PRELIMINARY (STAGE 1) SITE INVESTIGATION

Proposed Community School

1 Rosemead Road Hornsby NSW

Report To:

Maureen Hartung OAM
Executive Director - Blue Gum Community School

C/O ANDREW MARTIN PLANNING

Prepared By:

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30 April 2020

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EXECUTIVE SUMMARY

INTRODUCTION

This report presents the findings and recommendations of a Preliminary or Stage 1 Site Investigation undertaken in relation to a proposed Community School development at 1 Rosemead Road Hornsby. The findings of the site investigation are summarised below.

SITE INVESTIGATION PROCESS

The site investigation and assessment were completed in accordance with all relevant guidelines and protocols, including those provided by in the NSW EPA document *Guidelines for Consultants Reporting on Contaminated Sites (1997, reprinted 2000 & 2011)*, and included in particular:

- A detailed review and consideration of the history and past uses of the site, based on a search of available title and ownership records;
- A thorough physical inspection of the site and surrounding properties; and
- Physical examination of soil samples from varying depths at soil bores drilled by hand augur at representative locations throughout the site area.

SITE HISTORY

Nothing associated with the past uses of the site is indicative of operations or practices likely to have given rise to the contamination or pollution of the site, and the soils comprising the sub-surface at the site.

SITE INSPECTION

A detailed inspection of the site has been undertaken. This inspection did not indicate any environmental or contamination issues prejudicial to the educational purpose proposed for the site.

SOIL EXAMINATION & INVESTIGATION

Eighteen soil samples from six representative locations at the site were physically examined and tested in the field for indications of contamination. There was nothing in the physical appearance or odour of any of the soil samples to indicate the presence of chemical or other contamination, or the presence of extraneous materials.

All samples were tested at the time of sampling with a portable photoionisation detector for the presence of hydrocarbon vapours. No samples indicated a positive response for hydrocarbon vapours.

The physical inspection, examination and testing of soil samples from six locations at the site has provided no indication of contamination, and no further or more detailed assessment is considered necessary to confirm the suitability of soil quality at the site for the preschool and primary school proposed.

OVERALL FINDINGS

The overall findings of this assessment indicate that:

- The underlying soils at the site are not contaminated, and that soil quality at the 1 Rosemead Road Hornsby NSW site is appropriate for the educational use proposed.
- A thorough inspection of the site did not identify any environmental issues, risks or exposures considered to be of significant concern.
- A review of the history and past uses of the site did not identify any issues that might have resulted in residual environmental or contamination risks or exposures.
- No significant quantities of materials known or suspected to contain hazardous materials were identified at or in the vicinity of the site.
- The only potentially hazardous material issue identified at the site was the presence of lead in old and underlying paint films at the site.
- It was found that while some underlying paint films at the site contained lead, no significant hazard or risk resulted provided that (a) painted surfaces throughout the building are maintained in a stable condition, and (b) paints used following the repair of several areas of peeling paint caused by previous leaks (now repaired) are lead free.

From a general environmental, contamination and hazardous material perspective, the site is considered appropriate for the educational use proposed, and this preliminary investigation has not identified any issues, risks or exposures that would indicate that further assessment and investigation is required to confirm this finding.

RECOMMENDATIONS

The findings of this report, as summarised above, are made subject to the following recommendations:

- That any lead paint residues generated by the repair of areas of peeling paint caused by previous leaks (now repaired) at the site are safely collected and disposed of in a safe and appropriate manner (refer Section 8 and Appendix A);
- That all panted surfaces throughout the building are maintained in a stable condition, to ensure the effective capping and containment of any older underlying paint films containing lead; and
- That appropriate care is taken in respect of any potentially hazardous or dangerous materials unexpectedly identified during any future demolition or clearance works involving the existing dwelling at the site (refer Section 8 and Appendix A).

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30 April 2020

1 INTRODUCTION

Andrew Martin Planning, on behalf of client Maureen Hartung OAM (Executive Director, Blue Gum Community School) is involved in the planning, design and prospective delivery of a new Blue Gum Community School at 1 Rosemead Road Hornsby NSW. The proposed site will provide for a 32 place preschool and a 48 place primary school.

The proposed development is subject to the approval of the NSW Department of Planning.

A Preliminary or Stage 1 Site Investigation (and contamination assessment) will be required to accompany the Development Application (DA) submission for the project.

Andrew Martin Planning has engaged NG Child & Associates to undertake the site investigation and assessment work required.

Noel Child of NG Child & Associates is an appropriately qualified and experienced consultant to undertake the work involved. His CV is provided for reference at Appendix F.

This document presents the findings of the site investigation undertaken at 1 Rosemead Road Hornsby.

2 BACKGROUND

2.1 LOCATION

The general location of the proposed Community School is indicated by the road map in Figure 2.1 below.

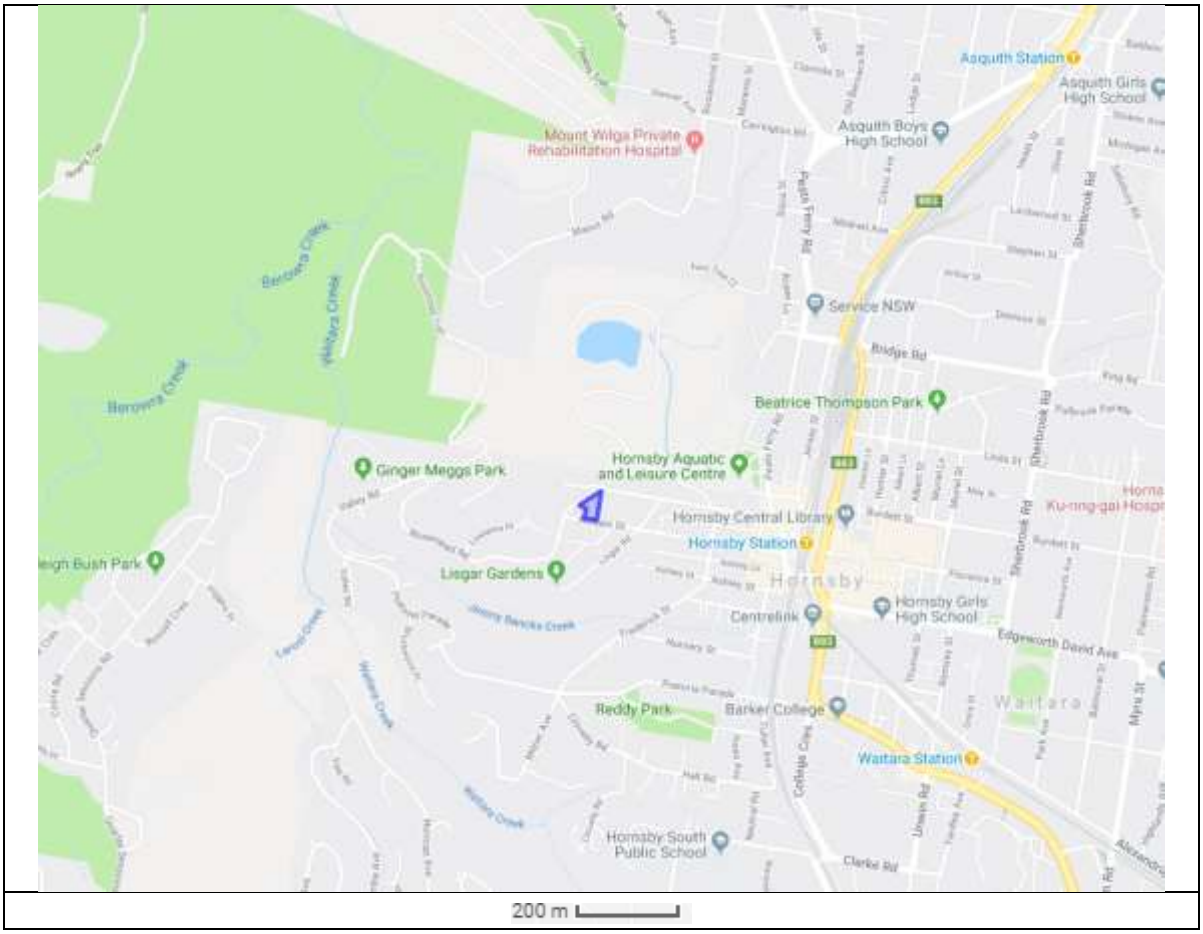

Figure 2.1 – Location of the Proposed Community School

Figure 2.2 below shows a recent (April 14th, 2020) satellite photograph of the site area.

The direction of north is towards the top of both diagrams, and the approximate scale is indicated below.

The site area is shown shaded in blue in both diagrams.

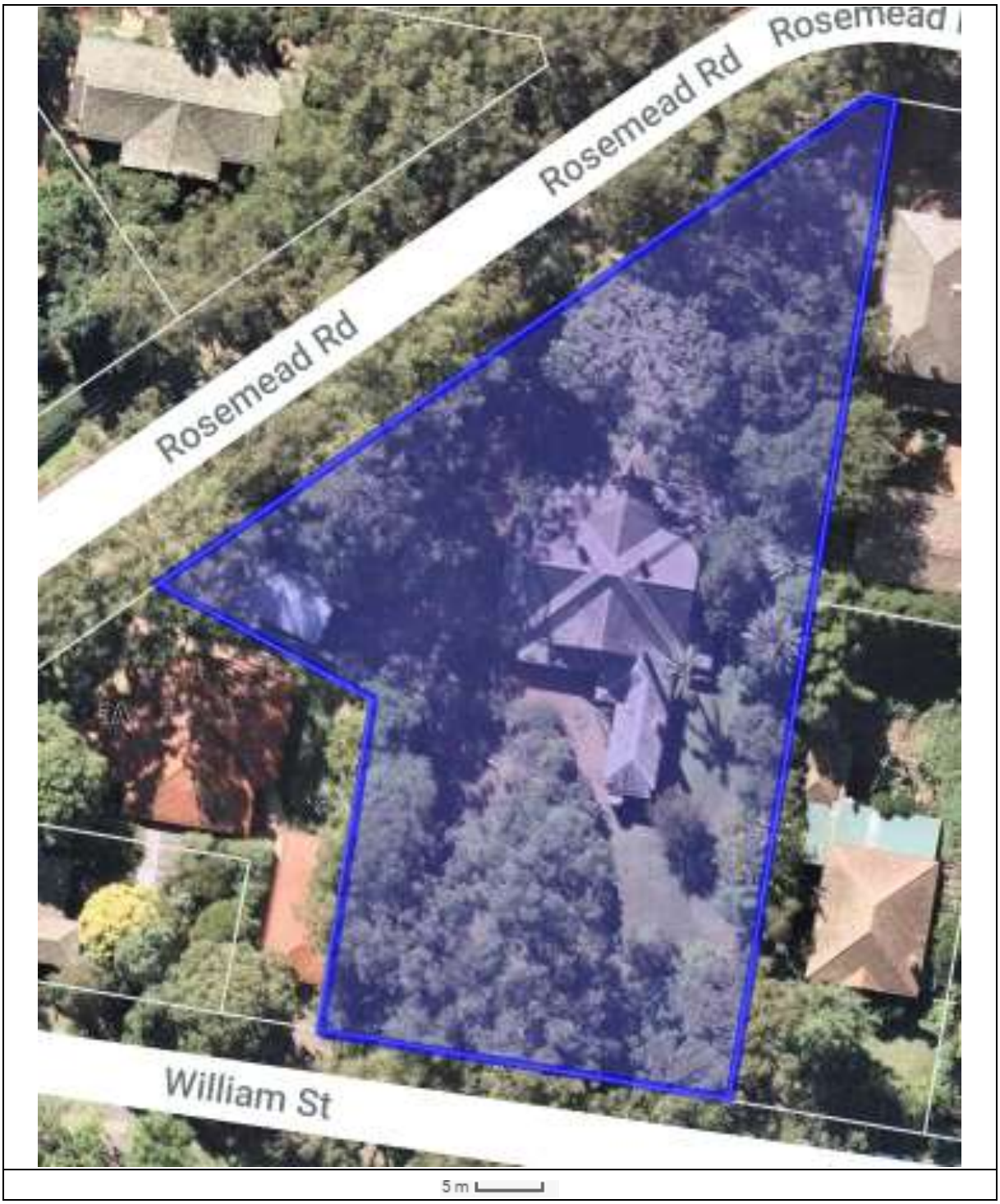

Figure 2.2 – Satellite Photograph of Site Location (April 14th, 2020)

Photographs of the site, including the current residential building at the site, are included for reference in Figures 2.3 and 2.4, on the following page.

Figure 2.3 – Site Viewed from Rosemead Road

Figure 2.4 – Site Viewed from William Street

2.2 LOCAL GOVERNMENT CONSENT AUTHORITY

The proposed site falls within the local government area of Hornsby Shire Council.

The site is zoned “R2 – Low Density Residential”, as shown in Figure 2.5 below. The Rosemead Road site is at the left-centre of the map.

Other land uses in the general vicinity include other low density residential, medium and high density residential, mixed use and public recreation.

Land in the immediate vicinity of the subject site is low density residential.

