan

Substitute Dealing

Time... 3:00
Date... 3/9/10
CSB2.....

REQUEST
New South Wales
Real Property Act 1900



AF531063K

Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

(A) STAMP DUTY

If applicable. Office of State Revenue use only

(B) LAND

Torrens Title
FOLIO IDENTIFIER 16/232740, 3/21/758387 and 4/21/758387

(C) REGISTERED DEALING

Number Torrens Title

(D) LODGED BY

Delivery Box 3926	Name, Address or DX and Telephone Reference (optional): JDF: LZN: 30603662	CODE R
----------------------	---	------------------

(E) APPLICANT

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W.) ARBN 134 487 095

(F) NATURE OF REQUEST

Request to enter a notification pursuant to section 24A Retirement Villages Act 1999

(G) TEXT OF REQUEST

The applicant requests the Registrar General to record that –

- the whole of the land in the Torrens Title(s) specified above –
- part of the land in the Torrens Title(s) specified above in 16/232740, 3/21/758387 and 4/21/758387 being the outlined subject site on “Edinglassie Village” Plan annexed to this Request form

is used as a retirement village known as Edinglassie Village.

DATE

31 / 08 / 10
dd mm yy

(H)

THE COMMON SEAL of THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W.) was hereunto affixed on the 31st day of August 2010 pursuant to a resolution of the Trust at a duly convened meeting in the presence of:

Andrew Williams
Member



Bryce Bridges
Member

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Athanasios George Koumoukelis

Signatory's name: Athanasios George Koumoukelis, by his fellow employed solicitor

Signatory's capacity: Applicant's solicitor

RELODGED

01 SEP 2010

TIME: 10:06

6805827.1 LZN LZN

All handwriting must be in block capitals.

ANNEXURE 'A'

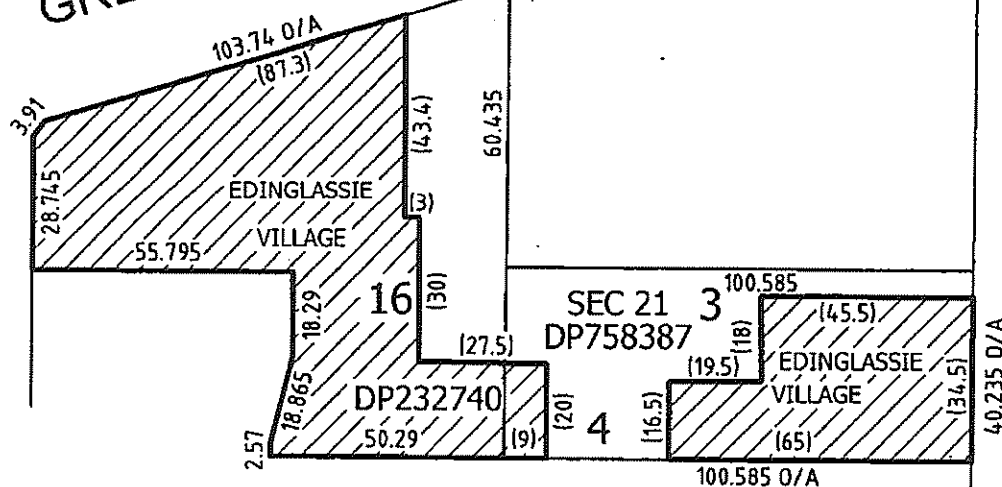
AF 531063



GREAT WESTERN HIGHWAY

TROY STREET

EMERALD STREET



DENOTES RETIREMENT VILLAGE

NOTE:
NO EASEMENTS OR RESTRICTIONS SHOWN

SCALE
1:1500

DATE
10/8/10

SITE PLAN

EDINGLASSIE VILLAGE
GREAT WESTERN HIGHWAY EMU PLAINS



LEAN LACKENBY & HAYWARD
CONSULTANTS IN SURVEYING, ENGINEERING & LAND DEVELOPMENT
1ST FLR, 708 NORTHAMPTON ST., 1ST FLOOR, PHOENIX, ARIZONA 85004 FAX (602) 955-1000

LYOOL PTY LTD.
ABN 61 073 103 371

SHEET
1 OF 1

DWG N°
59382/8 REQUEST

REFERENCE

59382

FOR THE UNITED CHURCH IN AUSTRALIA PROPERTY TRUST (INC.)

Les Ferguson

THE UNITED CHURCH IN AUSTRIA
Andrew Wiltrone
 Member

PROPERTY TRUST (N.E.)

LT2/16

PLAN OF LAND IN VOL 140 FOL 192

DP 650543

Registered:  MB 20.4.1994

C.A.: _____

Title System: _____ TORRENS

Purpose: _____ DEPARTMENTAL

Ref. Map: U 6460 - 53

Last Plan: _____

Mun./Shire/City PENRITH

Town or Locality EMU PLAINS

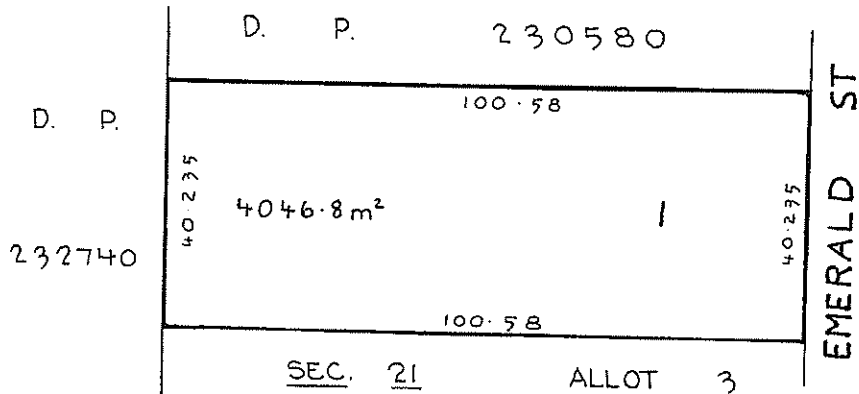
Parish STRATHDON

County COOK

Reduction Ratio 1: 800

Lengths are in metres

N
O
O
I
D
I
B



Plan of 2 acres of land for a Wesleyan Church, ~~School~~
^{Residence, and a Reserve}
 and ~~Manse~~, situate ^{within Town of} at ^{Parish of Strathgordon} ~~Finer Plains~~ County of Cook.

46014

67

Allot 4 dedicated for Methodist School Site Gaz. 27th February 1931 vide Parks 30.115/5
 {
 Allot 4
 Grant issued to Henry Lucas, William Hessel Hall, Percy Walker, Percy George Walker,
 Thomas Henry Holden, James Ramsay Lowry, Elizabeth Lucas & Susanna Walker
 vide Parks 30.115/5

Wesleyan Church and Residence. Area 1.2.0 }
Dedicated 12th March 1869. } Deeds issued.
Rededicated 15th August 1871.

Stephen Rabone, George Hurst and Benjamin Chapman
(Trustees for Church and Residence.) M^o 70. 1795

William Hogan
non Geo Dempsey

Allot. 4. Appropriated for Wesleyan (now Methodist) School
 Site vide papers M^s 03.3260 dep.
 Dedicated for Methodist School Site *Orig.* 27.2.31
 Re-gra 15.5.31 in lieu of notice of 27.2.31

Pls. 30.8193. Methodist Church
Trustees for deed of grant.

Phs. 30.8193. Methodist
ministries for dead of gre

Exchanged

March 2nd 1862

JAL

8 May 1868

Transmitted to the Surveyor General with
my Letter No. 67/43. July 29. 1864

George W. Chapman
Licensed Surveyor

25-1984

NEW SOUTH WALES

Crown Grants Vol. 183 Fols.164,1
Vol. 287 Fols.5 to 8 (incl.)

Prior Titles Vol. 183 Fol.164
Vol. 287 Fols 5 to 8 (incl.)
Vol.8429 Fols.136 and 137

CERTIFICATE OF TITLE
PROPERTY ACT, 1900, as amended.



10424143

Vol. 10424 Fol. 143

MA CANCELLED Edition issued 27-10-1966

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Witness D. O'Sullivan.

Jawatson
Registrar General.



PLAN SHOWING LOCATION OF LAND

DIAGRAM B
Not to Scale

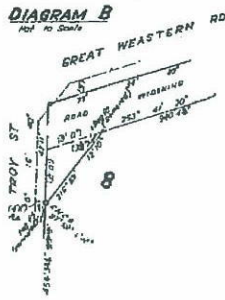
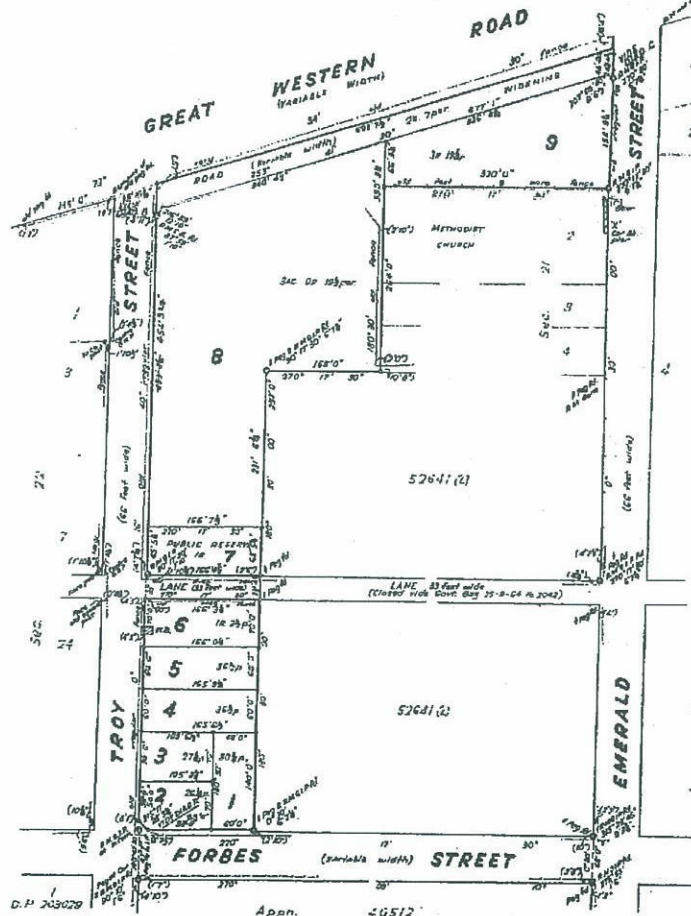


DIAGRAM C
Not to Scale



DIAGRAM A
Not to Scale



ESTATE AND LAND REFERRED TO
Estate in Fee-Simple in Lot 8 in Deposited Plan 230580 at Emu Plains in the City of Penrith Parish of Strathdon and County of Cook.

FIRST SCHEDULE (continued overleaf)

BENWERRIN CONTRACTING PTY. LIMITED.

Jawatson
Registrar General.

SECOND SCHEDULE (continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grants above referred to.
2. Mortgage No.K146462 to Donald Mackall, of Bateman's Bay, Investor. Entered 28-10-1965.

Jawatson
Registrar General.

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

WARNING THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

10424 Vol. 143
(Page 1)

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR

This deed is cancelled as to the whole New Certificates of Title have issued on 30-2-1967 for lots in De Bevoise Plan No. 233719 as follows:-
lots 10 to 16 incl Vol. 10544 Fols 49 to 55 incl respectively.



REGISTRAR GENERAL

Vol. 10424 Fol. 143

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR

This deed is cancelled as to the whole New Certificates of Title have issued on 30-2-1967 for lots in De Bevoise Plan No. 233719 as follows:-
lots 10 to 16 incl Vol. 10544 Fols 49 to 55 incl respectively.



REGISTRAR GENERAL

SECOND SCHEDULE (continued)[illegible]

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED

NEW SOUTH WALES

CERTIFICATE OF TITLE
PROPERTY ACT, 1900, as amended.



10544055

Vol. 10544 Fol. 55

Edition Issued 28-4-1967.

Crown Grants Vol.287 Fols. 5, 6, 7 & 8
Prior Title Vol. 10424 Fol. 143



I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

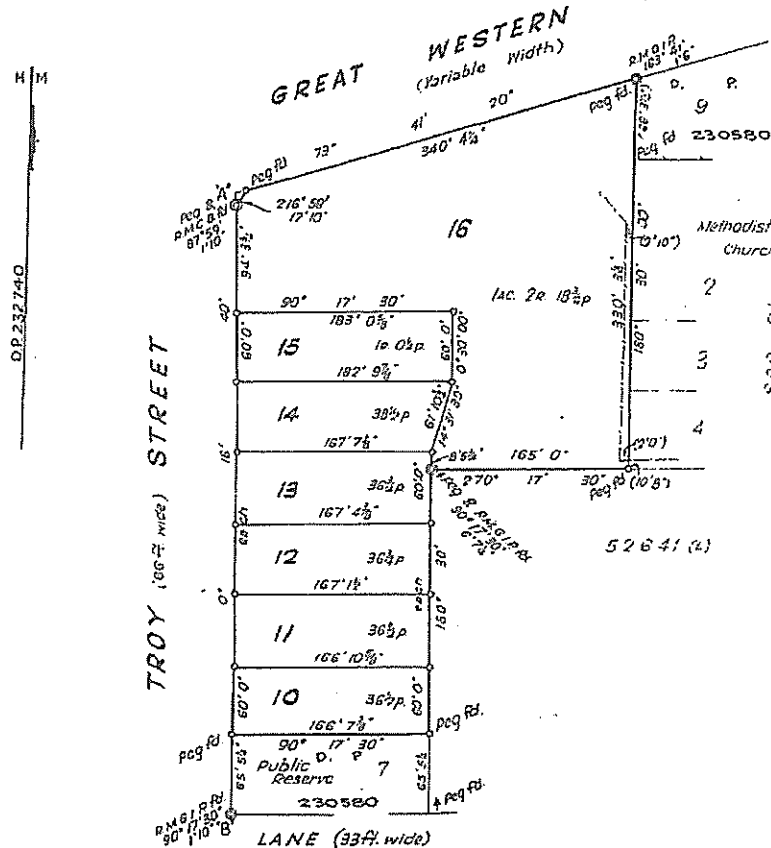
Witness

M. Salter

J. Jackson
CANCELLED
Registrar General.

PLAN SHOWING LOCATION OF LAND

ROAD SEE AUTO FOLIO



ESTATE AND LAND REFERRED TO.

Estate in Fee Simple in Lot 16 in Deposited Plan 232740 at Emu Plains in the City of Penrith, Parish of Strathdon and County of Cook.

FIRST SCHEDULE (continued overleaf)

~~BENJAMIN CONTRACTING PTY. LIMITED.~~

SECOND SCHEDULE (continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grants above referred to.
2. Mortgage No. K146462 to Donald Maskell of Bateman's Bay, Investigator Entered 28-10-1965. DISCHARGED R555720

J. Jackson
Registrar General.

PT 1, 17 V.C.N. Bligh, Government Printer

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR		INSTRUMENT NUMBER		DATE		ENTERED		Signature of Registrar-General	
NATURE									
Transfer	James & Co. Pty. Limited	6171317	16-5-1968	16-5-1968	16-5-1968	16-5-1968	16-5-1968	James	James
Transfer	Caroline Mary Bowdler of Dr. J. B. Bowdler, Dr. J. B. Bowdler and Dr. J. B. Bowdler	6526509	28-7-1969	28-7-1969	15-8-1969	15-8-1969	15-8-1969	James	James
Transfer	The United Church in Australia Property Trust (N.S.W.)	0399119	10-10-1977	10-10-1977	10-10-1977	10-10-1977	10-10-1977	James	James

CANCELLED

SEE AUTO FOLIO

SECOND SCHEDULE (continued)

INSTRUMENT NUMBER		DATE		ENTERED		Signature of Registrar-General		CANCELLATION	
NATURE									
Transfer	James & Co. Pty. Limited	6171317	16-5-1968	16-5-1968	16-5-1968	James	James	Discharged	6526508
Transfer	Caroline Mary Bowdler of Dr. J. B. Bowdler, Dr. J. B. Bowdler and Dr. J. B. Bowdler	6526509	28-7-1969	28-7-1969	15-8-1969	James	James	Discharged	15-8-1969
Transfer	The United Church in Australia Property Trust (N.S.W.)	0399119	10-10-1977	10-10-1977	10-10-1977	James	James	Discharged	10-10-1977

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPI/NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

29/9/2014 2:51PM

FOLIO: 16/232740

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 10544 FOL 55

Recorded	Number	Type of Instrument	C.T. Issue
5/6/1987		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
24/3/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
7/4/1993		AMENDMENT: LOCAL GOVT AREA	
7/9/2010	AF531063	REQUEST	

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI/SLIP Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 16/232740

SEARCH DATE	TIME	EDITION NO	DATE
29/9/2014	2:51 PM	-	-

VOL 10544 FOL 55 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 16 IN DEPOSITED PLAN 232740
AT EMU PLAINS
LOCAL GOVERNMENT AREA PENRITH
PARISH OF STRATHDON COUNTY OF COOK
TITLE DIAGRAM DP232740

FIRST SCHEDULE

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W.) (T Q399419)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- * 2 AF531063 PART OF THE LAND ABOVE DESCRIBED IS USED AS A
RETIREMENT VILLAGE UNDER THE RETIREMENT VILLAGES ACT
1999 KNOWN AS EDINGLASSIE VILLAGE SHOWN HATCHED IN
PLAN WITH AF531063
- 3 M809648 EASEMENT FOR STORMWATER DRAINAGE AFFECTING THAT
PART OF THE LAND WITHIN DESCRIBED SHOWN AS PROPOSED
EASEMENT 6 FEET WIDE FOR STORMWATER DRAINAGE IN
DP556154

NOTATIONS

AF531063 NOTE: REFER ALL DEALINGS TO SD2 (RETIREMENT VILLAGE)
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

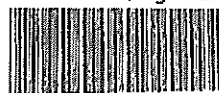
mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.

NEW SOUTH WALES

CERTIFICATE OF TITLE
 EASY ACT, 1900, as amended.



10424-144

Prior Title (Crown Grant)
 Vol. 83 Fol. 90

Vol. 10424 Fol. 144

Edition issued 27-10-1966



MA

SEE AUTO FOLIO

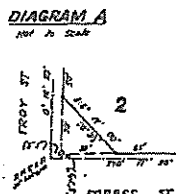
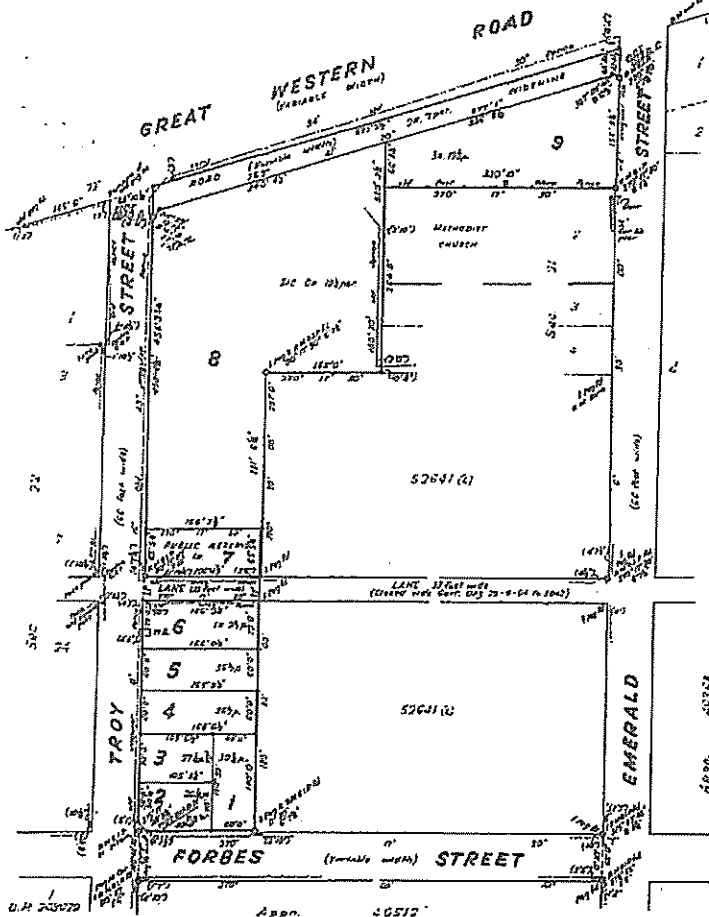
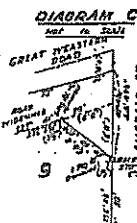
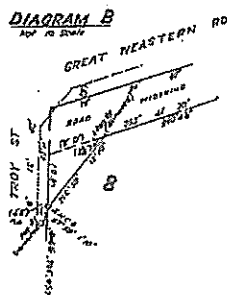
J. J. J. J.
 Registrar General.



I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Witness *D. O'Sullivan*.

