Douglas Partners
Geotechnics • Environment • Groundwater

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REPORT
on
PHASE 1 CONTAMINATION ASSESSMENT

PICTON HIGH SCHOOL
PROPOSED METALS FABRICATION TRADE SCHOOL
ARGYLE STREET, PICTON

Prepared for
NSW PUBLIC WORKS
DEPARTMENT OF SERVICES, TECHNOLOGY
& ADMINISTRATION

Project 34252.01
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EXECUTIVE SUMMARY

This report details the methodology and results of a Phase 1 contamination assessment undertaken by Douglas Partners Pty Ltd (DP) for part of the Picton High School, proposed Metals Fabrication Trade School, Argyle Street, Picton. The assessment was commissioned by NSW Public Works Department of Services, Technology and Administration, to assist in identifying existing and potential future contamination risks prior to the design and planning of the proposed development.

Picton High School Picton is located approximately 90 km to the south west of the Sydney CBD. The school is currently occupied generally by a number of multi-storey buildings, a car park, and open space areas/ playing fields. Buildings across the school are generally associated with classrooms. The subject Site is an area in the south-western portion of the school, proposed for a Metals Fabrication Trade School, and occupying an area of about 650 square metres (refer Drawing 1, Appendix A).

The scope of the current assessment comprised a review of site history information, a site inspection, limited soil sampling and testing.

A search of the site history showed that the site was mainly used for agricultural or residential purposes up until the late 1950s/ early1960s. The high school has been developed since, with the Site mainly comprising sports courts and open space areas.

On the basis of the site features and historical uses, it is considered that the potential for contamination is generally low. This was confirmed by laboratory testing on a limited number of soil samples, with concentrations of all contaminants analysed below the adopted Site Assessment Criteria (SAC) adopted. Sub-surface conditions across the Site are not expected to vary significantly between sampled locations.

Based on the assessment undertaken it is considered that the Site does not present an unacceptable risk of hazard to human health or the environmental and is environmentally suitable for the proposed development, subject to the following:

- Only limited sampling and testing was carried out, and no sampling was undertaken beneath the existing basketball courts. Should any visual or olfactory indicators of contamination (e.g. asbestos) be identified during initial civil works (i.e. earthworks) DP should be contacted for assessment;
- Prior to the off-site disposal of any excavated surplus material, an appropriate material classification assessment must be conducted by a qualified environmental consultant in accordance with NSW DECC *Waste Classification Guidelines* (2008, updated 2009); and
- No soils are to be imported to the site without prior approval from DP. Any imported materials are to be accompanied by a validation certificate / report stating the suitability of the materials for use on a secondary school site.

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1. INTRODUCTION

This report details the methodology and results of a Phase 1 contamination assessment undertaken by Douglas Partners Pty Ltd (DP) for the Picton High School, proposed Metals Fabrication Trade School, Argyle Street, Picton. The assessment was commissioned by NSW Public Works Department of Services, Technology and Administration, to assist in identifying existing and potential future contamination risks prior to the design and planning of the proposed development.

The objectives of the current Phase 1 contamination assessment were to assess the potential for contamination of the site based on past and present site usage, and to assist in the design and planning of the proposed development.

2. SCOPE OF WORKS

The scope of the current assessment comprised:

- A site history review (from historical aerial photograph records, historical title deeds, WorkCover records on the NSW Dangerous Goods Database, Council Section 149(2 & 5) certificates and a groundwater bore search);

- A site walk over inspection;
- Limited soil sampling and laboratory analysis; and
- Preparation of a Phase 1 Contamination Assessment report.

This report documents the results of each of these tasks and provides comments on the potential for contamination of the subsurface, and the need for further investigations and/or management (if required).

3. SITE IDENTIFICATION AND LOCATION

3.1 Site Location

Picton High School Picton is located approximately 90 km to the south west of the Sydney CBD (Figure 1, Appendix A). The School is bordered by Argyle Street, open space areas and residential properties. The school is currently occupied generally by a number of multi-storey buildings, a car park, and open space areas/ playing fields. Buildings across the school are generally associated with classrooms. The current investigation is focused on the area of the proposed Metals Fabrication Trade School, located in the south western portion of the school (Drawing 1, Appendix A).

The entire school occupies a total area of approximately 8.6 hectares (ha), with the subject Site comprising an approximate area of 0.065 ha (i.e. 650 square metres).

The land use surrounding the Site includes:

- North – School classrooms are located directly north of the Site area, beyond which are residential premises.
- East – Open space / playing fields are located to the east of the Site area. Located to the south east is the Wollondilly Animal Shelter.
- South – Open space / playing fields are located to the south of the Site.

- West – A school building is located to the west of the Site, beyond which is Argyle Street and open space.

4. GEOLOGY, TOPOGRAPHY AND HYDROGEOLOGY

Reference to the *Wollongong-Port Hacking* 1:100 000 Series Geological Sheet indicates that the Site is underlain by Ashfield Shale of Triassic age. Ashfield Shale typically comprises dark grey to black shale, siltstone and laminite which weathers to a residual clay profile of medium to high plasticity.

Stonequarry Creek runs to the east of the Site. Redbank Creek was observed to the north of the school. Several dams were observed to the south of the Site.

4.1 Groundwater Bore Search

A groundwater bore search of the Department of Water and Energy website database (previously held by the Department of Natural Resources) was conducted on 11 August 2010. Four groundwater bores were located within in a 1 km radius of the site. Work summaries were only available for one of the bores. Details are provided in Appendix B. Bore GW105336 was noted to be used for recreational purposes. The standing water level was noted to be 21.0 m bgl. Drillers logs indicated that the lithology was generally comprised of topsoil with broken and decomposed shale, then sandstone.

5. SITE HISTORY

A review of site history was conducted based on historical aerial photos, historical title deeds, a WorkCover NSW Dangerous Goods database search, a search for regulatory Notices (issued under *Contaminated Land Management (CLM) Act 1997* and *Protection of the Environment Operations Act 1997 (POEO Act)*), and a review of Council Section 149(2) certificates.

5.1 Aerial Photographic Record

Historical aerial photographs for the years 1955, 1969, 1984, 1994 and 2009 were obtained from the NSW Department of Lands Office. 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, whilst copies of the aerial photographs are provided in Appendix C.

1955 – The photograph shows that the Site is mainly comprised of paddocks / open space, most likely used for grazing or some other agricultural purpose. A building appears on the property towards the south western corner. No school buildings are present. Stonequarry Creek appears to the east of the Site, with residential and Redbank Creek located further to the north of the Site. The remaining surrounding area appears to be cleared / agricultural land.

1969 – The Site appears to be much the same as in the 1955 photograph. To the north of the Site, buildings assumed to be school buildings (still evident in the 2002 photograph) have been constructed. The surrounding land appears to be agricultural, with increasing rural development to the north.

1984 – The Site is comprised of 2 sports courts and grassed open space associated with the school. A line of trees appears on the southern and eastern boundaries. Additional buildings associated with the school have now been constructed towards the north. Increased (primarily rural) development has occurred in the area, with higher density residential properties being evident to the north. A large commercial property is now located to the north west of the Site. The majority of the surrounding area appears to still be mainly agricultural.

1994 –The Site area appears to be covered by basketball courts and open space/ grassed areas. Some vegetation is observed across the Site boundaries. A rectangular building is located to the west of the Site. Buildings associated with the school, as well as open space areas / playing fields are located to the north. Properties to the west are observed to be agricultural land / open spaces. A mixture of commercial / industrial / residential is to the north.

2009 – The photograph shows that the Site consists of mainly grass and two basketball courts. A small number of trees are present within the Site area. The surrounding school area consists largely of school buildings to the north, along with some hardstand areas and a car park. A large playing field and open space area was identified to the east of the Site. Towards the south eastern corner of the Site, the Wollondilly Animal Shelter is now present. To the south of the Site is a large open space area, beyond which is Wonga Road. A large building exists to the west, beyond which is Remembrance Drive. A large paddock with a dam exits on the western side of the road. Towards the north west is a large commercial / industrial complex with 2 large rectangular buildings.

A small number of residential properties were identified to the south and west of the Site, however these areas appeared to be less densely populated than the northern area.

Overall, the aerial photographs indicate that the site was used primarily for rural / grazing / agricultural uses until the late 1950's/ early 1960's. From the 1960's onwards, development of Picton High School increased over time.

5.2 Historical Title Deeds Search

A historical title deeds search was undertaken for the site. Searches were undertaken by Mark Groll, Service First Registration Pty Ltd on the entire school property. Table 1 below summarises the reported title deed information. A full copy is also provided in Appendix D.

Table 1 - Historical Title Deeds

Lot 2, Deposited Plan 520158 – Area A		
Date of Acquisition and term held	**Registered Proprietor(s) & Occupations where available**	**Potential Use**
30.01.1894 (1894 to 1924)	Florence Maude Teale (Spinster)	Residential
18.01.1924 (1924 to 1927)	Edward James Fairley (Farmer)	Agriculture
Lot 2, Deposited Plan 520158 – Area B		
Date of Acquisition and term held	**Registered Proprietor(s) & Occupations where available**	**Potential Use**
04.06.1894 (1894 to 1923)	Ada Mary Bradbury (Married Woman)	Residential
21.12.1923 (1923 to 1924)	George Bradbury (Gentleman)	Residential
18.01.1924 (1924 to 1927)	Edward James Fairley (Farmer)	Agriculture

Lot 2, Deposited Plan 520158 – Whole Subject Land (continued)		
Date of Acquisition and term held	**Registered Proprietor(s) & Occupations where available**	**Potential Use**
20.10.1927 (1927 to 1951)	Margaret Agnes Fairley (Married Woman)	Residential
03.05.1951 (1951 to 1956)	Gordon Lachlan Nicholson (or Nicolson) (Farmer) Alfred George Turner (Carrier) Edward John Fairley (Farmer)	Agriculture
16.08.1956 (1956 to 1989)	Her Most Gracious Majesty Queen Elizabeth the Second	Public Land
05.09.1989 (1989 to date)	Minister for Education	School

The title deeds are generally consistent with the aerial photos, with the school titles for the most part (post 1920s) being held by agricultural or residential owners. Since the late 1950's / early 1960's, the school area was gradually developed into the Picton High School.

5.3 WorkCover NSW Dangerous Goods Database

A search of the NSW WorkCover dangerous goods database indicated that there were two above-ground LPG storage tanks registered at the school. WorkCover search documentation is attached in Appendix I.

No underground storage tanks (USTs) were found to have been registered by WorkCover NSW.

5.4 Council Section 149(2) Planning Certificates

The Section 149 Planning Certificates were obtained from Wollondilly Council and are dated 10 August 2010 (provided in Appendix F). The Section 149 certificate indicated that the subject site is not reported to be affected by matters arising under the *Contaminated Land Management Act, 1997.*

5.5 Regulatory Notices Search

The NSW Department of Environment Climate Change and Water (DECCW) publishes records of contaminated sites under Section 58 of the CLM Act 1997 on a public database accessed via

the Internet. The Notices relate to investigation and/or remediation of site contamination considered to pose a significant risk of harm under the definition in the CLM Act. More specifically, the Notices cover the following:

- actions taken by the EPA under Section 15, 17, 19, 231, 23, 26 or 28 of the CLM Act;
- actions taken by the EPA under Section 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 declaration or order.

A search of the public database on 11 August 2010 revealed that the subject site is not listed. There are also no listed sites within close proximity to the site.

It should be noted that the DECCW record of Notices for Contaminated Land does not provide a record of all contaminated land in NSW. At the time of preparing this report, a total of 291 sites in NSW were registered in the database.

The NSW DECCW also issues environmental protection licences to the owners or operators of various industrial premises under the *Protection of the Environment Operations Act 1997* (POEO Act). Licence conditions relate to pollution prevention and monitoring, and cleaner production through recycling and reuse and the implementation of best practice.

The NSW DECCW has made available a public register of licences under Section 308 of the *Protection of the Environment Operations Act 1997* (POEO Act). The register contains:

- environment protection licences;
- applications for new licences and to transfer or vary existing licences;
- environment protection and noise control notices;
- convictions in prosecutions under the POEO Act;
- the results of civil proceedings;
- licence review information;
- exemptions from the provisions of the POEO Act or Regulations;

- 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 licenses were listed within the site.