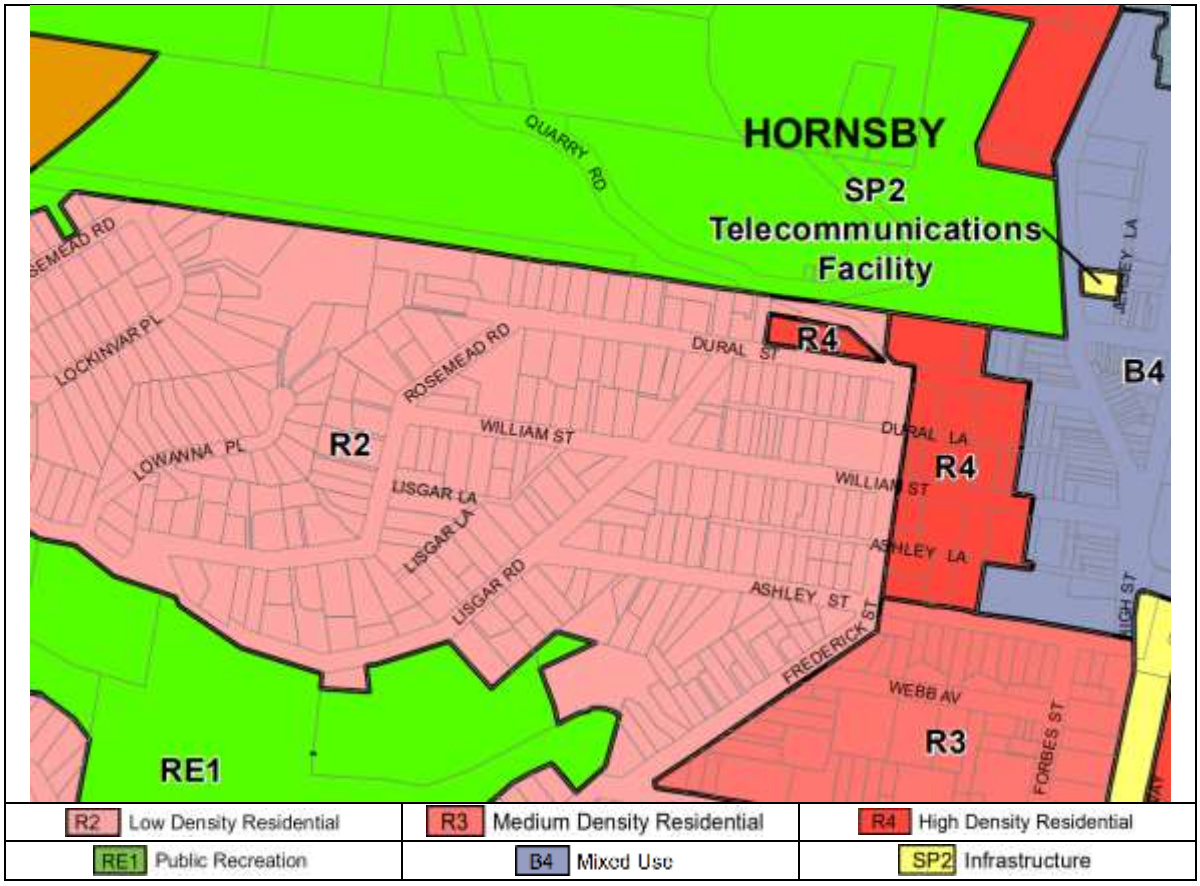

Figure 2.5 – Hornsby Shire Council Land Zoning Map

The zoning diagram shown in Figure 2.3 was sourced from the Hornsby Local Environment Plan 2013 (HELP 2013).

2.3 PROPOSED DEVELOPMENT

The proposed development is a small community school incorporating a 32 place preschool and a 48 place primary school.

A total of 80 children will be involved.

The development will involve modifications to an existing building at the 1 Rosemead Road site, as indicated by the plans and drawings provided in Figures 2.6 to 2.12 on subsequent pages, as follows:

Figure 2.6	Site & Roof Plan
Figure 2.7	Floor Plans & Sections
Figure 2.8	Elevations (House)
Figure 2.9	Elevations (Site)
Figure 2.10	Additional Details
Figure 2.11	Site Management & Stormwater Concept Plan
Figure 2.12	Landscape Plan

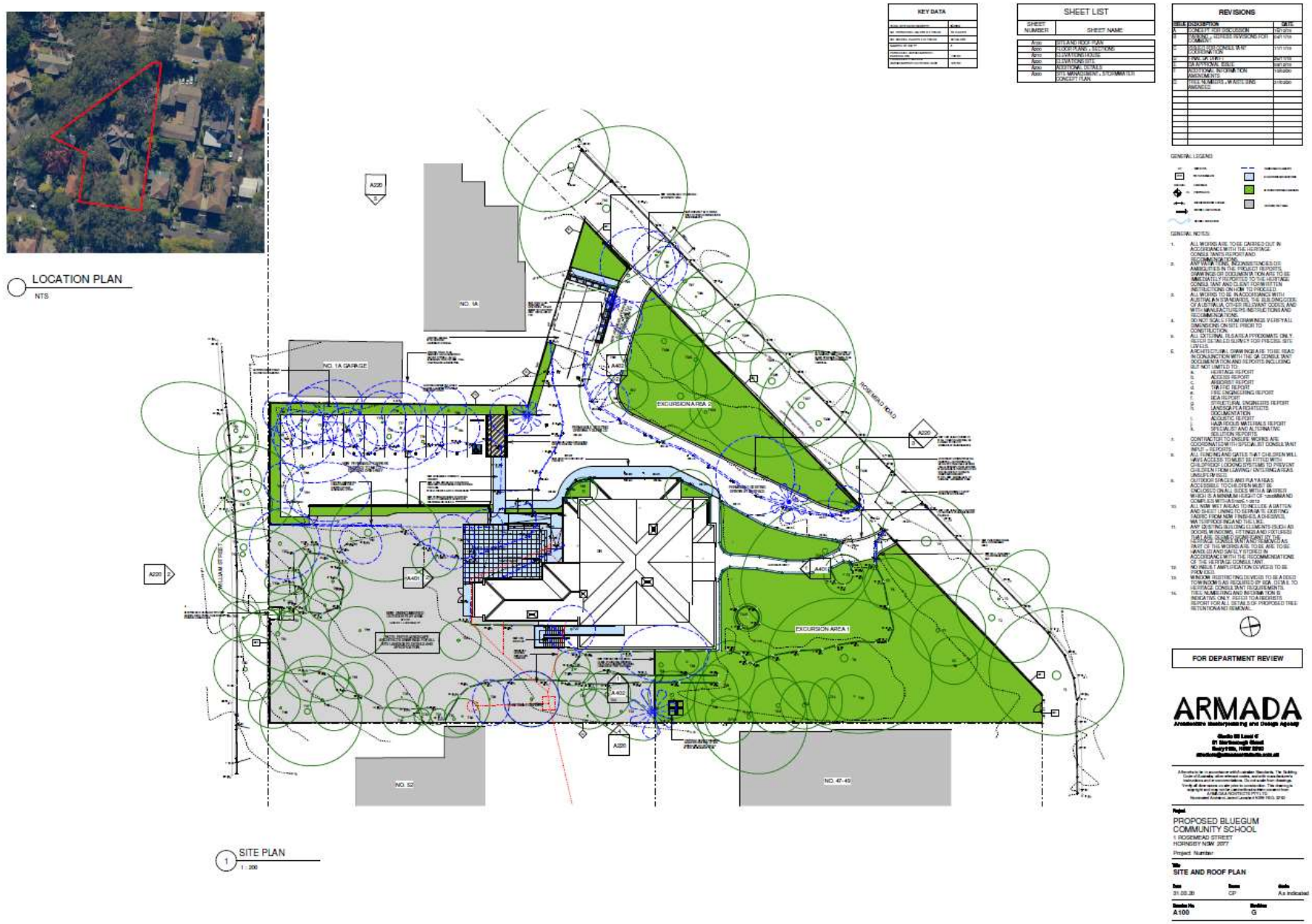

Figure 2.6 – Site & Roof Plan

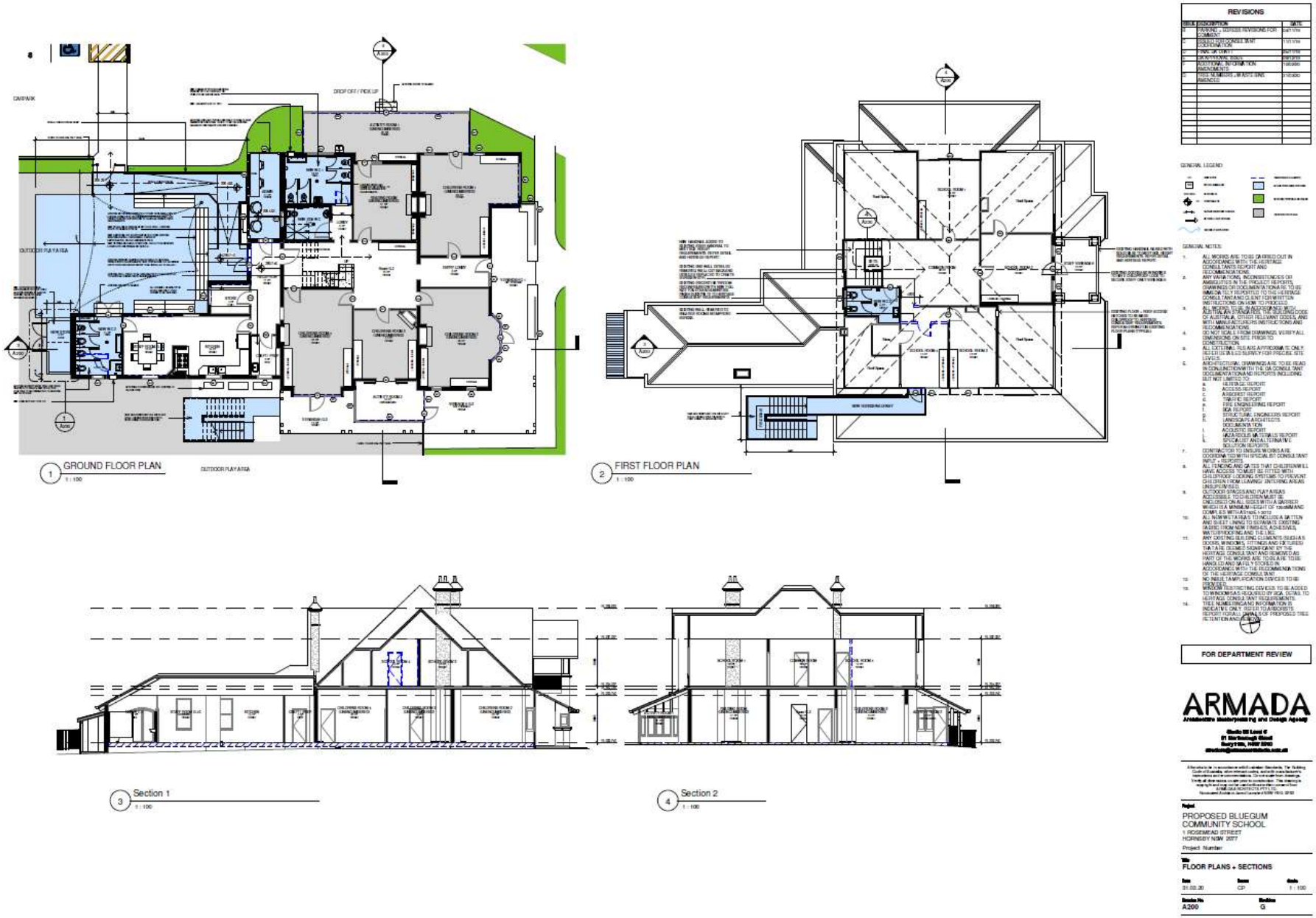

Figure 2.7 – Floor Plans & Sections

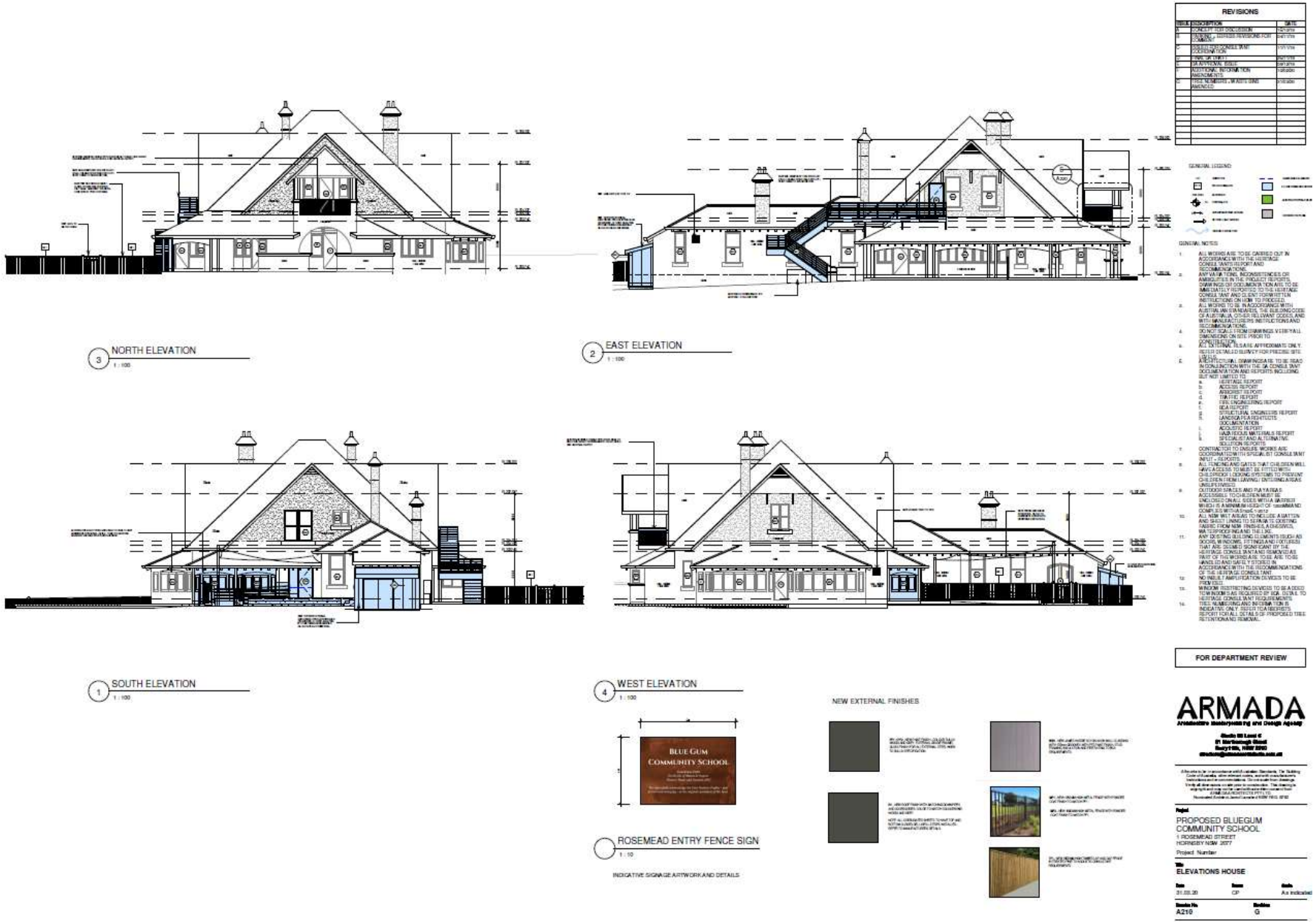

Figure 2.8 – Elevations (House)