PLAN SHOWING LOCATION OF LAND



ESTATE AND LAND REFERRED TO
 Estate in Fee Simple in Lot 9 in Deposited Plan 230580 at Emu Plains in the City of Penrith Parish of Strathdon and County of Cook.

FIRST SCHEDULE (continued overleaf)

~~BENWERRIN CONTRACTING PTY. LIMITED.~~

J. J. J. J.
 Registrar General.

SECOND SCHEDULE (continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. Mortgage No. K1462 to Donald Maskall, of Bateman's Bay, Investor. Entered 26-10-1965. DISCHARGED K15520

J. J. J. J.
 Registrar General.

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

WARNING THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE

PT 1, 17 V.C.N. Blight, Government Printer

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR

NATURE	INSTRUMENT NUMBER	DATE	ENTERED	Signature of Registrar-General
Transfer	1171218	16-8-1968	16-8-1968	<i>[Signature]</i>
Transfer	1526558	28-7-1969	28-8-1969	<i>[Signature]</i>
Transfer	1399419		10-10-1977	<i>[Signature]</i>

*Caroline Mary Darling of Double Bay, District of New South Wales
 King of North Ryde, District of New South Wales
 The United Church in Australia Property Trust (M.S.M.)*

CANCELLED

SEE AUTO FOLIO

SECOND SCHEDULE (continued)

NATURE	INSTRUMENT NUMBER	DATE	PARTICULARS	ENTERED	Signature of Registrar-General	CANCELLATION
Transfer	1171218	15-8-1968	<i>to Finance Corporation of Australia Limited</i>	16-8-1968	<i>[Signature]</i>	Discharged 1526558
Transfer	1526558	1-8-1969	<i>to Finance Corporation of Australia Limited</i>	15-8-1969	<i>[Signature]</i>	Discharged 1399419
Transfer	1399419	12-3-1971	<i>to Finance Corporation of Australia Limited</i>	16-8-1971	<i>[Signature]</i>	Discharged 1399419

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPI/SLP Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

29/9/2014 2:52PM

FOLIO: 9/230580

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 10424 FOL 144

Recorded	Number	Type of Instrument	C.T. Issue
5/6/1987		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
6/4/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
7/4/1993		AMENDMENT: LOCAL GOVT AREA	

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI/SLP Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 9/230580

SEARCH DATE	TIME	EDITION NO	DATE
29/9/2014	2:51 PM	-	-

VOL 10424 FOL 144 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 9 IN DEPOSITED PLAN 230580
AT EMU PLAINS
LOCAL GOVERNMENT AREA PENRITH
PARISH OF STRATHDON COUNTY OF COOK
TITLE DIAGRAM DP230580

FIRST SCHEDULE

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W.) (T Q399419)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPI/SH Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

29/9/2014 2:52PM

FOLIO: 1/650543

First Title(s): VOL 140 FOL 192

Prior Title(s): VOL 140 FOL 192

Recorded	Number	Type of Instrument	C.T. Issue
23/9/1992		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
11/4/1994	U170991	DEPARTMENTAL DEALING	
17/5/1994		AMENDMENT: TITLE DIAGRAM	
16/4/2007	AC994310	APPLICATION	EDITION 1
27/5/2013	AH759410	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPIA/SH/ Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/650543

SEARCH DATE	TIME	EDITION NO	DATE
29/9/2014	2:51 PM	1	16/4/2007

LAND

LOT 1 IN DEPOSITED PLAN 650543
AT EMU PLAINS
LOCAL GOVERNMENT AREA PENRITH
PARISH OF STRATHDON COUNTY OF COOK
TITLE DIAGRAM DP650543

FIRST SCHEDULE

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W) (AP AC994310)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- * 2 DEDICATED AS A SITE FOR THE ERECTION OF A CHAPEL - SEE CROWN GRANT

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPINSH Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

29/9/2014 2:52PM

FOLIO: 3/21/758387

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 140 FOL 193

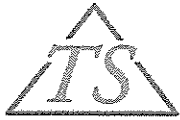
Recorded	Number	Type of Instrument	C.T. Issue
8/3/1990		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
29/4/1991		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
19/7/1999	5998676	DEPARTMENTAL DEALING	
16/4/2007	AC994310	APPLICATION	EDITION 1
7/9/2010	AF531063	REQUEST	
28/11/2012	AH396430	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services

LPI On-Line

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI/SLIP Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 3/21/758387

SEARCH DATE	TIME	EDITION NO	DATE
29/9/2014	2:51 PM	1	16/4/2007

LAND

LOT 3 OF SECTION 21 IN DEPOSITED PLAN 758387
AT EMU PLAINS
LOCAL GOVERNMENT AREA PENRITH
PARISH OF STRATHDON COUNTY OF COOK
(FORMERLY KNOWN AS ALLOTMENT 3 OF SECTION 21)
TITLE DIAGRAM CROWN PLAN 25.1984

FIRST SCHEDULE

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W) (AP AC994310)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- * 2 AF531063 PART OF THE LAND ABOVE DESCRIBED IS USED AS A
RETIREMENT VILLAGE UNDER THE RETIREMENT VILLAGES ACT
1999 KNOWN AS EDINGLASSIE VILLAGE SHOWN HATCHED IN
PLAN WITH AF531063
- * 3 DEDICATED AS A SITE FOR A WESLEYAN METHODIST MINISTERS RESIDENCE

NOTATIONS

AF531063 NOTE: REFER ALL DEALINGS TO SD2 (RETIREMENT VILLAGE)
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPI/NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

29/9/2014 2:53PM

FOLIO: 4/21/758387

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 4481 FOL 206

Recorded	Number	Type of Instrument	C.T. Issue
23/3/1990		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
21/7/1993		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
10/11/1994		AMENDMENT: TITLE DIAGRAM	
16/4/2007	AC994310	APPLICATION	EDITION 1
7/9/2010	AF531063	REQUEST	
28/11/2012	AH396669	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

mg1

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.



Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI/NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 4/21/758387

SEARCH DATE	TIME	EDITION NO	DATE
29/9/2014	2:51 PM	1	16/4/2007

LAND

LOT 4 OF SECTION 21 IN DEPOSITED PLAN 758387
AT EMU PLAINS
LOCAL GOVERNMENT AREA PENRITH
PARISH OF STRATHDON COUNTY OF COOK
(FORMERLY KNOWN AS ALLOTMENT 4 OF SECTION 21)
TITLE DIAGRAM CROWN PLAN 25.1984

FIRST SCHEDULE

THE UNITING CHURCH IN AUSTRALIA PROPERTY TRUST (N.S.W) (AP AC994310)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
- * 2 AF531063 PART OF THE LAND ABOVE DESCRIBED IS USED AS A RETIREMENT VILLAGE UNDER THE RETIREMENT VILLAGES ACT 1999 KNOWN AS EDINGGLASSIE VILLAGE SHOWN HATCHED IN PLAN WITH AF531063
- * 3 DEDICATED AS SITE FOR A SCHOOL BY GOV GAZ 15.5.1931

NOTATIONS

AF531063 NOTE: REFER ALL DEALINGS TO SD2 (RETIREMENT VILLAGE)
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 29/9/2014

*ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.

Appendix E

WorkCover Search

Our Ref: D14/128798
Your Ref: Jessica Little

8th October 2014

13 OCT 2014

Attention: Jessica Little
Douglas Partners Pty Ltd
96 Hermitage Road,
West Ryde NSW 2114

Dear Jessica Little,

RE SITE: 1-11 Emerald Road, Emu Plains, NSW, 2750

I refer to your site search request received by WorkCover NSW on 30th September 2014 requesting information on licences to keep dangerous goods for the above site.

A search of the Stored Chemical Information Database (SCID) and the microfiche records held by WorkCover NSW has not located any records pertaining to the above mentioned premises.

If you have any further queries please contact the Dangerous Goods Licensing Team on (02) 4321 5500.

Yours Sincerely



Michelle Kidd
Customer Service Officer
Dangerous Goods Team

Appendix F

Sections 149 (2&5) Certificates

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

Property No: 783523
Your Reference: emu plains post
Contact No: 98090666

Issue Date: 30/09/2014
Certificate No: 14/05088
Receipt Date: 30/09/2014
Receipt No: 2530890

2 OCT 2014

Issued to: Douglas Partners Pty Ltd/Jessica Little
PO Box 472
WEST RYDE NSW 1685

PRECINCT 356

DESCRIPTION OF LAND

County: COOK

Parish: STRATHDON

Location: 11 Emerald Street EMU PLAINS NSW 2750

Land Description: Lot 4 Sec 21 DP 758387

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan 1998 (Urban Land), gazetted 8 January 1999, as amended, applies to the land.

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme applies).

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith City Centre Local Environmental Plan 2008, Penrith Local Environmental Plan (Caddens) 2009, Penrith Local Environmental Plan (Glenmore Park Stage 2) 2009, Penrith Local Environmental Plan (South Werrington Urban Village) 2009, Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.32 - Urban Consolidation (Redevelopment of Urban Land).

(Note: This policy does not apply to land identified as coastal protection, environmental protection, escarpment, floodway, natural hazard, non-urban, rural, rural residential, water catchment or wetland.)

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 1998 (Lakes Environs) or State Environmental Planning Policy (Penrith Lakes Scheme) 1989 apply.)

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (Major Development) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

1(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:

The Planning Proposal for the Penrith City-wide Local Environmental Plan applies to the subject land. (See www.penrithcity.nsw.gov.au/ for details.)

Draft State Environmental Planning Policy (Competition) 2010 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial) 2014 applies to the land.

Draft State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3) applies to the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2010 applies to all land subject to Penrith Local Environmental Plan 2010. Penrith Development Control Plan 2006 applies to all land not subject to Penrith Local Environmental Plan 2010.

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):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Under the terms of Penrith Local Environmental Plan 1998 (Urban Land) the land is zoned as Zone No.2(c) Residential (Low-Medium Density).

(a) Objectives of the zone

- (i) to reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- (ii) to protect the character of traditional cottage development and streetscapes, and
- (iii) to consolidate population and housing densities, and
- (iv) to expand housing choices by allowing multi-unit housing with a single storey appearance, and
- (v) to promote a variety of housing types or forms upon the site of each proposed development, and
- (vi) to allow a range of compatible non-residential uses.

(b)(i) Without development consent

bed and breakfast establishments; bushfire hazard reduction; family day-care homes; home activities

(b)(ii) Only with development consent

buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the Act); child care centres; community facilities; demolition of buildings or other structures; drains; dual occupancies; dwelling houses; educational establishments; general stores; guesthouses; health care consulting rooms; home businesses; hospitals; internal structural work in bed and breakfast establishments; multi-unit housing; places of worship; recreation areas; roads; utility installations; utility undertakings

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(b)(iii) Prohibited

Any land use other than those included in items (b)(i) and (b)(ii).

Note:

(1) Despite any other provisions of Penrith Local Environmental Plan 1998 (Urban Land), a person may carry out development for the purpose of any one or more of the following on any land to which this plan applies without the consent of the Council:

- (a) an internal window display;
 - (b) any advertisement erected on land that is not visible from outside the land (but not an advertisement on a heritage item or on a site within a heritage conservation area);
 - (c) a temporary advertisement, being one which is displayed for a period not exceeding 2 months in total in any one year;
 - (d) a public notice in a public place;
 - (e) a road safety or advisory sign;
 - (f) a specific sign directing the travelling public to buildings or places of tourist interest.
- (Clause 31 of the LEP.)

(2) Land to which Penrith Local Environmental Plan 1998 (Urban Land) applies may be subdivided only with development consent.

(Clause 34 of the LEP.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development

In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

Under the provisions of the Planning Proposal for the Penrith City-wide Local Environmental Plan the land is affected by the following draft zone:

Zone R3 Medium Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a concentration of housing with access to services and facilities.
- To enhance the essential character and identity of established residential areas.
- To ensure that a high level of residential amenity is achieved and maintained.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Information and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

2(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:

No minimum land area provisions for the erection of a dwelling-house apply to the land.

Note: There are also certain performance requirements with regard to land dimensions affecting the construction of a dwelling-house on the land. In this regard Council has not considered the physical configuration or suitability of this particular land for the erection of a dwelling-house.

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

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

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

GENERAL HOUSING CODE

(The General Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the General Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Complying development under the Rural Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the Commercial and Industrial (New Buildings and Alterations) Code **may** be carried out on the land if the land is within one of the abovementioned zones.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

5 MINE SUBSIDENCE

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

6 ROAD WIDENING AND ROAD REALIGNMENT

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

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

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted 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).

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy 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, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the 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) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

Note: The land is subject to Penrith Development Control Plan 2010 Section C3.5 Flood Liable Lands and/or Penrith Development Control Plan 2006 Section 2.10 Flood Liable Land. On application and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No 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.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan 2007 applies to the land if residential development is permissible on the land.

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*).)

10 BIOBANKING AGREEMENTS

(Information is provided in this section only if Council has been notified by the Director-General of the Department of Environment, Climate Change and Water that the land is land to which a biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995* relates.)

11 BUSH FIRE PRONE LAND

The land is not identified as bush fire prone land according to Council records.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that 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.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only 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.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) 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/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

**This Certificate is directed to the following
relevant matters affecting the land**

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. 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 matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

* When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* The land is subject to minimum building setback requirements. Penrith Development Control Plan 2006 should be consulted to determine exact requirements for the subject land.

* The land is affected by a Tree Preservation Order.

Alan Stoneham
General Manager

PER 

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development*.

2 Aims of plan

This plan aims to:

- (a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and
- (b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre)*, and
- (c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance*, and
- (d) require development consent for the following:
 - (i) the erection of a building or structure ordinarily associated with a dwelling house,
 - (ii) a change of building use,

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

- (iii) demolition of a building or structure,
- (iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
- (v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

- (1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) This plan amends:
 - (a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,
 - (b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and
 - (c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.
- (3) This plan does not affect the application of:
 - (a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot*,

- (b) *State Environmental Planning Policy No 27 - Prison Sites,*
 - (c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*
 - (d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*
 - (e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*
 - (f) *Sydney Regional Environmental Plan No 30 - St Marys, or*
 - (g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*
- to land to which this plan applies.

5 Definitions

- (1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a *change of building use* meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979*.

- (2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

- (1) The erection of a dwelling house must not be carried out without development consent.
- (2) This clause applies to residentially zoned land within the City of Penrith.
- (3) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

- (1) The following development must not be carried out without development consent:
 - (a) erection of a building or structure ordinarily associated with a dwelling house, or
 - (b) development that results in a change of building use, or
 - (c) demolition of a building or structure, or
 - (d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.
- (2) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and

- (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
- (d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

- (1) A subdivision of land must not be carried out without development consent.
- (2) This clause applies if the subdivision of land:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and
 - (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
 - (d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

- [1] **Clause 4 Interpretation**
Omit the definition of *Country dwelling*.
- [2] **Clause 26 Erection or use of buildings or works**
Omit “country dwellings;” from Column III for Zone No 1 of the Table to the clause.
- [3] **Clause 26, Table**
Omit “dwelling-houses other than country dwellings and rural dwellings;” from Column V for Zone No. 1.
- [4] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached and terrace buildings.” from Column III for Zone No 2(a).
- [5] **Clause 26, Table**
Omit “Residential buildings.” from Column III for Zone No 2 (b).
- [6] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached or terrace buildings.” from Column III for Zone No 2 (c).
- [7] **Clause 26, Table**
Omit “;dwelling-houses attached to and used in conjunction with shops” from Column III for Zone No 3 (c).
- [8] **Clause 26, Table**
Omit “Purposes” from Column IV for Zone No 3(c).

Insert instead “Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979*); dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises”.
- [9] **Clause 26, Table**
Insert “; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms” after “roads” in Column IV for Zone No 3(c).
- [10] **Clause 38 Development in residential zones**
Omit the clause.
- [11] **Clause 46 Variation of area required for country dwelling**
Omit the clause.

Schedule 2 Amendment of Penrith Local Environmental

Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

[1] Clause 9 Zone objectives and development control table

Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:

- dwelling-houses

[2] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):

- buildings or other structures ordinarily associated with dwelling-houses
- demolition of buildings or other structures
- dwelling-houses

[3] Clause 20 Development of land within Zone No 3 (a)

Insert “where the new use does not involve structural or internal alterations or external buildings works” after the words “or take away food shops”.

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

[1] Clause 9 Zone objectives and development control table

Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:

- dwelling houses

[2] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- dwelling houses
- internal structural work in bed and breakfast establishments

[3] Clause 9, table

Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- structural or internal alterations to bed and breakfast establishments

[4] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):

- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- external building work associated with an existing land use carried out with consent
- structural or internal alterations to a building or other structure erected with consent or building approval

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Property No: 783523
Your Reference: emu plains post
Contact No: 98090666

Issue Date: 30/09/2014
Certificate No: 14/05089
Receipt Date: 30/09/2014
Receipt No: 253890

Issued to: Douglas Partners Pty Ltd/Jessica Little
PO Box 472
WEST RYDE NSW 1685

PRECINCT 356

DESCRIPTION OF LAND

County: COOK

Parish: STRATHDON

Location: 9 Emerald Street EMU PLAINS NSW 2750

Land Description: Lot 3 Sec 21 DP 758387

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan 1998 (Urban Land), gazetted 8 January 1999, as amended, applies to the land.

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme applies).

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith City Centre Local Environmental Plan 2008, Penrith Local Environmental Plan (Caddens) 2009, Penrith Local Environmental Plan (Glenmore Park Stage 2) 2009, Penrith Local Environmental Plan (South Werrington Urban Village) 2009, Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.32 - Urban Consolidation (Redevelopment of Urban Land).

(Note: This policy does not apply to land identified as coastal protection, environmental protection, escarpment, floodway, natural hazard, non-urban, rural, rural residential, water catchment or wetland.)

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 1998 (Lakes Environs) or State Environmental Planning Policy (Penrith Lakes Scheme) 1989 apply.

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (Major Development) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

1(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:

The Planning Proposal for the Penrith City-wide Local Environmental Plan applies to the subject land. (See www.penrithcity.nsw.gov.au/ for details.)

Draft State Environmental Planning Policy (Competition) 2010 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial) 2014 applies to the land.

Draft State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3) applies to the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2010 applies to all land subject to Penrith Local Environmental Plan 2010. Penrith Development Control Plan 2006 applies to all land not subject to Penrith Local Environmental Plan 2010.

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):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Under the terms of Penrith Local Environmental Plan 1998 (Urban Land) the land is zoned as Zone No.2(c) Residential (Low-Medium Density).

(a) Objectives of the zone

- (i) to reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- (ii) to protect the character of traditional cottage development and streetscapes, and
- (iii) to consolidate population and housing densities, and
- (iv) to expand housing choices by allowing multi-unit housing with a single storey appearance, and
- (v) to promote a variety of housing types or forms upon the site of each proposed development, and
- (vi) to allow a range of compatible non-residential uses.

(b)(i) Without development consent

bed and breakfast establishments; bushfire hazard reduction; family day-care homes; home activities

(b)(ii) Only with development consent

buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the Act); child care centres; community facilities; demolition of buildings or other structures; drains; dual occupancies; dwelling houses; educational establishments; general stores; guesthouses; health care consulting rooms; home businesses; hospitals; internal structural work in bed and breakfast establishments; multi-unit housing; places of worship; recreation areas; roads; utility installations; utility undertakings

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(b)(iii) Prohibited

Any land use other than those included in items (b)(i) and (b)(ii).

Note:

(1) Despite any other provisions of Penrith Local Environmental Plan 1998 (Urban Land), a person may carry out development for the purpose of any one or more of the following on any land to which this plan applies without the consent of the Council:

- (a) an internal window display;
 - (b) any advertisement erected on land that is not visible from outside the land (but not an advertisement on a heritage item or on a site within a heritage conservation area);
 - (c) a temporary advertisement, being one which is displayed for a period not exceeding 2 months in total in any one year;
 - (d) a public notice in a public place;
 - (e) a road safety or advisory sign;
 - (f) a specific sign directing the travelling public to buildings or places of tourist interest.
- (Clause 31 of the LEP.)

(2) Land to which Penrith Local Environmental Plan 1998 (Urban Land) applies may be subdivided only with development consent.

(Clause 34 of the LEP.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development

In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

Under the provisions of the Planning Proposal for the Penrith City-wide Local Environmental Plan the land is affected by the following draft zone:

Zone R3 Medium Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a concentration of housing with access to services and facilities.
- To enhance the essential character and identity of established residential areas.
- To ensure that a high level of residential amenity is achieved and maintained.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Information and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

2(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:

No minimum land area provisions for the erection of a dwelling-house apply to the land.

Note: There are also certain performance requirements with regard to land dimensions affecting the construction of a dwelling-house on the land. In this regard Council has not considered the physical configuration or suitability of this particular land for the erection of a dwelling-house.