Five Licences have been issued for premises in the surrounding area under the POEO Act the details of which are as follows:

- 422 Wollondilly Abattoirs Pty Limited, 48 Koorama Road, Picton. Licence type: Premises. Activity: Slaughtering or processing of animals;
- 4390 Wollondilly Shire Council – Waterways. Activity: Other Activities;
- 10555 Sydney water Corporation Picton Sewage treatment Plant. Remembrance Drive, Picton. Licence Type: Premises. Activity: Sewage Treatment – processing by small plants (<10,000ML per year);
- 11450 WJ Bond Pty Limited, 19 Coldenham Road, Picton. Licence Type: Premises. Activity: Transport of category 1 trackable waste, transport of category 2 trackable waste; and
- 11892 Earth Civil (NSW) Pty Ltd. Activity: Transport of category 1 trackable waste, transport of category 2 trackable waste.

It is noted that each of these premises is located sufficient distance from the Site and are therefore not likely to have a significant impact on the contamination status of the Site.

6. SITE INSPECTION

A site inspection was undertaken by a representative of DP on 9 August 2010. The site is an approximate rectangular shaped area with maximum north–south and east–west dimensions of about 25 m and 26 m, respectively. The ground surface slopes gently between RL 215.5 and RL 216.5 relative to Australian Height Datum (AHD) except adjacent to the southern boundary where the surface falls up to 1.2 m between RL 215.5 and RL 216.7 to the north at slopes ranging between 10^{o} to 14^{o}. It appears that a cut and fill operation has been carried out to

create the level surface across most of the site. The southern boundary appears to be cut. The north-eastern area appears to be filled.

The site includes and is bounded by asphalt covered basketball courts and grassed playground areas. It is bounded to the south by a rural property that is understood to have previously been used for agricultural purposes.

7. AREAS OF ENVIRONMENTAL CONCERN

The areas of environmental concern identified during the site history review, the processing of anecdotal information and the site inspection are as follows:

Potential for contamination and importation of fill material:

- The Site has previously been used for residential and agricultural purposes, prior to the 1960s. The former building (presumed residence) on the Site may have contained fibrous cement product. Demolition of these buildings could have resulted in the burial of fibrous cement (potential asbestos) waste beneath the Site.
- The extent of fill across the Site used for site formation processes and levelling is unknown. Fill may have potentially been imported onto the Site in order to level the sports playing fields. Due to the unknown source of fill material, the fill may have the potential for contamination.

Agricultural/Market Gardens

Site history indicates that the Site and surrounding areas may have been used for agricultural purposes in the past. It is therefore possible that contamination from the use of pesticides and fertilisers could remain on site. Common pesticide contaminants include organochlorine pesticides (OCPs) and organophosphorus pesticides (OPPs). A range of heavy metals can also be associated with pesticides and fertilisers. These contaminants would be mainly concentrated in the surficial, topsoil horizon.

The potentially current use of synthetic and organic fertilisers on playing fields and for weed control (e.g. nitrogen for plant growth) on the Site may have a cumulative effect over time.

8. SAMPLING AND ANALYTICAL REGIME

8.1 Sampling and Analysis

On the basis of the EPA's publication *Sampling Design Guidelines*, a minimum of 6 sampling locations are recommended to 'characterise' a site of 0.065 hectares. Due to the current assessment being preliminary in nature, with a view to assess potential contaminants rather than 'characterisation', DP has completed a total of 4 test bore locations.

Fieldwork was undertaken on the 9 August 2010, which included completion of 4 test bores using a mini-excavator auger and sampling rig, with 110 mm spiral flight augers. Due to the presence of the fenced basketball court, a significant proportion of the Site area could not be accessed with a mini-excavator drilling rig.

Test bores are referenced as TB. Drilling was completed to depths ranging from 1.2 m and 1.9 m. Sampling locations were determined in order to assess the general sub-surface characteristics of the Site, given the limited bore numbers. The fieldwork was carried out in conjunction with a geotechnical investigation (DP report No. 34252.00).

The sampling locations are shown on Drawing 1, Appendix A. Based on the potential for contamination (Section 7) and the Site observations, sample locations were spaced across the Site to maximise coverage using the limited bore numbers.

Given the most likely nature of contamination (i.e. surficial application) 2 of the recovered surface samples were selected for laboratory analysis, whilst 2 fill samples from the remaining bores were selected for analysis. The analytical regime adopted was as follows:

- Heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Zn) – 4 samples
- Total Petroleum Hydrocarbons (TPH) – 4 samples

- Benzene, Toluene, Ethylbenzene and Xylene (BTEX) – 4 samples
- Polycyclic Aromatic Hydrocarbons (PAH) – 4 samples
- Phenols – 4 samples
- Polychlorinated Biphenyls (PCB) – 4 samples
- Organochlorine Pesticides (OCP) – 4 samples
- Asbestos – 4 samples.

8.2 Field Quality Assurance and Quality Control (QA/QC)

Environmental sampling was performed according to standard operating procedures outlined in the DP *Field Procedures Manual*. All sampling data was recorded on DP chain-of-custody (COC) sheets. The general soil sampling procedure comprised:

- Decontamination of all 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;
- Transfer of samples into laboratory-prepared glass jars and capping immediately with teflon-lined lids;
- Labelling of sample containers with individual and unique identification, including project number, sample location and sample depth; and
- Placement of the sample jars and replicate sample bags into a cooled, insulated and sealed container for transport to the laboratory.

8.3 Laboratory QA/QC

The analytical laboratory is NATA accredited and is required to conduct in-house QA/QC procedures. These are normally incorporated into every analytical run and include reagent blanks, spike recovery, surrogate recovery and duplicate samples. These results are included in the laboratory reports in Appendix H.

9. DATA QUALITY OBJECTIVES

The scope of the Preliminary Phase 1 Contamination Assessment has been devised generally in accordance with the seven step data quality objective (DQO) process, as defined in Australian Standard *Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil Part 1: Non-volatile and Semi-volatile Compounds* (AS 4482.1 – 2005).

The seven step DQO process is as follows:

1) State the Problem

2) Identify the Decision

3) Identify Inputs to the Decision

4) Define the Boundary of the Assessment

5) Develop a Decision Rule

6) Specify Acceptable Limits on Decision Errors

7) Optimise the Design for Obtaining Data

1. State the Problem

A single storey building is proposed to form the Metals Fabrication Trade School at Picton High School. The proposed building is approximately 20 m x 25 m in plan dimensions. Limited sampling was requested in order to assess whether a contamination issue exists on the Site.

2. Identify the Decision

The Site history suggests that fill material may have been imported onto the Site for levelling purposes. The Site and surrounding are have also previously been used for agricultural activities, which could lead potentially to contamination issues.

The results of the soil investigation will be used to assess the likely contamination status of the Site, and potential risks posed to human health and the environment. Based on the desktop study it is considered that the principal contaminants of concern are heavy metals (particularly arsenic), PAH, OCP and asbestos. As such, the analysis will focus on these contaminants, however other common contaminants (TPH/BTEX, PCB and phenols) were also addressed.

The soil analytical data is to be compared to the Site Assessment Criteria (SAC) for parks, recreational open space, playing fields including secondary schools land use. The optimal situation is for soil/fill materials remaining on the site to be within the adopted SAC, therefore forming a suitable substrate without requiring management. The soil health-base investigation levels (HILs) sourced from the DECC (now DECCW) publication *Guidelines for the NSW Site Auditor Scheme* (2006), Appendix II, Column 3, are summarised in Table 3.

3. Identify Inputs to the Decision

The primary inputs that will be utilised to assess the contamination status of the Site are:

- Available site information regarding activities undertaken on the site and the surrounding area;
- The local geology, topography and hydrology;
- Potential contaminants;
- Published guidelines for assessing soil quality; and
- Field observations / measurement and analytical results from the current assessment.

4. Define the Boundary of the Assessment

The assessment is conducted in the south western portion of the Picton High School, Picton. The boundary of the assessment is defined by the real property descriptions given in Section 6. The Site locality plan is depicted on Figure 1, Appendix A. The Site layout plan is depicted on Drawing 1, Appendix A.

5. Develop a Decision Rule

The decision rule is the comparison of the analytical results against relevant published guideline criteria. These assessment criteria are addressed in Table 3, Section 10.

6. Specify Acceptable Limits on Decision Errors

In order to ensure the quality of the soil data, appropriate and adequate quality assurance and quality control (QA/QC) measures and evaluations should be incorporated into the sampling and testing regime.

One QA/QC sample was incorporated into the assessment.

The laboratory QA/QC regime is to comply with the following data quality indicators (DQIs):

- Conformance with specified holding times;
- Accuracy of spiked samples within the laboratory's acceptable range (typically 70-130% for inorganic contaminants and greater for some organic contaminants); and
- Laboratory duplicates and replicates samples will have a precision average of +/- 30% relative percentage difference (RPD) for inorganic analytes and +/- 50% RPD for organic analytes.

7. Optimise the Design for Obtaining Data

In order to ensure the representativeness of the data base, sampling locations were distributed in a generally systematic pattern, in order to maximise the coverage across the Site given the limited number of bores. However, due to access constraints, no samples were collected in the vicinity of the basketball courts. The sampling locations are presented on Drawing 1, Appendix A.

Table 2 summarises the DQIs and the procedures designed to enable achievement of the DQIs. For reference purposes, relevant sections of the report are also identified.

Table 2 - Data Quality Indicators

DQI	Achievement Evaluation Procedure
Documentation completeness	Completion of field and laboratory chain-of-custody documentation, completion of test bore report sheets in Appendix H.
Data completeness	Sampling density based on DP's proposal, only preliminary at this stage.
Data comparability	Use of NATA accredited laboratories, use of consistent sampling techniques (Appendix G).
Data representativeness	Sampling on a generally systematic basis to obtain a reasonable site coverage (Section 8)
Precision and accuracy for sampling and analysis	Achievement of laboratory QC criteria (Appendix G).

Discussion of how the sampling and analysis programme met the DQIs is provided in Appendix G.

10. SITE ASSESSMENT CRITERIA

The significance of the results in regards to the levels of contaminants in the soils with respect to the Site's suitability for parks, recreational open space, playing fields including secondary schools use is based on the threshold concentrations given in Table 3 below. The SAC have been sourced from the following Guidelines:

i) NSW DECC *Guidelines for the NSW Site Auditor Scheme 2nd edition* (2006);

ii) NSW EPA *Guidelines for Assessing Service Station Sites (1994);* and

iii) National Environment Protection Measure (NEPM) – *Assessment of Site Contamination*, 1999 (National Environment Protection Council, NEPC).

Table 3 - Site Acceptance Criteria for Soil

Contaminant	SAC (mg/kg)	Rationale
TPH[a]		[a] NSW EPA[1] Contaminated Sites *Guidelines for Assessing Service Station Sites* (1994) threshold concentrations for sensitive land use-soils.
$C_6 – C_9$	65	
$C_{10} – C_{36}$	1000	
BTEX[a]		
Benzene	1	
Toluene	1.4	
Ethylbenzene	3.1	
Xylene	14	
Metals	**HIL**	NSW DEC[2] Contaminated Sites *Guidelines for the NSW Site Auditor Scheme* (2nd edition) (2006) Appendix II, Soil Investigation Levels for Urban Redevelopment Sites in NSW Heath-based investigation levels for Parks, recreational Open Space, Playing Fields including Secondary Schools sites (HIL Column 3).
Arsenic (total)	200 mg/kg	
Cadmium	40 mg/kg	
Chromium	24%	
Copper	2,000 mg/kg	
Lead	600 mg/kg	
Mercury	30 mg/kg	
Nickel	600 mg/kg	
Zinc	14,000 mg/kg	
Total Phenols	17,000	
PAH		
Total	40	
Benzo(a)Pyrene	2	
PCB	20	
OCP		
aldrin + dieldrin	20	
chlordane	100	
DDT (including DDD, DDE, DDT)	400	
Heptachlor	20	
Asbestos	No asbestos present in soil at the surface	Correspondence from NSW EPA[1] Director of Contaminated Sites to Accredited Site Auditors

1 NSW EPA is now part of the NSW Department of Environment, Climate Change and Water (DECCW).

2. now administered by the DECCW

No soil criteria is currently available for Organophosphate Pesticides (OPP) and Volatile Organic Compounds (VOC). In the interim, the laboratory practical quantitation limits (PQL) have been adopted as an initial screen and SAC. Exceedance of the PQL will trigger further investigations into acceptable levels.

Conformance with the SAC will be attained when either all sample results meet the specified SAC, or (for non-volatile contaminants) when:

- the 95% upper confidence limit (UCL) average concentration of each contaminant is below the SAC;
- no individual exceedance is greater than 2.5 times the SAC; and
- the standard deviation is less than 50% of the SAC thresholds.

11. RESULTS

11.1 Field Observations – Soils

Details of the conditions encountered in the boreholes are presented in on the test bore logs in Appendix E. Notes defining classification methods and descriptive terms used in logging the boreholes are also given in the appendix.