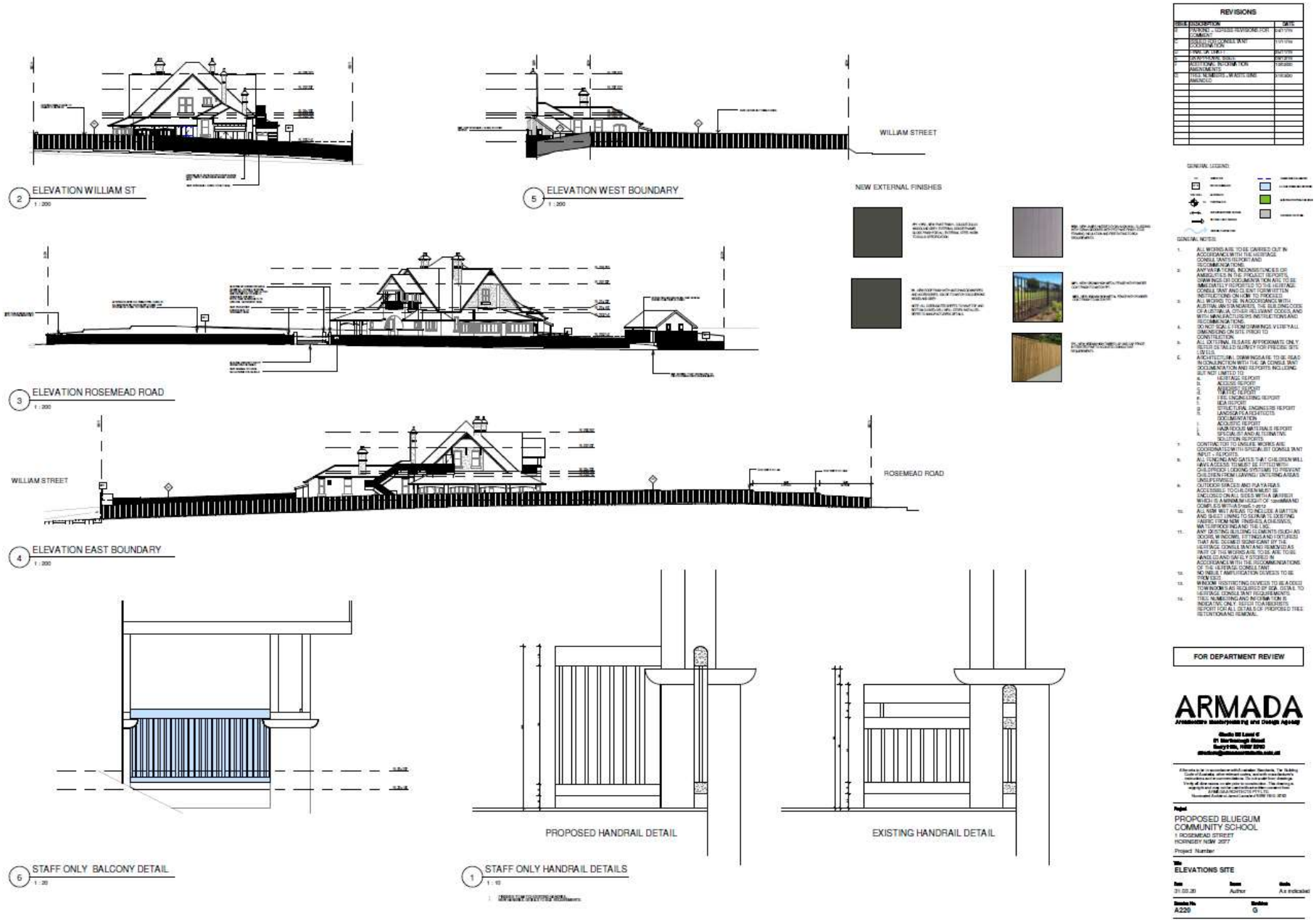

Figure 2.9 – Elevations (Site)