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

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

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

GENERAL HOUSING CODE

(The General Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the General Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Complying development under the Rural Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the Commercial and Industrial (New Buildings and Alterations) Code **may** be carried out on the land if the land is within one of the abovementioned zones.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

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

6 ROAD WIDENING AND ROAD REALIGNMENT

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

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

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted 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).

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy 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, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the 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) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Note: The land is subject to Penrith Development Control Plan 2010 Section C3.5 Flood Liable Lands and/or Penrith Development Control Plan 2006 Section 2.10 Flood Liable Land. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No 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.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan 2007 applies to the land if residential development is permissible on the land.

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*.)

10 BIOBANKING AGREEMENTS

(Information is provided in this section only if Council has been notified by the Director-General of the Department of Environment, Climate Change and Water that the land is land to which a biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995* relates.)

11 BUSH FIRE PRONE LAND

The land is not identified as bush fire prone land according to Council records.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that 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.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only 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.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) 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/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

**This Certificate is directed to the following
relevant matters affecting the land**

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. 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 matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

* When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* The land is subject to minimum building setback requirements. Penrith Development Control Plan 2006 should be consulted to determine exact requirements for the subject land.

* The land is affected by a Tree Preservation Order.

Alan Stoneham
General Manager

PER 

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development*.

2 Aims of plan

This plan aims to:

- (a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and
- (b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre)*, and
- (c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance*, and
- (d) require development consent for the following:
 - (i) the erection of a building or structure ordinarily associated with a dwelling house,
 - (ii) a change of building use,

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

- (iii) demolition of a building or structure,
- (iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
- (v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

- (1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) This plan amends:
 - (a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,
 - (b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and
 - (c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.
- (3) This plan does not affect the application of:
 - (a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot*,

- (b) *State Environmental Planning Policy No 27 - Prison Sites,*
 - (c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*
 - (d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*
 - (e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*
 - (f) *Sydney Regional Environmental Plan No 30 - St Marys, or*
 - (g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*
- to land to which this plan applies.

5 Definitions

- (1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979*.

- (2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

- (1) The erection of a dwelling house must not be carried out without development consent.
- (2) This clause applies to residentially zoned land within the City of Penrith.
- (3) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

- (1) The following development must not be carried out without development consent:
 - (a) erection of a building or structure ordinarily associated with a dwelling house, or
 - (b) development that results in a change of building use, or
 - (c) demolition of a building or structure, or
 - (d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.
- (2) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and

- (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
- (d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

- (1) A subdivision of land must not be carried out without development consent.
- (2) This clause applies if the subdivision of land:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and
 - (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
 - (d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

- [1] **Clause 4 Interpretation**
Omit the definition of *Country dwelling*.
- [2] **Clause 26 Erection or use of buildings or works**
Omit "country dwellings;" from Column III for Zone No 1 of the Table to the clause.
- [3] **Clause 26, Table**
Omit "dwelling-houses other than country dwellings and rural dwellings;" from Column V for Zone No. 1.
- [4] **Clause 26, Table**
Omit "Dwelling-houses other than semi-detached and terrace buildings." from Column III for Zone No 2(a).
- [5] **Clause 26, Table**
Omit "Residential buildings." from Column III for Zone No 2 (b).
- [6] **Clause 26, Table**
Omit "Dwelling-houses other than semi-detached or terrace buildings." from Column III for Zone No 2 (c).
- [7] **Clause 26, Table**
Omit ";dwelling-houses attached to and used in conjunction with shops" from Column III for Zone No 3 (c).
- [8] **Clause 26, Table**
Omit "Purposes" from Column IV for Zone No 3(c).

Insert instead "Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979*); dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises".
- [9] **Clause 26, Table**
Insert "; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms" after "roads" in Column IV for Zone No 3(c).
- [10] **Clause 38 Development in residential zones**
Omit the clause.
- [11] **Clause 46 Variation of area required for country dwelling**
Omit the clause.

Schedule 2 Amendment of Penrith Local Environmental

Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

[1] Clause 9 Zone objectives and development control table

Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:

- dwelling-houses

[2] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):

- buildings or other structures ordinarily associated with dwelling-houses
- demolition of buildings or other structures
- dwelling-houses

[3] Clause 20 Development of land within Zone No 3 (a)

Insert “where the new use does not involve structural or internal alterations or external buildings works” after the words “or take away food shops”.

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

[1] Clause 9 Zone objectives and development control table

Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:

- dwelling houses

[2] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- dwelling houses
- internal structural work in bed and breakfast establishments

[3] Clause 9, table

Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- structural or internal alterations to bed and breakfast establishments

[4] Clause 9, table

Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):

- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- external building work associated with an existing land use carried out with consent
- structural or internal alterations to a building or other structure erected with consent or building approval

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Property No: 253077
Your Reference: emu plains piost
Contact No: 98090666

Issue Date: 30/09/2014
Certificate No: 14/05087
Receipt Date: 30/09/2014
Receipt No: 2530890

Issued to: Douglas Partners Pty Ltd/Jessica Little
PO Box 472
WEST RYDE NSW 1685

PRECINCT 356

DESCRIPTION OF LAND

County: COOK

Parish: STRATHDON

Location: 1-3 Emerald Street EMU PLAINS NSW 2750

Land Description: Lot 9 DP 230580

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan 1998 (Urban Land), gazetted 8 January 1999, as amended, applies to the land.

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme applies).

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith City Centre Local Environmental Plan 2008, Penrith Local Environmental Plan (Caddens) 2009, Penrith Local Environmental Plan (Glenmore Park Stage 2) 2009, Penrith Local Environmental Plan (South Werrington Urban Village) 2009, Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.32 - Urban Consolidation (Redevelopment of Urban Land).

(Note: This policy does not apply to land identified as coastal protection, environmental protection, escarpment, floodway, natural hazard, non-urban, rural, rural residential, water catchment or wetland.)

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 1998 (Lakes Environs) or State Environmental Planning Policy (Penrith Lakes Scheme) 1989 apply.

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (Major Development) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

1(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:

The Planning Proposal for the Penrith City-wide Local Environmental Plan applies to the subject land. (See www.penrithcity.nsw.gov.au/ for details.)

Draft State Environmental Planning Policy (Competition) 2010 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial) 2014 applies to the land.

Draft State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3) applies to the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2010 applies to all land subject to Penrith Local Environmental Plan 2010. Penrith Development Control Plan 2006 applies to all land not subject to Penrith Local Environmental Plan 2010.

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):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Under the terms of Penrith Local Environmental Plan 1998 (Urban Land) the land is zoned as Zone No.2(c) Residential (Low-Medium Density).

(a) Objectives of the zone

- (i) to reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- (ii) to protect the character of traditional cottage development and streetscapes, and
- (iii) to consolidate population and housing densities, and
- (iv) to expand housing choices by allowing multi-unit housing with a single storey appearance, and
- (v) to promote a variety of housing types or forms upon the site of each proposed development, and
- (vi) to allow a range of compatible non-residential uses.

(b)(i) Without development consent

bed and breakfast establishments; bushfire hazard reduction; family day-care homes; home activities

(b)(ii) Only with development consent

buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the Act); child care centres; community facilities; demolition of buildings or other structures; drains; dual occupancies; dwelling houses; educational establishments; general stores; guesthouses; health care consulting rooms; home businesses; hospitals; internal structural work in bed and breakfast establishments; multi-unit housing; places of worship; recreation areas; roads; utility installations; utility undertakings

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(b)(iii) Prohibited

Any land use other than those included in items (b)(i) and (b)(ii).

Note:

(1) Despite any other provisions of Penrith Local Environmental Plan 1998 (Urban Land), a person may carry out development for the purpose of any one or more of the following on any land to which this plan applies without the consent of the Council:

- (a) an internal window display;
 - (b) any advertisement erected on land that is not visible from outside the land (but not an advertisement on a heritage item or on a site within a heritage conservation area);
 - (c) a temporary advertisement, being one which is displayed for a period not exceeding 2 months in total in any one year;
 - (d) a public notice in a public place;
 - (e) a road safety or advisory sign;
 - (f) a specific sign directing the travelling public to buildings or places of tourist interest.
- (Clause 31 of the LEP.)

(2) Land to which Penrith Local Environmental Plan 1998 (Urban Land) applies may be subdivided only with development consent.

(Clause 34 of the LEP.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development

In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

Under the provisions of the Planning Proposal for the Penrith City-wide Local Environmental Plan the land is affected by the following draft zone:

Zone R3 Medium Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a concentration of housing with access to services and facilities.
- To enhance the essential character and identity of established residential areas.
- To ensure that a high level of residential amenity is achieved and maintained.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Information and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

2(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:

No minimum land area provisions for the erection of a dwelling-house apply to the land.

Note: There are also certain performance requirements with regard to land dimensions affecting the construction of a dwelling-house on the land. In this regard Council has not considered the physical configuration or suitability of this particular land for the erection of a dwelling-house.

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

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

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

GENERAL HOUSING CODE

(The General Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the General Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Complying development under the Rural Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the Commercial and Industrial (New Buildings and Alterations) Code **may** be carried out on the land if the land is within one of the abovementioned zones.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

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

6 ROAD WIDENING AND ROAD REALIGNMENT

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

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

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted 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).

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy 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, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the 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) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Note: The land is subject to Penrith Development Control Plan 2010 Section C3.5 Flood Liable Lands and/or Penrith Development Control Plan 2006 Section 2.10 Flood Liable Land. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No 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.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan 2007 applies to the land if residential development is permissible on the land.

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*).)

10 BIOBANKING AGREEMENTS

(Information is provided in this section only if Council has been notified by the Director-General of the Department of Environment, Climate Change and Water that the land is land to which a biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995* relates.)

11 BUSH FIRE PRONE LAND

The land is not identified as bush fire prone land according to Council records.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that 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.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only 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.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) 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/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

**This Certificate is directed to the following
relevant matters affecting the land**

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. 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 matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

* When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* The land is subject to minimum building setback requirements. Penrith Development Control Plan 2006 should be consulted to determine exact requirements for the subject land.

* The land is affected by a Tree Preservation Order.

Alan Stoneham
General Manager

PER 

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development*.

2 Aims of plan

This plan aims to:

- (a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and
- (b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre)*, and
- (c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance*, and
- (d) require development consent for the following:
 - (i) the erection of a building or structure ordinarily associated with a dwelling house,
 - (ii) a change of building use,

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

- (iii) demolition of a building or structure,
- (iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
- (v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

- (1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) This plan amends:
 - (a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,
 - (b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and
 - (c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.
- (3) This plan does not affect the application of:
 - (a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot*,

- (b) *State Environmental Planning Policy No 27 - Prison Sites,*
 - (c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*
 - (d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*
 - (e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*
 - (f) *Sydney Regional Environmental Plan No 30 - St Marys, or*
 - (g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*
- to land to which this plan applies.

5 Definitions

- (1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a *change of building use* meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979*.

- (2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

- (1) The erection of a dwelling house must not be carried out without development consent.
- (2) This clause applies to residentially zoned land within the City of Penrith.
- (3) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

- (1) The following development must not be carried out without development consent:
 - (a) erection of a building or structure ordinarily associated with a dwelling house, or
 - (b) development that results in a change of building use, or
 - (c) demolition of a building or structure, or
 - (d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.
- (2) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and

- (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
- (d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

- (1) A subdivision of land must not be carried out without development consent.
- (2) This clause applies if the subdivision of land:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and
 - (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
 - (d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

- [1] **Clause 4 Interpretation**
Omit the definition of *Country dwelling*.
- [2] **Clause 26 Erection or use of buildings or works**
Omit “country dwellings;” from Column III for Zone No 1 of the Table to the clause.
- [3] **Clause 26, Table**
Omit “dwelling-houses other than country dwellings and rural dwellings;” from Column V for Zone No. 1.
- [4] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached and terrace buildings.” from Column III for Zone No 2(a).
- [5] **Clause 26, Table**
Omit “Residential buildings.” from Column III for Zone No 2 (b).
- [6] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached or terrace buildings.” from Column III for Zone No 2 (c).
- [7] **Clause 26, Table**
Omit “;dwelling-houses attached to and used in conjunction with shops” from Column III for Zone No 3 (c).
- [8] **Clause 26, Table**
Omit “Purposes” from Column IV for Zone No 3(c).

Insert instead “Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979*); dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises”.
- [9] **Clause 26, Table**
Insert “; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms” after “roads” in Column IV for Zone No 3(c).
- [10] **Clause 38 Development in residential zones**
Omit the clause.
- [11] **Clause 46 Variation of area required for country dwelling**
Omit the clause.

Schedule 2 Amendment of Penrith Local Environmental

Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

- [1] **Clause 9 Zone objectives and development control table**
Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:
- dwelling-houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):
- buildings or other structures ordinarily associated with dwelling-houses
 - demolition of buildings or other structures
 - dwelling-houses
- [3] **Clause 20 Development of land within Zone No 3 (a)**
Insert “where the new use does not involve structural or internal alterations or external buildings works” after the words “or take away food shops”.

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

- [1] **Clause 9 Zone objectives and development control table**
Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:
- dwelling houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - dwelling houses
 - internal structural work in bed and breakfast establishments
- [3] **Clause 9, table**
Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - structural or internal alterations to bed and breakfast establishments
- [4] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):
- changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - external building work associated with an existing land use carried out with consent
 - structural or internal alterations to a building or other structure erected with consent or building approval

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

Property No: 253077
Your Reference: emu plains post
Contact No: 98090666

Issue Date: 30/09/2014
Certificate No: 14/05085
Receipt Date: 30/09/2014
Receipt No: 2530890

Issued to: Douglas Partners Pty Ltd/Jessica Little
PO Box 472
WEST RYDE NSW 1685

PRECINCT 356

DESCRIPTION OF LAND

County: COOK

Parish: STRATHDON

Location: 208 Great Western Highway EMU PLAINS NSW 2750

Land Description: Lot 16 DP 232740

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan 1998 (Urban Land), gazetted 8 January 1999, as amended, applies to the land.

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme applies).

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith City Centre Local Environmental Plan 2008, Penrith Local Environmental Plan (Caddens) 2009, Penrith Local Environmental Plan (Glenmore Park Stage 2) 2009, Penrith Local Environmental Plan (South Werrington Urban Village) 2009, Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.32 - Urban Consolidation (Redevelopment of Urban Land).

(Note: This policy does not apply to land identified as coastal protection, environmental protection, escarpment, floodway, natural hazard, non-urban, rural, rural residential, water catchment or wetland.)

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 1998 (Lakes Environs) or State Environmental Planning Policy (Penrith Lakes Scheme) 1989 apply.

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (Major Development) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

1(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:

The Planning Proposal for the Penrith City-wide Local Environmental Plan applies to the subject land. (See www.penrithcity.nsw.gov.au/ for details.)

Draft State Environmental Planning Policy (Competition) 2010 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial) 2014 applies to the land.

Draft State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3) applies to the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2010 applies to all land subject to Penrith Local Environmental Plan 2010. Penrith Development Control Plan 2006 applies to all land not subject to Penrith Local Environmental Plan 2010.

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):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Under the terms of Penrith Local Environmental Plan 1998 (Urban Land) the land is zoned as Zone No.2(c) Residential (Low-Medium Density).

(a) Objectives of the zone

- (i) to reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- (ii) to protect the character of traditional cottage development and streetscapes, and
- (iii) to consolidate population and housing densities, and
- (iv) to expand housing choices by allowing multi-unit housing with a single storey appearance, and
- (v) to promote a variety of housing types or forms upon the site of each proposed development, and
- (vi) to allow a range of compatible non-residential uses.

(b)(i) Without development consent

bed and breakfast establishments; bushfire hazard reduction; family day-care homes; home activities

(b)(ii) Only with development consent

buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the Act); child care centres; community facilities; demolition of buildings or other structures; drains; dual occupancies; dwelling houses; educational establishments; general stores; guesthouses; health care consulting rooms; home businesses; hospitals; internal structural work in bed and breakfast establishments; multi-unit housing; places of worship; recreation areas; roads; utility installations; utility undertakings

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

(b)(iii) Prohibited

Any land use other than those included in items (b)(i) and (b)(ii).

Note:

(1) Despite any other provisions of Penrith Local Environmental Plan 1998 (Urban Land), a person may carry out development for the purpose of any one or more of the following on any land to which this plan applies without the consent of the Council:

- (a) an internal window display;
 - (b) any advertisement erected on land that is not visible from outside the land (but not an advertisement on a heritage item or on a site within a heritage conservation area);
 - (c) a temporary advertisement, being one which is displayed for a period not exceeding 2 months in total in any one year;
 - (d) a public notice in a public place;
 - (e) a road safety or advisory sign;
 - (f) a specific sign directing the travelling public to buildings or places of tourist interest.
- (Clause 31 of the LEP.)

(2) Land to which Penrith Local Environmental Plan 1998 (Urban Land) applies may be subdivided only with development consent.

(Clause 34 of the LEP.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development

In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

Under the provisions of the Planning Proposal for the Penrith City-wide Local Environmental Plan the land is affected by the following draft zone:

Zone R3 Medium Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a concentration of housing with access to services and facilities.
- To enhance the essential character and identity of established residential areas.
- To ensure that a high level of residential amenity is achieved and maintained.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Information and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

2(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:

No minimum land area provisions for the erection of a dwelling-house apply to the land.

Note: There are also certain performance requirements with regard to land dimensions affecting the construction of a dwelling-house on the land. In this regard Council has not considered the physical configuration or suitability of this particular land for the erection of a dwelling-house.

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

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

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

GENERAL HOUSING CODE

(The General Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the General Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

Complying development under the Rural Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

Complying development under the Commercial and Industrial (New Buildings and Alterations) Code **may** be carried out on the land if the land is within one of the abovementioned zones.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

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

6 ROAD WIDENING AND ROAD REALIGNMENT

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

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

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted 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).

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy 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, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the 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) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Note: The land is subject to Penrith Development Control Plan 2010 Section C3.5 Flood Liable Lands and/or Penrith Development Control Plan 2006 Section 2.10 Flood Liable Land. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No 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.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan 2007 applies to the land if residential development is permissible on the land.

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*.)

10 BIOBANKING AGREEMENTS

(Information is provided in this section only if Council has been notified by the Director-General of the Department of Environment, Climate Change and Water that the land is land to which a biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995* relates.)

11 BUSH FIRE PRONE LAND

The land is not identified as bush fire prone land according to Council records.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that 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.)

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only 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.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) 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/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

**This Certificate is directed to the following
relevant matters affecting the land**

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. 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 matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

* When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* The land is subject to minimum building setback requirements. Penrith Development Control Plan 2006 should be consulted to determine exact requirements for the subject land.

* The land is affected by a Tree Preservation Order.

Alan Stoneham
General Manager

PER *J. Hollier*

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development*.

2 Aims of plan

This plan aims to:

- (a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and
- (b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre)*, and
- (c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance*, and
- (d) require development consent for the following:
 - (i) the erection of a building or structure ordinarily associated with a dwelling house,
 - (ii) a change of building use,

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

- (iii) demolition of a building or structure,
- (iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
- (v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

- (1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) This plan amends:
 - (a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,
 - (b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and
 - (c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.
- (3) This plan does not affect the application of:
 - (a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot*,

- (b) *State Environmental Planning Policy No 27 - Prison Sites,*
 - (c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*
 - (d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*
 - (e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*
 - (f) *Sydney Regional Environmental Plan No 30 - St Marys, or*
 - (g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*
- to land to which this plan applies.

5 Definitions

- (1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a *change of building use* meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979*.

- (2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

- (1) The erection of a dwelling house must not be carried out without development consent.
- (2) This clause applies to residentially zoned land within the City of Penrith.
- (3) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

- (1) The following development must not be carried out without development consent:
 - (a) erection of a building or structure ordinarily associated with a dwelling house, or
 - (b) development that results in a change of building use, or
 - (c) demolition of a building or structure, or
 - (d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.
- (2) This clause applies if the development:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and

- (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
- (d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

- (1) A subdivision of land must not be carried out without development consent.
- (2) This clause applies if the subdivision of land:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and
 - (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
 - (d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

- [1] **Clause 4 Interpretation**
Omit the definition of *Country dwelling*.
- [2] **Clause 26 Erection or use of buildings or works**
Omit “country dwellings;” from Column III for Zone No 1 of the Table to the clause.
- [3] **Clause 26, Table**
Omit “dwelling-houses other than country dwellings and rural dwellings;” from Column V for Zone No. 1.
- [4] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached and terrace buildings.” from Column III for Zone No 2(a).
- [5] **Clause 26, Table**
Omit “Residential buildings.” from Column III for Zone No 2 (b).
- [6] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached or terrace buildings.” from Column III for Zone No 2 (c).
- [7] **Clause 26, Table**
Omit “;dwelling-houses attached to and used in conjunction with shops” from Column III for Zone No 3 (c).
- [8] **Clause 26, Table**
Omit “Purposes” from Column IV for Zone No 3(c).