The material strata encountered, in increasing depth order, are:

TOPSOIL: a brown clay silt topsoil layer to depths ranging from 0.05 m to 0.15 m and of filling or natural provenance;

FILLING: variably and poorly compacted, brown, gravelly clay and slightly gravelly silty clay with some shale gravel and cobbles, extending to depths ranging from 0.25 m to 0.8 m in Boreholes 1 and 2;

RESIDUAL CLAYS: stiff to very stiff, orange brown and light grey clays, extending to depths ranging from 0.7 m to 1.4 m;

WEATHERED SILTSTONE: Extremely low to very low strength, light grey siltstone with some sandstone laminate grading to siltstone of at least low strength at depths ranging from 1.2 m to 1.9 m.

No free groundwater was encountered during drilling.

11.2 Analytical Results

The laboratory results of the assessment for soil samples are summarised in Table 4. The NATA accredited laboratory reports for the soil samples are provided in Appendix H. Several samples returned slightly elevated concentrations for arsenic, chromium, copper, lead, nickel, zinc and total phenols. However, all soil samples analysed returned results below the adopted SAC.

Table 4 - Results of Soil Analysis (All results in mg/kg unless otherwise) stated

Sample ID	Soil Type	Heavy Metals								PAH		TPH		BTEX				OCP [2]				PCB (Total)	Total Phenolics (as Phenol)
		As	Cd	Cr[1]	Cu	Pb	Hg	Ni	Zn	Benzo(a)pyrene	Total PAH	C6-C9	C10-C36	Benzene	Toulene	Ethyl-benzene	Total Xylenes	Heptachlor	Aldrin + Dieldrin	Chlordane (trans + cis)	DDT + DDD + DDE		
BH1/0.3-0.4	Fill	5	<0.5	33	14	23	<0.1	15	63	<0.05	<PQL	<25	<250	<0.5	<0.5	<1.0	<2.0	<0.1	<0.1	<0.1	<0.1	<PQL	<5.0
BH3/0.0-0.1	Topsoil/Fill	7	<0.5	31	21	40	<0.1	14	41	<0.05	<PQL	<25	<250	<0.5	<0.5	<1.0	<2.0	<0.1	<0.1	<0.1	<0.1	<PQL	<5.0
BH3/0.2-0.3	Fill	6	<0.5	32	18	28	<0.1	15	25	<0.05	<PQL	<25	<250	<0.5	<0.5	<1.0	<2.0	<0.1	<0.1	<0.1	<0.1	<PQL	12
BH4/0.0-0.1	Topsoil/Fill	5	<0.5	23	13	23	<0.1	14	28	<0.05	<PQL	<25	<250	<0.5	<0.5	<1.0	<2.0	<0.1	<0.1	<0.1	<0.1	<PQL	<5.0
BD090810 (parent sample BH4/0.0-0.1)	Topsoil/Fill	5	<0.5	17	12	19	<0.1	13	27	<0.05	<PQL	<25	<250	<0.5	<0.5	<1.0	<2.0	<0.1	<0.1	<0.1	<0.1	<PQL	<5.0
RPD %		-	-	30	8	19	0	7	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soil Acceptance Criteria (SAC) [2]																							
Parks, recreational open space, playing fields		200	40	200	2000	600	30	600	14000	2	40	65 [3]	1000 [3]	1 [3]	1.4 [3]	3.1 [3]	14 [3]	20	20	100	400	20	17000

Notes:

1 All Chromium are assumed to exist in the stable Cr(III) oxidation state, as Cr(VI) will be too reactive and unstable under the normal environment

2 *Guidelines for the Site Auditor Scheme* (2nd Edition) (2006) Appendix II, Soil Investigation levels for Urban Redevelopment Sites in NSW, Health-based Investigation Levels for Parks, Recreational Open Space, Playing Fields including Secondary Schools Sites (HIL Column 3)

3 NSW EPA (1994) Service Station Guidelines - for sensitive landuse

5 where analytical results below laboratory practical quantitation limit (PQL) for all compounds, results quoted as <PQL

\- not defined/ not analysed/ not applicable

NAD No Asbestos Detected at reporting limit of 0.1 g/kg, no respirable fibres detected

Bold exceeds SAC

12. CONCLUSIONS AND RECOMMENDATIONS

At the time of the investigation the Site was part of Picton High School, which is occupied by buildings, pavements, open spaces and sports ovals. Some levelling of the school grounds, including within the Site, had been carried out in the past. Historical uses of the Site, prior to the development of the school, included agricultural and residential.

On the basis of the site features and historical uses, it is considered that the potential for contamination is generally low. This was confirmed by laboratory testing on a limited number of soil samples, with all contaminants analysed below the adopted Site Assessment Criteria (SAC) adopted. Sub-surface conditions across the Site are not expected to vary significantly between sampled locations.

Based on the assessment undertaken it is considered that the Site does not present an unacceptable risk of hazard to human health or the environmental and is environmentally suitable for the proposed development, subject to the following:

- Only limited sampling and testing was carried out, and no sampling was undertaken beneath the existing basketball courts. Should any visual or olfactory indicators of contamination (e.g. asbestos) be identified during initial civil works (i.e. earthworks) DP should be contacted for assessment;
- Prior to the off-site disposal of any excavated surplus material, an appropriate material classification assessment must be conducted by a qualified environmental consultant in accordance with NSW DECC *Waste Classification Guidelines* (2008, updated 2009); and
- No soils are to be imported to the site without prior approval from DP. Any imported materials are to be accompanied by a validation certificate / report stating the suitability of the materials for use on a secondary school site.

13. LIMITATIONS OF THIS REPORT

The scope of the assessment and consulting services undertaken by DP were limited to those detailed in the proposal dated 3 August 2010 and accepted by NSW Public Works Department of Services, Technology and Administration.

DP's assessment is necessarily based upon the result of a historical review, review of available information, site inspection and limited sampling which was set out in the proposal. DP cannot provide unqualified warranties with regards to contamination nor does DP assume any liability for site conditions not observed or accessible during the time of the investigations.

Despite all reasonable care and diligence site characteristics may change over time due to activities, such as spillages of contaminating substances. These changes may occur subsequent to DP's investigations and assessment.

This report, its associated documentation and the information herein have been prepared solely for the use of NSW Public Works Department of Services, Technology and Administration. Any reliance assumed by third parties on this report shall be at such parties' own risk.

DOUGLAS PARTNERS PTY LTD

Kate Graham
Environmental Scientist

Reviewed by:

Paul Gorman
Senior Associate

APPENDIX A
Figures

Douglas Partners
Geotechnics · Environment · Groundwater

CLIENT: NSW Public Works		
DRAWN BY: PSCH	SCALE: As shown	OFFICE: Sydney
APPROVED BY:		DATE: 19.8.2010

TITLE: **Location of Test Bores**
Proposed Picton Metals Fabrication School
480 Argyle Street, PICTON

PROJECT No:	34252
DRAWING No:	1
REVISION:	A

P:\34252.00 PICTON, Trade and Engineering School GIR\Drawings\34252_1.dwg, 6/10/2010 2:39:07 PM

APPENDIX B
Groundwater Bore Data

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Wednesday, August 11, 2010

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW105336

Works Details (top)

GROUNDWATER NUMBER	GW105336
LIC-NUM	10BL161175
AUTHORISED-PURPOSES	RECREATION (GROUNDWATER)
INTENDED-PURPOSES	RECREATION (GROUNDWATER)
WORK-TYPE	Bore
WORK-STATUS	
CONSTRUCTION-METHOD	Rotary
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	2003-03-10
FINAL-DEPTH (metres)	130.00
DRILLED-DEPTH (metres)	130.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	PICTON BOWLING CLUB
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	21.00
SALINITY	
YIELD	4.50

Site Details (top)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6216879.00
EASTING	279817.00
LATITUDE	34 9' 57"
LONGITUDE	150 36' 41"
GS-MAP	

AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	CAMDEN
PARISH	PICTON
PORTION-LOT-DP	1 879284

Licensed (top)

COUNTY	CAMDEN
PARISH	PICTON
PORTION-LOT-DP	1 879284

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter; ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	35.10	200			Rotary Air
1		Hole	Hole	35.10	130.00	162			Rotary Air
1	1	Casing	PVC Class 6	-0.30	41.10	158			C: 0-35.1m; Glued; Driven into Hole

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
31.00	31.20	0.20		17.00		0.13	35.00	0.50	4400.00
77.00	77.30	0.30		21.00		1.18	80.00	0.50	Fresh
83.80	84.00	0.20		21.00		1.75	85.00	0.50	Fresh
108.00	108.40	0.40		21.00		1.50	115.00	0.50	Fresh
124.00	124.40	0.40		21.00		4.50	130.00	0.50	Fresh

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.40	0.40	TOPSOIL		
0.40	1.50	1.10	BROKEN SHALE		
1.50	7.50	6.00	SHALE DECOMPOSED		
7.50	35.10	27.60	BLACK AND GREY SHALE		

35.10	130.00	94.90	SANDSTONE WITH SMALL BANDS SHALE

APPENDIX C
Aerial Photographs

N

Aerial Photographs - 2009 Preliminary Phase 1 Contamination Assessment Picton High School	Project 34252.01	August 2010	Figure 1

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N

Aerial Photographs - 1994 **Preliminary Phase 1 Contamination Assessment** **Picton High School**	**Project** **34252.01**	**August** **2010**	**Figure** **2**

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Aerial Photographs - 19 **Preliminary Phase 1 Contamination Assessment** **Picton High School**	**Project** **34252.01**	**August** **2010**	**Figure** **3**

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Aerial Photographs - 1969 **Preliminary Phase 1 Contamination Assessment** **Picton High School**	**Project** **34252.01**	**August** **2010**	**Figure** **4**

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Aerial Photographs - 1955 **Preliminary Phase 1 Contamination Assessment** **Picton High School**	**Project** **34252.01**	**August** **2010**	**Figure** **5**

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APPENDIX D
Historical Land Titles

Service First Registration Pty Ltd

ACN: 108 037 029
Ph: 02 9233 1314
Fax: 9233 2878

Suite 102, Level 1, 64 Castlereagh Street
Sydney 2000
PO Box 1539 Sydney 2000
DX 189 Sydney

Summary of Owners Report

LPMA **Sydney**

Re: Picton High School

Description: - Lot 2 D.P. 520158

As regards the part marked (A) on the attached cadastre

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
30.01.1894 (1894 to 1924)	Florence Maude Teale (Spinster)	Vol 1118 Fol 2
18.01.1924 (1924 to 1927)	Edward James Fairley (Farmer)	Vol 1118 Fol 2

As regards the part marked (B) on the attached cadastre

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
04.06.1894 (1894 to 1923)	Ada Mary Bradbury (Married Woman)	Vol 1130 Fol 31
21.12.1923 (1923 to 1924)	George Bradbury (Gentleman) (Transmission Application not investigated)	Vol 1130 Fol 31
18.01.1924 (1924 to 1927)	Edward James Fairley (Farmer)	Vol 1130 Fol 31

Search continued as regards the whole of the subject land

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
20.10.1927 (1927 to 1951)	Margaret Agnes Fairley (Married Woman)	Vol 1118 Fol 2 & Vol 1130 Fol 31
03.05.1951 (1951 to 1956)	Gordon Lachlan Nicholson (or Nicolson) (Farmer) Alfred George Turner (Carrier) Edward John Fairley (Farmer)	Vol 1118 Fol 2 & Vol 1130 Fol 31
16.08.1956 (1956 to 1989)	Her Most Gracious Majesty Queen Elizabeth the Second	Vol 1118 Fol 2 & Vol 1130 Fol 31 Now 2/520158
05.09.1989 (1989 to date)	# Minister for Education	2/520158

# Denotes Current Registered Proprietor

Yours Sincerely
Mark Groll
12 August 2010
(Ph: 0412 199 304)