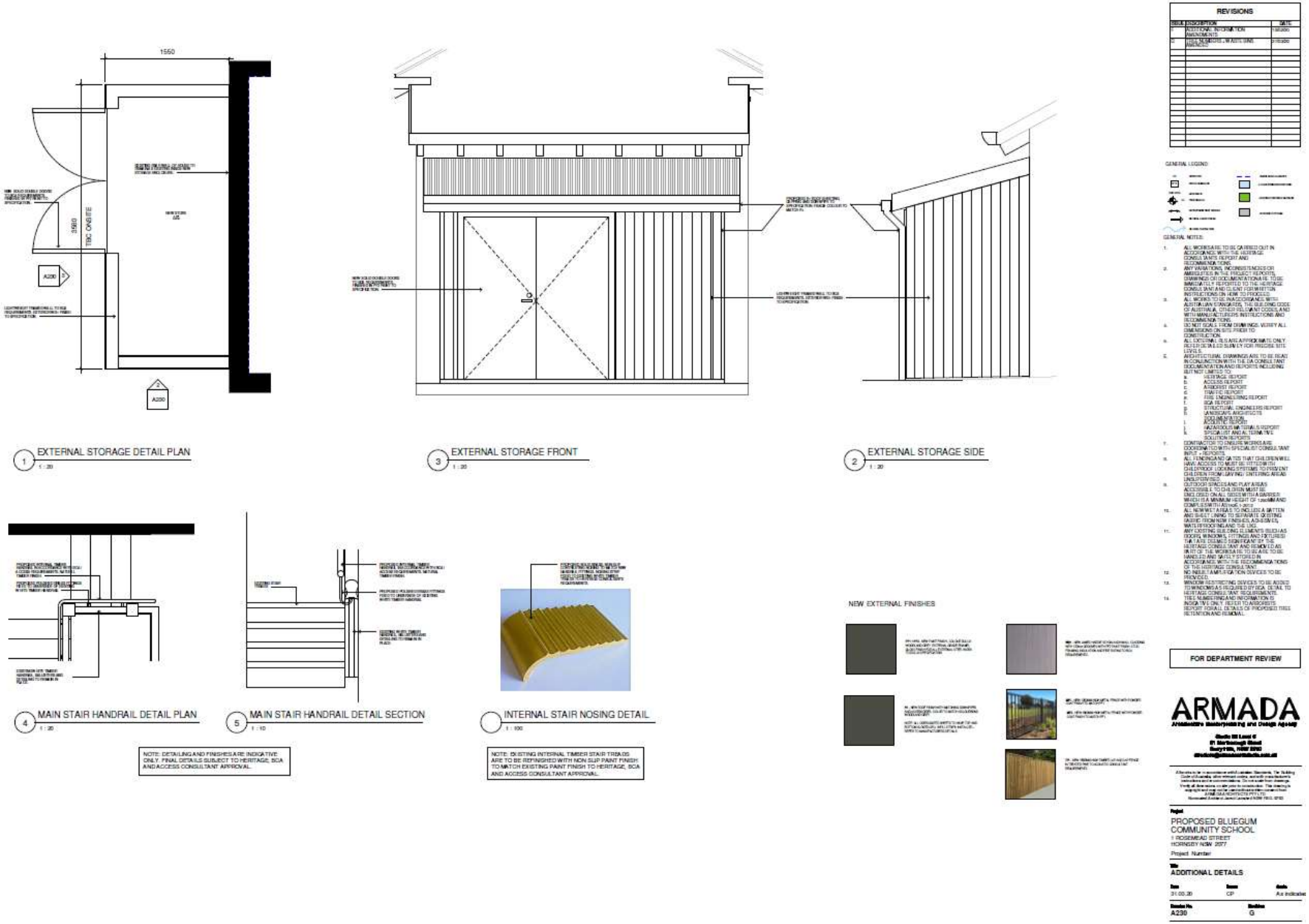

Figure 2.10 – Additional Details

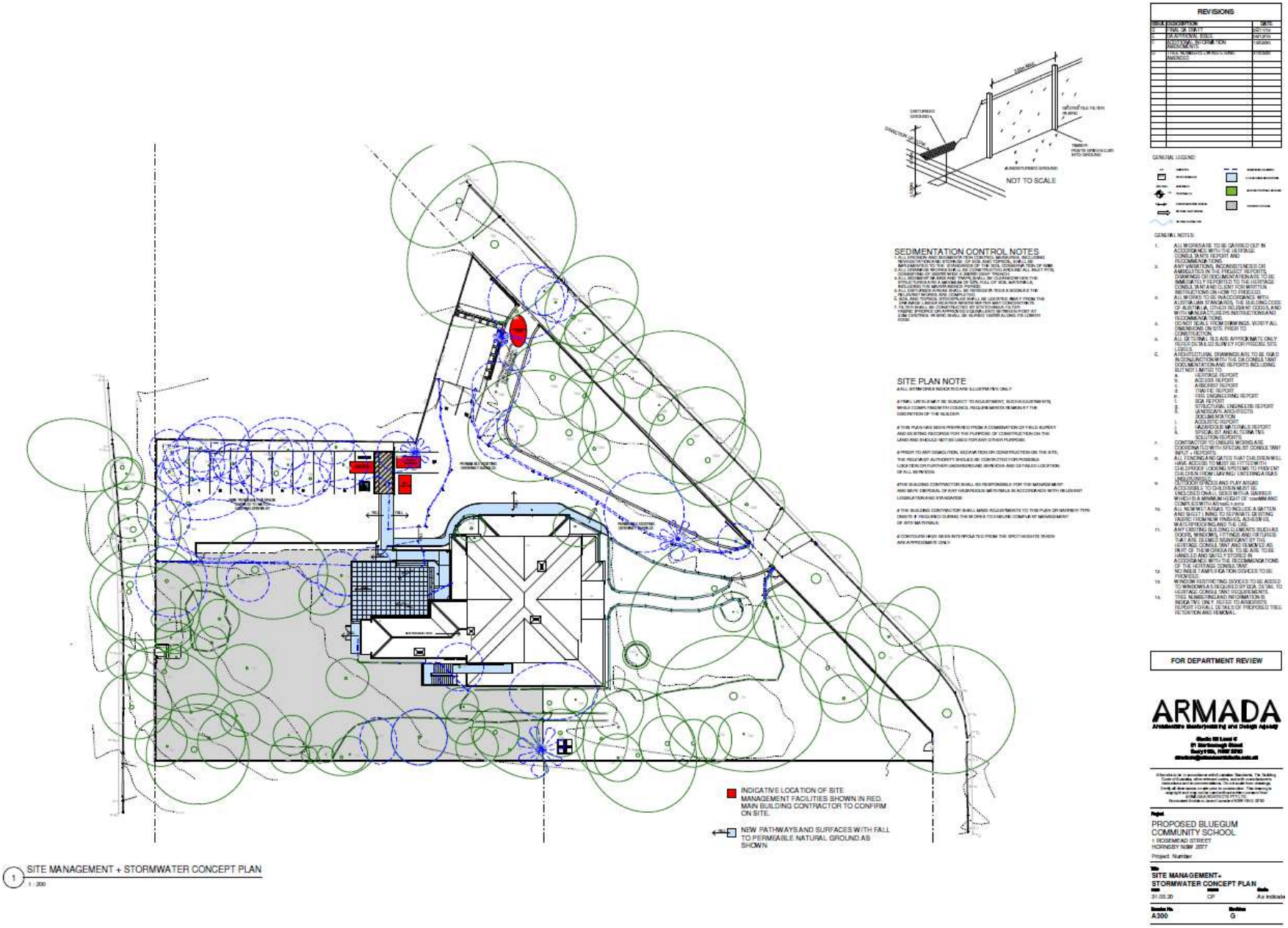

Figure 2.11 – Site Management & Stormwater Concept Plan

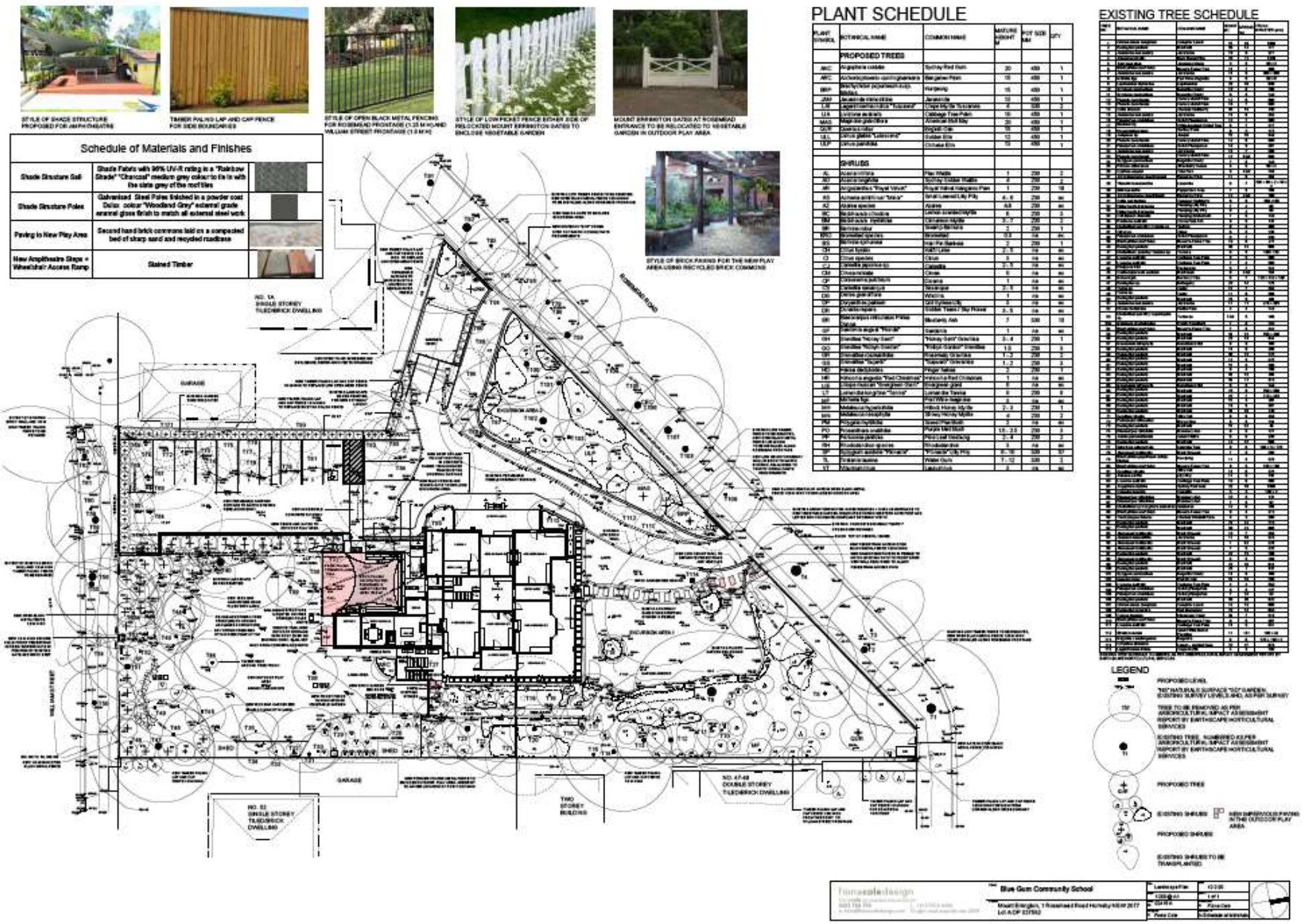

Figure 2.12 – Landscape Plan

3 SITE INVESTIGATION & ASSESSMENT GUIDELINES

3.1 NSW DEPARTMENT OF PLANNING INDUSTRY & ENVIRONMENT

The NSW Department of Planning Industry & Environment is the authority responsible for review and approval of the application for development of a community school at 1 Rosemead Road, Hornsby.

All issues relevant to a preliminary site investigation have been considered, including any indications that further investigation and assessment may be required to establish the environmental suitability of the site for the educational use proposed.

Specific assessment criteria and guidelines are summarised below.

3.2 SEPP EDUCATIONAL ESTABLISHMENTS & CHILD CARE (2017)

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the Child Care Planning Guideline apply to all development for childcare and education in NSW. This includes all new and existing childcare and educational facilities.

All Development Applications must demonstrate how the development complies with:

- The National Quality Framework for Early Childhood Education and Care Facilities; and
- The relevant objectives, provisions and considerations in the SEPP and the Child Care Planning Guideline.

Typically, individual local government DCP's do not apply where they are inconsistent with the SEPP or the guideline, except for building height, side and rear setback or car parking provisions. All relevant provisions of the SEPP have been considered in the preparation of this acoustic assessment.

3.3 NSW CHILD CARE PLANNING GUIDELINE (2017)

The Child Care Planning Guideline : Delivering quality childcare for NSW (August 2017) supports the SEPP described in 4.2 above.

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (the SEPP) determines that a consent authority must take into consideration this Guideline when assessing a development application (DA) for a centre based childcare facility ("childcare facility").

It also determines this Guideline will take precedence over a Development Control Plan (DCP), with some exceptions, where the two overlap in relation to a childcare (or educational) facility.

This Guideline informs state and local government, industry and the community about how good design can maximise the safety, health and overall care of young children. At the same time, it aims to deliver attractive buildings that are sympathetic to the streetscape and appropriate for the setting while minimising any adverse impacts on surrounding areas. It will help achieve a high level of design that is practical and aligned with the National Quality Framework.

The Guideline is intended to provide a consistent statewide planning and design framework.

In terms of visual and acoustic issues, Sections 3.5 and 3.6 of the Guidelines apply, as follows;

3.1 Site selection and location

Not all sites will be suitable for childcare or educational facilities. This Guideline aims to help proponents choose a suitable site for a new service or facility. The most important question for each applicant is: Is the neighbourhood a good "fit" for the proposal?

The location and physical context of a childcare or educational facility should be safe and healthy for children. There are several environmental hazards to be aware of when locating a new proposal, for example, bush fire and flood prone land, and contaminated land.

In addition, local councils may identify areas of significant hazard in their planning instruments and policies.

Childcare and educational facilities should also be compatible with the surrounding land uses. The predominant issues will vary depending on the location and setting of the site, the type of development being proposed, and the type of surrounding may be more important in rural areas.

Considerations

Objective: To ensure that the site selected for a proposed facility is suitable for the use.

C2 When selecting a site, ensure that:

- the location and surrounding uses are compatible with the proposed development or use
- the site is environmentally safe including risks such as flooding, land slip, bushfires, coastal hazards
- there are no potential environmental contaminants on the land, in the building or the general proximity, and whether hazardous materials remediation is needed
- the characteristics of the site are suitable for the scale and type of development proposed having regard to:
  - size of street frontage, lot configuration, dimensions and overall size
  - number of shared boundaries with residential properties
  - the development will not have adverse environmental impacts on the surrounding area, particularly in sensitive environmental or cultural areas

C4 A childcare or educational facility should be located to avoid risks to children, staff or visitors and adverse environmental conditions arising from:

Proximity to:

- heavy or hazardous industry, waste transfer depots or landfill sites
- LPG tanks or service stations
- water cooling and water warming systems
- odour (and other air pollutant) generating uses and sources or sites which, due to prevailing land use zoning, may in future accommodate noise or odour generating uses
- extractive industries, intensive agriculture, agricultural spraying activities
- any other identified environmental hazard or risk relevant to the site and/ or existing buildings within the site.

Aspects of the Child Care Planning Guideline (2017) relating to environmental and contamination issues relevant to the site have been taken fully into account in the preparation of this Site Investigation Report.

3.4 STATE ENVIRONMENTAL PLANNING POLICY 55

Planning NSW's State Environmental Planning Policy 55 requires that an assessment of soil quality is required in cases where land previously used for non-residential purposes is proposed for residential development. The provisions of SEPP 55 typically apply to the use of former commercial or industrial land for residential or other sensitive land uses, including educational uses.

As the past land use of the properties comprising the proposed Community School site appears to have been residential in nature, it is considered unlikely that the provisions of SEPP 55 apply in this case.

However, for completeness, SEPP 55 requirements have been considered as part of the site investigation undertaken.

3.5 NSW ENVIRONMENT PROTECTION AUTHORITY

The NSW Environment Protection Authority (now a division of the NSW Department of Planning) provide guidelines and protocols for the environmental assessment of land.

These guidelines and protocols are summarised for reference at Appendix A, and have been taken into account in the site investigation

3.6 SAFEWORK NSW (AND OTHERS)

SafeWork NSW and other NSW government departments and agencies provide guidelines for the management, handling and disposal of materials containing asbestos.

All relevant guidelines and protocols will be taken into account and detailed in the asbestos and general hazardous materials handling and management procedures summarised in Section 8 of this report.

3.7 TYPICAL SITE INVESTIGATION & ASSESSMENT REQUIREMENTS

The following considerations typically apply to the approach of local government in NSW to environmental and contamination site investigations and assessments and are considered relevant to the assessment presented in this document, and to the level of investigation and assessment detail provided.

Pursuant to the provisions of the Environmental Planning and Assessment Act 1979 (as amended), Councils have a duty of care, when considering Rezoning, Development and Complying Development Certificate Applications, to consider fully the possibility of land contamination and the implications it has for any proposed future use of land.

In recognition of this duty of care, Councils typically (and not unreasonably) adopt a precautionary approach to the consideration of applications involving contaminated or potentially contaminated land. The object of this approach is to enable any land contamination issues to be identified and dealt with at an early stage in the planning process. This approach can, as in this case, involve the requirement for a detailed environmental site investigation.

Councils typically have regard for the sensitivity of a proposed land use in addition to any technical standards or requirements published by:

(a) The NSW Environment Protection Authority (EPA) (incorporated into the NSW Department of Environment and Conservation);

(b) The Australian and New Zealand Environment Conservation Council (ANZECC);

(c) The National Health and Medical Research Council (NH&MRC);

(d) The National Environment Protection Council (NEPC); and

(e) Any other relevant authority.

The processes of identifying, evaluating and remediating contaminated land are documented in the ANZECC and NH&MRC publication entitled "Guidelines for the Assessment and Management of Contaminated Sites" (January 1992). Councils typically consider these guidelines to be a mandatory reference for consultants assessing contamination levels and undertaking remediation works. Councils also generally require that consultants preparing contamination reports should also have a practical working knowledge of the various Environment Protection Authority and NEPC publications on contaminated land including:

(1) Environment Protection Authority (EPA), 1994, Contaminated Sites: Guidelines for Assessing Service Station Sites;

(2) EPA, 1995, Contaminated Sites: Sampling Design Guidelines;

(3) EPA, 1995, Contaminated Sites: Guidelines for the Vertical Mixing of Soil on Former Broad-Acre Agricultural Land;

(4) EPA, 1997, Guidelines for Consultants Reporting on Contaminated Sites;

(5) EPA, 1998, Guidelines for the NSW Auditor Scheme; and

(6) NEPC, 1999, Draft National Environmental Protection Measure - Assessment of Contaminated Sites.

Contaminated land is generally defined as land in, on or under which any substance is present at a concentration above that naturally present in, on or under the land and that poses, or is likely to pose, an immediate or long-term risk to human health or the environment (Environmental Planning & Assessment Act 1979, as amended). Contamination can result from many past and/or present occurrences, such as:

(a) The controlled or uncontrolled disposal of wastes, including sewage;

(b) Accidental leakage;

(c) Leakage during plant operation, storage or transportation of materials, products or wastes;

(d) The corrosion of underground tanks;

(e) The emission of particulate matter into the atmosphere;

(f) The migration of contaminants into a site from neighbouring land, either as vapour, leachate or movement of liquids through the soil; and

(g) The use of agricultural chemicals.

In accordance with the NSW EPA guidelines included at Appendix A, four stages or levels of environmental or contamination assessment are identified, as follows:

- Stage 1 – Preliminary Investigation
- Stage 2 – Detailed Investigation
- Stage 3 – Site Remedial Action Plan
- Stage 4 – Validation and Monitoring

In this case, a Preliminary or Stage 1 Site Investigation has been undertaken.

It is noted that established NSW EPA site investigation processes typically require that a Stage 1 site investigation be initially undertaken, and that a more detailed Stage 2 investigation is only undertaken if indicated by the results of the preliminary investigation.

3.8 HAZARDOUS MATERIALS CONSIDERATIONS

The handling, management and disposal of hazardous materials, including in particular any materials containing asbestos, must be undertaken in accordance with protocols and guidelines established by SafeWork NSW, the NSW EPA, and other NSW government departments and agencies.

While no indications of the presence of asbestos have merged from this preliminary investigation, for completeness appropriate guidelines for the handling, management and disposal of any hazardous materials that may be encountered during the proposed development have been provided in Section 8 of this report, and are supported by advice provided in Appendix A.