Insert instead “Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979*); dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises”.
- [9] **Clause 26, Table**
Insert “; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms” after “roads” in Column IV for Zone No 3(c).
- [10] **Clause 38 Development in residential zones**
Omit the clause.
- [11] **Clause 46 Variation of area required for country dwelling**
Omit the clause.

Schedule 2 Amendment of Penrith Local Environmental

Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

- [1] **Clause 9 Zone objectives and development control table**
Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:
- dwelling-houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):
- buildings or other structures ordinarily associated with dwelling-houses
 - demolition of buildings or other structures
 - dwelling-houses
- [3] **Clause 20 Development of land within Zone No 3 (a)**
Insert “where the new use does not involve structural or internal alterations or external buildings works” after the words “or take away food shops”.

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

- [1] **Clause 9 Zone objectives and development control table**
Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:
- dwelling houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - dwelling houses
 - internal structural work in bed and breakfast establishments
- [3] **Clause 9, table**
Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - structural or internal alterations to bed and breakfast establishments
- [4] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):
- changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - external building work associated with an existing land use carried out with consent
 - structural or internal alterations to a building or other structure erected with consent or building approval

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Property No: 685128
Your Reference: emu plains post
Contact No: 98090666

Issue Date: 30/09/2014
Certificate No: 14/05086
Receipt Date: 30/09/2014
Receipt No: 2530890

Issued to: Douglas Partners Pty Ltd/Jessica Little
PO Box 472
WEST RYDE NSW 1685

PRECINCT 996

DESCRIPTION OF LAND

County: COOK

Parish: STRATHDON

Location: 5-7 Emerald Street EMU PLAINS NSW 2750

Land Description: Lot 1 DP 650543

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan 1998 (Urban Land), gazetted 8 January 1999, as amended, and Penrith Local Environmental Plan 1991 (Environmental Heritage Conservation), gazetted 20 December 1991, as amended, apply to the land.

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme applies).

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith City Centre Local Environmental Plan 2008, Penrith Local Environmental Plan (Caddens) 2009, Penrith Local Environmental Plan (Glenmore Park Stage 2) 2009, Penrith Local Environmental Plan (South Werrington Urban Village) 2009, Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.32 - Urban Consolidation (Redevelopment of Urban Land). (Note: This policy does not apply to land identified as coastal protection, environmental protection, escarpment, floodway, natural hazard, non-urban, rural, rural residential, water catchment or wetland.)

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 1998 (Lakes Environs) or State Environmental Planning Policy (Penrith Lakes Scheme) 1989 apply.)

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (Major Development) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

1(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:

The Planning Proposal for the Penrith City-wide Local Environmental Plan applies to the subject land. (See www.penrithcity.nsw.gov.au/ for details.)

Draft State Environmental Planning Policy (Competition) 2010 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Commercial and Industrial) 2014 applies to the land.

Draft State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development (Amendment No. 3) applies to the land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2010 applies to all land subject to Penrith Local Environmental Plan 2010. Penrith Development Control Plan 2006 applies to all land not subject to Penrith Local Environmental Plan 2010.

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):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Under the terms of Penrith Local Environmental Plan 1998 (Urban Land) the land is zoned as Zone No.2(c) Residential (Low-Medium Density).

(a) Objectives of the zone

- (i) to reinforce the importance of natural landscape settings and areas with heritage conservation value, and
- (ii) to protect the character of traditional cottage development and streetscapes, and
- (iii) to consolidate population and housing densities, and
- (iv) to expand housing choices by allowing multi-unit housing with a single storey appearance, and
- (v) to promote a variety of housing types or forms upon the site of each proposed development, and
- (vi) to allow a range of compatible non-residential uses.

(b)(i) Without development consent

bed and breakfast establishments; bushfire hazard reduction; family day-care homes; home activities

(b)(ii) Only with development consent

buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the Act); child care centres; community facilities; demolition of buildings or other structures; drains; dual occupancies; dwelling houses; educational establishments; general stores; guesthouses; health care consulting rooms; home businesses; hospitals; internal structural work in bed and breakfast establishments; multi-unit housing; places of worship; recreation areas; roads; utility installations; utility undertakings

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(b)(iii) Prohibited

Any land use other than those included in items (b)(i) and (b)(ii).

Note:

(1) Despite any other provisions of Penrith Local Environmental Plan 1998 (Urban Land), a person may carry out development for the purpose of any one or more of the following on any land to which this plan applies without the consent of the Council:

- (a) an internal window display;
 - (b) any advertisement erected on land that is not visible from outside the land (but not an advertisement on a heritage item or on a site within a heritage conservation area);
 - (c) a temporary advertisement, being one which is displayed for a period not exceeding 2 months in total in any one year;
 - (d) a public notice in a public place;
 - (e) a road safety or advisory sign;
 - (f) a specific sign directing the travelling public to buildings or places of tourist interest.
- (Clause 31 of the LEP.)

(2) Land to which Penrith Local Environmental Plan 1998 (Urban Land) applies may be subdivided only with development consent.

(Clause 34 of the LEP.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development

In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

Under the provisions of the Planning Proposal for the Penrith City-wide Local Environmental Plan the land is affected by the following draft zone:

Zone R3 Medium Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for a concentration of housing with access to services and facilities.
- To enhance the essential character and identity of established residential areas.
- To ensure that a high level of residential amenity is achieved and maintained.

2 Permitted without consent

Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Information and

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Shop top housing

4 Prohibited

Any development not specified in item 2 or 3

2(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:

No minimum land area provisions for the erection of a dwelling-house apply to the land.

Note: There are also certain performance requirements with regard to land dimensions affecting the construction of a dwelling-house on the land. In this regard Council has not considered the physical configuration or suitability of this particular land for the erection of a dwelling-house.

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

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

An item/Items of environmental heritage (identified in Penrith Local Environmental Plan 1991 (Environmental Heritage Conservation)) is/are situated on the land.

Under the terms of the Planning Proposal for the Penrith City-wide Local Environmental Plan a proposed item of environmental heritage is situated on the land.

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

GENERAL HOUSING CODE

(The General Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. If the land is within the relevant zones complying development under the General Housing Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. If the land is within the relevant zones complying development under the Rural Housing Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

HOUSING ALTERATIONS CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the Housing Alterations Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

GENERAL DEVELOPMENT CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the General Development Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the Commercial and Industrial Alterations Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

SUBDIVISIONS CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the Subdivisions Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

DEMOLITION CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the Demolition Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or the Planning Proposal for the Penrith City-wide Local Environmental Plan, or an equivalent zone in a non standard template planning instrument.)

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. If the land is within the relevant zones complying development under the Commercial

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

and Industrial (New Buildings and Additions) Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

FIRE SAFETY CODE

- The land contains an item of environmental heritage, a heritage item and/or a draft heritage item. Complying development under the Fire Safety Code **may not** be carried out on any part of the land that is identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is located an item that is so identified, or that comprises, or on which there is, a draft heritage item. Complying development **may** be carried out on any part of the land that is not identified as an item of environmental heritage or a heritage item by an environmental planning instrument or on which is not located an item that is so identified, or that does not comprise, or on which there is not, a draft heritage item. Plans of the above items may be found in the applicable planning instrument(s)/draft planning instrument(s).

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

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

6 ROAD WIDENING AND ROAD REALIGNMENT

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

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

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted 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).

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy 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, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the 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) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

Note: The land is subject to Penrith Development Control Plan 2010 Section C3.5 Flood Liable Lands and/or Penrith Development Control Plan 2006 Section 2.10 Flood Liable Land. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No 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.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

The Penrith City Local Open Space Development Contributions Plan 2007 applies to the land if residential development is permissible on the land.

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land (within the meaning of Part 7AA of the *Threatened Species Conservation Act 1995*).)

10 BIOBANKING AGREEMENTS

(Information is provided in this section only if Council has been notified by the Director-General of the Department of Environment, Climate Change and Water that the land is land to which a biobanking agreement under Part 7A of the *Threatened Species Conservation Act 1995* relates.)

11 BUSH FIRE PRONE LAND

The land is not identified as bush fire prone land according to Council records.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan under the Native Vegetation Act 2003 applies.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that 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.)

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only 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.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) 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/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

**This Certificate is directed to the following
relevant matters affecting the land**

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. 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 matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

* When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* The land is subject to minimum building setback requirements. Penrith Development Control Plan 2006 should be consulted to determine exact requirements for the subject land.

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

* The land is affected by a Tree Preservation Order.

Alan Stoneham
General Manager

PER 

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development*.

2 Aims of plan

This plan aims to:

- (a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and
- (b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre)*, and
- (c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance*, and
- (d) require development consent for the following:
 - (i) the erection of a building or structure ordinarily associated with a dwelling house,
 - (ii) a change of building use,

Note. At the commencement of this plan, a **change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

- (iii) demolition of a building or structure,
- (iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
- (v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

- (1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) This plan amends:
 - (a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,
 - (b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and
 - (c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.
- (3) This plan does not affect the application of:
 - (a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot*,

- (b) *State Environmental Planning Policy No 27 - Prison Sites,*
 - (c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*
 - (d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*
 - (e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*
 - (f) *Sydney Regional Environmental Plan No 30 - St Marys, or*
 - (g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*
- to land to which this plan applies.

5 Definitions

- (1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a *change of building use* meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979*.

- (2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

- (1) The erection of a dwelling house must not be carried out without development consent.
- (2) This clause applies to residentially zoned land within the City of Penrith.
- (3) This clause applies if the development:
- (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

- (1) The following development must not be carried out without development consent:
- (a) erection of a building or structure ordinarily associated with a dwelling house, or
 - (b) development that results in a change of building use, or
 - (c) demolition of a building or structure, or
 - (d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.
- (2) This clause applies if the development:
- (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and

- (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
- (d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

- (1) A subdivision of land must not be carried out without development consent.
- (2) This clause applies if the subdivision of land:
 - (a) does not require development consent because of another environmental planning instrument, and
 - (b) is not prohibited by another environmental planning instrument, and
 - (c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and
 - (d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

- [1] **Clause 4 Interpretation**
Omit the definition of *Country dwelling*.
- [2] **Clause 26 Erection or use of buildings or works**
Omit “country dwellings;” from Column III for Zone No 1 of the Table to the clause.
- [3] **Clause 26, Table**
Omit “dwelling-houses other than country dwellings and rural dwellings;” from Column V for Zone No. 1.
- [4] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached and terrace buildings.” from Column III for Zone No 2(a).
- [5] **Clause 26, Table**
Omit “Residential buildings.” from Column III for Zone No 2 (b).
- [6] **Clause 26, Table**
Omit “Dwelling-houses other than semi-detached or terrace buildings.” from Column III for Zone No 2 (c).
- [7] **Clause 26, Table**
Omit “dwelling-houses attached to and used in conjunction with shops” from Column III for Zone No 3 (c).
- [8] **Clause 26, Table**
Omit “Purposes” from Column IV for Zone No 3(c).

Insert instead “Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979*); dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises”.
- [9] **Clause 26, Table**
Insert “; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms” after “roads” in Column IV for Zone No 3(c).
- [10] **Clause 38 Development in residential zones**
Omit the clause.
- [11] **Clause 46 Variation of area required for country dwelling**
Omit the clause.

Schedule 2 Amendment of Penrith Local Environmental

Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

- [1] **Clause 9 Zone objectives and development control table**
Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:
- dwelling-houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):
- buildings or other structures ordinarily associated with dwelling-houses
 - demolition of buildings or other structures
 - dwelling-houses
- [3] **Clause 20 Development of land within Zone No 3 (a)**
Insert “where the new use does not involve structural or internal alterations or external buildings works” after the words “or take away food shops”.

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

- [1] **Clause 9 Zone objectives and development control table**
Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:
- dwelling houses
- [2] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - dwelling houses
 - internal structural work in bed and breakfast establishments
- [3] **Clause 9, table**
Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);
- buildings or other structures ordinarily associated with dwelling houses
 - changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - structural or internal alterations to bed and breakfast establishments
- [4] **Clause 9, table**
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):
- changes of building use (as defined in the Act)
 - demolition of buildings or other structures
 - external building work associated with an existing land use carried out with consent
 - structural or internal alterations to a building or other structure erected with consent or building approval

Appendix G

Site Photographs



Photo 1 - Small mounds around site



Photo 2 - Historic church circa 1800s adjacent Emerald Street

	Site Photographs		PROJECT:	84503
	Preliminary Site Investigation		PLATE No:	1
	1 - 11 Emerald Street		REV:	A
	CLIENT: Uniting Care Ageing		DATE:	8-Oct-14

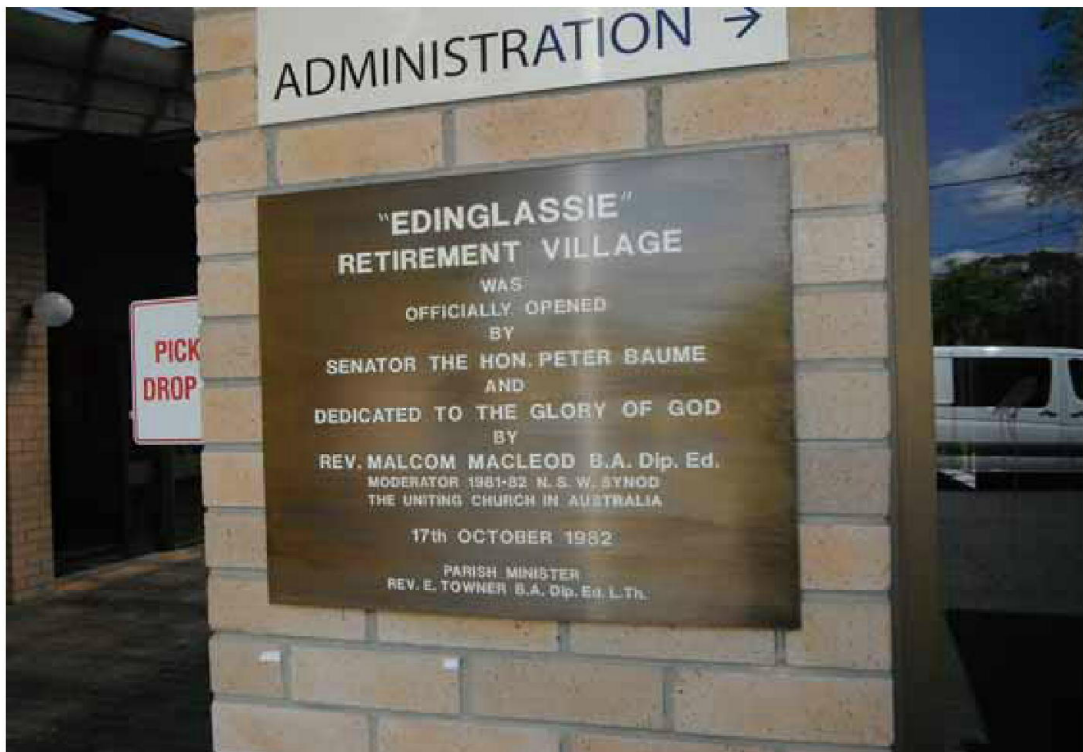


Photo 3 - Plaque on building indicates opening of facility in 1982



Photo 4 - Substation observed adjacent Emerald Street access driveway

	Site Photographs	PROJECT: 84503
	Preliminary Site Investigation	PLATE No: 2
	1 - 11 Emerald Street	REV: A
	CLIENT: Uniting Care Ageing	DATE: 8-Oct-14



Photo 5 - One of many stormwater drains observed across the site. This drain located in central courtyard.



Photo 6 - Underground sewer or water pipes along southern boundary of the site



Site Photographs
Preliminary Site Investigation
1 - 11 Emerald Street

CLIENT: Uniting Care Ageing

PROJECT: 84503

PLATE No: 3

REV: A

DATE: 8-Oct-14



Photo 7 - Kitchen area



Photo 8 - Door to workshop was locked during inspection

 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT:	84503
	Preliminary Site Investigation		PLATE No:	4
	1 - 11 Emerald Street		REV:	A
	CLIENT: Uniting Care Ageing		DATE:	8-Oct-14



Photo 9 - Door to workshop indicates storage of flammable liquids



Photo 10 - Internal view of chemical storage cupboard

	Site Photographs Preliminary Site Investigation 1 - 11 Emerald Street	PROJECT: 84503
		PLATE No: 5
		REV: A
		CLIENT: Uniting Care Ageing
		DATE: 8-Oct-14

Appendix H

DQOs/DQIs and Calculations

QA/QC PROCEDURES AND RESULTS

Q1. Data Quality Objectives

The PSI has been devised broadly in accordance with the seven step data quality objective (DQO) process as specified in Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* as amended 2013 (NEPC 2013). The DQO process is outlined as follows:

(1) State the Problem

A new development is proposed for the site which may include up to three above ground levels of residential aged care facilities, individual living units, and support facilities. Up to one basement level is being considered, although not confirmed, as are associated pavement and landscaping reconfigurations. The “problem” to be addressed is that the extent and nature of potential contamination is unknown. The objective of the investigation is to characterise the nature and extent of contamination, if any, at the site and, if confirmed, to make recommendations for further investigations and/or remediation to render the site suitable for the proposed development.

The site is surrounded largely by residential premises, open space and roads. The site is within the Local Government Area (LGA) of Penrith City Council. DP’s environmental project team includes: Environmental Manager Paul Gorman, and Environmental Scientists Kate Sargent and Jessica Little. The consent authority is Penrith City Council.

(2) Identify the Decision/Goal of the Study

Based on the available site history for 1 – 11 Emerald Street Emu Plains, it is considered that the contaminants of concern are generalised and include metals (including lead from paint), pesticides (OCP), polycyclic aromatic hydrocarbons (PAH), total recoverable hydrocarbons (TRH), monocyclic aromatic hydrocarbons (benzene, ethylbenzene, toluene, total xylenes – BTEX), phenols, VOC, and PCB. Asbestos will also be tested in samples considered likely to contain asbestos.

The analytical data for soils will be compared to Health-based investigation levels (HIL) and the Health-based Screening Levels (HSL) for residential use based on the current and proposed land use as per Tables 1A Schedule B1, NEPC (2013). Given that the site is covered largely by buildings and hard stand and the proposed development may add a basement level, Ecological Investigation and Screening Levels were not considered.

The suitability of the site for the proposed residential aged care facility will be based on a comparison of the analytical results for all COC to the adopted site assessment criteria and, if necessary, compared to the 95% UCL of the mean concentrations.

The following specific decisions will be made, as appropriate:

- What is the conceptual site model (i.e. sources, receptors, migration pathways, exposure)?
- Do the existing fill materials and/or natural soils pose a potential risk to identified receptors?

- Is the data sufficient to make a decision regarding the abovementioned risks, the compatibility of the site for the proposed development or are additional investigations required?
- Does contamination at the site, if encountered, trigger the Duty to Report requirements under the CLM Act 1997?
- Are there any off-site migration issues that need to be considered?
- Is the data sufficient to enable the preparation of a Remediation Action Plan (RAP) and/or Environmental Management Plan (EMP) should the data suggest these are required?

(3) Identify Information Inputs

Inputs into the decisions are as follows:

- Collection and review of site history information including information regarding previous and current activities undertaken on the site and the surrounding areas;
- Regional geology, topography and hydrogeology information including acid sulphate soils,
- Soil samples will be collected across the site in a general grid pattern. Drilling was conducted using a truck mounted solid flight auger for two locations, and a hand auger for the remaining six. It is noted that at this stage a limited sampling regime has been adopted and is considered suitable for initial characterisation of the site. Soil samples will be analysed for the COC;
- The lithology of the site as described in the bore logs;
- If site conditions suggest additional COC i.e. condition of subsurface material encountered during test bores (odours, staining etc.), further analysis will be undertaken;
- Field and laboratory QA/QC data to assess the suitability of the environmental data for the assessment;
- All analysis undertaken at a NATA accredited laboratory; and
- The results will be compared with the NEPC (2013) criteria discussed in DQO section 2.

(4) Define the Study Boundaries

The site is identified as Lots 16 in deposited plan 232740, Lot 1 in deposited plan 650543, Lot 9 in deposited plan 230580, and Lots 3 and 4 in deposited plan 758387 also known as 1 – 11 Emerald Street, Emu Plains, and is located approximately 57 km to the west of the Sydney CBD. The site occupies an approximate area of 1.8 hectares. The lateral site boundaries are defined as Great Western Highway to the north, Emerald Street to the east, open space and commercial/residential to the south and west. The investigation was undertaken to a maximum depth of 5.2 metres bgl across the site due to refusal. The locations of the boreholes were subject to access constraints due to the presence of the existing buildings.