Email: grolly1@bigpond.net.au

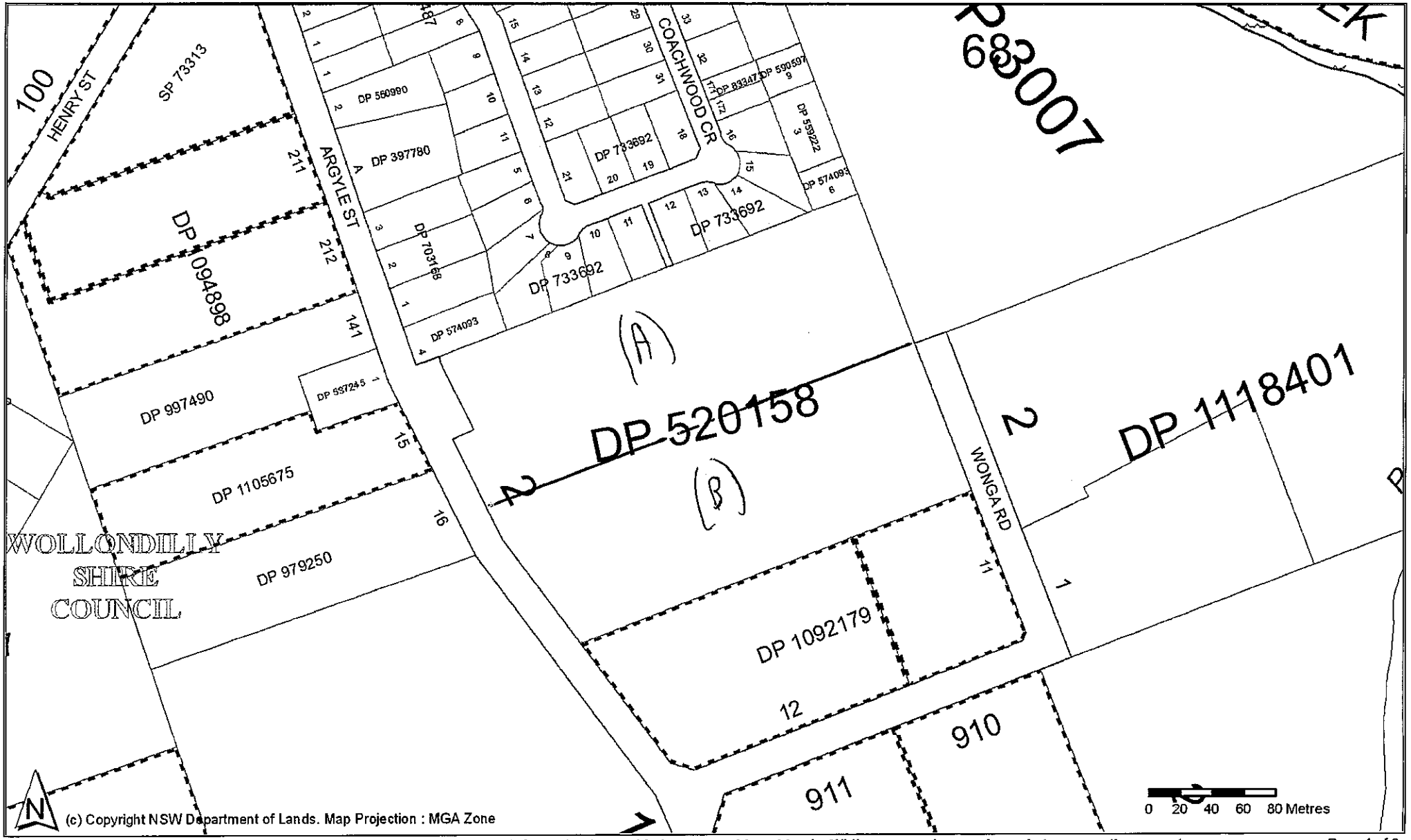
Department of Lands
Reliable from the ground up

Cadastral Records Enquiry Report

Ref : surv:scim-grollm

Requested Parcel : Lot 2 DP 520158 **Identified Parcel :** Lot 2 DP 520158

Locality : PICTON **LGA :** WOLLONDILLY **Parish :** COURIDJAH **County :** CAMDEN



Report Generated 1:22:26 PM, 11 August, 2010

This information is provided as a searching aid only. While every endeavour is made to ensure the current cadastral pattern is accurately reflected, the Registrar General cannot guarantee the information provided. For all ACTIVITY PRIOR to SEPT 2002 you must refer to the RGs Charting and Reference Maps.

D'6 250 129 — OFFICE USE ONLY

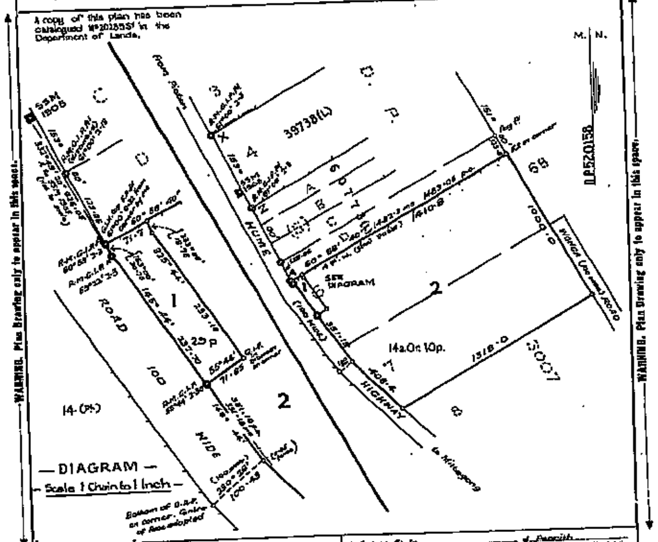
Form 1

PLAN OF SUBDIVISION OF LOTS 6 & 7 D.P. 3007 BEING THE LAND IN CERT. OF TITLE VOL. 7302 FOL. 111.

Shire: Wollondilly
Town or Locality: Picton
Parish: Couridjah
County: Camden
Scale: 4 Chains to 1 Inch.

D.P. 520158
Registered: KR 16/6/66.
C.A. 367 of 24.2.1966.
Title System: Torrens
Purpose: Subdivision
Ref. Map: Parish
Last Plan: D.P. 3007

A copy of this plan has been catalogued No. 3025553 in the Department of Lands.



Signatures, Seals and Statements of intention to dedicate public roads or public reserves, drainage reserves, easements, or restrictions ...

It is intended to dedicate ... as a public road.

... Council was hereto affixed ... day of February, 1966, in pursuance of a resolution passed on the ... February ...

Shire Clerk.

R E Middleton President.

Minister for Education.

I, Robert Stolz of Penrith a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan is accurate and has been made (1) by me ... in accordance with the Survey Practice Regulations, 1933, and was completed on ... June 1965

Datum Line of Azimuth: X-Z
Signature: R Stolz — Surveyor Registered under Surveyors Act, 1929, as amended.
* Strike out either (1) or (2). † Insert date of survey.

Council Clerk's Certificate.

I hereby certify that (a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans) and (b) the requirements of Section 34B of the Metropolitan Water, Sewerage, and Drainage Act, 1924, as amended, in relation to the proposed ... have been complied with by the applicant ... (insert "new road" or "subdivision") set out herein.

Subdivision No. ...
Date 24/2/66 (Signature) ... Council Clerk.

* NOTE—This part of certificate to be deleted where the application is only for the opening of a new road or where the land to be subdivided is wholly outside the area of operations of the Metropolitan Water Sewerage and Drainage Board.

M.F.R. — D.P.520158 — SURVEYORS REFERENCE

I, Jack Hayward Watson, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 23rd day of April, 1976.

J Watson

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 520158

LINKS	METRES
0.32	0.064
0.95	0.191
2.13	0.428
2.3	0.463
18.76	3.774
20.7	4.164
71.65	14.414
71.7	14.424
100	20.117
100.43	20.203
125	25.146
125.06	25.158
233.1	46.892
237.7	47.818
351	70.610
351.1	70.630
351.15	70.640
408.4	82.157
626.05	125.941
1000	201.168
1318	265.139
1410.6	283.768
1482.3	298.191
1483.05	298.342
AC RD P	SQ M
- - 29	738.5
AC RD P	HA
19 - 10	5.691

NEW SOUTH WALES [redacted]TIFICATE OF TITLE
[redacted]PERTY ACT, 1900, as amended.

Application No. 1041 ///
'rior Title Vol. 7302 Fol. 14

SC. Vol. 10339 Fol. 200

Edition issued 30-6-1966.

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

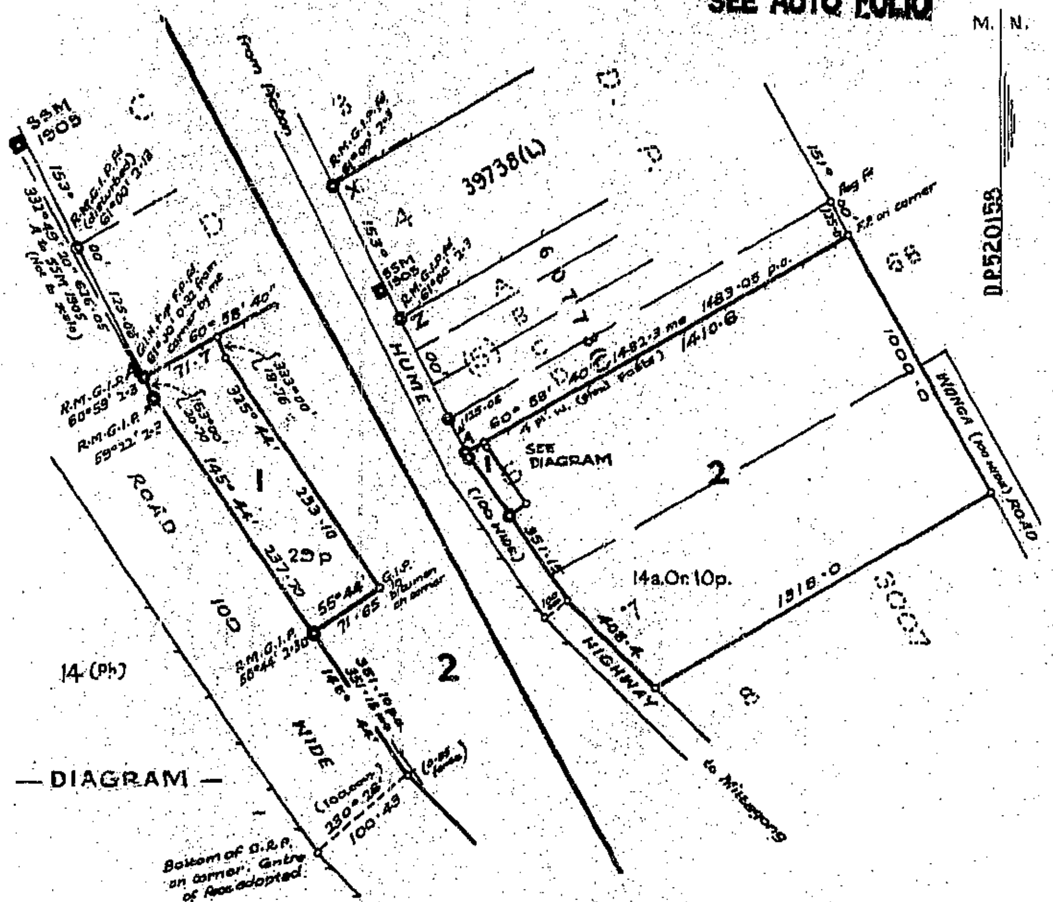
ross J. O'Sullivan.

CANCELLED

Registrar General.

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 2 in Deposited Plan 520158 at Picton in the Shire of Wollondilly, Parish of Couridjah and County of Camden, being part of Portion 11 granted to Charles Luis Rumker on 27-12-1828.

FIRST SCHEDULE (continued overleaf)

HER MOST GRACIOUS MAJESTY QUEEN ELIZABETH THE SECOND.

Registrar General.

SECOND SCHEDULE (continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.

Registrar General.