4 PURPOSE & SCOPE OF THE ASSESSMENT

4.1 OVERALL OBJECTIVE

The overall objective of this assessment has been to thoroughly investigate and assess all relevant general environmental, soil quality and potential contamination issues at the 1 Rosemead Road Hornsby site and prepare a Stage 1 Site Investigation Assessment Report.

4.2 GENERAL APPROACH TO THE ASSESSMENT

The general approach to this investigation and assessment has involved a careful review of the issues that, in our professional opinion, and in terms of all relevant assessment guidelines and protocols as summarised in Section 3 of this report, require observation, consideration, testing and assessment in order to determine whether the general environmental condition of the site, including in particular soil quality, is appropriate for the residential land use proposed; whether it complies with relevant guidelines and criteria, and whether any remedial actions may be required to achieve these outcomes. The assessment has taken into account regulatory approval, due diligence and any known or potential environmental and environmental health related issues, and has involved the following:

- Use of the best available data regarding the background environment at and in the vicinity of the proposed development site;
- Consideration of all other known and relevant information in relation to the various environmental issues involved in the assessment;
- Consideration of all known and identifiable sources of actual or potential environmental impact, and the effects of any such potential impacts;
- Detailed inspection of the site and its immediate environs;
- Review and consideration of site history; and
- Soil examination and investigation in accordance with the requirements of the NSW EPA document *Guidelines for Consultants Reporting on Contaminated Sites* for a Preliminary or Stage 1 Site Investigation.

4.3 SCOPE OF THIS ASSESSMENT

The three key areas of the assessment presented in this report are summarised in 4.3.1, 4.3.2 and 4.3.3 below.

4.3.1 Review of Site History

Past activities and land uses can influence the environmental condition of land and can result in the contamination of soils. To ensure that past uses of and activities at and near the 1 Rosemead Road Hornsby site are fully investigated and assessed, a review of available records regarding the history of the site has been undertaken.

The results of this aspect of the site assessment are presented in Section 5.

4.3.2 General Site Inspection & Assessment

To ensure that all relevant environmental and contamination issues are dealt with in the assessment, a physical inspection of the site and surrounding areas has been undertaken. This type of site inspection forms an important part the environmental assessment process, and the guidelines and protocols for environmental assessment provided by the NSW EPA in its guideline document *Guidelines for Consultants Reporting on Contaminated Sites*. A site inspection and general environmental assessment, describing the site and the location, and providing a review and consideration of all potential environmental risk and exposure issues, including consideration of nearby properties and activities, identifying any potential environmental impacts, including any potential hazardous risk issues, has been completed. The findings of this inspection process are reported in Section 6 of this report.

4.3.3 Soil Quality and Contamination Assessment

Soil contamination is a potential area of environmental risk and concern, primarily in cases when previously non-residential land is used for residential purposes. NSW State Environmental Planning Policy 55 (SEPP 55) requires the sampling, analysis and assessment of soil in relevant instances when land previously used for non-residential purposes is proposed for more sensitive land uses, including residential development.

It is noted in this case that the primary past use of the land in question appears to have been residential, an issue addressed in greater detail in Section 5 of this report.

For this reason, the soil quality assessment undertaken as part of this investigation has involved the physical inspection and examination of soil from varying depths from the surface to 1000 mm at six sampling locations at representative locations throughout the site.

The investigation process has involved:

- **Soil Sampling:** Collection and physical examination of soil samples from the six representative locations, and at various depths;

- **Physical Inspection:** A thorough physical inspection of the soils at the six sampling locations, including the visual examination of all soil samples to identify an obvious physical indications of soil contamination or associated issues, including consideration of physical appearance, odour, and any indications of the use of imported or in any way potentially hazardous fill materials at the site;

- **Testing by Photoionisation Detector:** Testing of soil from varying depths at the six sampling locations by portable photoionisation detector for the possible presence of hydrocarbon contamination; and

- **Reporting:** The preparation of this report, in accordance with relevant guidelines, setting out the findings of the assessment, including any relevant conclusions and recommendations.

The results of this soil quality examination and investigation are presented in Section 7 of the report.

4.3.4 Asbestos & Hazardous Materials Considerations

An inspection of the site, including the existing dwelling at the site, has been undertaken to identify any actual or potential hazardous materials present.

This task forms part of the site inspection process and includes the identification of any hazardous or potentially hazardous materials, and the provision of appropriate advice for the management, handling and disposal of any such materials.

General advice has been provided in Section 8, supported by the detailed information included at Appendix A.

Particular emphasis has been placed on the identification of any materials containing asbestos.

While the scope of this Preliminary Site Investigation did not include a detailed Hazardous Materials Survey, relevant comments and advice have been provided wherever applicable.

4.3.5 Any Other Relevant Environmental Issues

In addition to the specific assessment tasks discussed in 4.3.1, 4.3.2, 4.3.3 and 4.3.4 above, and in accordance with sound professional practice, any other matters of potential environmental relevance and significance noted during the assessment process have also been taken fully into account in the assessment and reporting process.

5 SITE HISTORY & PAST USE

5.1 PROPERTY SEARCH

A detailed property and title search of the 1 Rosemead Road Hornsby site was undertaken as part of this assessment.

Detailed results of the property and title searches involved have been provided for reference in Appendices C, D and E to this document.

Summaries are provided below, together with any environmental or contamination implications arising from the history and past use of the property.

5.2 HISTORY & PAST USE

The property search provided details of ownership (and indications of land use) dating back to 1900, prior to which time the land involved is understood to have formed part of a larger portion of either undeveloped crown land or an early agricultural land grant. From an environmental and contamination viewpoint, this overview since 1900 is considered to be a more than adequate review period.

Before 1900

As indicated above, prior to 1900, the site is understood to have formed part of a larger portion of either undeveloped crown land or an early agricultural land grant. Prior to European colonisation of Australia, the land formed part of the Australian Aboriginal lands and culture.

1900 - 1931

Between 1900 and 1931, the current portion of land formed part of a slightly larger land parcel, which also included what is now 1A Rosemead Road Hornsby. It is assumed from the available land records that this slightly larger land area was used for residential purposes, with the existing residence and much of the existing gardens and landscaping also present. No farming or agricultural use of this portion of land is indicated, although it is assumed that surrounding lands were used for agricultural purposes, including orchards.

1931 - 1990

In 1931 the land portion was reduced to its current area by the sub-division of 1A Rosemead Road portion, as demonstrated by the plan included for reference as part of Appendix E. Between 1931 and 1990 the property had only two owners. Firstly, between 1931 and 1953 Jean baker Harbison, wife of John Wesley Harbison (medical practitioner, and then between 1953 and 1990 Thomas Richard Mason (a school master) and his wife Blanche Sophia Mason.

1990 - 2002

Between 1990 and 1990 ownership of the property continued to be held by the immediate Mason family, and the extended Mason family.

2002 – 2007

Between 2002 and 2007 the property was owned by Roslyn Skinner and Graham Warrington Skinner.

2007 - 2019

Between 2007 and 2019 the property was owned by Judith Mary Blazey, transferring to Roger William Blazey in 2019.

2019 – todate

In 2019, the property was acquired by its current owner, Best Practice Education Group Limited.

5.3 IMPLICATIONS OF SITE HISTORY & PAST USE

It is considered unlikely that land use during the period prior to 1900 would have had any actual or certainly ongoing environmental or contamination implications for the current Community School proposal.

Consideration of land ownership and use since 1900 indicates that the property, in very much its current form other than for the removal by sub-division of what is now 1A Rosemead Road in 1931, has been used exclusively for residential use, with associated gardens and landscaping complementary to that use/

These past land uses are not indicative of any significant environmental or contamination impacts at the site.

6 SITE INSPECTION & ASSOCIATED ISSUES

6.1 INTRODUCTION

This assessment has included a general consideration of any identifiable environmental issues, risks and exposures associated with the proposed development site, or associated with properties and activities in the immediate vicinity of the site. This section of the assessment report deals with a number of important general environmental issues and takes into account those issues typically considered in Stage 1 Site Investigations.

This aspect of the assessment is based on inspections of the site and surrounding areas undertaken by Noel Child of NG Child & Associates during October and November 2019.

More specific consideration of soil quality and potential soil contamination issues has been provided in Section 7 of this report, based on soil inspection and physical examination undertaken as part of the site inspection and assessment process.

6.2 PRELIMINARY (STAGE 1) SITE INVESTIGATION

The Stage 1 Site Investigation undertaken has involved an as detailed as possible inspection of the proposed site and its immediate surroundings, taking into account the general environmental condition of the site, and including a review and assessment of past and current activities at the site; structural and engineering elements that may be relevant to the proposed development; nearby activities and operations, and any associated environmental risks, impacts or implications, and in accordance with relevant assessment guidelines.

Issues considered included:

- **General Definition of the Site Boundaries**: A description of the proposed site, including the preparation of appropriate diagrams showing the location of the site in relation to existing streets and other relevant references (refer Section 2).

- **Site Photographs**: Representative photographs of the site, and nearby properties and civilities, illustrating relevant features, subject to access limitations described above (refer Sections 2 and 6).

- **Site Activities:** A description of present activities and operations at and in the immediate vicinity of the site, noting any existing or potential environmental risks associated with these activities and operations.

- **Adjacent Activities**: A consideration and description of the general nature of nearby property activities, including relevant comment on existing or potential environmental risks or exposures associated with these activities and operations.

- **Site History**: A summary, to the extent that it can reasonably be obtained from local government and other sources, of the history of the past use of the proposed site, including appropriate consideration of any past operations or activities that may involve environmental risks or impacts (refer Section 5).

- **Hazardous Goods & Materials**. An assessment of risks and potential risks associated with any hazardous or potentially hazardous goods or materials identified at or in the immediate vicinity the site.

- **Possible Hazards Associated with Building and Construction Materials or Structural Elements.** Provision of general comments and relevant advice regarding any obvious or apparent issues in relation to building or construction materials, or structural elements, at or in the immediate vicinity of the proposed residential development. A general consideration of potential hazardous materials issues has been provided (refer Section 8 and Appendix A).

- **Soil Contamination.** Physical inspection and assessment of soils for indications of contamination, including staining and odour. (Assessment supported by the limited but more detailed soil quality assessment provided in Section 7).

- **Road Traffic Impacts.** A general assessment of the potential environmental impacts of road traffic activities in the immediate vicinity of the site (excluding acoustic impacts), taking into account any impacts that these activities might have on the site.

- **Equipment and Infrastructure**. A review of any plant, equipment and infrastructure items at or in the immediate vicinity of the proposed site, and a review of any potential environmental risks or impacts.

- **Telephony, Power Distribution Infrastructure & other Potential EMF Sources**. A review of any significant items of mobile telephone, electrical power distribution infrastructure, or any other potential electromagnetic field sources at or in the immediate vicinity of the site, with a view to identifying any potential environmental impacts or possible health risk exposures.

- **Acoustic & Air Quality Issues**: General and preliminary consideration of acoustic and air quality issues, based on a physical inspection of the site and surrounding areas; and

- **Any Other Matters of Environmental Relevance:** Comment and advice on any other matters of an environmental nature considered relevant in terms of providing a thorough and complete environmental assessment of the proposed development.

This assessment presented in this Section of the report is intended to provide a concise, preliminary review of all general environmental and contamination issues, impacts and risks associated with the site.

6.3 SITE HISTORY

Refer specific review provided in Section 5. The review of site history undertaken has not identified any past uses of or activities at the site that indicate a significant risk of site pollution or contamination.

6.4 SITE & IMMEDIATE SURROUNDINGS

Refer Sections 1 and 2.

Photographs of the general land area associated with the property are provided in Figures 6.1 and 6.2, on the following page.

These photographs confirm the general impression formed during the site inspection, namely that the general condition of the site and immediate surroundings indicated healthy vegetation growth and provided no physical indication of any systematic underlying soil contamination issue.

Figure 6.1 – View of the Rear Area of the Site, to the West

Figure 6.2 – View of the Rear Area of the Site, to the South

6.5 BUILDINGS & STRUCTURES

The 1 Rosemead Road site currently includes a substantial residential dwelling, as shown in Figure 6.3, below.

Figure 6.3 – Existing Dwelling at the Site (Viewed from Rosemead Road)

A view of the roof line of the existing dwelling is provided in Figure 6.4, below.

Figure 6.4 – Roof Line of Existing Dwelling

An inspection of the existing dwelling was undertaken to identify any hazardous or potentially hazardous materials that may be present.

In the main, the basic building structure did not include any materials of concern.

A small addition to the original structure in the form of a sun-room or sewing-room extending onto the external verandah on the eastern side of the building was noted. This building extension was obviously later than the original structure, and included cement based sheeting of a type similar to “fibro”, and asbestos cement based sheeting material (ACM).

“Scrape” samples of this sheeting material were collected and examined by microscope to identify any possible asbestos fibres present. Details are provided in Section 6.8, below.

Painted surfaces throughout the existing house at the site were considered to be of an age that may include lead. Samples were collected and tested for the presence of lead, and in-situ testing for the presence of lead was undertaken. Details are provided in Section 6.8, below.

A quantity of lead based ridge capping was noted on part of the property roof. Once again, comments are provided in Section 6.8.

6.6 PHYSICAL INDICATIONS OF CONTAMINATION OR POLLUTION

A general inspection of the overall site area was undertaken to identify any visible evidence of pollution or contamination. The results of this aspect of the site inspection are summarised below:

Site condition and general standards of housekeeping

The site and associated improvements were found to be in a clean and well-maintained condition.

Presence of fuel, lubricant or chemical storage

No fuel, lubricant or chemical storage facilities were noted at or in the immediate vicinity of the site, and no bulk chemical, fuel or lubricant storage facilities were noted.