(5) Develop the Analytical Approach (or decision rule)

The information obtained during the assessment will be used to characterise the site in terms of contamination issues and risk to human health and/or the environment. The decision rules used in characterising the site will be as follows:

- Laboratory test results for soil samples will be assessed individually for each analyte or analyte group (of like materials)];
- The adopted site criteria will be the NSW Environment Protection Authority (EPA) endorsed criteria.
- Where such criteria are not available, other recognised national or international standards will be used;
- The contaminant concentrations in soil/fill material should meet the following criteria, or further investigation is required if:
 - The concentration of the contaminant is more than 2.5 times the investigation level. Any location more than 2.5 times the adopted site criteria is classified as a 'hotspot', requiring further assessment/ management; and
 - The calculated 95% Upper Confidence Limit (95% UCL) of average concentrations (excluding any 'hotspot' concentrations) exceeds the adopted investigation level; and
 - The standard deviation of the results is greater than 50% of the investigation level.
- Further investigation, remediation and/or management will be recommended if the site is found to be contaminated or containing contamination "hot spots".

Field and laboratory test results will be considered useable for the assessment after evaluation against the following data quality indicators (DQIs):

- Precision – a measure of variability or reproducibility of data;
- Accuracy – a measure of closeness of the data to the 'true' value;
- Representativeness – the confidence (qualitative) of data representativeness of media present on site;
- Completeness – a measure of the amount of usable data from a data collection activity; and
- Comparability – the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event.

The specific limits (their acceptable range, where applicable) are outlined in the data QA/QC procedures and results below.

(6) Specify the Performance or Acceptable Criteria

Considering that the future site use/development will involve the site continuing to be used for residential purposes and as a residential development, decision errors for the respective COC for fill / soil are:

1. Deciding that the site's fill/soil exceeds the HIL/HSL when they truly do not; and
2. Deciding that the site's fill/soils are within the HIL/HSL when they are truly not.

Decision errors for the proposed assessment will be minimised and measured by the following:

- Systematic soil sample numbers will comply (where possible) with those recommended in the NSW EPA *Sampling Design Guidelines* (1995), which have risk probabilities already incorporated;
- The sampling regime will target each stratum identified to account for site variability;

- Sample collection and handling techniques will be in accordance with DP's Field Procedures Manual;
- Samples will be prepared and analysed by a NATA-accredited laboratory with the acceptance limits for laboratory QA/QC parameters based on the laboratory reported acceptance limits and those stated in NEPC(2013);
- The analyte selection is based on the available site history, past site activities, site features and the findings of the PSI. The potential for contaminants other than those proposed to be analysed is considered to be low;
- The HSLs/HILs will be adopted from established and NSW EPA endorsed guidelines. Where not available, recognised national and international guidelines were used. The HSL and HILs have risk probabilities already incorporated;
- A significance level (if required to be assessed) of 0.05 will be adopted for data with statistical analysis of 95% Upper Confidence Limit (95% UCL) of average concentrations; and
- Only NATA accredited laboratories using NATA endorsed methods are used to perform laboratory analysis. Where NATA endorsed methods are not used, the reasons are stated. The effect of using non-NATA methods on the decision making process are explained.

(7) Optimise the design for obtaining data

Sampling design and procedures that will be implemented to optimise data collection for achieving the DQOs included the following;

- Only NATA accredited laboratories using NATA endorsed methods are used to perform laboratory analysis whenever possible;
- Targeted soil sampling will be used to target areas of environmental concern identified during the review of site history;
- Where possible, targeted samples will be incorporated into the grid based sampling to provide a more resource and cost effective sampling program;
- To optimise the selection of soil samples for chemical analysis, all samples collected will be screened using a calibrated photo-ionisation detector (PID) allowing for site assessment and sample selection. In addition, additional soil samples will be collected but kept 'on hold' pending details of initial analysis and will be analysed if further delineation is required;
- Adequately experienced environmental scientists/engineers will be chosen to conduct field work and sample analysis interpretation.

Q2. Data Quality Indicators

Field and laboratory procedures were assessed against the following data quality indicators (DQIs):

- Completeness – a measure of the amount of usable data from a data collection activity;
- Comparability – the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness – the confidence (qualitative) of data representativeness of media present on-site;
- Precision – a measure of variability or reproducibility of data; and
- Accuracy – a measure of closeness of the data to the ‘true’ value.

The DQIs were assessed as outlined in Table Q1.

Table Q1. Data Quality Indicators

DQI	Considerations as specified in NEPM Schedule B2	Comments
Completeness		
Field Considerations	All critical locations sampled	All critical locations (areas of environmental concern) sampled in accordance with DP’s proposal and PSI, subject to access constraints.
	All samples collected (from grid and at depth)	Limited grid based and targeted soil sampling has been used to provide coverage of the site in general accordance with DP’s proposal. Samples collected from different soil strata at depth.
	Standard operating practices (SOPs) appropriate and complied with	Field staff followed SOPs as defined in the DP <i>Field Procedures Manual</i> .
	Experienced sampler	DP’s Environmental Scientist with at least two year’s experience led the field team.
	Documentation correct	Field staff followed SOPs as defined in the DP <i>Field Procedures Manual</i> . Documentation reviewed and signed off by a Senior Environmental Engineer.
Laboratory Considerations	All critical samples analysed according to DP’s proposal and this PSI	The DP proposal was followed. Any variation to the proposal has been recorded in the report.
	All analytes analysed according to DP’s proposal and PSI	All analytes analysed according to the proposal. Any variation has been recorded in the report.

DQI	Considerations as specified in NEPM Schedule B2	Comments
	Appropriate methods and PQLs/LOR	NATA approved methods have been adopted. Limits of reporting (LORs) and practical quantitation limits (PQLs) in accordance with the method have been used by the contract laboratory.
	Sample Documentation complete	Chain-of-custody (COC) maintained and appended to the Certificates of Analysis(s). All Certificates of Analysis are complete and appended to the report.
	Sample holding times complied with	Sample holding times complied with the NATA accredited Laboratory.
Comparability		
Field Considerations	Same SOPs used on each occasion	Field staff followed SOPs for each day of sampling as defined in the <i>DP Field procedures Manual</i>
	Experienced sampler	DP's Geotechnical Engineer and Environmental Scientist with two year's experience led the field team
	Climatic conditions	Climatic conditions at the time of sampling are reported in Section 10
	Same types of samples collected	Field staff followed SOPs as defined in the <i>DP Field Procedures Manual</i> and sampling regime defined in the proposal.
Laboratory Considerations	Sample analytical methods used	Laboratories used are accredited by NATA for the analyses undertaken. Laboratory methods are as stated on the Certificates of Analysis
	Sample PQLs / LORs	PQL or LOR set by the laboratories are below the adopted site criteria or indicate across-the-board lack of detection.
	Same laboratories	EnviroLab Services Pty Ltd was used for sample analysis.
	Same units	All laboratory results are expressed in consistent units for each media type.
Representativeness		
Field Considerations	Appropriate media sampled according to DP's proposal and PSI	Appropriate media were sampled in accordance with the proposal and PSI
	All media identified in DP's proposal and PSI sampled	All media identified in DP's proposal were sampled.

DQI	Considerations as specified in NEPM Schedule B2	Comments
Laboratory Considerations	All samples analysed according to SAQP	All samples analysed according to DP's proposal and PSI.
Precision		
Field Considerations	SOPs appropriate and complied with	Field staff followed SOPs as defined in the DP Field Procedures Manual
Laboratory Considerations	Analysis of: 1) Laboratory duplicates 2) field replicates 3) laboratory-prepared volatile trip spikes	Envirolab Services Pty Ltd acceptance limits are: <i>[1) Average relative percentage difference (RPD) result <5 times PQL, no limit; results >5 times PQL, 0% -50%</i> <i>2) Recovery of 30% for organics and 50% for inorganics</i> <i>3) Recovery of 70-130% for inorganics/metals; 60-140% for organics and 10-140 % for SVOC.</i>
Accuracy (bias)		
Field Considerations	SOPs Appropriate and complied with	Field staff to follow SOPs as defined in the DP Field Procedures Manual
Laboratory Considerations	Analysis of: 1) field blanks 2) reagent blank/method blank 3) matrix spike 4) surrogate spike 5) reference material	Envirolab Services Pty Ltd acceptance limits are: 1) Concentrations of analytes are <PQL/LOR 2) Results are within acceptance limits as specified by the laboratory (<i>recovery usually within 60-140%</i>). 3) Results are within acceptance limits as specified by the laboratory (<i>recovery within 70-130% for inorganics and 60-140% for organics</i>). 4) Results are within acceptance limits as specified by the laboratory (<i>recovery within 70-130% for inorganics and 60-140% for organics</i>). 5) Analysis within the acceptable limits of the Certificate of Analysis for the reference material. These results are generally not contained in the Certificate of Analysis.

DQI	Considerations as specified in NEPM Schedule B2	Comments
	6) laboratory control sample 7) laboratory-prepared spikes	6) Results are within acceptance limits as specified by the laboratory (<i>recovery within 70-130% for inorganics and 60-140% for organics</i>). 7) Results are within acceptance limits as specified by the laboratory (<i>recovery within 60-140%</i>).

Q3. FIELD QUALITY ASSURANCE AND QUALITY CONTROL

The field QC procedures for sampling as prescribed in Douglas Partners' *Field Procedures Manual* were followed at all times during the assessment.

Q3.1 Sampling Team

Field sampling was undertaken by DP Environmental Scientist, Jessica Little. Site works were undertaken on the 26 of September 2014. Sampling was undertaken during fine weather conditions. All members of the team were instructed by the Project Manager regarding the sampling and well installation processes to be adopted. The same approach to the sampling was applied by each team member, minimising the potential for field sampling related variations in test outcomes.

Q3.2 Sample Collection

Soil

Soil samples were collected from SPT returns and auger returns from a drilling rig and hand auger. Further details of the drilling and sampling methodology are presented in Section 8 of the report. The QA/QC samples collected during the course of soil sampling comprised the following:

- Collection of a minimum of 10% replicate samples (inter-laboratory replicate) for QA/QC purposes, with a minimum of one replicate sample collected for each day of fieldwork;
- Collection of a minimum one trip spike and one trip blank per day of sampling.

The field QC procedures for sampling as prescribed in Douglas Partners' *Field Procedures Manual* were followed at all times during the assessment.

Q3.3 Logs and Field Sheets

Logs for each soil sampling location were recorded in the field. The individual samples were recorded on the field logs along with the sample identity, location, depth, initials of sampler, replicate locations, replicate type, and site observations. Analysis to be performed on each sample and the dispatch courier were recorded on the COC, Appendix J. Logs are presented in Appendix I.

Q3.4 Decontamination Procedure

Where stainless steel sampling equipment was required for soil sampling the equipment (e.g. SPT split shoe, hand auger) was decontaminated between use. The decontamination procedure involved a three stage wash. The equipment was first rinsed with tap water to remove sediment followed by a 3% Decon 90 solution. Finally the equipment was rinsed in demineralised water and dried using disposable paper towel.

Q3.5 Chain of Custody

Chain of custody information was recorded on the Chain-of-Custody (COC) sheets and accompanied samples to the analytical laboratory. Signed copies of COCs are presented in Appendix J, following the laboratory certificates of analysis. A complete list of the laboratory certificates of analysis, and a brief description of the analysis undertaken is included in Table Q2 below.

Table Q2. Laboratory Certificates of Analysis

Report No	Analysis Completed
116867	Soil samples from BH1 – BH8 and trip spikes and blanks

Q3.6 Sample Splitting Techniques

Replicate samples were collected in the field as a measure of accuracy, precision and repeatability of the results.

Field replicate samples for soil were collected from the same location and an identical depth to the primary sample. Equal portions of the primary sample were placed into the sampling jars and sealed. The sample was split to prevent the loss of volatiles from the soil but not homogenised in a bowl. Replicate samples were labelled with a DP identification number, recorded on DP's bore logs, so as to conceal their relationship to their primary sample from the analytical laboratory.

Q3.7 Replicate Frequency

Field sampling included collection of a minimum of 10% replicate samples (inter-laboratory replicates) for QA/QC purposes, with a minimum of one replicate sample collected per day of sampling.

Q3.8 Field Blank

A field blank is a sample taken as an indication to demonstrate correct field handling. Field blank samples were collected at least once per day during soil and groundwater sampling.

Q3.9 Trip Spike

In accordance with the *NSW EPA Guidelines for Consultants Reporting on Contaminated Sites (2011)*, laboratory prepared trip spike results for volatile analytes are included in this report. The purpose of a trip spike is to assess the potential loss of volatile analytes that may have occurred between the time of collection and transfer of the sample to the laboratory. For the current investigation, a trip spike was taken into the field on each day of sampling with BTEX being the volatile assessed.

For soils, laboratory preparation of the trip spike involved putting 1mL of BTEX (using a 1500ppm BTEX trip spike standard) into two jars which are cross referenced and labelled 'trip spike' and 'control'. Both jars were sealed with electrical tape. The trip spike was taken onto site and subject to the same jar storage and transfer as the field samples. The control stayed refrigerated in the laboratory. Following receipt of the trip spike and field samples, the trip spike and corresponding control are both analysed with results of the trip spike being expressed as the % difference from the control sample.

The acceptance limit for trip spikes is 60-140% in difference compared to the control or standard.

A trip spike was taken into the field on every soil sampling day and dispatched with the batch sampling run.

Q3.10 Relative Percentage Difference

A measure of the consistency of results for field samples is derived by the calculation of relative percentage differences (RPDs) for replicate samples. A RPD of +/- 30% is generally considered typically acceptable for inorganic analytes by NSW EPA, although in general a wider RPD range (50%) may be acceptable for organic analytes. RPDs have only been considered where a concentration is greater than five times the PQL. High RPDs (if applicable) are shown in **bold and shaded** on the relevant tables below.

Replicate samples were collected at a rate of approximately one replicate sample for every ten original samples collected and also analysed at a rate of 10% of primary samples analysed (5% inter- and 5% intra-laboratory replicates), generally with a minimum of one replicate sample collected for each day of sampling.

Q3.10.1 Inter-Laboratory Analysis

An inter-laboratory replicate was analysed as an internal check of the reproducibility within the primary laboratory (Envirolab Pty Ltd) and as a measure of consistency of sampling techniques.

One primary soil sample was analysed to one inter-laboratory soil sample replicate (10%). Therefore the inter-laboratory replicate sampling requirement was met.

The comparative results of analysis between original and replicate samples are summarised in Table Q3.

Table Q3: Inter-laboratory Results – Soils (mg/kg)

Analyte	Primary Sample ID	Replicate Sample ID	Difference	RPD
Arsenic	<4	8	NA	120
Cadmium	<0.4	<0.4	NA	-
Chromium	11	11	0	0
Copper	7	6	1	15
Lead	9	7	2	25
Mercury	<0.1	<0.1	NA	-
Nickel	6	5.5	0.5	9
Zinc	30	27	3	11
Naphthalene	<0.1	<0.5	NA	-
B(a)P	<0.05	<0.5	NA	-
B(a)P TEQ	<0.5	<0.5	NA	-
Total +ve PAH	NIL	NIL	NA	-

The calculated RPD values were within the acceptable range of ± 30 for inorganic analytes with the exception of those shaded and in bold. However, this is not considered to be significant because:

- The majority of RPDs within were within the acceptable limits.

Overall, the inter-laboratory comparisons indicate that the sampling technique was consistent and repeatable and therefore the results are useable and representative of the conditions encountered.

Q3.11 Field Blanks

Laboratory prepared soil field blanks were taken out to the field unopened on each day of sampling, subjected to the same preservation methods as the field samples, then analysed for the purposes of determining whether transfer of contaminants into the blank sample had occurred prior to reaching the laboratory. If this is confirmed then there is also a potential for other samples in the batch to have been impacted. The result of the laboratory analysis for the field blank is shown in Table Q4. One soil blank was analysed over the course of the investigation.

Table Q4: Trip Blank Results - Soils (mg/kg)

Sample ID	Benzene	Toluene	Ethylbenzene	M + P Xylene	O Xylene
TB/260914	<0.2	<0.5	<1	<2	<1

Levels of analytes were all below detection limits indicating that the potential that significant cross contamination had not occurred during the course of the round trip from the site to the laboratory.

Q3.12 Trip Spikes

A trip spike was taken into the field on each day of sampling and dispatched with the batch sampling run. Results (Table 5) indicate that the percentage loss for BTEX during the trip was minimal and therefore appropriate preservation techniques were employed. The results of the laboratory analysis for the trip spikes are shown in Table Q5. A total of one soil spike was analysed over the course of the investigation.

Table Q5: Trip Spike Results – Soils (% Recovery)

Sample ID	Benzene	Toluene	Ethylbenzene	M + P Xylene	O Xylene
TS/260914	118	118	118	118	118

Results indicate that the percentage recovery for BTEX during the trip was acceptable and therefore appropriate preservation techniques were employed.

Q3.13 Field Instrument Calibration

The photoionisation detector (PID) fitted with a 10.6 volt lamp and was calibrated and serviced at ThermoFisher Scientific on 4 April 2014 and in the field with isobutylene gas every week during the course of the drilling programme.

Q4. LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Q4.1 Chain of Custody

Chain-of-custody procedures are discussed in Section Q 3.5.

Q4.2 Holding Times

A review of the laboratory certificates of analysis and chain-of-custody documentation indicated that holding times were met, as summarised in Table Q6.

Table Q6: Holding Times

Matrix	Analyte	Recommended maximum holding time	Holding time met
Soil	Heavy Metals: As, Cd, Cr, Cu, Pb, Hg, Ni, Zn	6 months	Yes
	TRH C ₆ -C ₉	14 days	Yes
	TRH C ₁₀ -C ₃₆	14 days	Yes
	BTEX/VOC	14 days	Yes
	PAH	14 days	Yes
	OCP	14 days	Yes
	OPP	14 days	Yes
	PCB	14 days	Yes
	Phenols	14 days	Yes
	Asbestos	Nil	Yes

Q4.3 Analytical Laboratories

Samples were submitted to the following laboratory for analysis:

- Envirolab Services (Envirolab)
- Eurofins (inter-lab sample)

The laboratories are NATA accredited for the analyses undertaken. Envirolab's accreditation number is 2901 and Eurofins accreditation number is 1261, both are accredited for compliance with ISO 17025. Envirolab's and Eurofins tests comply with NATA and NEPC (2013). In-house procedures are employed by Envirolab and Eurofins in the absence of documented standards.

It is noted, however, that some of the test methods adopted are not NATA accredited where no NATA accredited method exists, however, the best international practice was adopted in the analytical

methods and standard international analytical methods adopted. It is not considered that this will affect the validity of the results for this assessment.

Q4.4 Analytical Methods

The laboratory analytical methods are provided on the laboratory certificates of analysis in Appendix J and summarised below in Table Q7.

Table Q7: Soil Analysis

Analyte	Limit of Reporting (mg/kg)	Reference Method
Heavy Metals Cd, Cr, Cu, Pb, Ni, Zn	1.0	Metals 020 ICP-AES
Arsenic (As)	4.0	Metals 020 ICP-AES
Mercury (Hg)	0.10	Metals 021 ICP-AAS
VOC	0.2-1	Org-014
TPH C ₆ -C ₉	25	Org-016
TPH C ₁₀ -C ₃₆	250	Org-003
BTEX	0.2-2	Org-016
OCP	0.1	Org-005
PCB	0.1	Org-006
PAH	0.05-0.1	Org-012 subset
Phenols	5	Inorg-031
Asbestos	qualitative identification	NA

Q4.5 Results of Laboratory QA/QC Procedures

The following QA/QC procedures were conducted by the laboratories. The results are included in the laboratory certificates of analysis in Appendix J.

Q4.5.1 Surrogate Spike

This sample is prepared by adding a known amount of surrogate, which behaves similarly to the analyte, prior to analysis to each sample. The recovery result indicates the proportion of the known

concentration of the surrogate that is detected during analysis. These results are within acceptance limits as specified by Envirolab indicating that the extraction technique was effective.

The laboratory acceptance criteria for surrogate samples is generally 60-140% for organics; and 10-140% for SVOC and speciated phenols.

The laboratory QC for surrogate spikes was within the acceptance standards.

Q4.5.2 Practical Quantitation Limits - PQLs

The PQL is the lowest quantity of an analyte which can be measured with a high degree of confidence that the analyte is present at or above that concentration. PQLs at different analytical laboratories can differ based on the analytical techniques.

Q4.5.3 Reference and Daily Check Sample Results – Laboratory Control Sample (LCS)

This sample comprises spiking either a standard reference material or a control matrix (such as a blank of sand or water) with a known concentration of specific analytes. The LCS is then analysed and results compared against each other to determine how the laboratory has performed with regard to sample preparation and analytical procedure. LCSs are analysed at a frequency of 1 in 20, with a minimum of one analysed per batch.

The laboratory acceptance criteria for LCS samples is generally 70-130% for inorganic/ metals; and 60-140% for organics; and 10-140% for SVOC and speciated phenols.

The laboratory QC for LCS was within the acceptance standards.

Q4.5.4 Laboratory Replicate Results

These are additional portions of a sample which are analysed in exactly the same manner as all other samples. The laboratory acceptance criteria for replicate samples are: in cases where the level is $<5 \times \text{PQL}$ – any RPD is acceptable; and in cases where the level is $>5 \times \text{PQL}$ – 0-50% RPD is acceptable.