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

Vol. 10359 Fol 200

(Page 2 of 2 pages)

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT			ENTERED	Signature of Registrar-General
	NATURE	NUMBER	DATE		

SECOND SCHEDULE (continued)

INSTRUMENT			PARTICULARS	ENTERED	Signature of Registrar-General	CANCELLATION		
NATURE	NUMBER	DATE						
			CANCELLED					
			SEE AUTO FOLIO					

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

Historical Title

LEAP Searching
An Approved LPI NSW
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
11/8/2010 3:13PM

FOLIO: 2/520158

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 10339 FOL 200

Recorded	Number	Type of Instrument	C.T. Issue
28/3/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
27/6/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
5/9/1989	Y490389	DEPARTMENTAL DEALING	EDITION 1

*** END OF SEARCH ***

mg

PRINTED ON 11/8/2010

SFR Service First Registration

Title Search

LEAP Searching
An Approved LPI NSW
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 2/520158

SEARCH DATE	TIME	EDITION NO	DATE
11/8/2010	3:13 PM	1	5/9/1989

LAND

LOT 2 IN DEPOSITED PLAN 520158
AT PICTON
LOCAL GOVERNMENT AREA WOLLONDILLY
PARISH OF COURIDJAH COUNTY OF CAMDEN
TITLE DIAGRAM DP520158

FIRST SCHEDULE

MINISTER FOR EDUCATION (DD Y490389)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

NOTE: THE CERTIFICATE OF TITLE FOR THIS FOLIO OF THE REGISTER DOES NOT INCLUDE SECURITY FEATURES INCLUDED ON COMPUTERISED CERTIFICATES OF TITLE ISSUED FROM 4TH JANUARY, 2004. IT IS RECOMMENDED THAT STRINGENT PROCESSES ARE ADOPTED IN VERIFYING THE IDENTITY OF THE PERSON(S) CLAIMING A RIGHT TO DEAL WITH THE LAND COMPRISED IN THIS FOLIO.
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg PRINTED ON 11/8/2010

APPENDIX E
Borehole Logs

BOREHOLE LOG

CLIENT: NSW Public Works
PROJECT: Picton Metals Fabrications Trade School
LOCATION: 480 Argyle Street, Picton

SURFACE LEVEL: 215.6 AHD **BORE No:** 1
EASTING: **PROJECT No:** 34252
NORTHING: **DATE:** 9/8/2010
DIP/AZIMUTH 90°/-- **SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
215	0.1	FILLING - brown clayey silt topsoil filling with some vegetation		A/E	0.0		PID<1ppm		5 10 15 20
		FILLING - variably compacted, brown, slightly gravelly silty clay filling, humid (possibly old topsoil material but no vegetation)			0.1				
				A/E	0.3		PID<1ppm		
					0.4				
				A/E	0.6		PID<1ppm		
	0.8				0.7				
		CLAY - very stiff, orange brown clay, humid (possibly filling to 1.0m)							
	1	- becoming light grey from 1.0m		A/E	1.0		PID<1ppm		1
					1.1				
	1.35	SILTSTONE - extremely to very low strength, light grey siltstone with some sandstone laminae		A/E	1.4		PID<1ppm		
214					1.5				
	1.7	Bore discontinued at 1.7m - practical refusal on at least low strength siltstone							

RIG: Mini-Excavator **DRILLER:** Boers **LOGGED:** Boyd **CASING:** Uncased

TYPE OF BORING: 110mm diameter spiral flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: E = Environmental sample

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U$_x$	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep ▼ Water level

CHECKED	
Initials:	GRB
Date:	19/8/10

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BOREHOLE LOG

CLIENT: NSW Public Works
PROJECT: Picton Metals Fabrications Trade School
LOCATION: 480 Argyle Street, Picton

SURFACE LEVEL: 215.5 AHD **BORE No:** 2
EASTING: **PROJECT No:** 34252
NORTHING: **DATE:** 9/8/2010
DIP/AZIMUTH: 90°/-- **SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
	0.05	FILLING - brown clayey silt topsoil filling with some vegetation		A/E	0.0		PID<1ppm		
		FILLING - poorly compacted, brown gravelly clay filling with some shale gravel and cobbles, humid			0.1				
	0.25	CLAY - stiff to very stiff, orange brown clay, humid							
				A/E	0.4		PID<1ppm		
215					0.5				
				A/E	0.7		PID<1ppm		
	1	- becoming light grey at 1.0m			0.8				1
				A	1.1		PID<1ppm		
					1.2				
	1.4	SILTSTONE - extremely low to very low strength, light grey siltstone with some sandstone laminae							
214				A	1.6		PID<1ppm		
					1.7				
	1.9	Bore discontinued at 1.9m - practical refusal on at least low strength siltstone							

RIG: Mini-Excavator **DRILLER:** Boers **LOGGED:** Boyd **CASING:** Uncased

TYPE OF BORING: 110mm diameter spiral flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: E = Environmental sample. Concrete pipe on western side of borehole

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U_x	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep ▼ Water level

CHECKED
Initials: GRB
Date: 19/8/10

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Geotechnics · Environment · Groundwater

BOREHOLE LOG

CLIENT: NSW Public Works
PROJECT: Picton Metals Fabrications Trade School
LOCATION: 480 Argyle Street, Picton

SURFACE LEVEL: 216.4 AHD **BORE No:** 3
EASTING: **PROJECT No:** 34252
NORTHING: **DATE:** 9/8/2010
DIP/AZIMUTH: 90°/-- **SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
216	0.0	TOPSOIL - brown clayey silt topsoil with some vegetation		A/E	0.0		PID<1ppm		
	0.1	CLAY - very stiff, orange brown clay with trace amounts of gravel, humid			0.1				
				A/E	0.2		PID<1ppm		
					0.3				
				A/E	0.6		PID<1ppm		
	0.7	SILTSTONE - extremely low to very low strength, light grey siltstone			0.7				
	1			A/E	1.0		PID<1ppm		1
					1.1				
215	1.3	Bore discontinued at 1.3m - practical refusal on at least low strength siltstone							

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Mini-Excavator **DRILLER:** Boers **LOGGED:** Boyd **CASING:** Uncased

TYPE OF BORING: 110mm diameter spiral flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: E = Environmental sample

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo Ionisation detector
B	Bulk sample	S	Standard penetration test
U,	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep ▼ Water level

CHECKED	
Initials:	GRB
Date:	19/8/10

Douglas Partners
Geotechnics · Environment · Groundwater

BOREHOLE LOG

CLIENT: NSW Public Works
PROJECT: Picton Metals Fabrications Trade School
LOCATION: 480 Argyle Street, Picton

SURFACE LEVEL: 216.5 AHD **BORE No:** 4
EASTING: **PROJECT No:** 34252
NORTHING: **DATE:** 9/8/2010
DIP/AZIMUTH: 90°/-- **SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
216		TOPSOIL - brown clayey silt topsoil with trace amounts of sand and some vegetation		A/E*	0.0		PID<1ppm		5 10 15 20
	0.15	CLAY - very stiff, orange brown clay, humid			0.1				
				A/E	0.3		PID<1ppm		
					0.4				
	0.7	SILTSTONE - low to very low strength, light grey siltstone with some sandstone laminae		A/E	0.7		PID<1ppm		
					0.8				
1				A/E	1.0		PID<1ppm		1
					1.1				
	1.2	Bore discontinued at 1.2m - practical refusal on at least low strength siltstone							
215									

RIG: Mini-Excavator **DRILLER:** Boers **LOGGED:** Boyd **CASING:** Uncased

TYPE OF BORING: 110mm diameter spiral flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: E = Environmental sample. *Denotes field replicate sample BD090810 collected

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo Ionisation detector
B	Bulk sample	S	Standard penetration test
U$_x$	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep ▼ Water level

CHECKED
Initials: GRB
Date: 19/8/10

Douglas Partners
Geotechnics · Environment · Groundwater

APPENDIX F
Section 149 Planning Certificates

WOLLONDILLY SHIRE COUNCIL

PLANNING CERTIFICATE UNDER SECTION 149(2) & (5)
ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

APPLICANT: Department Services, Technology & Administration
level 13, 2-24 Rawson Place
SYDNEY NSW 2000

Planning Certificate No.: 20101081
Receipt No.: 165766
Issue Date: 10 August 2010
Applicant's Reference: Picton HS
Property No.: 3653

DESCRIPTION OF PROPERTY

Address: **480 Argyle Street PICTON 2571**
Land Description: **Lot: 2 DP: 520158**

Notes:

The following prescribed matters may apply to the land to which this certificate relates.

Where this certificate refers to a specific allotment (or allotments) within a strata plan, the certificate is issued for the whole of the land within the strata plan, not just the specific allotment(s) referred to, and any information contained in the certificate may relate to the whole, or any part, of the strata plan.

The following information is provided pursuant to Section 149(2) of the Environmental Planning and Assessment Act 1979 as prescribed by Schedule 4 of the Environmental Planning and Assessment Regulation 2000 and is applicable as at the date of this certificate.

Information provided in this certificate should be interpreted in conjunction with the relevant plans, policies and documents held at Council. In order to obtain copies of these documents you may purchase them from Council's Administration Centre at 62-64 Menangle Street, Picton or view free of charge on Council's Website www.wollondilly.nsw.gov.au.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPS

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

Wollondilly Local Environmental Plan 1991.

Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2 - 1997)

Sydney Regional Environmental Plan No 9 Extractive Industries (No 2 - 1995)

State Environmental Planning Policy No 1 - Development Standards

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

State Environmental Planning Policy No 4 - Development without Consent and Miscellaneous Complying Development

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004

State Environmental Planning Policy No 6 - Number of Storeys in a Building

State Environmental Planning Policy No 21 - Caravan Parks

State Environmental Planning Policy No 22 - Shops and Commercial Premises

State Environmental Planning Policy No 30 - Intensive Agriculture

State Environmental Planning Policy No 33 - Hazardous and Offensive Development

State Environmental Planning Policy No 44 - Koala Habitat Protection
(Note: Excludes land dedicated or reserved as National Park)

State Environmental Planning Policy No 50 - Canal Estate Development

State Environmental Planning Policy No 55 - Remediation of Land

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 (Major Projects) 2005

State Environmental Planning Policy (Temporary Structures) 2007

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

State Environmental Planning Policy (Infrastructure) 2007

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

State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008

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

State Environmental Planning Policy No 62 - Sustainable Aquaculture

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

State Environmental Planning Policy (Affordable Rental Housing) 2009

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

DRAFT WOLLONDILLY LOCAL ENVIRONMENTAL PLAN 2009 has been placed on public exhibition. The draft plan proposes to replace Wollondilly Local Environmental Plan 1991 in accordance with a Standard Instrument (LEP Template) as required for all Councils by the NSW Department of Planning. The proposed zoning of the land and certain changes proposed under the draft plan are outlined in this certificate as required. Further information can be obtained from Council's Strategic Planning Department.

Draft State Environmental Planning Policy (Application of Development Standards) 2004

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

Development Control Plan No 7 - Off Street Car Parking

Development Control Plan No 21 - Earth Dams

Development Control Plan No 42 - Bed and Breakfast Establishments

Development Control Plan No 46 - Management of Contaminated Lands

Development Control Plan No 47 - Exempt and Complying Development

Development Control Plan No 54 - Telecommunications and Radio Communications

Development Control Plan - Notification and Advertising of Development Proposals

Development Control Plan - Poultry

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

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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):

WOLLONDILLY LOCAL ENVIRONMENTAL PLAN 1991

(a) the identity of the zone, whether by reference to a name (such as "Residential Zone" or "Heritage Area") or by reference to a number (such as "Zone No 2 (a)"):

Zone No 5(a) (Special Uses "A" Zone).

(b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent:

Nil.

(c) the purposes for which the instrument provides that development may not be carried out within the zone except with development consent:

The particular purpose indicated by black lettering on the map; drainage; land filling operations; roads; telecommunications facilities; utility installations (other than generating works).

(d) the purposes for which the instrument provides that development

is prohibited within the zone:

Any purpose other than a purpose included in Item (c).

(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,

Wollondilly Local Environmental Plan 1991 does not contain any development standards that fix minimum land dimensions for the erection of a dwelling house on the land.

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

None known

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

The land is not within a conservation area under Wollondilly Local Environmental Plan 1991.

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

The land does not contain an item of environmental heritage under Wollondilly Local Environmental Plan 1991.

DRAFT WOLLONDILLY LOCAL ENVIRONMENTAL PLAN 2009

(a) the identity of the zone, whether by reference to a name (such as "Residential Zone" or "Heritage Area") or by reference to a number (such as "Zone No 2 (a)"),

Zone R2 Low Density Residential.

(b) the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent:

Bushfire hazard reduction work; Flood mitigation works; Home occupations.

(c) the purposes for which the instrument provides that development may not be carried out within the zone except with development consent,

Bed and breakfast accommodation; Boarding houses; Cemeteries; Child care centres; Community facilities; Dwelling houses; Educational establishments; Electricity generating works; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Group homes; Health consulting rooms; Home-based child care; Home business; Home industries; Home occupation (sex services); Mining; Neighbourhood shops; Places of public worship; Recreation areas; Residential accommodation; Roads; Sewerage systems; Signage; Veterinary hospitals; Water supply systems.

(d) the purposes for which the instrument provides that development is prohibited within the zone,

Any development not specified in item (b) or (c).

Attached dwellings; Multi dwelling housing; Residential flat buildings; Rural worker's dwellings; Shop top housing.

(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,

Draft Wollondilly Local Environmental Plan 2009 proposes development standards that fix minimum land dimensions for the erection of a dwelling house on this land under clause 7.6 as follows:

Consent may be granted to the erection of a single dwelling on vacant land only if the land is:

(i) A lot created in accordance with clause 4.1 of the draft plan, or
(ii) A lot in existence prior to the day on which the Plan commences, being a lot on which a single dwelling could lawfully have been erected immediately before that day.

Reference must be made to clause 7.6 of the draft plan for further information.

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

None known

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

The land is not located within a proposed Heritage Conservation Area as provided by clause 5.10 and Schedule 5 of Draft Wollondilly Local Environmental Plan 2009.