Visible staining on the ground, or in the vicinity of drainage systems

No significant staining of structural or surface areas was noted throughout the site.

Evidence of waste disposal on or from the site

There was no indication of significant waste or waste disposal issues at or in the immediate vicinity of the property.

Odours

No unusual odours, or odours not typically associated with the current use of the property, were noted at or in the immediate vicinity of the site. No odours were noted in or near any drains on or in the immediate vicinity of the site.

Likelihood of spillages associated with site practices

No practices or activities were noted at the site, or in its immediate vicinity, that could be considered likely to give rise to the possibility of significant spillages of fuels, chemicals or other potentially hazardous goods.

Summary

No physical indications of significant contamination or pollution were noted at or in the immediate vicinity of the 1 Rosemead Road Hornsby site.

6.7 SURFACE WATER & DRAINAGE

No significant or atypical surface water drainage issues or potential problems or hazards were noted at or in the immediate vicinity of the site.

6.8 HAZARDOUS MATERIALS

Hazardous or potentially hazardous materials associated with the existing house at the site were mentioned in Section 6.5 above.

Further details are as follows:

Sheeting Associated with the Building Extension on Eastern Verandah:

As noted, a small sun or sewing room addition has been added to the original building structure, on the eastern verandah.

Scrape samples of the sheeting associated with this extension were collected from two locations and subjected to microscopic examination for the possible presence of asbestos.

No asbestos fibres were detected.

It was concluded that the sheeting involved was of the type introduced following the removal of asbestos from cladding materials such as “fibro”, and that no hazard or risk existing either with the ongoing presence of the extension as part of the proposed facility, or with any possible future removal of this structure.

Lead Based Paint Films:

The vintage of the existing house at the site (Refer Section 5) was considered to be such as to involve the possible presence of lead in older paint films still present at the site.

In one area of the site, peeling paint was present as a result of previous leaks which have now been repaired. Samples of paint from this area were collected and tested for the presence of lead.

In other areas of the site, representative area of paint film were tested for the presence of lead using lead detection wipes.

The results of these tests indicated that lead is present in some of the older paint films present at the site. Physical examination of samples suggested that the lead based paints were most likley associated with undercoats used prior to the removal of lead from paints, at a time when lead was extensively used in undercoats and primers – both for internal and external paints. These older paint films containing lead were generally found to be very well capped by more recent, and stable, lead free paint surfaces.

The exception were the small areas where peeling paint was present as a result of previous leaks, and where existing paint films were being removed and replaced as part of this restoration and maintenance work.

The conclusion reached regarding the presence of lead in these underlying paint films was that no significant hazard or risk existed in relation to the proposed Community School, subject to:

(1) Ensuring that he painted surfaces throughout the building generally were maintained in a good and stable condition, and that through this mechanism any older underlying paint films containing lead were effectively capped and isolated; and

(2) That any paint films removed as part of the repair of structural areas affected by previous leaks were safely handled and disposed of (refer Section 8 and Appendix A), and that paints used in the restoration and repair process are lead-free.

Lead Ridge Capping:

The small area of lead ridge capping noted at the site was not considered to pose any significant risk or hazard to the proposed Community School.

The impact of this ridge capping on water from the roof is considered likely to be minimal.

It was noted that the ridge capping in question was stable and was not considered to pose an environmental or health hazard.

6.9 ACTIVITIES POSING POTENTIAL ENVIRONMENTAL RISK

General

In general terms, no practices or activities representing potential environmental risks or hazards were noted at, or in the site.

Plant, Equipment and Storerooms

No plant, equipment or other potentially hazardous storerooms or storage facilities were noted at or in the immediate vicinity of the site.

Operating Plant

No items of plant and equipment were noted in operation in the general area of the site.

6.10 NSW EPA CONTAMINATED SITE RECORDS

A search of the NSW EPA Register of Contaminated Sites did not indicate any past or current contamination notice or advice in relation to the subject site. The 1 Rosemead Road Hornsby site was not listed as contaminated or potentially contaminated, and no notices in this regard were noted.

6.11 WORKCOVER NSW RECORDS OF UNDERGROUND STORAGE TANKS

A search of WorkCover records of underground storage tanks did not indicate the presence of any listed or notified underground fuel or chemical storage tanks at or in the immediate vicinity of the site. While these WorkCover records are known to be incomplete, the site inspection undertaken did not indicate the presence of any such items at the site, and the review of site history presented in Section 5 did not identify any past operations at the site that might be expected to involve underground storage tanks.

6.12 BUILDING & CONSTRUCTION MATERIALS

Refer Section 8.

6.13 ASBESTOS

Refer Section 8.

6.14 SOIL CONTAMINATION CONSIDERATIONS

Soil quality and potential soil contamination issues have been considered in detail in the Soil Quality & Contamination Assessment presented in Section 7.

6.15 NEARBY BUILDINGS AND ACTIVITIES

Surrounding building were noted to be residential in nature, as shown in Figure 6.5 and 6.6 below.

Figure 6.5 – Adjoining Residence to the West

Figure 6.6 – Neighbouring Properties Opposite Rosemead Road to the North

No significant environmental issues, exposures or risks of a general nature were noted in relation to any nearby buildings and activities.

Surrounding buildings were noted to be clean and well maintained condition, with no indications of environmental or contamination issues.

Surrounding vegetation growth, like that at the 1 Rosemead Road site, appeared healthy and vigorous, and provided no indication of underlying soil quality or contamination issues.

6.16 AIR QUALITY

The site is not located close to any particularly busy or heavily trafficked roads, and no obvious air quality or odour issues were apparent in the vicinity of the site, or within the existing building at the site.

The site area was noted to be open and subject to good natural air flow and ventilation.

6.17 ELECTROMAGNETIC FIELD

No significant electromagnetic field sources were noted in the general vicinity of the site, or within a distance from the site considered likely to result in any electromagnetic field impact of potential concern at the proposed development site.

6.18 OTHER

No other significant environmental issues, exposures or impacts of a general nature were noted during the site inspection and assessment process.

6.19 KEY FINDINGS & RECOMMENDATIONS

6.19.1 Findings

Based on the site inspections undertaken the general environmental condition of the 1 Rosemead Road Hornsby site is considered to be sound, and a detailed physical inspection of the site has not indicated any significant environmental or contamination issues prejudicial to the educational purpose proposed for the site.

However, the following issues are noted:

1. **Asbestos**: No asbestos based materials were noted at or in the immediate vicinity of the site. Cladding associated with a small sun or sewing room extension present on the eastern site verandah was sampled and tested, and found not to contain asbestos; and

2. **Lead Based Paints:** It was found that while some underlying paint films at the site contained lead, no significant hazard or risk resulted provided that (a) panted surfaces throughout the building are maintained in a stable condition, and (b) paints used following the repair of several areas of peeling paint caused by previous leaks are lead free.

6.19.2 Recommendations

Based on the inspection of the site reported in 6.1 to 6.18 above, and the findings summarised in 6.19.1 above, the following recommendations are made:

1. **Disposal of Lead Paint Residues:** That any lead paint residues generated by the repair of areas of peeling paint at the site are safely collected and disposed of in a safe and appropriate manner (refer Section 8 and Appendix A); and

2. **Unexpected Finds:** That appropriate care is taken in respect of the possible identification of any other potentially hazardous or dangerous materials that may unexpectedly be identified during the preparation of the site for the educational purpose proposed (refer Section 8 and Appendix A).

7 ON-SITE SOIL INSPECTION & INVESTIGATION

7.1 INTRODUCTION

This section of the report presents the results of a physical examination and investigation of soil quality at the 1 Rosemead Road Hornsby site.

7.2 INSPECTION METHODOLOGY

The soil quality assessment undertaken as part of this investigation has involved the physical inspection and examination of soil from varying depths from the surface to 1000 mm at six sampling locations at representative locations throughout the site.

The investigation process has involved:

- **Soil Sampling:** Collection and physical examination of soil samples from the six representative locations, and at various depths;
- **Physical Inspection:** A thorough physical inspection of the soils at the six sampling locations, including the visual examination of all soil samples to identify an obvious physical indications of soil contamination or associated issues, including consideration of physical appearance, odour, and any indications of the use of imported or in any way potentially hazardous fill materials at the site;
- **Testing by Photoionisation Detector:** Testing of soil from varying depths at the six sampling locations by portable photoionisation detector for the possible presence of hydrocarbon contamination; and

7.3 ASSESSMENT CRITERIA

For the purposes of this assessment, soil quality guidelines applicable to Residential A (the most demanding category) are applicable.

Residential A guidelines apply to residential land uses involving the potential for garden/accessible soil (home grown produce <10% fruit and vegetable intake (no poultry), and also apply to childcare centres, preschools and primary schools. Residential B guidelines apply to residential land uses with minimal opportunities for soil access, including dwellings with fully and permanently paved yard space such as high-rise buildings and apartments.

In this case the strictest or Residential A guidelines are those applicable to educational and childcare applications, and these guidelines have been adopted for assessment purposes.

Although the assessment of soil quality undertaken was limited to the physical inspection and testing of soils from four sampling locations, and no follow up laboratory analysis was included in the scope of this preliminary investigation, summary of assessment guidelines in relation to the assessment of soil, including the site assessment criteria adopted for this investigation, is provided for reference in Table 7.1 on the following page.

Table 7.1 – Guideline Levels: Soil Contamination

Substance	Health Based Investigation Levels (HBILs) [1] NEPM (May 2013 Update) Residential A	Background Range [2]	Vapour Intrusion (0-<1 to 2-<4m)	Adopted Site) Assessment Criteria
	mg/kg	mg/kg	mg/kg	mg/kg
Metals/Metalloids				
Arsenic, As	100	1 - 50		**100**
Beryllium Be	60			**60**
Boron, B	4,500			**4,500**
Cadmium, Cd	20	1		**20**
Chromium (III), Cr [3]	48%			**190**
Chromium (VI), Cr	100	1		**100**
Chromium (total), Cr [3]	n/a	5 - 1000		**n/a**
Cobalt, Co	100			**100**
Copper, Cu	6,000	2 – 100		**6,000**
Lead, Pb	300	2 - 200		**300**
Manganese, Mn	3,800			**3,800**
Mercury, Hg [4]	10	0.03		**10**
Nickel, Ni	400	5 - 500		**400**
Zinc, Zn	7,400	10 - 300		**7,400**
Volatile Petroleum Hydrocarbons (vTPH) & BTEX [5]				
C6 – C10	180	Nil	45 - 110	**180**
Benzene	50	Nil	0.5 – 0.5	**50**
Toluene	85	Nil	160 - 310	**85**
Ethylbenzene	70	Nil	55 - NL	**70**
Total xylene	45	Nil	40 - 95	**45**
Naphthalene	10	Nil	3 - NL	**10**
Semi Volatile Petroleum Hydrocarbons (sTPH)				
C10 – C16	120 [6]	Nil	110 - 240	**120 [6]**
C16 – C34	300 [6]	Nil	n/a	**300 [6]**
C34 – C40	2800 [6]	Nil	n/a	**2800 [6]**
C10 – C36	ID [7]	Nil	n/a	**1000 [5]**
Other Analytes				
VOC's	(consider individually)			**n/a**
OCP	(refer Appendix E; Table E2)			**n/a**
OPP	(refer Appendix E; Table E2)			**n/a**
PAH's (non-carcinogenic)	300	n/a		**300**
PAH's (carcinogenic)	3	n/a		**3**
Benzo(a)pyrene	3	n/a		**3**
PCB's	1			**1**
Phenolics [9]	100	Nil		**100**
Asbestos	None	n/a		**None**

Notes

1. The limitations of health-based soil investigation levels are discussed in Schedule B (1) Guidelines on the Investigation Levels for Soil and Groundwater and Schedule B(7a) Guidelines on Health-based Investigation Levels, *National Environment Protection (Assessment of Site Contamination) Measure 1999 (*NEPC 1999), updated May 2013
2. Background ranges, where HILs or EILs are set, are taken from the Field Geologist's Manual, compiled by DA Berkman, Third Edition 1989. Publisher - The Australasian Institute of Mining & Metallurgy. This publication contains information on a more extensive list of soil elements than is included in this Table. Another source of information is Contaminated Sites Monograph No. 4: Trace Element Concentrations in Soils from Rural & Urban Areas of Australia, 1995. South Australian Health Commission.
3. Valence state not distinguished - expected as Cr (III).
4. Methyl mercury
5. Service Stations guidelines adopted as site criteria (precautionary)
6. May 2013 NEPM Update Table 1(B)6 – Appendix F Table F-9
7. Insufficient data available to establish a guideline level
8. as BaP TEQ
9. As pentachlorophenol (precautionary)

7.4 SOIL INVESTIGATION LOCATIONS

A diagram showing the six locations where soil investigation was undertaken is provided in Figure 7.1, below.

Soil bores were drilled by hand augur by Noel Child of NG Child & Associates during late October and early November 2019.

Soil samples were inspected field for any indications of discolouration, staining or odour, and by photoionisation detection for the presence of volatile hydrocarbons.

Figure 7.1 – Soil Sampling Locations

Results of the soil sampling, inspection and testing are summarised in table 7.2, on the following page.

7.5 SOIL INSPECTION & TEST RESULTS

Results of the investigation, examination and field testing of soils from varying depths at the six soil sampling locations soil sampling locations are summarised in Table 7.2, below.