The laboratory QC for laboratory replicate results was within the acceptance standards, with the exception of one Eurofins sample for benzo (b&k) fluoranthene. It is considered however that the overall results are acceptable for the current investigation and the result is possibly an anomaly.

Q4.5.5 Laboratory Blank Results

The laboratory blank sometimes referred to as the method blank or reagent blank is the sample prepared and analysed at the beginning of every analytical run, following calibration of the analytical apparatus. This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, it can be determined by processing solvents and reagents in exactly the same manner as for samples. Laboratory blanks are analysed at a frequency of 1 in 20, with a minimum of one per batch.

The laboratory QC for method blanks was within the acceptance standards.

Q4.5.6 Matrix Spike

This is a sample replicate prepared by adding a known amount of analyte prior to analysis, and then treated exactly the same as all other samples. The recovery result indicates the proportion of the known concentration of the analyte that is detected during analysis. The laboratory acceptance criteria for matrix spike samples is generally 70-130% for inorganic/metals; and 60-140% for organics; and 10-140% for SVOC and speciated phenols.

The laboratory QC for matrix spikes were within the acceptance standards.

Q4.6 Laboratory Comments

The laboratory QC for surrogate spikes, LCS, laboratory replicate results, method blanks and matrix spikes were within the acceptance standards.

Appendix I

Borehole Log Results

Notes About this Report

About this Report

Douglas Partners



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.



Sampling

Sampling is carried out during drilling or test pitting to allow engineering examination (and laboratory testing where required) of the soil or rock.

Disturbed samples taken during drilling provide information on colour, type, inclusions and, depending upon the degree of disturbance, some information on strength and structure.

Undisturbed samples are taken by pushing a thin-walled sample tube into the soil and withdrawing it to obtain a sample of the soil in a relatively undisturbed state. Such samples yield information on structure and strength, and are necessary for laboratory determination of shear strength and compressibility. Undisturbed sampling is generally effective only in cohesive soils.

Test Pits

Test pits are usually excavated with a backhoe or an excavator, allowing close examination of the in-situ soil if it is safe to enter into the pit. The depth of excavation is limited to about 3 m for a backhoe and up to 6 m for a large excavator. A potential disadvantage of this investigation method is the larger area of disturbance to the site.

Large Diameter Augers

Boreholes can be drilled using a rotating plate or short spiral auger, generally 300 mm or larger in diameter commonly mounted on a standard piling rig. The cuttings are returned to the surface at intervals (generally not more than 0.5 m) and are disturbed but usually unchanged in moisture content. Identification of soil strata is generally much more reliable than with continuous spiral flight augers, and is usually supplemented by occasional undisturbed tube samples.

Continuous Spiral Flight Augers

The borehole is advanced using 90-115 mm diameter continuous spiral flight augers which are withdrawn at intervals to allow sampling or in-situ testing. This is a relatively economical means of drilling in clays and sands above the water table. Samples are returned to the surface, or may be collected after withdrawal of the auger flights, but they are disturbed and may be mixed with soils from the sides of the hole. Information from the drilling (as distinct from specific sampling by SPTs or undisturbed samples) is of relatively low

reliability, due to the remoulding, possible mixing or softening of samples by groundwater.

Non-core Rotary Drilling

The borehole is advanced using a rotary bit, with water or drilling mud being pumped down the drill rods and returned up the annulus, carrying the drill cuttings. Only major changes in stratification can be determined from the cuttings, together with some information from the rate of penetration. Where drilling mud is used this can mask the cuttings and reliable identification is only possible from separate sampling such as SPTs.

Continuous Core Drilling

A continuous core sample can be obtained using a diamond tipped core barrel, usually with a 50 mm internal diameter. Provided full core recovery is achieved (which is not always possible in weak rocks and granular soils), this technique provides a very reliable method of investigation.

Standard Penetration Tests

Standard penetration tests (SPT) are used as a means of estimating the density or strength of soils and also of obtaining a relatively undisturbed sample. The test procedure is described in Australian Standard 1289, Methods of Testing Soils for Engineering Purposes - Test 6.3.1.

The test is carried out in a borehole by driving a 50 mm diameter split sample tube under the impact of a 63 kg hammer with a free fall of 760 mm. It is normal for the tube to be driven in three successive 150 mm increments and the 'N' value is taken as the number of blows for the last 300 mm. In dense sands, very hard clays or weak rock, the full 450 mm penetration may not be practicable and the test is discontinued.

The test results are reported in the following form.

- In the case where full penetration is obtained with successive blow counts for each 150 mm of, say, 4, 6 and 7 as:
4,6,7
N=13
- In the case where the test is discontinued before the full penetration depth, say after 15 blows for the first 150 mm and 30 blows for the next 40 mm as:
15, 30/40 mm

Sampling Methods

The results of the SPT tests can be related empirically to the engineering properties of the soils.

Dynamic Cone Penetrometer Tests / Perth Sand Penetrometer Tests

Dynamic penetrometer tests (DCP or PSP) are carried out by driving a steel rod into the ground using a standard weight of hammer falling a specified distance. As the rod penetrates the soil the number of blows required to penetrate each successive 150 mm depth are recorded. Normally there is a depth limitation of 1.2 m, but this may be extended in certain conditions by the use of extension rods. Two types of penetrometer are commonly used.

- Perth sand penetrometer - a 16 mm diameter flat ended rod is driven using a 9 kg hammer dropping 600 mm (AS 1289, Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.
- Cone penetrometer - a 16 mm diameter rod with a 20 mm diameter cone end is driven using a 9 kg hammer dropping 510 mm (AS 1289, Test 6.3.2). This test was developed initially for pavement subgrade investigations, and correlations of the test results with California Bearing Ratio have been published by various road authorities.



Description and Classification Methods

The methods of description and classification of soils and rocks used in this report are based on Australian Standard AS 1726, Geotechnical Site Investigations Code. In general, the descriptions include strength or density, colour, structure, soil or rock type and inclusions.

Soil Types

Soil types are described according to the predominant particle size, qualified by the grading of other particles present:

Type	Particle size (mm)
Boulder	>200
Cobble	63 - 200
Gravel	2.36 - 63
Sand	0.075 - 2.36
Silt	0.002 - 0.075
Clay	<0.002

The sand and gravel sizes can be further subdivided as follows:

Type	Particle size (mm)
Coarse gravel	20 - 63
Medium gravel	6 - 20
Fine gravel	2.36 - 6
Coarse sand	0.6 - 2.36
Medium sand	0.2 - 0.6
Fine sand	0.075 - 0.2

The proportions of secondary constituents of soils are described as:

Term	Proportion	Example
And	Specify	Clay (60%) and Sand (40%)
Adjective	20 - 35%	Sandy Clay
Slightly	12 - 20%	Slightly Sandy Clay
With some	5 - 12%	Clay with some sand
With a trace of	0 - 5%	Clay with a trace of sand

Definitions of grading terms used are:

- Well graded - a good representation of all particle sizes
- Poorly graded - an excess or deficiency of particular sizes within the specified range
- Uniformly graded - an excess of a particular particle size
- Gap graded - a deficiency of a particular particle size with the range

Cohesive Soils

Cohesive soils, such as clays, are classified on the basis of undrained shear strength. The strength may be measured by laboratory testing, or estimated by field tests or engineering examination. The strength terms are defined as follows:

Description	Abbreviation	Undrained shear strength (kPa)
Very soft	vs	<12
Soft	s	12 - 25
Firm	f	25 - 50
Stiff	st	50 - 100
Very stiff	vst	100 - 200
Hard	h	>200

Cohesionless Soils

Cohesionless soils, such as clean sands, are classified on the basis of relative density, generally from the results of standard penetration tests (SPT), cone penetration tests (CPT) or dynamic penetrometers (PSP). The relative density terms are given below:

Relative Density	Abbreviation	SPT N value	CPT qc value (MPa)
Very loose	vl	<4	<2
Loose	l	4 - 10	2 - 5
Medium dense	md	10 - 30	5 - 15
Dense	d	30 - 50	15 - 25
Very dense	vd	>50	>25

Soil Descriptions

Soil Origin

It is often difficult to accurately determine the origin of a soil. Soils can generally be classified as:

- Residual soil - derived from in-situ weathering of the underlying rock;
- Transported soils - formed somewhere else and transported by nature to the site; or
- Filling - moved by man.

Transported soils may be further subdivided into:

- Alluvium - river deposits
- Lacustrine - lake deposits
- Aeolian - wind deposits
- Littoral - beach deposits
- Estuarine - tidal river deposits
- Talus - scree or coarse colluvium
- Slopewash or Colluvium - transported downslope by gravity assisted by water. Often includes angular rock fragments and boulders.



Rock Strength

Rock strength is defined by the Point Load Strength Index ($Is_{(50)}$) and refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects. The test procedure is described by Australian Standard 4133.4.1 - 1993. The terms used to describe rock strength are as follows:

Term	Abbreviation	Point Load Index $Is_{(50)}$ MPa	Approx Unconfined Compressive Strength MPa*
Extremely low	EL	<0.03	<0.6
Very low	VL	0.03 - 0.1	0.6 - 2
Low	L	0.1 - 0.3	2 - 6
Medium	M	0.3 - 1.0	6 - 20
High	H	1 - 3	20 - 60
Very high	VH	3 - 10	60 - 200
Extremely high	EH	>10	>200

* Assumes a ratio of 20:1 for UCS to $Is_{(50)}$

Degree of Weathering

The degree of weathering of rock is classified as follows:

Term	Abbreviation	Description
Extremely weathered	EW	Rock substance has soil properties, i.e. it can be remoulded and classified as a soil but the texture of the original rock is still evident.
Highly weathered	HW	Limonite staining or bleaching affects whole of rock substance and other signs of decomposition are evident. Porosity and strength may be altered as a result of iron leaching or deposition. Colour and strength of original fresh rock is not recognisable
Moderately weathered	MW	Staining and discolouration of rock substance has taken place
Slightly weathered	SW	Rock substance is slightly discoloured but shows little or no change of strength from fresh rock
Fresh stained	Fs	Rock substance unaffected by weathering but staining visible along defects
Fresh	Fr	No signs of decomposition or staining

Degree of Fracturing

The following classification applies to the spacing of natural fractures in diamond drill cores. It includes bedding plane partings, joints and other defects, but excludes drilling breaks.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with some fragments
Fractured	Core lengths of 40-200 mm with some shorter and longer sections
Slightly Fractured	Core lengths of 200-1000 mm with some shorter and longer sections
Unbroken	Core lengths mostly > 1000 mm

Rock Descriptions

Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$\text{RQD \%} = \frac{\text{cumulative length of 'sound' core sections} \geq 100 \text{ mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or better. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e. drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

Stratification Spacing

For sedimentary rocks the following terms may be used to describe the spacing of bedding partings:

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

Symbols & Abbreviations

Douglas Partners



Introduction

These notes summarise abbreviations commonly used on borehole logs and test pit reports.

Drilling or Excavation Methods

C	Core Drilling
R	Rotary drilling
SFA	Spiral flight augers
NMLC	Diamond core - 52 mm dia
NQ	Diamond core - 47 mm dia
HQ	Diamond core - 63 mm dia
PQ	Diamond core - 81 mm dia

Water

▷	Water seep
▽	Water level

Sampling and Testing

A	Auger sample
B	Bulk sample
D	Disturbed sample
E	Environmental sample
U ₅₀	Undisturbed tube sample (50mm)
W	Water sample
pp	pocket penetrometer (kPa)
PID	Photo ionisation detector
PL	Point load strength Is(50) MPa
S	Standard Penetration Test
V	Shear vane (kPa)

Description of Defects in Rock

The abbreviated descriptions of the defects should be in the following order: Depth, Type, Orientation, Coating, Shape, Roughness and Other. Drilling and handling breaks are not usually included on the logs.

Defect Type

B	Bedding plane
Cs	Clay seam
Cv	Cleavage
Cz	Crushed zone
Ds	Decomposed seam
F	Fault
J	Joint
Lam	lamination
Pt	Parting
Sz	Sheared Zone
V	Vein

Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

h	horizontal
v	vertical
sh	sub-horizontal
sv	sub-vertical

Coating or Infilling Term

cln	clean
co	coating
he	healed
inf	infilled
stn	stained
ti	tight
vn	veneer

Coating Descriptor

ca	calcite
cbs	carbonaceous
cly	clay
fe	iron oxide
mn	manganese
slt	silty

Shape

cu	curved
ir	irregular
pl	planar
st	stepped
un	undulating

Roughness

po	polished
ro	rough
sl	slickensided
sm	smooth
vr	very rough

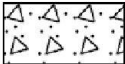
Other

fg	fragmented
bnd	band
qtz	quartz

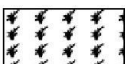
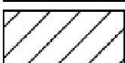
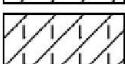
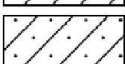
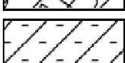
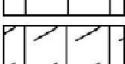
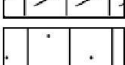
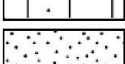
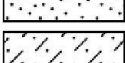
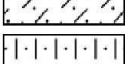
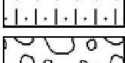
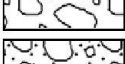
Symbols & Abbreviations

Graphic Symbols for Soil and Rock

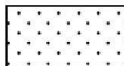
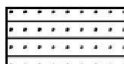
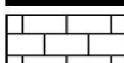
General

	Asphalt
	Road base
	Concrete
	Filling

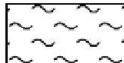
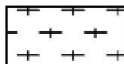
Soils

	Topsoil
	Peat
	Clay
	Silty clay
	Sandy clay
	Gravelly clay
	Shaly clay
	Silt
	Clayey silt
	Sandy silt
	Sand
	Clayey sand
	Silty sand
	Gravel
	Sandy gravel
	Cobbles, boulders
	Talus

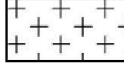
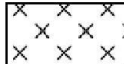
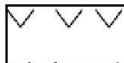
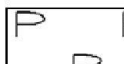
Sedimentary Rocks

	Boulder conglomerate
	Conglomerate
	Conglomeratic sandstone
	Sandstone
	Siltstone
	Laminite
	Mudstone, claystone, shale
	Coal
	Limestone

Metamorphic Rocks

	Slate, phyllite, schist
	Gneiss
	Quartzite

Igneous Rocks

	Granite
	Dolerite, basalt, andesite
	Dacite, epidote
	Tuff, breccia
	Porphyry

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.8 AHD
EASTING: 283146
NORTHING: 6262605
DIP/AZIMUTH: 90°/-

BORE No: BH1
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.05	ASPHALTIC CONCRETE		E/D	0.2		PID<1			
	0.3	FILLING - brown, silty, fine to coarse sand filling with trace basalt gravel, humid		E/D	0.5		PID<1			
	1	SILTY CLAY - very stiff, red silty clay with trace fine to medium sand (MC<<PL)		S	1.0		8,13,15 N = 28			
	1.8	SILTY SAND - medium dense, red-brown, slightly clayey, silty, fine to medium sand, damp		S	2.5		4,6,10 N = 16 PID<1			
	2			S	2.95					
	3			S	4.0		10,17,18 N = 35 PID<1			
	4.4	SILTY SANDY CLAY - hard, brown, silty sandy clay (MC<<PL)			4.45					
	5.2	Bore discontinued at 5.2m - refusal on river gravel								
	6									
	7									
	8									
	9									

RIG: DT 100

DRILLER: SS

LOGGED: JE

CASING: Uncased

TYPE OF BORING: Auger to termination

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.4 AHD
EASTING: 283006
NORTHING: 6262595
DIP/AZIMUTH: 90°/-

BORE No: BH2
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.05	ASPHALTIC CONCRETE		E/D	0.0		PID<1			
	0.3	FILLING - grey, silty, fine to medium sand with trace fine to medium basalt gravel, humid		E/D	0.2					
	0.7	FILLING - grey, gravelly clay filling, fine to medium angular shale gravel (MC<<PL)		E/D	0.5		PID<1			
	1.0	SAND - dense, light grey, fine to medium sand with trace silt, humid		E/D S*	1.0		PID<1 8/20mm refusal			
	1.9	CLAYEY SAND - dense, orange-brown, slightly silty, clayey fine to medium sand, damp		S	2.5		25/100mm refusal PID<1			
	3.7	Bore discontinued at 3.7m - refusal on river gravel								

RIG: DT 100

DRILLER: SS

LOGGED: JE

CASING: Uncased

TYPE OF BORING: Auger to termination

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *SPT aborted, concern over services

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 27.0 AHD
EASTING: 283155
NORTHING: 6262667
DIP/AZIMUTH: 90°/--

BORE No: BH3
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
27.0	0.15	FILLING - brown, sandy silt (topsoil) with bark and rootlets	[Cross-hatched pattern]	E	0.1		PID<1			
		FILLING - light orange-brown, silty sand with trace clay and sticks (<5cm length) (possibly reworked natural)		E	0.15		PID<1			
	0.4			E	0.2					
				E	0.25		PID<1			
	0.7	SILTY SAND - light orange-brown, silty sand with trace of clay and ironstone gravel		E	0.5					
		Bore discontinued at 0.7m - refusal on tree root			0.6					
26.0	1									
25.0	2									
24.0	3									
23.0	4									
22.0	5									
21.0	6									
20.0	7									
19.0	8									
18.0	9									

RIG: Hand tools

DRILLER: JAL

LOGGED: JAL

CASING: Uncased

TYPE OF BORING: Hand auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	>	Water seep
E	Environmental sample	≡	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.8 AHD
EASTING: 283083
NORTHING: 6262650
DIP/AZIMUTH: 90°/--

BORE No: BH4
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.1	FILLING - brown, sandy silt (topsoil)		E	0.1		PID<1			
	0.2	FILLING - brown, silty clayey sand filling with some sandstone gravel		E	0.2					
	0.4			E*	0.5		PID<1			
	0.6	SILTY CLAYEY SAND - orange-brown, silty, fine to medium clayey sand		E	0.6		PID<1			
	0.7	- medium to coarse sand at 0.7m			0.7					
	0.8	Bore discontinued at 0.9m - target depth reached			0.8					
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

RIG: Hand tools

DRILLER: JAL

LOGGED: JAL

CASING: Uncased

TYPE OF BORING: Hand auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD1/260914

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.4 AHD
EASTING: 283052
NORTHING: 6262656
DIP/AZIMUTH: 90°/--

BORE No: BH5A
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.05	FILLING - dark brown, sandy silt filling with rootlets								
	0.3	FILLING - orange-brown, clayey silty sand filling with some sandstone and shale gravel, quartz and brick fragments		m	0.3		PID<1			
	0.4			m	0.4		PID<1			
	0.5				0.5					
	0.7	FILLING - mottled grey-red-brown, sandy clay filling with trace sandstone gravel and wire fragments								
	0.9	FILLING - mottled grey-red-brown, sandy clay filling with trace sandstone gravel and wire fragments								
	1.0	FILLING - brown, gravelly sand filling with trace clay and shale gravel								
		Bore discontinued at 1.0m - refusal on hard filling								
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

RIG: Hand tools

DRILLER: JAL

LOGGED: JAL

CASING: Uncased

TYPE OF BORING: Hand auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	>	Water seep
E	Environmental sample	≡	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.3 AHD
EASTING: 283048
NORTHING: 6262658
DIP/AZIMUTH: 90°/--

BORE No: BH5B
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.05	FILLING - dark brown, sandy silt filling with rootlets								
	0.4	FILLING - orange-brown, clayey silty sand filling with some sandstone and shale gravel, quartz and brick fragments		E	0.5		PID<1			
	0.7			E	0.6		PID<1			
	1.0	FILLING - mottled grey-red-brown, sandy clay filling with some shale gravel and trace brick fragments			0.7					
		CLAYEY SAND - brown, clayey sand with some ironstone and shale gravel			0.8					
		Bore discontinued at 1.0m - target depth reached								
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

RIG: Hand tools

DRILLER: JAL

LOGGED: JAL

CASING: Uncased

TYPE OF BORING: Hand auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	>	Water seep
E	Environmental sample	≡	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.6 AHD
EASTING: 283075
NORTHING: 6262580
DIP/AZIMUTH: 90°/--

BORE No: BH6
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.15	FILLING - brown, sandy silt (topsoil) with traces of rootlets		E	0.0		PID<1			
		SAND - light brown, sand with medium to coarse river gravel (quartz, etc)		E*	0.15		PID<1			
					0.3					
					0.4					
	0.8				0.8		PID<1			
	0.9	SANDY CLAY - brown, sandy clay, moist		E	0.9					
		Bore discontinued at 0.9m - target depth reached								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

RIG: Hand tools

DRILLER: JAL

LOGGED: JAL

CASING: Uncased

TYPE OF BORING: Hand auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD2/260914