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

This land does not contain an item of environmental heritage as provided by clause 5.10 and Schedule 5 of Draft Wollondilly Local Environmental Plan 2009.

3. COMPLYING DEVELOPMENT

(1) Whether or not the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clause 1.19 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

(2) If complying development may not be carried out on that land because of the provisions of clause 1.19 of that Policy, the reasons why it may not be carried out under that clause.

GENERAL HOUSING CODE

Complying development MAY be carried out on the land under the General Housing Code in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

HOUSING INTERNAL ALTERATIONS CODE

Complying development MAY be carried out on the land under the Housing Internal Alterations Code in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

GENERAL COMMERCIAL AND INDUSTRIAL CODE

Complying development MAY be carried out on the land under the General Commercial and Industrial Code in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

SUBDIVISIONS CODE

Complying development MAY be carried out on the land under the Subdivisions Code in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

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4. COASTAL PROTECTION

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

No

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5. MINE SUBSIDENCE

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

The land is within a proclaimed Mine Subsidence District under the Mine Subsidence Compensation Act 1961. The approval of the Mine Subsidence Board is required for all subdivision and building, except for certain minor structures. Surface development controls are in place to prevent damage from old, current or future mining. It is strongly recommended prospective purchasers consult with the Mine Subsidence Board regarding mine subsidence and any surface development guidelines. The Board can assist with information about mine subsidence and advise whether existing structures comply with the requirements of the Act

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6. ROAD WIDENING AND ROAD REALIGNMENT

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

(a) Division 2 or Part 3 of the *Roads Act* 1993, or

(b) Any environmental planning instrument, or

(c) Any resolution of the council.

No

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7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy:

(a) Adopted by the council, or

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

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

The Council has adopted, by resolution dated 9 August 1999, a policy concerning contaminated land. That policy applies to the land to which this certificate relates and will restrict development of the land if the circumstances set out in the policy prevail. A copy of the policy is available at the Council.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

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

No

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

No

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

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8. LAND RESERVED FOR ACQUISITION

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

Wollondilly Local Environmental Plan 1991 does not provide for the acquisition of the subject land by a public authority, as referred to in section 27 of the Act.

Draft Wollondilly Local Environmental Plan 2009 does not provide for the acquisition of the subject land by a public authority, as referred to in section 27 of the Act.

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9. CONTRIBUTIONS PLANS

The name of each contributions plan applying to the land.

Wollondilly Development Contributions Plan, 2005.

9A. BIODIVERSITY CERTIFIED LAND

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

The land is not biodiversity certified land (within the meaning of Part 7AA of the Threatened Species Conservation Act 1995).

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10. BIOBANKING AGREEMENTS

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

Council has not been notified by the Director-General of the Department of Environment, Climate Change and Water of any biobanking agreement approved under the Threatened Species Conservation Act 1995 for this land.

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11. BUSH FIRE PRONE LAND

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

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

The land is not shown as bushfire prone land in Council's records.

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12. PROPERTY VEGETATION PLANS

Whether or not the land is land to which a property vegetation plan under the *Native Vegetation Act 2003* applies, a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under the Act).

Council has not been notified of any such plan that affects this land.

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13. ORDER UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

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

No

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14. DIRECTIONS UNDER PART 3A

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

No

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15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

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

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

(i) the period for which the certificate is current, and
(ii) that a copy may be obtained from the head office of the Department of Planning, and

There is not a current site compatibility certificate (seniors housing) as described that applies to this land.

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

There are currently no conditions of consent relating to a development application for seniors housing that apply to the land.

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16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

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

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

There is not a valid site compatibility certificate (infrastructure) as described that applies to this land.

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17. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the Council is aware, in respect of proposed development on the land and, if there is a certificate, that statement is to include:

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

There is not a current site compatibility certificate (affordable rental housing) as described that applies to this land.

(2) A statement setting out any terms of a kind referred to in clause 17 (1) or 37 (1) of *State Environmental Planning Policy (Affordable Rental Housing) 2009* that have been imposed as a condition of consent to a development application in respect of the land.

There are currently no conditions of consent relating to a development application for affordable rental housing that apply to 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) that the land to which the certificate relates is significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,

No.

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

No.

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

No.

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

No.

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

No.

THE FOLLOWING ADDITIONAL INFORMATION IS PROVIDED UNDER:

SECTION 149(5) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

For the purposes of Section 149(5), the following information is provided in relation to the subject property:

1. The subject land is not affected by a Foreshore Building Line.

2. Any enquiries relating to whether or not the land has frontage to a classified road or a controlled access road should be referred directly to the RTA on 02 4221 2495.

3. **SECOND SYDNEY AIRPORT PROPOSAL.**

   In November 1996 the Commonwealth Government released details of five airport options being considered for the development of a second major airport for Sydney at either Badgerys Creek or the Holsworthy Military Area. In September 1997, the Government abandoned the Holsworthy option and announced that the Draft Environmental Impact Statement would concentrate on Badgerys Creek. The Government also released the Draft Environmental Impact Statement Summary, which gives an indication of the impact of the proposal on the local environment. Information on the proposal and the Summary of the Draft Environmental Impact Statement can be obtained from the Federal Department of Transport.

4. Other Matters (if applicable).

   DRAFT WOLLONDILLY DEVELOPMENT CONTROL PLAN 2009

   Draft Wollondilly Development Control Plan 2009 has been placed on public exhibition. The draft plan proposes to replace all current Development Control Plans and Policies applying to the land. It has been prepared in conjunction with Draft Wollondilly Local Environmental Plan 2009 which is also on public exhibition. Further information can be obtained from Council's website or by contacting Council's Strategic Planning Department or Customer Service Centre.

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

In respect of matters beyond the control and/or responsibility of Council, information provided is provided only to the extent that Council has been so notified by the relevant Authorities or Departments, which have responsibility for the administration of the particular status referred to.

L McMahon
GENERAL MANAGER

Any request for further information in connection with the above should be directed to Council's Duty Planner on (02) 4677 1100.

NOTICE TO PURCHASERS OF RURAL LAND

Wollondilly Shire Council supports the rights of persons in rural areas of the Shire to undertake and pursue agricultural production activities that are consistent with land capability and use reasonable and practical measures to avoid environmental harm and minimise impact to adjoining land users. Intending purchasers are advised that agricultural production **can** include the following activities that may have implications for occupiers and prospective purchasers of rural land:

Use of agricultural machinery (tractors, chainsaws, motorbikes)

Use of bird-scare devices
Intensive livestock production (cattle feedlots, poultry farms, piggeries, restricted dairies)
Operation of rural industries (packing sheds, abattoirs, stock and sale yards, sawmills)
Vegetation clearing
Grazing of livestock

Crop and fodder production

Soil cultivation

Crop harvesting

Use of firearms

Bushfire hazard reduction burning

Construction of firebreaks

Earthworks (construction of dams, drains, contour banks, access roads and tracks)

Fencing

Pumping and irrigation

Use of pesticides and herbicides

Spreading of manure, compost and treated effluent

Fertiliser usage

Slashing and mowing of grass

Production of silage

Re-vegetation activities (planting trees and shrubs)

Agroforestry

Livestock droving on roads

This is not an exhaustive list and intending purchasers of rural land should assess surrounding agricultural land uses and the impact these activities may have when being pursued in close proximity their proposed purchase. If you think these types of activities will affect your ability to live in a rural locality then intending purchasers are advised to reconsider their purchase and seek independent advice.
This notice is not intended to affect the rights of individuals to take action under the common law or legislation and is provided for information purposes only.

APPENDIX G
Quality Assurance / Quality Control

QA/QC PROCEDURES AND RESULTS

Q1 - FIELD QUALITY ASSURANCE AND QUALITY CONTROL

The field quality control (QC) procedures for sampling as prescribed in Douglas Partners *Field Procedures Manual* were followed at all times during the assessment.

Q1.1 Sampling Team

Field sampling was undertaken by DP Senior Geotechnical Engineer/ Associate Gavin Boyd on 9 August 2010. Sampling was undertaken during fine weather conditions.

Q1.2 Sample Collection and Dispatch

Sample collection procedures and dispatch for soil are reported in Section 8, Sampling and Analytical Regime.

Q1.3 Logs

Logs for each sampling location were recorded in the field. The location of individual samples were recorded on the field logs along with location, depth, initials of sampler, replicate locations, replicate type and site observations. Logs are presented in Appendix E.

Q1.4 Chain-of-Custody (COC)

Analysis to be performed on each sample was recorded on the COC which accompanied samples to the analytical laboratory. Signed copies of COCs are presented in Appendix H, following the laboratory reports.

Q1.5 Sample Splitting Techniques

One duplicate sample was collected as part of the assessment.

Q1.6 Decontamination Procedures

Soil samples were recovered directly from the auger with nitrile disposable gloves. Clean equipment was used at the commencement of each test bore. No sample equipment decontamination was therefore required.

Q1.7 Trip Spikes

According to the NSW EPA *Guidelines for Consultants Reporting on Contaminated Sites* (1997), laboratory prepared trip spikes are to be taken into the field, subjected to the same preservation methods as the field samples, then analysed, for the purposes of determining the losses in volatile organics incurred prior to reaching the laboratory.

Due to the preliminary nature of the assessment, no trip spikes were prepared or analysed.

Q1.8 Trip Blanks

No laboratory prepared soil trip blanks were taken out to the field and analysed, due to the preliminary nature of the assessment.

Q1.9 Relative Percentage Difference

A measure of the consistency of results for field samples is derived by the calculation of relative percentage differences (RPDs) for duplicate samples. A RPD of ± 30% is generally considered acceptable for inorganic analytes by the DECC, although in general a wider RPD range may be acceptable for organic analytes (up to 50%).

One duplicate samples were collected as part of this assessment (BD090810). RPDs were found to be within the acceptable limits for the assessment.

Q2 - LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Q2.1 Laboratory Accreditation

Only laboratories accredited by the National Association of Testing Authorities (NATA) for the chemical analyses undertaken were used for analysis of samples recovered as part of this assessment. Samples were submitted to Envirolab Services Pty Ltd, located in Chatswood. Envirolab's accreditation number is 2901 and they are accredited for compliance with ISO/IEC 17025. In-house procedures are employed by Envirolab in the absence of documented standards. This is performed yearly and is reviewed by NATA.

Envirolab participate in all common Proficiency Rounds including NARL (NMI) for organics and metals, PTA (NATA for organics, inorganics, asbestos and metals, QLD Govt for SPOCAS and National Residue Survey for metals). Envirolab also participate in non-accredited rounds conducted by the University of Wollongong.

Q2.2 Chain-of-Custody

Chain-of-custody information was recorded on the DP standard chain-of-custody (COC) sheets, which accompanied samples to the analytical laboratories. COCs contained sampling date, receipt date and time and the identity of samples. Copies of COCs, signed by the analytical laboratories, are presented in Appendix H, following the laboratory reports.

Q2.3 Batch Numbers and Holding Times

The following table lists the laboratory batch numbers applicable to this assessment, together with the corresponding sampling, sample receipt and COC receipt dates.

Table Q1 – Batch Details

Laboratory	Batch No.	Sampling Date	Sample Receipt	COC Receipt
Envirolab	44539	09/08/10	10/08/10	10/08/10

Schedule B(3) of the *National Environment Protection (Assessment of Site Contamination) Measure* 1999 (NEPM) prepared by the National Environment Protection Council (NEPC), details recommended maximum holding times for samples for various analytes.

A review of the laboratory report sheets and chain-of-custody documentation indicated that holding times were met by the laboratory, as summarised in the table below.

Table Q2 - 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
	TPH C_6-C_9	14 days	yes
	TPH C_{10}-C_{36}	14 days	yes
	BTEX	14 days	yes
	PAH	14 days	yes
	OCP	14 days	yes
	OPP	14 days	NA
	PCB	14 days	yes
	Phenols	14 days	NA
	Asbestos	Nil	yes

Q2.4 Analytical Methods

The laboratory analytical methods are provided on the laboratory certificates in Appendix H and summarised below in Table Q3.

The test methods used by the laboratories generally comply with those listed in the NEPM and the Australian and New Zealand Environment and Conservation Council (ANZECC)-1996 "*Guidelines for the Laboratory Analysis of Contaminated Soils*". Alternate methods used by the laboratories (i.e. not identified in the NEPM and ANZECC guidelines) have been validated by the laboratories, as recommended in the NEPM and ANZECC guidelines, and endorsed by NATA.