The soil bores were hand drilled, and soil samples were collected and inspected from the surface (0 – 300 mm), and at depths of 500 mm, and 1000 mm.

Soil samples were physically examined for any indications of possible contamination, including odour, staining and any other discoloration, and were field tested using a portable photoionisation detector for the possible presence of hydrocarbon residues.

Table 7.2 – Soil Examination and Inspection Results

Sample Location	Sample Depth (mm)	Results
1	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
2	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
3	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
4	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
5	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
6	Surface/300	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	500	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.
	1000	No staining or odour. No indication of atypical or imported material. No photoionisation response – no indication of hydrocarbon contamination.

7.6 ARBORICULTURAL REPORT

It is noted that the following observations regarding soil quality at the site are contained in the report *Arboricultural Impact Assessment Report: Proposed School 1 Rosemead Road Hornsby* prepared by Earthscape Horticultural Services in November 2019.

> The soils of this area are typical of the Lucas Heights Soil Landscape Group (as classified in the *Soil Landscapes of the Sydney 1:100,000 Sheet*), consisting of "moderately deep (500-1500 mm) hardsetting *Yellow Podzolic and Yellow Soloth soils and Yellow Earths"* on the outer edges of crests.[1] The site is located within the transition between Wianamatta Shale and Hawkesbury Sandstone. The landscape of the area is typically gently undulating terrain with level to gently inclined slopes of less than 10% grade.

These observations appear consistent with the consideration of soil quality presented in this report.

7.7 FINDINGS & RECOMMENDATIONS

7.7.1 Findings

Eighteen soil samples identified in Table 7.2 were physically examined for indications of contamination.

There was nothing in the physical appearance or odour of any of the soil samples to indicate the presence of chemical or other contamination, or the presence of extraneous materials.

All samples were tested at the time of sampling with a portable photoionisation detector for the presence of hydrocarbon vapours. No samples indicated a positive response for hydrocarbon vapours.

7.7.2 Conclusion

The physical inspection, examination and testing of soil samples from six locations at the site has provided no indication of contamination, and no further or more detailed assessment is considered necessary to confirm the suitability of soil quality at the site for the educational use proposed.

8 HAZARDOUS MATERIALS CONSIDERATIONS

8.1 SURVEY

A preliminary consideration of any hazardous materials risk or exposures applicable at the 1 Rosemead Road Hornsby site was undertaken during the site inspections which took place during October and November 2019.

This preliminary investigation included a thorough inspection of the house currently present at the site, which has been used as a basis for this consideration of possible hazardous materials issues is based on the general external inspection of the building that was undertaken.

8.2 GENERAL GUIDANCE REGARDING HAZARDOUS MATERIALS

Notes providing general guidance regarding hazardous materials have been provided for general reference at Appendix A.

No apparent asbestos issues were identified at the Rosemead Road site.

The following comments and advice are provided for reference, and in the case of any unexpected finds or circumstances that may apply during the development process.

Asbestos

Asbestos containing materials can be classified into the following main categories:

- Asbestos cement sheeting material (typically “fibro”);
- Sprayed or trowelled asbestos materials applied to ceilings, walls and other surfaces for fire-rating purposes. This material is commonly referred to as limpet asbestos;
- Asbestos paper products, millboard in electrical switchboards or underlaying lining for linoleum or vinyl floor coverings;
- Vinyl tiles, linoleum and vinyl flooring mastic and associated adhesives;
- Asbestos containing compounds, gaskets and mastic from mechanical fittings, and roofing membranes;
- Electrical switchboards containing compressed asbestos tar electrical boards, asbestos cement sheeting, asbestos rope to spark arresters and asbestos millboard from inside auxiliary switchboxes/fuse boards; and
- Roofing sealants, bituminous membranes, tar composites and similar materials were occasionally mixed with asbestos materials.

Management of Asbestos Hazards

The health effects associated with asbestos exposure are due to the inhalation of airborne respirable asbestos fibres. In general, the asbestos fibres cannot be released to become airborne in significant quantities unless the asbestos containing material is severely disrupted such as in the case of cutting asbestos cement products with power saws etc.

A range of control measures are available for the abatement of asbestos hazards. The selection of the appropriate control measure is based on the assessment risk for each specific location. These measures include:

- Leave and maintain in existing condition;

- Repair and maintain in good condition;
- Enclose asbestos or synthetic mineral fibre material by providing a barrier such as a box enclosure or steel cladding;
- Remove by approved methods under controlled conditions; and
- Labelling of asbestos materials that are to remain in situ should be undertaken where practical to ensure that the asbestos materials are not damaged inadvertently by maintenance contractors etc.

Synthetic Mineral Fibre (SMF)

No apparent synthetic mineral fibre (SMF) issues were identified at the Rosemead Road site.

The following comments and advice are provided for reference, and in the case of any unexpected finds or circumstances that may apply during the development process.

In the late 1980's the International Agency for Research on Cancer (IARC) evaluated certain SMF materials as being possibly carcinogenic to humans. The similarity in application and appearance to asbestos has resulted in some community concern regarding the health effects associated with exposure to SMF.

Current medical research indicates that the slightly increased risk of lung cancer for workers employed in the early days of rockwool and slagwool manufacture, and workers in the glasswool sector is not anticipated under present day working conditions. However, acute health effects such as eye, skin and upper respiratory tract irritation may occur with certain SMF products.

Caution is required when handling SMF products in order to minimise disturbance of the materials and subsequent airborne SMF fibre levels. Where SMF materials are to be installed or removed, then suitable controls and appropriate personal protection are to be provided.

It is recommended that the following Code of Practice be closely adhered to for appropriate procedures when handling such materials:

- National Code of Practice for the safe use of Synthetic Mineral Fibres [NOHSC: 2006(1990)] & National Standard for Synthetic Mineral Fibres [NOHSC: 2004(1990)].

Polychlorinated Biphenyls (PCB's)

No apparent polychlorinated biphenyls (PCB) issues were identified at the Rosemead Road site.

The following comments and advice are provided for reference, and in the case of any unexpected finds or circumstances that may apply during the development process.

PCBs are usually identified as a colourless to darker coloured oily liquid. PCBs are considered probable carcinogens. They can be absorbed through the skin, inhaled as a vapour or ingested; therefore, contact with them should be prevented. They are often found in old transformers and metallised capacitors of fluorescent light fittings. These synthetic compounds are chemically stable, have good insulating properties and do not degrade appreciably over time or with exposure to high temperatures. It is these properties that made PCBs useful in electrical devices.

Paint Containing Lead

Advice and recommendations have been included in this report in relation to the presence of lead in some underlaying paint films at the site.

Lead carbonate (white lead) was once the main white pigment in paints for houses and public properties. Paint with lead pigment was manufactured up until the late 1960's, and in 1969 the National Health and

Medical Research Council's Uniform Paint Standard was amended to restrict lead content in domestic paint.

Many older Australian homes and properties still contain lead paint, even though it may be covered with layers of more recent paint. Lead paint was used mainly on exterior surfaces, and to a lesser degree on interior doors plus door and window architraves, especially in undercoats and primers, where concentrations of up to 20% lead content were used. Interior walls weren't commonly painted with paint containing white lead pigment, though some colours did contain red, orange and yellow lead pigments.

All paints manufactured for Australian dwellings from the 1970's onwards have been required to contain less than 1% lead, though higher lead-content industrial paints may have been applied since then to housing and commercial properties. Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint removal poses two potential avenues of transmission. Firstly, by inhalation or ingestion by workers and public in the vicinity of the works, and secondly by the deposition of particles on nearby footpaths, streets or soil where they may be resuspended, tracked into houses or property's where it can be inhaled or ingested.

8.3 HANDLING & DISPOSAL GUIDELINES

Based on the site investigation undertaken, and detailed in this report, no significant issues regarding the handling and disposal of hazardous materials, other than the minor quantity of lead paint residues referred to in Section 6.

However, the following comments and advice are provided for reference, and in the case of any unexpected finds or circumstances that may apply during the development process.

8.3.1 Demolition

Any handling, removal and disposal of hazardous materials that may be required during future construction works must be undertaken in accordance with the following guidelines, codes of practice and standards:

- WorkCover NSW How to Safely Remove Asbestos Code of Practice December 2011
- WorkCover NSW, How to Manage and Control Asbestos in the Workplace Code of Practice, December 2011
- Australian Government, National Occupational Health and Safety Commission, Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC: 2002 (2005)]
- Australian Government, National Occupational Health and Safety Commission, *Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC: 2006 (1990)]

8.3.2 Asbestos Licences

Asbestos removal, if it is required, must be undertaken by appropriately licensed contractors. There are two licences for asbestos removal, as well as a licence to be an asbestos assessor. They are:

Licence	Actions
Class A	To remove friable asbestos
Class B	To remove bonded asbestos
Asbestos Assessor	To carry out air monitoring, clearance inspections, issue clearance certificates

8.4 OVERALL RECOMMENDATIONS

This section of the report presents a consideration of hazardous materials issues in relation to a Community School development proposed for 1 Rosemead Road Hornsby NSW.

The following recommendations are provided in case the handling, removal and disposal of hazardous materials is required during future works at the subject site:

Demolition

- Prior to any demolition works, undertake a Destructive Hazardous Material Survey as per Australian Standard AS2601:2001 *The Demolition of Structures*.
- Prior to demolition works, prepare a Site Demolition Plan per Australian Standard AS2601:2001 *The Demolition of Structures*.

Asbestos

- Handle, remove and dispose of all materials containing asbestos in accordance with all relevant guidelines, codes of practice and standards including but not limited to those identified in this document.
- Should future demolition works entail possible disturbance of asbestos materials in locations not accessible during this survey, further investigation and sampling of specific areas should be conducted in accordance with the provisions of AS 2601-2001 *'The Demolition of Structures' (and any other relevant guidelines, codes of practice and standards)* prior to such demolition works proceeding.

Other

- Provision should be made, as part of any future demolition works, for the sampling and analysis of any additional hazardous or potentially hazardous materials encountered, and for the provision of appropriate advice regarding handling, removal and disposal.

9 OVERALL FINDINGS & RECOMMENDATIONS

This report presents the results of a Preliminary or Stage 1 Site Investigation undertaken in relation to a proposed Community School development at 1 Rosemead Road Hornsby NSW.

9.1 FINDINGS

The overall findings of this assessment indicate that the underlying soils at the site are not contaminated, and that soil quality at the 1 Rosemead Road Hornsby NSW site is appropriate for the educational purpose proposed.

a) A thorough inspection of the site did not identify any environmental issues, risks or exposures considered to be of significant concern.

b) A review of the history and past uses of the site did not identify any issues that might have resulted in residual environmental or contamination risks or exposures.

c) No significant quantities of materials known or suspected to contain hazardous materials were identified at or in the vicinity of the site.

d) The only potentially hazardous material issue identified at the site was the presence of lead in old and underlying paint films at the site.

e) It was found that while some underlying paint films at the site contained lead, no significant hazard or risk resulted provided that (a) panted surfaces throughout the building are maintained in a stable condition, and (b) paints used following the repair of several areas of peeling paint caused by previous leaks (now repaired) are lead free.

f) From a general environmental, contamination and hazardous material perspective, the site is considered appropriate for the educational use proposed, and this preliminary investigation has not identified any issues, risks or exposures that would indicate that further assessment and investigation is required to confirm this finding.

9.2 RECOMMENDATIONS

This finding is made subject to the following recommendations:

1. That any lead paint residues generated by the repair of areas of peeling paint caused by previous leaks (now repaired) at the site are safely collected and disposed of in a safe and appropriate manner (refer Section 8 and Appendix A);

2. That all panted surfaces throughout the building are maintained in a stable condition, to ensure the effective capping and containment of any older underlying paint films containing lead; and

3. That appropriate care is taken in respect of any potentially hazardous or dangerous materials unexpectedly identified during any future demolition or clearance works involving the existing dwelling at the site (refer Section 8 and Appendix A).

10 LIMITATIONS

NG Child & Associates has based this report on the data, methods and sources described herein.

Within the limitations of the agreed scope of services, this assessment has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by professionally trained and experienced environmental engineers.

No other warranty, expressed or implied, is made.

This report has been prepared in accordance with an agreement between the Andrew Martin Planning on behalf of client Blue Gum Community School and NG Child & Associates and is solely for the use of Andrew Martin Planning and its client Blue Gum Community School. Any reliance of this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses.

Whilst this report is accurate to the best of our knowledge and belief NG Child & Associates cannot guarantee completeness or accuracy of any descriptions or conclusions based on information supplied to it during site surveys, visits and interviews. Responsibility is disclaimed for any loss or damage, including but not limited to, any loss or damage suffered by Andrew Martin Planning and its client Blue Gum Community School arising from the use of this report or suffered by any other person for any reason whatsoever.

Subject to the limitations described above, it is the professional opinion of NG Child & Associates that this report presents a thorough, accurate and reliable assessment of the environmental and soil quality condition of the proposed 1 Rosemead Road Hornsby NSW Community School development site.