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 25.9 AHD
EASTING: 283107
NORTHING: 6252681
DIP/AZIMUTH: 90°/--

BORE No: BH7
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
0.1 										

RIG: DT 100

DRILLER: SS

LOGGED: JE

CASING: Uncased

TYPE OF BORING: Auger to termination

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U _x	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W _{seep}	Water seep
E	Environmental sample	W _{level}	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



Douglas Partners
Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: Uniting Care Ageing
PROJECT: Proposed Aged Care Facility
LOCATION: Emerald Street, Emu Plains

SURFACE LEVEL: 26.5 AHD
EASTING: 282988
NORTHING: 6262665
DIP/AZIMUTH: 90°/--

BORE No: BH8
PROJECT No: 84503
DATE: 26/9/2014
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
26 25 24 23 22 21 20 19 18 17	0.1	TOPSOIL - dark brown, silty clay topsoil with some fine to medium sand (MC<PL) (rootlets to 50mm)		E/D	0.2		PID<1			
		FILLING - brown, sandy silty clay filling with trace shale and brick fragments		E/D	0.5		PID<1			
	0.7	SILTY CLAY - stiff, red-brown, silty clay with some fine to medium sand (MC<PL)		E/D	1.0		PID<1			
	1.2	Bore discontinued at 1.2m - at target depth								

RIG: DT 100

DRILLER: SS

LOGGED: JE

CASING: Uncased

TYPE OF BORING: Auger to termination

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U _x	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W _{sp}	Water seep
E	Environmental sample	W _{lv}	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



Douglas Partners
Geotechnics | Environment | Groundwater

Appendix J

Laboratory Reports

CERTIFICATE OF ANALYSIS

116867

Client:

Douglas Partners Pty Ltd
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Jessica Little

Sample log in details:

Your Reference:	84503.00, Emu Plains Aged Care
No. of samples:	13 Soils
Date samples received / completed instructions received	29/09/2014 / 29/09/2014

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	7/10/14 / 7/10/14
Date of Preliminary Report:	Not Issued

NATA accreditation number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025. **Tests not covered by NATA are denoted with *.**

Results Approved By:



Jacinta Hurst
Laboratory Manager

VOCs in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-2 BH2 0.5 26/09/2014 Soil	116867-5 BH5A 0.3 26/09/2014 Soil
Date extracted	-	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014
Dichlorodifluoromethane	mg/kg	<1	<1
Chloromethane	mg/kg	<1	<1
Vinyl Chloride	mg/kg	<1	<1
Bromomethane	mg/kg	<1	<1
Chloroethane	mg/kg	<1	<1
Trichlorofluoromethane	mg/kg	<1	<1
1,1-Dichloroethene	mg/kg	<1	<1
trans-1,2-dichloroethene	mg/kg	<1	<1
1,1-dichloroethane	mg/kg	<1	<1
cis-1,2-dichloroethene	mg/kg	<1	<1
bromochloromethane	mg/kg	<1	<1
chloroform	mg/kg	<1	<1
2,2-dichloropropane	mg/kg	<1	<1
1,2-dichloroethane	mg/kg	<1	<1
1,1,1-trichloroethane	mg/kg	<1	<1
1,1-dichloropropene	mg/kg	<1	<1
Cyclohexane	mg/kg	<1	<1
carbon tetrachloride	mg/kg	<1	<1
Benzene	mg/kg	<0.2	<0.2
dibromomethane	mg/kg	<1	<1
1,2-dichloropropane	mg/kg	<1	<1
trichloroethene	mg/kg	<1	<1
bromodichloromethane	mg/kg	<1	<1
trans-1,3-dichloropropene	mg/kg	<1	<1
cis-1,3-dichloropropene	mg/kg	<1	<1
1,1,2-trichloroethane	mg/kg	<1	<1
Toluene	mg/kg	<0.5	<0.5
1,3-dichloropropane	mg/kg	<1	<1
dibromochloromethane	mg/kg	<1	<1
1,2-dibromoethane	mg/kg	<1	<1
tetrachloroethene	mg/kg	<1	<1
1,1,1,2-tetrachloroethane	mg/kg	<1	<1
chlorobenzene	mg/kg	<1	<1
Ethylbenzene	mg/kg	<1	<1
bromoform	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
styrene	mg/kg	<1	<1
1,1,2,2-tetrachloroethane	mg/kg	<1	<1
o-Xylene	mg/kg	<1	<1

VOCs in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-2 BH2 0.5 26/09/2014 Soil	116867-5 BH5A 0.3 26/09/2014 Soil
1,2,3-trichloropropane	mg/kg	<1	<1
isopropylbenzene	mg/kg	<1	<1
bromobenzene	mg/kg	<1	<1
n-propyl benzene	mg/kg	<1	<1
2-chlorotoluene	mg/kg	<1	<1
4-chlorotoluene	mg/kg	<1	<1
1,3,5-trimethyl benzene	mg/kg	<1	<1
tert-butyl benzene	mg/kg	<1	<1
1,2,4-trimethyl benzene	mg/kg	<1	<1
1,3-dichlorobenzene	mg/kg	<1	<1
sec-butyl benzene	mg/kg	<1	<1
1,4-dichlorobenzene	mg/kg	<1	<1
4-isopropyl toluene	mg/kg	<1	<1
1,2-dichlorobenzene	mg/kg	<1	<1
n-butyl benzene	mg/kg	<1	<1
1,2-dibromo-3-chloropropane	mg/kg	<1	<1
1,2,4-trichlorobenzene	mg/kg	<1	<1
hexachlorobutadiene	mg/kg	<1	<1
1,2,3-trichlorobenzene	mg/kg	<1	<1
Surrogate Dibromofluorometha	%	119	119
Surrogate aaa-Trifluorotoluene	%	116	117
Surrogate Toluene-d8	%	100	101
Surrogate 4-Bromofluorobenzene	%	79	78

vTRH(C6-C10)/BTEXNin Soil	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Our Reference:	-----	BH1	BH2	BH3	BH4	BH5A
Your Reference	-----	0.2	0.5	0.2	0.1	0.3
Depth		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
TRHC ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRHC ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPHC ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	110	116	111	114	117

vTRH(C6-C10)/BTEXNin Soil	UNITS	116867-6	116867-7	116867-8	116867-9	116867-10
Our Reference:	-----	BH5B	BH6	BH7	BH8	TS
Your Reference	-----	0.5	0.3	0.2	0.5	-
Depth		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
TRHC ₆ - C ₉	mg/kg	<25	<25	<25	<25	[NA]
TRHC ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	[NA]
vTPHC ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	[NA]
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	118%
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	118%
Ethylbenzene	mg/kg	<1	<1	<1	<1	118%
m+p-xylene	mg/kg	<2	<2	<2	<2	118%
o-Xylene	mg/kg	<1	<1	<1	<1	118%
naphthalene	mg/kg	<1	<1	<1	<1	[NA]
Surrogate aaa-Trifluorotoluene	%	114	111	117	108	116

vTRH(C6-C10)/BTEXNin Soil		
Our Reference:	UNITS	116867-11
Your Reference	-----	TB
Depth	-----	-
Date Sampled		26/09/2014
Type of sample		Soil
Date extracted	-	30/09/2014
Date analysed	-	30/09/2014
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	119

svTRH(C10-C40) in Soil						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	<100	350	<100	<100
TRH>C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₆ -C ₃₄	mg/kg	<100	<100	290	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	<100	<100	140	<100	<100
Surrogate o-Terphenyl	%	79	82	85	83	88

svTRH(C10-C40) in Soil					
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9
Your Reference	-----	BH5B	BH6	BH7	BH8
Depth	-----	0.5	0.3	0.2	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100
TRH>C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50
TRH>C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH>C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100
Surrogate o-Terphenyl	%	86	84	87	81

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-1 BH1 0.2 26/09/2014 Soil	116867-2 BH2 0.5 26/09/2014 Soil	116867-3 BH3 0.2 26/09/2014 Soil	116867-4 BH4 0.1 26/09/2014 Soil	116867-5 BH5A 0.3 26/09/2014 Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Naphthalene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQNEPMB1	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	NIL (+)VE	0.18	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	98	97	102	106	101

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-6 BH5B 0.5 26/09/2014 Soil	116867-7 BH6 0.3 26/09/2014 Soil	116867-8 BH7 0.2 26/09/2014 Soil	116867-9 BH8 0.5 26/09/2014 Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQNEPMB1	mg/kg	<0.5	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	102	100	99	101

Organochlorine Pesticides in soil						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	102	99	108	100

Organochlorine Pesticides in soil					
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9
Your Reference	-----	BH5B	BH6	BH7	BH8
Depth	-----	0.5	0.3	0.2	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	109	104	97

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-1 BH1 0.2 26/09/2014 Soil	116867-2 BH2 0.5 26/09/2014 Soil	116867-3 BH3 0.2 26/09/2014 Soil	116867-4 BH4 0.1 26/09/2014 Soil	116867-5 BH5A 0.3 26/09/2014 Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	100	102	99	108	100

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	116867-6 BH5B 0.5 26/09/2014 Soil	116867-7 BH6 0.3 26/09/2014 Soil	116867-8 BH7 0.2 26/09/2014 Soil	116867-9 BH8 0.5 26/09/2014 Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	108	109	104	97

Total Phenolics in Soil						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014
Date analysed	-	07/10/2014	07/10/2014	07/10/2014	07/10/2014	07/10/2014
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Total Phenolics in Soil					
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9
Your Reference	-----	BH5B	BH6	BH7	BH8
Depth	-----	0.5	0.3	0.2	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	07/10/2014	07/10/2014	07/10/2014	07/10/2014
Date analysed	-	07/10/2014	07/10/2014	07/10/2014	07/10/2014
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5

Acid Extractable metals in soil						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Arsenic	mg/kg	<4	4	<4	9	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	24	14	8	17	11
Copper	mg/kg	12	29	8	19	36
Lead	mg/kg	13	9	22	20	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	21	21	5	5	6
Zinc	mg/kg	32	56	43	29	31

Acid Extractable metals in soil					
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9
Your Reference	-----	BH5B	BH6	BH7	BH8
Depth	-----	0.5	0.3	0.2	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil
Date digested	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Arsenic	mg/kg	4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	11	10	13
Copper	mg/kg	33	7	8	9
Lead	mg/kg	15	9	26	21
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	14	6	5	6
Zinc	mg/kg	66	30	29	23

CEC				
Our Reference:	UNITS	116867-1	116867-2	116867-6
Your Reference	-----	BH1	BH2	BH5B
Depth	-----	0.2	0.5	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil
Date extracted	-	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014
Exchangeable Ca	meq/100g	7.2	7.7	6.7
Exchangeable K	meq/100g	0.2	0.6	0.5
Exchangeable Mg	meq/100g	1.2	5.8	6.9
Exchangeable Na	meq/100g	0.99	2.0	0.53
Cation Exchange Capacity	meq/100g	9.5	16	15

Miscellaneous Inorg - soil						
Our Reference:	UNITS	116867-1	116867-2	116867-6	116867-12	116867-13
Your Reference	-----	BH1	BH2	BH5B	BH2	BH1
Depth	-----	0.2	0.5	0.5	1.0	2.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
pH 1:5 soil:water	pH Units	9.6	9.5	7.6	6.9	6.9
Electrical Conductivity 1:5 soil:water	µS/cm	[NA]	[NA]	[NA]	76	28
Chloride, Cl 1:5 soil:water	mg/kg	[NA]	[NA]	[NA]	<10	10
Sulphate, SO4 1:5 soil:water	mg/kg	[NA]	[NA]	[NA]	80	10

Moisture						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	01/10/2014	01/10/2014	01/10/2014	01/10/2014	01/10/2014
Moisture	%	4.5	6.3	14	8.1	5.6

Moisture						
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9	116867-11
Your Reference	-----	BH5B	BH6	BH7	BH8	TB
Depth	-----	0.5	0.3	0.2	0.5	-
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	30/09/2014	30/09/2014	30/09/2014	30/09/2014	30/09/2014
Date analysed	-	01/10/2014	01/10/2014	01/10/2014	01/10/2014	01/10/2014
Moisture	%	12	5.5	7.6	8.7	0.2

Asbestos ID - soils						
Our Reference:	UNITS	116867-1	116867-2	116867-3	116867-4	116867-5
Your Reference	-----	BH1	BH2	BH3	BH4	BH5A
Depth	-----	0.2	0.5	0.2	0.1	0.3
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	7/10/2014	7/10/2014	7/10/2014	7/10/2014	7/10/2014
Sample mass tested	g	Approx 40g	Approx 40g	Approx 40g	Approx 40g	Approx 40g
Sample Description	-	Brown coarse-grained soil & rocks	Grey coarse-grained soil & rocks	Brown coarse-grained sandy soil	Brown coarse-grained soil & rocks	Orange coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils					
Our Reference:	UNITS	116867-6	116867-7	116867-8	116867-9
Your Reference	-----	BH5B	BH6	BH7	BH8
Depth	-----	0.5	0.3	0.2	0.5
Date Sampled		26/09/2014	26/09/2014	26/09/2014	26/09/2014
Type of sample		Soil	Soil	Soil	Soil
Date analysed	-	7/10/2014	7/10/2014	7/10/2014	7/10/2014
Sample mass tested	g	Approx 40g	Approx 40g	Approx 40g	Approx 40g
Sample Description	-	Brown clayey soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

MethodID	Methodology Summary
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-012 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Metals-009	Determination of exchangeable cations and cation exchange capacity in soil based on Rayment and Lyons 2011.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell at 25oC in accordance with APHA latest edition 2510 and Rayment & Lyons.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B.
Inorg-008	Moisture content determined by heating at 105+/-5 deg C for a minimum of 12 hours.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in soil						Base Duplicate %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Dichlorodifluoromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Chloromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Vinyl Chloride	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Bromomethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Chloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Trichlorofluoromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,1-Dichloroethene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
trans-1,2-dichloroethene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,1-dichloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	111%
cis-1,2-dichloroethene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
bromochloromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
chloroform	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	132%
2,2-dichloropropane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2-dichloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	118%
1,1,1-trichloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	122%
1,1-dichloropropene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Cyclohexane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
carbon tetrachloride	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Benzene	mg/kg	0.2	Org-014	<0.2	116867-2	<0.2 <0.2	[NR]	[NR]
dibromomethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2-dichloropropane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
trichloroethene	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	109%
bromodichloromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	133%
trans-1,3-dichloropropene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
cis-1,3-dichloropropene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,1,2-trichloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Toluene	mg/kg	0.5	Org-014	<0.5	116867-2	<0.5 0.6	[NR]	[NR]
1,3-dichloropropane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
dibromochloromethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	129%
1,2-dibromoethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
tetrachloroethene	mg/kg	1	Org-014	<1	116867-2	<1 <1	LCS-2	129%
1,1,1,2-tetrachloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
chlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Ethylbenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
bromoform	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
m+p-xylene	mg/kg	2	Org-014	<2	116867-2	<2 <2	[NR]	[NR]
styrene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,1,2,2-tetrachloroethane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
o-Xylene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2,3-trichloropropane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in soil						Base Duplicate %RPD		
isopropylbenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
bromobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
n-propyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
2-chlorotoluene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
4-chlorotoluene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,3,5-trimethyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
tert-butyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2,4-trimethyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,3-dichlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
sec-butyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,4-dichlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
4-isopropyl toluene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2-dichlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
n-butyl benzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2-dibromo-3-chloropropane	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2,4-trichlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
hexachlorobutadiene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
1,2,3-trichlorobenzene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Surrogate Dibromofluorometha	%		Org-014	116	116867-2	119 113 RPD: 5	LCS-2	107%
Surrogate aaa-Trifluorotoluene	%		Org-014	105	116867-2	116 113 RPD: 3	LCS-2	105%
Surrogate Toluene-d8	%		Org-014	100	116867-2	100 97 RPD: 3	LCS-2	97%
Surrogate 4-Bromofluorobenzene	%		Org-014	72	116867-2	79 76 RPD: 4	LCS-2	92%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Soil						Base II Duplicate II %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
TRHC ₆ - C ₉	mg/kg	25	Org-016	<25	116867-2	<25 <25	LCS-2	124%
TRHC ₆ - C ₁₀	mg/kg	25	Org-016	<25	116867-2	<25 <25	LCS-2	124%
Benzene	mg/kg	0.2	Org-016	<0.2	116867-2	<0.2 <0.2	LCS-2	116%
Toluene	mg/kg	0.5	Org-016	<0.5	116867-2	<0.5 0.6	LCS-2	122%
Ethylbenzene	mg/kg	1	Org-016	<1	116867-2	<1 <1	LCS-2	123%
m+p-xylene	mg/kg	2	Org-016	<2	116867-2	<2 <2	LCS-2	130%
o-Xylene	mg/kg	1	Org-016	<1	116867-2	<1 <1	LCS-2	125%
naphthalene	mg/kg	1	Org-014	<1	116867-2	<1 <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	105	116867-2	116 113 RPD: 3	LCS-2	105%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH(C10-C40) in Soil						Base II Duplicate II %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
TRHC ₁₀ - C ₁₄	mg/kg	50	Org-003	<50	116867-2	<50 <50	LCS-2	102%
TRHC ₁₅ - C ₂₈	mg/kg	100	Org-003	<100	116867-2	<100 <100	LCS-2	97%
TRHC ₂₉ - C ₃₆	mg/kg	100	Org-003	<100	116867-2	<100 <100	LCS-2	100%
TRH>C ₁₀ -C ₁₆	mg/kg	50	Org-003	<50	116867-2	<50 <50	LCS-2	102%
TRH>C ₁₆ -C ₃₄	mg/kg	100	Org-003	<100	116867-2	<100 <100	LCS-2	97%
TRH>C ₃₄ -C ₄₀	mg/kg	100	Org-003	<100	116867-2	<100 <100	LCS-2	100%
Surrogate o-Terphenyl	%		Org-003	83	116867-2	82 81 RPD: 1	LCS-2	95%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Naphthalene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	0.2 0.2 RPD: 0	LCS-2	92%
Acenaphthylene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	LCS-2	96%
Phenanthrene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	LCS-2	102%
Anthracene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	LCS-2	99%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Pyrene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	LCS-2	100%
Benzo(a)anthracene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	LCS-2	89%
Benzo(b,j+k) fluoranthene	mg/kg	0.2	Org-012 subset	<0.2	116867-2	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	Org-012 subset	<0.05	116867-2	<0.05 <0.05	LCS-2	109%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012 subset	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012 subset	95	116867-2	97 97 RPD: 0	LCS-2	104%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
HCB	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	91%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	92%
Heptachlor	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	95%
delta-BHC	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	100%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	101%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	88%
Dieldrin	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	99%
Endrin	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	95%
pp-DDD	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	96%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	LCS-2	94%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Surrogate TCMX	%		Org-005	105	116867-2	102 99 RPD: 3	LCS-2	98%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-2	30/09/2014
Arochlor 1016	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	LCS-2	117%
Arochlor 1260	mg/kg	0.1	Org-006	<0.1	116867-2	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		Org-006	105	116867-2	102 99 RPD: 3	LCS-2	100%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Total Phenolics in Soil						Base II Duplicate II %RPD		
Date extracted	-			07/10/2014	116867-1	07/10/2014 07/10/2014	LCS-1	07/10/2014
Date analysed	-			07/10/2014	116867-1	07/10/2014 07/10/2014	LCS-1	07/10/2014
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	116867-1	<5 <5	LCS-1	97%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-6	30/09/2014
Date analysed	-			30/09/2014	116867-2	30/09/2014 30/09/2014	LCS-6	30/09/2014
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	116867-2	4 4 RPD: 0	LCS-6	103%
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	116867-2	<0.4 <0.4	LCS-6	106%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	116867-2	14 15 RPD: 7	LCS-6	107%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	116867-2	29 32 RPD: 10	LCS-6	105%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	116867-2	9 12 RPD: 29	LCS-6	104%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	116867-2	<0.1 <0.1	LCS-6	88%
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	116867-2	21 24 RPD: 13	LCS-6	106%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	116867-2	56 66 RPD: 16	LCS-6	105%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
CEC						Base Duplicate %RPD		
Date extracted	-			30/09/2014	[NT]	[NT]	LCS-1	30/09/2014
Date analysed	-			30/09/2014	[NT]	[NT]	LCS-1	30/09/2014
Exchangeable Ca	meq/100 g	0.1	Metals-009	<0.1	[NT]	[NT]	LCS-1	104%
Exchangeable K	meq/100 g	0.1	Metals-009	<0.1	[NT]	[NT]	LCS-1	103%
Exchangeable Mg	meq/100 g	0.1	Metals-009	<0.1	[NT]	[NT]	LCS-1	101%
Exchangeable Na	meq/100 g	0.1	Metals-009	<0.1	[NT]	[NT]	LCS-1	100%
Cation Exchange Capacity	meq/100 g	1	Metals-009	<1.0	[NT]	[NT]	[NR]	[NR]
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base Duplicate %RPD		
Date prepared	-			[NT]	116867-12	30/09/2014 30/09/2014	LCS-1	30/09/2014
Date analysed	-			[NT]	116867-12	30/09/2014 30/09/2014	LCS-1	30/09/2014
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	116867-12	6.9 6.7 RPD: 3	LCS-1	102%
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	116867-12	76 80 RPD: 5	LCS-1	108%
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	<10	116867-12	<10 <10	LCS-1	81%
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	<10	116867-12	80 84 RPD: 5	LCS-1	87%
QUALITYCONTROL	UNITS	Dup. Sm#		Duplicate		Spike Sm#	Spike % Recovery	
VOCs in soil				Base + Duplicate + %RPD				
Date extracted	-	[NT]		[NT]		116867-5	30/09/2014	
Date analysed	-	[NT]		[NT]		116867-5	30/09/2014	
Dichlorodifluoromethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
Chloromethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
Vinyl Chloride	mg/kg	[NT]		[NT]		[NR]	[NR]	
Bromomethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
Chloroethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
Trichlorofluoromethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,1-Dichloroethene	mg/kg	[NT]		[NT]		[NR]	[NR]	
trans-1,2-dichloroethene	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,1-dichloroethane	mg/kg	[NT]		[NT]		116867-5	119%	
cis-1,2-dichloroethene	mg/kg	[NT]		[NT]		[NR]	[NR]	
bromochloromethane	mg/kg	[NT]		[NT]		[NR]	[NR]	
chloroform	mg/kg	[NT]		[NT]		116867-5	140%	
2,2-dichloropropane	mg/kg	[NT]		[NT]		[NR]	[NR]	
1,2-dichloroethane	mg/kg	[NT]		[NT]		116867-5	129%	
1,1,1-trichloroethane	mg/kg	[NT]		[NT]		116867-5	132%	
1,1-dichloropropene	mg/kg	[NT]		[NT]		[NR]	[NR]	