Table Q3 - Soil Analysis

Analyte	PQL[1] (mg/kg) Envirolab	Envirolab Reference Method
Heavy Metals Cd, Cr, Cu, Pb, Ni, Zn	1.0	ICP-AES (Metals.20)
Arsenic (As)	4.0	ICP-AES (Metals.20)
Mercury (Hg)	0.10	CV-AAS (Metals.21)
VOC	0.5-10	P&T/GC/MS (GC.14)
TPH C_6-C_9	25	P&T/GC/MS (GC.16)
TPH C_{10}-C_{36}	250	GC/FID (GC.3)
BTEX	0.5-2	P&T/GC/MS (GC.14)
OCP	0.1	GC/ECD (GC.5)
OPP	0.1	GC/MS (GC.8)
PCB	0.1	GC/ECD (GC.6)
PAH	0.05-0.1	GC/MS (GC.12 subset)
Phenols	1-10	GC/MS (GC.12)
Asbestos	qualitative identification	AS4964-2004, qualitative identification using Polarised Light Microscopy and Dispersion Staining Techniques.

1: Practical Quantitation Limit

Q2.5 Practical Quantitation Limits - PQLs

The PQL (also referred to by some laboratories as the limit of reporting) is the lowest quantity of an analyte which can be detected by the adopted analysis. PQLs at different analytical laboratories can differ depending on the analytical techniques.

A review of the laboratory results indicated that all PQLs were below the site criteria for the laboratory.

Q2.6 Surrogate Spike

This sample is prepared by adding a known amount of surrogate, which behaves similarly to the analyte, prior to analysis of each sample. The recovery result indicates the proportion of the known concentration of the surrogate that is detected during analysis. The following Table Q4 summarises the reported recoveries and the acceptance criteria adopted by each of the laboratories.

Table Q4 – Surrogate Spike Recoveries

Laboratory	Reported Recoveries	Acceptance Limits
Envirolab	99 – 105% 86 – 117%	60-140% organics 10-140% SVOC and speciated phenols

The reported recoveries are within acceptance limits, indicating that the extraction technique was effective.

Q2.7 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 control sample is analysed with the sample batch and the recorded concentrations reported as a percentage recovery of the known or expected concentration, in order to determine how the laboratory has performed with regard to sample preparation and analytical procedure. LCS are analysed at a frequency of 1 in 20, with a minimum of one analysed per batch.

The following Table Q5 summarises the reported recoveries and the acceptance criteria adopted by each of the laboratories.

Table Q5 – Laboratory Control Samples

Laboratory	Reported Recoveries	Acceptance Limits
Envirolab	89 – 108% 110 – 140% 86 – 106%	70-130% inorganics / metals 60-140% organics 10-140% SVOC and speciated phenols

The results are within acceptance limits as specified by the laboratory, indicating that the extraction and analytical techniques were effective.

Table Q6 – Laboratory Duplicate Samples

Laboratory	Reported Recoveries	Acceptance Limits
Envirolab	Not Analysed Not Analysed	>5xPQL : 0-50% RPD <5xPQL : any RPD

No laboratory duplicates were tested as part of this assessment.

Q2.8 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 results for blanks indicated concentrations of all analytes to be below PQL and therefore the results were considered to be acceptable.

Q2.9 Matrix Spike

The purpose of matrix spikes is to monitor the performance of the analytical methods used and to determine whether matrix interferences exist. Samples and replicates are spiked with identical concentrations of the target analyte before extraction or digestion. The results are reported as percentage recoveries of the known spike concentration.

No matrix spike recoveries were reported as part of this assessment.

APPENDIX H
Laboratory Results

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
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CERTIFICATE OF ANALYSIS 44539

Client:
Douglas Partners
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Gavin Boyd

Sample log in details:

Your Reference:	**34252.01, Picton Metals Fabrications T-S**
No. of samples:	6 Soils
Date samples received:	10/08/10
Date completed instructions received:	10/08/10

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:	17/08/10
Date of Preliminary Report:	Not issued
Issue Date:	17/08/10

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Results Approved By:

Sandra Taylor
Senior Organic Chemist

Rhian Morgan
Metals Supervisor

Jacinta Hurst
Laboratory Manager

Nancy Zhang
Chemist

Matt Mansfield
Approved Signatory

ACCREDITED FOR TECHNICAL COMPETENCE

vTPH & BTEX in Soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/08/2010	11/08/2010	11/08/2010	11/08/2010	11/08/2010
Date analysed	-	13/08/2010	13/08/2010	13/08/2010	13/08/2010	13/08/2010
vTPH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	109	117	101	98	95

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
TPH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TPH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TPH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	107	110	110	108	107

PAHs in Soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	12/8/2010	12/8/2010	12/8/2010	12/8/2010	12/8/2010
Naphthalene	mg/kg	<0.1	<0.1	<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+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
Surrogate p-Terphenyl-d_{14}	%	89	92	90	88	86

Organochlorine Pesticides in soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
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 TCLMX	%	105	103	99	101	99

PCBs in Soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
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	%	105	103	99	101	99

Total Phenolics in Soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0	12	<5.0	<5.0

Acid Extractable metals in soil						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	12/8/2010	12/8/2010	12/8/2010	12/8/2010	12/8/2010
Arsenic	mg/kg	5	7	6	5	5
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	33	31	32	23	17
Copper	mg/kg	14	21	18	13	12
Lead	mg/kg	23	40	28	23	19
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	15	14	15	14	13
Zinc	mg/kg	63	41	25	28	27

Miscellaneous Inorg - soil			
Our Reference:	UNITS	44539-3	44539-6
Your Reference	----------	3/0.2-0.3	2/0.7-0.8
Date Sampled	----------	9/08/2010	9/08/2010
Type of sample		Soil	Soil
Date prepared	-	12/08/2010	12/08/2010
Date analysed	-	12/08/2010	12/08/2010
pH 1:5 soil:water	pH Units	6.0	5.7
Chloride, Cl 1:5 soil:water	mg/kg	48	5.7
Sulphate, SO4 1:5 soil:water	mg/kg	77	53

Moisture						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Date analysed	-	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Moisture	%	19	12	13	22	22

Asbestos ID - soils						
Our Reference:	UNITS	44539-1	44539-2	44539-3	44539-4	44539-5
Your Reference	----------	1/0.3-0.4	3/0.0-0.1	3/0.2-0.3	4/0.0-0.1	BD090810
Date Sampled	----------	9/08/2010	9/08/2010	9/08/2010	9/08/2010	9/08/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	12/8/2010	12/8/2010	12/8/2010	12/8/2010	12/8/2010
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Method ID	Methodology Summary
GC.16	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.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
LAB.30	Total Phenolics - determined colorimetrically following disitillation.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.81	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA 21st ED, 4110-B.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
ASB.1	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

QUALITY CONTROL vTPH & BTEX in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/08/2010	[NT]	[NT]	LCS-1	11/08/2010
Date analysed	-			13/08/2010	[NT]	[NT]	LCS-1	13/08/2010
vTPH C_6 - C_9	mg/kg	25	GC.16	<25	[NT]	[NT]	LCS-1	97%
Benzene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-1	87%
Toluene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-1	92%
Ethylbenzene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-1	98%
m+p-xylene	mg/kg	2	GC.16	<2.0	[NT]	[NT]	LCS-1	105%
o-Xylene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-1	106%
Surrogate aaa-Trifluorotoluene	%		GC.16	85	[NT]	[NT]	LCS-1	116%

QUALITY CONTROL sTPH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/8/2010	[NT]	[NT]	LCS-1	11/8/2010
Date analysed	-			11/8/2010	[NT]	[NT]	LCS-1	11/8/2010
TPH C_{10} - C_{14}	mg/kg	50	GC.3	<50	[NT]	[NT]	LCS-1	87%
TPH C_{15} - C_{28}	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-1	88%
TPH C_{29} - C_{36}	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-1	91%
Surrogate o-Terphenyl	%		GC.3	109	[NT]	[NT]	LCS-1	107%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/8/2010	[NT]	[NT]	LCS-1	11/8/2010
Date analysed	-			12/8/2010	[NT]	[NT]	LCS-1	12/8/2010
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	100%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	91%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	94%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	86%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	89%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-1	101%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	[NT]	[NT]	LCS-1	105%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		GC.12 subset	90	[NT]	[NT]	LCS-1	82%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/8/2010	[NT]	[NT]	LCS-3	11/8/2010
Date analysed	-			11/8/2010	[NT]	[NT]	LCS-3	11/8/2010
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	120%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	125%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	112%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	112%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	132%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	140%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	121%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	119%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	135%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	110%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	101	[NT]	[NT]	LCS-3	104%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/8/2010	[NT]	[NT]	LCS-3	11/8/2010
Date analysed	-			11/8/2010	[NT]	[NT]	LCS-3	11/8/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	LCS-3	120%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	101	[NT]	[NT]	LCS-3	113%

QUALITY CONTROL Total Phenolics in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			11/8/2010	[NT]	[NT]	LCS-1	11/8/2010
Date analysed	-			11/8/2010	[NT]	[NT]	LCS-1	11/8/2010
Total Phenolics (as Phenol)	mg/kg	5	LAB.30	<5.0	[NT]	[NT]	LCS-1	89%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date digested	-			11/8/2010	[NT]	[NT]	LCS-2	11/8/2010
Date analysed	-			12/8/2010	[NT]	[NT]	LCS-2	12/8/2010
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	[NT]	[NT]	LCS-2	100%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	[NT]	[NT]	LCS-2	106%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-2	105%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-2	108%
Lead	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-2	102%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	[NT]	[NT]	LCS-2	103%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-2	105%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-2	103%

QUALITY CONTROL Miscellaneous Inorg - soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			12/08/2010	[NT]	[NT]	LCS-1	12/08/2010
Date analysed	-			12/08/2010	[NT]	[NT]	LCS-1	12/08/2010
pH 1:5 soil:water	pH Units		LAB.1	[NT]	[NT]	[NT]	LCS-1	100%
Chloride, Cl 1:5 soil:water	mg/kg	2	LAB.81	<2.0	[NT]	[NT]	LCS-1	100%
Sulphate, SO4 1:5 soil:water	mg/kg	2	LAB.81	<2.0	[NT]	[NT]	LCS-1	96%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			11/8/2010
Date analysed	-			11/8/2010
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank
Date analysed	-			[NT]

Report Comments:

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample.
Envirolab recommends supplying 30-40g of sample in it's own container.

Asbestos was analysed by Approved Identifier: Paul Ching
Asbestos was authorised by Approved Signatory: Matt Mansfield

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 batched of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

Douglas Partners
Geotechnics - Environment - Groundwater

CHAIN OF CUSTODY

Project Name: Picton Metals Fabrications Trade School .....
Project No: 34252.01..... Sampler:G Boyd ....
Project Mgr: G Boyd ..... Mob. Phone: 0431 496 721
Email: gavin.boyd@douglaspartners.com.au .....
Date Required: standard Lab Quote No. .....

To: Envirolab Services
12 Ashley Street, Chatswood NSW 2068
Attn: Tania Notaras
Phone: 02 9910 6200 Fax: 02 9910 6201
Email: tnotaras@envirolabservices.com.au

Sample ID	Sample Depth	Lab ID	Sampling Date	Sample Type S - soil W – water	Container type	Analytes: Heavy Metals	BTEX/ TPH	OCPs/ PCBs	PAH	Phenols	Asbestso	Ph, Cl, SO4						Other	Notes
1	0.3-0.4	1	9/8	S	G														
3.	0.0-0.1	2																	
3	0.2-0.3	3																	
4.	0.0-0.1	4																	
BD 0908 10.		5																	
2-	0.7-0.8	6	9/8	S	G														

Envirolab Services
12 Ashley
Chatswood NSW 2067
Ph: 9910 6200

Job No: 44539
Date received: 10/8/08
Time received: 4pm
Received by: JHC
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Lab Report No. .....
Send Results to: Douglas Partners Address: 96 Hermitage Road, West Ryde 2114
Phone: (02) 9809 0666
Fax: (02) 9809 4095

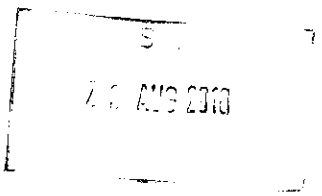
Relinquished by:	Signed:	Date & Time:	Received By:	Date & Time: 10/8/08
Relinquished by:	Signed:	Date & Time:	Received By:	Date & Time:

APPENDIX I
WorkCover Search Documentation

WorkCover
NEW SOUTH WALES

Our Ref: D10/106200
Your Ref: Kate Graham

18 August 2010



Attention: Kate Graham
Douglas Partners Pty Ltd
PO Box 472
WEST RYDE NSW 1685

Dear Ms Graham,

RE SITE: Lot 2 DP520158 Argyle Street Picton

I refer to your site search request received by WorkCover NSW on 12 August 2010 requesting information on licences to keep dangerous goods for the above site.