QUALITYCONTROL VOCs in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Cyclohexane	mg/kg	[NT]	[NT]	[NR]	[NR]
carbon tetrachloride	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzene	mg/kg	[NT]	[NT]	[NR]	[NR]
dibromomethane	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2-dichloropropane	mg/kg	[NT]	[NT]	[NR]	[NR]
trichloroethene	mg/kg	[NT]	[NT]	116867-5	118%
bromodichloromethane	mg/kg	[NT]	[NT]	116867-5	140%
trans-1,3-dichloropropene	mg/kg	[NT]	[NT]	[NR]	[NR]
cis-1,3-dichloropropene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,1,2-trichloroethane	mg/kg	[NT]	[NT]	[NR]	[NR]
Toluene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,3-dichloropropane	mg/kg	[NT]	[NT]	[NR]	[NR]
dibromochloromethane	mg/kg	[NT]	[NT]	116867-5	140%
1,2-dibromoethane	mg/kg	[NT]	[NT]	[NR]	[NR]
tetrachloroethene	mg/kg	[NT]	[NT]	116867-5	140%
1,1,1,2-tetrachloroethane	mg/kg	[NT]	[NT]	[NR]	[NR]
chlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethylbenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
bromoform	mg/kg	[NT]	[NT]	[NR]	[NR]
m+p-xylene	mg/kg	[NT]	[NT]	[NR]	[NR]
styrene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,1,2,2-tetrachloroethane	mg/kg	[NT]	[NT]	[NR]	[NR]
o-Xylene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2,3-trichloropropane	mg/kg	[NT]	[NT]	[NR]	[NR]
isopropylbenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
bromobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
n-propyl benzene	mg/kg	[NT]	[NT]	[NR]	[NR]
2-chlorotoluene	mg/kg	[NT]	[NT]	[NR]	[NR]
4-chlorotoluene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,3,5-trimethylbenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
tert-butyl benzene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2,4-trimethylbenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,3-dichlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
sec-butyl benzene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,4-dichlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
4-isopropyl toluene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2-dichlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
n-butyl benzene	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2-dibromo-3-chloropropane	mg/kg	[NT]	[NT]	[NR]	[NR]
1,2,4-trichlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
hexachlorobutadiene	mg/kg	[NT]	[NT]	[NR]	[NR]

QUALITYCONTROL VOCs in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	SpikeSm#	Spike % Recovery
1,2,3-trichlorobenzene	mg/kg	[NT]	[NT]	[NR]	[NR]
<i>Surrogate</i> Dibromofluorometha	%	[NT]	[NT]	116867-5	110%
<i>Surrogate</i> aaa- Trifluorotoluene	%	[NT]	[NT]	116867-5	115%
<i>Surrogate</i> Toluene-d ₈	%	[NT]	[NT]	116867-5	96%
<i>Surrogate</i> 4- Bromofluorobenzene	%	[NT]	[NT]	116867-5	72%
QUALITYCONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	SpikeSm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
TRHC ₆ - C ₉	mg/kg	[NT]	[NT]	116867-5	135%
TRHC ₆ - C ₁₀	mg/kg	[NT]	[NT]	116867-5	135%
Benzene	mg/kg	[NT]	[NT]	116867-5	124%
Toluene	mg/kg	[NT]	[NT]	116867-5	133%
Ethylbenzene	mg/kg	[NT]	[NT]	116867-5	136%
m+p-xylene	mg/kg	[NT]	[NT]	116867-5	140%
o-Xylene	mg/kg	[NT]	[NT]	116867-5	136%
naphthalene	mg/kg	[NT]	[NT]	[NR]	[NR]
<i>Surrogate</i> aaa- Trifluorotoluene	%	[NT]	[NT]	116867-5	115%
QUALITYCONTROL svTRH(C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	SpikeSm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
TRHC ₁₀ - C ₁₄	mg/kg	[NT]	[NT]	116867-5	115%
TRHC ₁₅ - C ₂₈	mg/kg	[NT]	[NT]	116867-5	116%
TRHC ₂₉ - C ₃₈	mg/kg	[NT]	[NT]	116867-5	107%
TRH>C ₁₀ -C ₁₈	mg/kg	[NT]	[NT]	116867-5	115%
TRH>C ₁₈ -C ₃₄	mg/kg	[NT]	[NT]	116867-5	116%
TRH>C ₃₄ -C ₄₀	mg/kg	[NT]	[NT]	116867-5	107%
<i>Surrogate</i> o-Terphenyl	%	[NT]	[NT]	116867-5	95%

QUALITYCONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
Naphthalene	mg/kg	[NT]	[NT]	116867-5	94%
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	116867-5	97%
Phenanthrene	mg/kg	[NT]	[NT]	116867-5	100%
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	116867-5	99%
Pyrene	mg/kg	[NT]	[NT]	116867-5	100%
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	116867-5	90%
Benzo(b,j,k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	116867-5	109%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	116867-5	105%
QUALITYCONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	116867-5	90%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	116867-5	89%
Heptachlor	mg/kg	[NT]	[NT]	116867-5	90%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	116867-5	98%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	116867-5	98%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	116867-5	86%
Dieldrin	mg/kg	[NT]	[NT]	116867-5	97%
Endrin	mg/kg	[NT]	[NT]	116867-5	91%
pp-DDD	mg/kg	[NT]	[NT]	116867-5	95%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	116867-5	92%

QUALITYCONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%	[NT]	[NT]	116867-5	97%
QUALITYCONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
Arochlor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	[NT]	[NT]	116867-5	117%
Arochlor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%	[NT]	[NT]	116867-5	93%
QUALITYCONTROL Total Phenolics in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	116867-2	07/10/2014
Date analysed	-	[NT]	[NT]	116867-2	07/10/2014
Total Phenolics (as Phenol)	mg/kg	[NT]	[NT]	116867-2	97%
QUALITYCONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	[NT]	[NT]	116867-5	30/09/2014
Date analysed	-	[NT]	[NT]	116867-5	30/09/2014
Arsenic	mg/kg	[NT]	[NT]	116867-5	100%
Cadmium	mg/kg	[NT]	[NT]	116867-5	96%
Chromium	mg/kg	[NT]	[NT]	116867-5	100%
Copper	mg/kg	[NT]	[NT]	116867-5	110%
Lead	mg/kg	[NT]	[NT]	116867-5	94%
Mercury	mg/kg	[NT]	[NT]	116867-5	87%
Nickel	mg/kg	[NT]	[NT]	116867-5	95%
Zinc	mg/kg	[NT]	[NT]	116867-5	92%

QUALITYCONTROL Miscellaneous Inorg - soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	116867-13	30/09/2014
Date analysed	-	[NT]	[NT]	116867-13	30/09/2014
pH 1:5 soil:water	pH Units	[NT]	[NT]	[NR]	[NR]
Electrical Conductivity 1:5 soil:water	µS/cm	[NT]	[NT]	[NR]	[NR]
Chloride, Cl 1:5 soil:water	mg/kg	[NT]	[NT]	116867-13	90%
Sulphate, SO ₄ 1:5 soil:water	mg/kg	[NT]	[NT]	116867-13	100%

Report Comments:

Asbestos: A portion of the supplied sample was sub-sampled for asbestos analysis according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.

Asbestos ID was analysed by Approved Identifier: Paul Ching
Asbestos ID was authorised by Approved Signatory: Paul Ching

INS: Insufficient sample for this test
NA: Test not required
<: Less than

PQL: Practical Quantitation Limit
RPD: Relative Percent Difference
>: Greater than

NT: Not tested
NA: Test not required
LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

CHAIN OF CUSTODY DESPATCH SHEET (2)

Project Name: ENV PLANS - AGED CARE
 Project No: 84503.00
 DP Contact Person: Jessica Little
 Prior Storage: esky / fridge / shelved (circle)
 Do samples contain HBM? YES/NO
 (If YES, then handle, transport and store in accordance with FPM HAZID)

To: Envirolab Services
 12 Ashley Street, Chatswood NSW 2068
 Ph 02 9910 6200
 Attn: Tania Notaras

Sample ID	Sample Type S-soil W-water	Lab ID	Analytes										Notes
			Asbestos	Lead	PH	CEC	Moisture	PHH	PTX				
BH1-0.2	S	1	X	X	X	X							
BH2-0.5	S	2	X	X	X	X							
BH3-0.2	S	3	X	X									
BH4-0.1	S	4	X										
BH5A-0.3	S	5	X	X									
BH5B-0.5	S	6	X		X								
BH6-0.3	S	7	X										
BH7-0.2	S	8	X										
BH8-0.5	S	9	X										
TS	S	10								X			
TB	S	11								X			
PQL (S)	mg/kg												
PQL (W)	mg/L												
PQL = practical quantitation limit, *As per Laboratory Method													
Date relinquished: <u>Sampled 26/9 Sent 29/9</u>													
Total number of samples in container: <u>14</u>													
Results required by: <u>S.T.T</u>													
SAMPLES RECEIVED Please sign and date to acknowledge receipt of samples and return by e-mail Signature: <u>Ray</u> Date: <u>29.9.2014</u> Lab Ref: <u>116867</u>													Send results to: Jessica Little Douglas Partners Pty Ltd Postal Address: E-mail: jessica.little@douglaspartners.com.au

BD 2 / 260914

Please send to MGT - Interlab.

Project Name: *EMU PLAINS - AGED CARE*
 Project No: *84503.00*
 DP Contact Person: **Jessica Little**
 Prior Storage: *esky* / *fridge* / shelved (circle)
 Do samples contain HBM? **YES/NO**
 (If YES, then handle, transport and store in accordance with FPM HAZID)

To: Envirolab Services
 12 Ashley Street, Chatswood NSW 2068
 Ph 02 9910 6200
 Attn: Tania Notaras

[illegible]

Douglas Partners (Syd)
96 Hermitage Road
West Ryde
NSW 2114

Certificate of Analysis



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or
measurements included in this document are traceable
to Australian/national standards.

Attention: **Jessica Little**

Report **433847-S**
Project name EMU PLAINS - AGED CARE 84503.00
Received Date Sep 30, 2014

Client Sample ID			BD2/260914
Sample Matrix			Soil
Eurofins mgt Sample No.			S14-Se22844
Date Sampled			Sep 26, 2014
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound)*	0.5	mg/kg	1.2
2-Fluorobiphenyl (surr.)	1	%	118
p-Terphenyl-d14 (surr.)	1	%	141
Heavy Metals			
Arsenic	2	mg/kg	8.0
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	11
Copper	5	mg/kg	6.0
Lead	5	mg/kg	7.0
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	5.5
Zinc	5	mg/kg	27
% Moisture	0.1	%	6.0

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Polycyclic Aromatic Hydrocarbons	Melbourne	Oct 02, 2014	14 Day
- Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons			
Metals M8	Melbourne	Oct 02, 2014	28 Day
- Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury			
% Moisture	Melbourne	Sep 30, 2014	14 Day
- Method: Method 102 - ANZECC - % Moisture			

Company Name: Douglas Partners (Syd)
Address: 96 Hermitage Road
West Ryde
NSW 2114
Project Name: EMU PLAINS - AGED CARE 84503.00

Order No.:
Report #: 433847
Phone: 02 9809 0666
Fax:

Received: Sep 30, 2014 1:40 PM
Due: Oct 8, 2014
Priority: 5 Day
Contact Name: Jessica Little

Eurofins | mgt Client Manager: Jean Heng

Sample Detail					% Moisture	Polycyclic Aromatic Hydrocarbons	Metals M8
Laboratory where analysis is conducted							
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X
Sydney Laboratory - NATA Site # 18217							
Brisbane Laboratory - NATA Site # 20794							
External Laboratory							
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
BD2/260914	Sep 26, 2014		Soil	S14-Se22844	X	X	X

Eurofins | mgt Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	75			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	70			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	%	70			70-130	Pass	
Benzo(g,h,i)perylene	%	77			70-130	Pass	
Benzo(k)fluoranthene	%	82			70-130	Pass	
Chrysene	%	72			70-130	Pass	
Dibenz(a,h)anthracene	%	74			70-130	Pass	
Fluoranthene	%	80			70-130	Pass	
Fluorene	%	72			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	76			70-130	Pass	
Naphthalene	%	84			70-130	Pass	
Phenanthrene	%	75			70-130	Pass	
Pyrene	%	80			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	92			80-120	Pass	
Cadmium	%	106			80-120	Pass	
Chromium	%	110			80-120	Pass	
Copper	%	108			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Lead			%	103			80-120	Pass	
Mercury			%	96			75-125	Pass	
Nickel			%	112			80-120	Pass	
Zinc			%	112			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M14-Se22657	NCP	%	92			70-130	Pass	
Acenaphthylene	M14-Se22657	NCP	%	97			70-130	Pass	
Anthracene	M14-Se22657	NCP	%	93			70-130	Pass	
Benz(a)anthracene	M14-Se22657	NCP	%	102			70-130	Pass	
Benzo(a)pyrene	M14-Se22657	NCP	%	115			70-130	Pass	
Benzo(b&j)fluoranthene	M14-Se22657	NCP	%	96			70-130	Pass	
Benzo(g,h,i)perylene	M14-Se22657	NCP	%	95			70-130	Pass	
Benzo(k)fluoranthene	M14-Se22657	NCP	%	102			70-130	Pass	
Chrysene	M14-Se22657	NCP	%	97			70-130	Pass	
Dibenz(a,h)anthracene	M14-Se22657	NCP	%	113			70-130	Pass	
Fluoranthene	M14-Se22657	NCP	%	93			70-130	Pass	
Fluorene	M14-Se22657	NCP	%	92			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M14-Se22657	NCP	%	98			70-130	Pass	
Naphthalene	M14-Se22657	NCP	%	91			70-130	Pass	
Phenanthrene	M14-Se22657	NCP	%	95			70-130	Pass	
Pyrene	M14-Se22657	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M14-Oc01139	NCP	%	92			75-125	Pass	
Cadmium	M14-Oc01139	NCP	%	104			75-125	Pass	
Chromium	M14-Oc01139	NCP	%	107			75-125	Pass	
Copper	M14-Oc01149	NCP	%	118			75-125	Pass	
Lead	M14-Oc01139	NCP	%	76			75-125	Pass	
Mercury	M14-Oc01139	NCP	%	92			70-130	Pass	
Nickel	M14-Oc01139	NCP	%	102			75-125	Pass	
Zinc	B14-Se21518	NCP	%	94			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M14-Oc02086	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M14-Oc02086	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M14-Oc02086	NCP	mg/kg	0.60	0.50	15	30%	Pass	
Benz(a)anthracene	M14-Oc02086	NCP	mg/kg	1.7	1.7	3.0	30%	Pass	
Benzo(a)pyrene	M14-Oc02086	NCP	mg/kg	1.4	1.7	21	30%	Pass	
Benzo(b&j)fluoranthene	M14-Oc02086	NCP	mg/kg	0.80	1.2	43	30%	Fail	Q15
Benzo(g,h,i)perylene	M14-Oc02086	NCP	mg/kg	0.90	1.0	13	30%	Pass	
Benzo(k)fluoranthene	M14-Oc02086	NCP	mg/kg	1.3	1.4	13	30%	Pass	
Chrysene	M14-Oc02086	NCP	mg/kg	1.3	1.3	2.0	30%	Pass	
Dibenz(a,h)anthracene	M14-Oc02086	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M14-Oc02086	NCP	mg/kg	4.6	3.6	24	30%	Pass	
Fluorene	M14-Oc02086	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M14-Oc02086	NCP	mg/kg	1.1	1.4	26	30%	Pass	
Naphthalene	M14-Oc02086	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M14-Oc02086	NCP	mg/kg	2.9	2.4	17	30%	Pass	
Pyrene	M14-Oc02086	NCP	mg/kg	3.8	3.2	18	30%	Pass	

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M14-Oc01138	NCP	mg/kg	8.5	6.6	25	30%	Pass
Cadmium	M14-Oc01138	NCP	mg/kg	1.4	1.2	13	30%	Pass
Chromium	M14-Oc01138	NCP	mg/kg	12	12	1.0	30%	Pass
Copper	M14-Oc01139	NCP	mg/kg	110	110	<1	30%	Pass
Lead	M14-Oc01138	NCP	mg/kg	200	230	10	30%	Pass
Mercury	M14-Oc02087	NCP	mg/kg	1.1	1.0	12	30%	Pass
Nickel	M14-Oc01138	NCP	mg/kg	8.7	7.2	20	30%	Pass
Zinc	M14-Oc01148	NCP	mg/kg	170	190	8.0	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins mgt's Acceptance Criteria as stipulated in SOP 05. Refer to Glossary Page of this report for further details

Authorised By

Jean Heng	Client Services
Carroll Lee	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Huong Le	Senior Analyst-Inorganic (VIC)



Dr. Bob Symons Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DESPATCH SHEET (2)

Project Name: EMU PLAINS - AGED CARE
Project No: 24503.00
DP Contact Person: Jessica Little
Prior Storage: esky / fridge / shelved (circle)
Do samples contain HBM? YES/NO
(If YES, then handle, transport and store in accordance with FPM HAZID)

To: Envirolab Services
12 Ashley Street, Chatswood NSW 2068
Ph 02 9910 6200
Attn: Tania Notaras

Sample ID	Sample Type S-soil W-water	Lab ID	Analytes										Notes
			Comb	Vol	PH	CEL	metals	PAH	BTEX				
BH1-0.2	S		X	X	X	X							
BH2-0.5	S		X	X	X	X							
BH3-0.2	S		X	X									
BH4-0.1	S		X										
BH5A-0.3	S		X	X									
BH5B-0.5	S		X		X	X							
BH6-0.3	S		X										
BH7-0.2	S		X										
BH8-0.5	S		X										
TS	S								X				
TB	S								X				
PQL (S)	mg/kg												
PQL (W)	mg/L												

PQL = practical quantitation limit, *As per Laboratory Method
Detection Limit

Date relinquished: Sampled 26/9 Sent 29/9
Total number of samples in container: 14
Results required by: S.T.T
Relinquished by: PT(ES) 30/9/14 12:00

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by e-mail

Signature:

Date: Lab Ref:

Send results to: **Jessica Little**

Douglas Partners Pty Ltd

Postal Address:

ELS Job no: **116876**

E-mail: **jessica.little@douglaspartners.com.au**

BD 2 / 260914

RECEIVED
30 SEP 2014

BY: Sean 1.40

→ Please send to MGT - Interlab.

Sample Receipt Advice

Company name: **Douglas Partners (Syd)**
Contact name: **Jessica Little**
Project name: **EMU PLAINS - AGED CARE 84503.00**
COC number: **Not provided**
Turn around time: **5 Day**
Date/Time received: **Sep 30, 2014 1:40 PM**
Eurofins | mgt reference: **433847**

Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Jean Heng on Phone : (+61) (2) 9900 8400 or by e.mail: JeanHeng@eurofins.com.au

Results will be delivered electronically via e.mail to Jessica Little - jessica.little@douglaspartners.com.au.

Eurofins | mgt Sample Receipt