Enclosed are copies of the documents that WorkCover NSW holds on Dangerous Goods Licence 35/024997 relating to the storage of dangerous goods at the above-mentioned premises, as listed on the Stored Chemical Information Database (SCID).

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

Yours Sincerely

Diana Hayes

Senior Licensing Officer
Dangerous Goods Team

Form DG1

— INSERT — R1520

Department of Industrial Relations

DANGEROUS GOODS ACT, 1975

LICENCE No. S31/1069 35—024997

APPLICATION FOR LICENCE (or AMENDMENT or TRANSFER of LICENCE)* FOR THE KEEPING OF DANGEROUS GOODS

(* delete whichever is not required)

DG 8605 0001 — — 87 —

DATA ENTERED
- 8 MAY 1986
OPERATOR ONE

FEE: $15.00 per Depot for new licence.
$15.00 for amendment or transfer.

Name of Applicant in full (see Item 1—Explanatory notes—page 4)	PICTON HIGH SCHOOL.
Trading name or occupier's name (if any)	As ABOVE
Postal Address	HUME HIGHWAY, PICTON Postcode 2571
Address of the premises to be licensed. (Including Street No.)	As ABOVE Postcode
Nature of premises (See Item 2—Explanatory notes—page 4)	School.
Telephone number of applicant	STD Code 046 Number 771245 9/05/86 03A

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (See item 3—Explanatory notes—page 4)	Storage capacity	Dangerous goods: Product being stored	C & C Office use only
			DD	002 100 0
1	A/G TANK	7-5K1	LPG	1 100 73
2	〃	〃	〃	1 100 73
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

INSPECTORS FIELD COLLECTION
RECEIPT No. 7.96.21.
DATE 9.6.86
AMOUNT 30.00
CHQ

Has site plan been approved by the Dangerous Goods Branch? Yes / No — If yes, no plans required. If no, please attach site plan, or provide sketch plan overleaf.

Have premises previously been licensed? Yes / No — If, yes, state name of previous occupier, and licence No. (if known).

Name of oil company supplying flammable liquid (if applicable).

Signature of applicant D. Booth Date 9/4/86

For external explosives magazine(s), please fill in page 3.

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, WAYNE BOOTH being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

1 0 1 7-8-86

NEW TEE TO BE CUT INTO EXISTING 100 Cu FIRE HYDRANT SERVICE AND NEW THRUST BLOCK PROVIDED.

EXISTING FIRE HYDRANT SERVICE TO BE BLANKED OFF - AWAITING EXTENSION IN A LATER CONTRACT.

25 GAL. STEEL 140kPa

25 Cu

25 2·75kPa 25

32

NEW TEE. TO EXISTING GAS ISOLATION JO DIFFERENT M FOR CONTINUA PIPING SEE IN SERVICES DRA

FLUSH SECOND STAGE SEE SPECIFIC.

100 F Cu F TB F

FUTURE EXTENSION OF FIRE HYDRANT

EXISTING FIRE HYDRANT SERVICE TO BE DISCONNECTED & REMOVED.

215

EXISTING NEW

214·5

214

213·5

213

212·5

212

NEW BITUMINOUS ROAD WAY

FUTURE L.P. GAS TANK.

DEMOLISH & MAKE

NEW 150 V.C SEWER DRAIN

EXISTING GAS SERVICE

EXISTING 150 SEWER DRAIN

150 V.C S.W. DRAIN

RWP

STAND PIPE

EXISTING 25 GAL. STEEL 140kPa

NEW LIBRARY. FLOOR R.L 214·5

NEW 150 V.C SEWER DRAIN

BOLLARDS (3)

100 V.C

EXISTING 150 SEWER DRAIN REMOVED & BACK FILLED UNDER BUILDING.

EXISTING CLASSROOMS

EXISTING INCINERATOR

EXISTING S.P.

DEMOLISH ROADWAY & MAKE GOOD

NEW

100 A.G. DRAIN

EXCAVATED & LEVELLED AREA

NEW 25 OD. WATER SERVICE

450 V.C. S.W. DRAIN

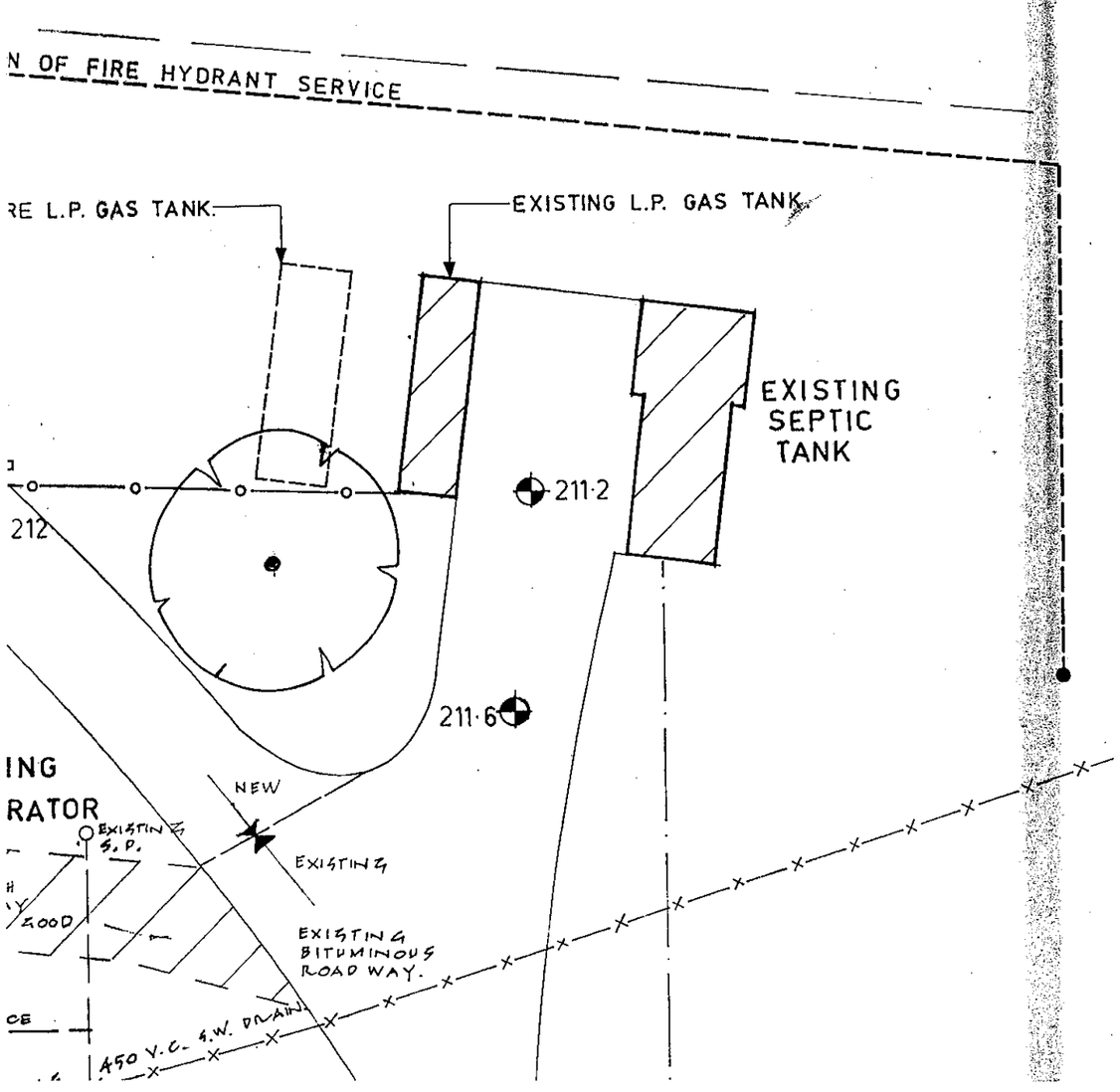
FH

FR

NEW TEE TO BE CUT INTO EXISTING GAS LINE. WITH ISOLATION JOINT BETWEEN DIFFERENT METALS

FOR CONTINUATION OF GAS PIPING SEE INTERNAL GAS SERVICES DRAWING.

FLUSH MOUNTED SECOND STAGE REGULATOR. SEE SPECIFICATION.



LEGEND

—o—o— EXISTING GAS PIPING TO BE RE-USED.

——·——·—— NEW GAS PIPING.

GAS MARKER.

—F—F— EXISTING FIRE HYDRANT SERVICE TO BE RE-USED.

—FR—FR— EXISTING FIRE HYDRANT SERVICE TO BE DISCONNECTED AND REMOVED.

—FH—FH— NEW FIRE HYDRANT SERVICE.

THRUST BLOCKS

NOTE:

1. ALL GAS PIPING TO BE COPPER TYPE 'A'.
2. ALL GAS PIPING TO COMPLY WITH AUSTRALIAN STANDARD 1596 -1983. SAA L.P. GAS CODE. THE DEPARTMENT'S STANDARD FOR L.P. GAS INSTALLATIONS EDS G103 AND THE LOCAL AUTHORITIES REQUIREMENTS.
3. THE INTERNAL GAS PIPING HAS BEEN SIZED FOR NATURAL GAS.
4. GAS SUPPLIED IS L.P. GAS WITH AN AVAILABLE PRESSURE OF 140 kPa AT THE SECOND STAGE REGULATOR.
5. ALL FIRE HYDRANT SERVICE PIPING TO BE COPPER TYPE 'A'.
6. ALL FIRE HYDRANT SERVICE PIPING TO COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS, THE DEPARTMENT'S STANDARD FOR HYDRAULIC SERVICES EDS H101 AND THE LOCAL AUTHORITIES REQUIREMENTS.
7. THE POSITION OF ALL PIPEWORK SHOWN IS APPROXIMATE ONLY. THE ACTUAL POSITION OF THE NEW WORK SHALL BE DETERMINED ON SITE TO THE SATISFACTION OF THE SUPERINTENDENT.
8. THIS DRAWING IS TO BE IN CONJUNCTION WITH DRAWING Nº SB1220-15/4

FH
FH
FR
RWP
150 V.C
DEMOLISH ROAD & MAKE GOOD.
EXISTING S.W DRAIN REMOVED & BACKFILLED
SEWER PIT
NEW 900 x 900 S.W. PIT
300 V.C
RWP
NEW 900x600 S.W. PIT
300 V.C.
NEW S.W DRAIN
& PITS (2)
EXISTING 25 WATER SERVIC
EXISTING SEWER DRAIN DISCONNECTED
NEW 150 V.C SEWER DRAIN
TB
FH
100 Cu
NEW FIRE HYDRANT SERVICE TO BE CUT INTO EXISTING
NEW BITUMINOUS PATH WAY
NEW THRUST BLOCKS
EXISTING S.W PIT
RL 214·265
2000
EXISTING SEWER DRAINS & PITS
EXISTING CHANGE ROOMS
NEW COVERED WAY
100 Cu
EXISTING FSU. FLOOR RL 214·265
NEW
EXISTING
EXISTING FIRE HYDRANT VALVES.
N

SCALES 1:1
10 20 30 40 50 60 70 80
1:2
20 40 60 80 100 120 140
1:5
100 200 300

MECHANICAL ENGINEER,
DEPARTMENT OF PUBLIC WO
NEW SOUTH WALES

ELECTRICAL ENGINEER,
DEPARTMENT OF PUBLIC WO
NEW SOUTH WALES

x900

212

EXISTING 25
WATER SERVICE

EWER
NNECTED

ISTING
GE ROOMS

N

ANICAL ENGINEER.
RTMENT OF PUBLIC WORKS
SOUTH WALES

CONSULTING ARCHITECT.
GEORGE M. LILLYMAN FRAIA AA&DC ARCHITECT
24 KIPARRA STREET PYMBLE 2073 TEL 449833

TRICAL ENGINEER.
RTMENT OF PUBLIC WORKS
SOUTH WALES

CONSULTING STRUCTURAL ENGINEER.
GARY TRUSWELL & ASSOCIATES PTY LTD
202 MONA VALE ROAD ST IVES 2075 TEL 449717

DEPARTMENT OF PUBLIC WORKS N.S.W.
DIRECTOR OF PUBLIC WORKS

W. THOMSON — GOVERNMENT ARCHITECT

PRINCIPAL ENGINEER SCHOOLS

G.C. CORKILL — DEPUTY CHIEF ENGINEER GOVT. ARCHITECT'S BRANCH

P.B.G. 11.7.83

PICTON HIGH SCHOOL
NEW LIBRARY

EXTERNAL GAS SERVICES
SITE PLAN L.P GAS

PLAN ROOM NUMBER SB1220-15/5

NUMBER IN SET

SHEET NUMBER 2

SCALES 1 : 200

DRAWN ROSS B. MILLS