11 AUTHORISATION

Noel Child BSc (Hons), PhD, MIEA, MRACI
Visiting Fellow, Engineering
University of Technology, Sydney
Principal, NG Child & Associates
30 April 2020

APPENDIX A

Information on Common Hazardous Materials

INFORMATION ON COMMON HAZARDOUS MATERIALS

Asbestos containing materials can be classified into the following main categories:

- Sprayed or trowelled asbestos materials applied to ceilings, walls and other surfaces for fire-rating purposes. This material is commonly referred to as limpet asbestos.
- Asbestos containing insulation on pipes, boilers, tanks, ducts etc. which is often referred to as asbestos lagging.
- Asbestos cement products, Cementitious or concrete like products.
- Asbestos paper products, millboard in electrical switchboards or underlaying lining for linoleum or vinyl floor coverings.
- Asbestos textiles, braided asbestos, rope, tape, gaskets etc (note that rope and millboard are potentially friable).
- Vinyl tiles, linoleum and vinyl flooring mastic and associated adhesives.
- Asbestos containing compounds, gaskets and mastic from mechanical fittings, and roofing membranes.
- Electrical switchboards containing compressed asbestos tar electrical boards, asbestos cement sheeting, asbestos rope to spark arresters and asbestos millboard from inside auxiliary switchboxes/fuse boards.
- Roofing sealants, bituminous membranes, tar composites and similar materials were occasionally mixed with asbestos materials.
- Some office furnishings such as wall partitions may contain an asbestos cement internal lining inside plaster or “Stramit” type panelling. Certain types of older vinyl covered desktops and workbenches may contain an underlying asbestos millboard lining.

Sprayed Asbestos Materials

Sprayed asbestos or limpet asbestos is most often found on structural steel members to provide a fire-rating. Limpet asbestos is a friable material. Friable materials are those which can easily be crumbled, pulverised or reduced to powder by hand pressure. Limpet asbestos tends to be the most friable of all asbestos containing materials and can contain relatively high percentage of asbestos (30% - 90%).

Limpet asbestos can slowly release fibres as the materials age, i.e. as its friability increases.

Direct mechanical damage or excessive machinery vibration can lead to more significant release of airborne asbestos fibres.

Asbestos containing Lagging Materials

Insulation such as lagging usually contains a smaller percentage of asbestos (usually 20% - 50%). Protective jackets on the insulation materials (such as metal jacketing or calico on pipe lagging) prevent asbestos fibre release. Physical damage to the protective jacket, however, may lead to the release of respirable fibres. The binding material in the insulation can deteriorate with age rendering it more friable.

Asbestos Cement Sheeting Materials

Asbestos cement products and asbestos gaskets generally do not present a significant health risk unless they are cut, sanded or otherwise disturbed so as to release asbestos dust. Fibre release due to occasional damage is negligible and thus not a significant health risk. Care must be taken therefore in the removal of asbestos cement products to avoid the release of airborne fibres. Unless analysis of “fibro” cement products indicates otherwise, these materials should be considered as containing asbestos. External asbestos cement claddings become weathered after many years by the gradual loss of cement from the exposed surface. This leaves loosely bound layers enriched with asbestos fibres. In other words, the material becomes more friable through the weathering process.

Asbestos containing Vinyl Products

Vinyl tiles and linoleum flooring manufactured before 1984 may contain asbestos in various quantities in a well-bound cohesive matrix. Asbestos containing vinyl floor and wall coverings generally do not present a significant health risk unless they are sanded or otherwise mechanically abraded so as to release asbestos dust.

Fibre release due to occasional damage is negligible and thus not a significant health risk. Care must be taken therefore, in the removal of asbestos containing vinyl tiles to avoid the release of airborne fibres. Unless analysis of vinyl tiles and linoleum flooring indicates otherwise, these materials should be considered as containing asbestos. Older bituminous adhesives may also contain asbestos and must be removed as an asbestos process in circumstance where the floor is to be renewed and re-levelled by floor sanding or grinding.

Asbestos containing Gaskets

Gaskets and sealing compounds in equipment, duct work and re-heat air conditioning boxes may contain asbestos. These should be replaced with non-asbestos equivalents during routine maintenance. In addition, asbestos containing mastic and seals in air handling duct work joints. These usually do not pose a hazard as the asbestos fibres are firmly held within the plastic resinous compound and should be replaced as part of routine maintenance or removed during the demolition of the plant equipment.

Asbestos Insulation to Re-Heat Boxes

Insulation to internal lining of ductwork sections and electrical re-heat air conditioning boxes generally contain asbestos millboard. These should be replaced with non-asbestos equivalents during routine maintenance.

Asbestos containing Mastics and Sealants

Many mastic and sealant products contain Chrysotile asbestos within the pliable, resinous matrix. The nature of the substrate is such that it does not readily dry out in situ, and therefore the fibres are well bound and pose a minimal risk.

Management of Asbestos Hazards

The health effects associated with asbestos exposure are due to the inhalation of airborne respirable asbestos fibres. In general, the asbestos fibres cannot be released to become airborne in significant quantities unless the asbestos containing material is severely disrupted such as in the case of cutting asbestos cement products with power saws etc.

A range of control measures are available for the abatement of asbestos hazards. The selection of the appropriate control measure is based on the assessment risk for each specific location. These measures include:

- **Leave and maintain** in existing condition.
- **Repair and maintain** in good condition.
- **Enclose** asbestos or synthetic mineral fibre material by providing a barrier such as a box enclosure or steel cladding.
- **Remove** by approved methods under controlled conditions.
- **Labelling** of asbestos materials that are to remain in situ should be undertaken where practical to ensure that the asbestos materials are not damaged inadvertently by maintenance contractors etc.

SYNTHETIC MINERAL FIBRE (SMF)

General

In the late 1980’s the International Agency for Research on Cancer (IARC) evaluated certain SMF materials as being possibly carcinogenic to humans. The similarity in application and appearance to asbestos has resulted in some community concern regarding the health effects associated with exposure to SMF.

Current medical research indicates that the slightly increased risk of lung cancer for workers employed in the early days of rockwool and slagwool manufacture, and workers in the glasswool sector is not anticipated under present day working conditions. However, acute health effects such as eye, skin and upper respiratory tract irritation may occur with certain SMF products.

Caution is required when handling SMF products in order to minimise disturbance of the materials and subsequent airborne SMF fibre levels. Where SMF materials are to be installed or removed, then suitable controls and appropriate personal protection are to be provided.

It is recommended that the following Code of Practice be closely adhered to for appropriate procedures when handling such materials:

- *National Code of Practice for the safe use of Synthetic Mineral Fibres [NOHSC: 2006(1990)] & National Standard for Synthetic Mineral Fibres [NOHSC: 2004(1990)].*

POLYCHLORINATED BIPHENYLS (PCBS)

General

PCBs are usually identified as a colourless to darker coloured oily liquid. PCBs are considered probable carcinogens. They can be absorbed through the skin, inhaled as a vapour or ingested; therefore, contact with them should be prevented. They are often found in old transformers and metallised capacitors of fluorescent light fittings. These synthetic compounds are chemically stable, have good insulating properties and do not degrade appreciably over time or with exposure to high temperatures. It is these properties that made PCBs useful in electrical devices.

LEAD CONTAINING PAINT

General

Lead paint, as defined by the Australian Standard *AS4361.2 – 1998 Guide to Lead Paint Management – Part 2: Residential and Commercial Property's,* is that which contains more than 1% Lead by weight.

Lead carbonate (white lead) was once the main white pigment in paints for houses and public properties. Paint with lead pigment was manufactured up until the late 1960's, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict lead content in domestic paint.

Many older Australian homes and properties still contain lead paint, even though it may be covered with layers of more recent paint. Lead paint was used mainly on exterior surfaces, and to a lesser degree on interior doors plus door and window architraves, especially in undercoats and primers, where concentrations of up to 20% lead content were used. Interior walls weren't commonly painted with paint containing white lead pigment, though some colours did contain red, orange and yellow lead pigments.

All paints manufactured for Australian dwellings from the 1970's onwards have been required to contain less than 1% lead, though higher lead-content industrial paints may have been applied since then to housing and commercial properties.

Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint removal poses two potential avenues of transmission. Firstly, by inhalation or ingestion by workers and public in the vicinity of the works, and secondly by the deposition of particles on nearby footpaths, streets or soil where they may be resuspended, tracked into houses or property's where it can be inhaled or ingested.

APPENDIX B

NSW EPA Stage 1 Environmental & Site Contamination Assessment Guidelines

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Site history (continued)	✓	✓(S)	✓(S)	✓(S)
– Inventory of chemicals and wastes associated with site use and their on-site storage location				
– Possible contaminant sources and potential off-site effects				
– Site layout plans showing present and past industrial processes				
– Sewer and service plans				
– Description of manufacturing processes				
– Details and locations of current and former underground and above ground storage tanks				
– Product spill and loss history				
– Discharges to land, water and air				
– Disposal locations				
– Relevant complaint history				
– Local site knowledge of residents and staff – both present and former				
– Summary of local literature about the site, including newspaper articles				
– Details of building and related permits, licences, approvals and trade waste agreements				
– Historical use of adjacent land				
– Local usage of ground/surface waters, and location of bores/pumps				
– Integrity assessment (assessment of the accuracy of information).				
Site condition and surrounding environment	✓	✓(S)	✓(S)	✓(S)
– Topography				
– Conditions at site boundary such as type and condition of fencing, soil stability and erosion				
– Visible signs of contamination such as discolouration or staining of soil, bare soil patches – both on-site and off-site adjacent to site boundary				
– Visible signs of plant stress				
– Presence of drums, wastes and fill material				
– Odours				
– Condition of buildings and roads				

✓	*Include this section*
(S)	*A summary is adequate if detailed information was included in an available referenced previous report*
(N)	*Include only if there is to be no further site investigation*
N/A	*Not applicable*

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Site condition and surrounding environment (continued)	✓	✓(S)	✓(S)	✓(S)
– Quality of surface water – Flood potential – Details of any relevant local sensitive environment – e.g. rivers, lakes, creeks, wetlands, local habitat areas, endangered flora and fauna.				
Geology and hydrogeology	Include readily available information	✓	✓(S)	✓(S)
– Soil stratigraphy using recognised classification methods, e.g. Australian Standard 1726, Unified Soil Classification Table – Location and extent of imported and locally derived fill – Site borehole logs or test pit logs showing stratigraphy – Detailed description of the location, design and construction of on-site wells – Description and location of springs and wells in the vicinity – Depth to groundwater table – Direction and rate of groundwater flow – Direction of surface water run-off – Background water quality – Preferential water courses – Summary of local meteorology				
Sampling and analysis plan and sampling methodology	Include readily available information	✓	N/A	✓
– Sampling, analysis and data quality objectives (DQOs) – Rationale for the selection of: o Sampling pattern o Sampling density including an estimated size of the residual hot spots that may remain undetected o Sampling locations including locations shown on a site map o Sampling depths o Samples for analysis and samples not analysed o Analytical methods				

✓	*Include this section*
(S)	*A summary is adequate if detailed information was included in an available referenced previous report*
(N)	*Include only if there is to be no further site investigation*
N/A	*Not applicable*

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Sampling and analysis plan and sampling methodology (continued)	Include readily available information	✓	N/A	✓
○ Analytes for samples – Detailed description of the sampling methods including: ○ Sample containers and type of seal used ○ Sampling devices and equipment e.g. auger type ○ Equipment contamination procedures ○ Sample handling procedures ○ Sample preservation methods and reference to recognised protocols, e.g. APHA or US EPA SW 846 – Detailed description of field screening protocols.				
Field quality assurance and quality control (QA/QC)	✓(N)	✓	N/A	✓
– Details of sampling team – Decontamination procedures carried out between sampling events – Logs for each sample collected – including time, location, initials of sampler, duplicate locations, duplicate type, chemical analyses to be performed, site observations and weather conditions – Chain of custody fully identifying – for each sample – the sampler, nature of the sample, collection date, analyses to be performed, sample preservation method, departure time from the site and dispatch courier(s) – Sample splitting techniques – Statement of duplicate frequency – Field blank results – Background sample results – Rinsate sample results – Laboratory-prepared trip spike results for volatile analytes – Trip blank results – Field instrument calibrations (when used).				

✓	*Include this section*
(S)	*A summary is adequate if detailed information was included in an available referenced previous report*
(N)	*Include only if there is to be no further site investigation*
N/A	*Not applicable*

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Laboratory QA/QC	✓(N)	✓	N/A	✓
– A copy of signed chain-of-custody forms acknowledging receipt date and time, and identity of samples included in shipments				
– Record of holding times and a comparison with method specifications				
– Analytical methods used				
– Laboratory accreditation for analytical methods used				
– Laboratory performance in inter-laboratory trials for the analytical methods used, where available				
– Description of surrogates and spikes used				
– Per cent recoveries of spikes and surrogates				
– Instrument detection limit				
– Method detection limit				
– Matrix or practical quantification limits				
– Standard solution results				
– Reference sample results				
– Reference check sample results				
– Daily check sample results				
– Laboratory duplicate results				
– Laboratory blank results				
– Laboratory standard charts.				
QA/QC data evaluation	✓(N)	✓	N/A	✓
– Evaluation of all QA/QC information listed above against the stated DQOs, including a discussion of:				
○ Documentation completeness				
○ Data completeness	✓	*Include this section*		
○ Data comparability (see next point)	(S)	*A summary is adequate if detailed information was included in an available referenced previous report*		
○ Data representativeness	(N)	*Include only if there is to be no further site investigation*		
○ Precision and accuracy for both sampling and analysis for each analyte in each environmental matrix informing data users of the reliability, unreliability, or qualitative value of the data	N/A	*Not applicable*		

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
QA/QC data evaluation (continued)	✓(N)	✓	N/A	✓
– Data comparability checks, which should include e.g. bias assessment – which may arise from various sources, including: o Collection and analysis of samples by different personnel o Use of different methodologies o Collection and analysis by the same personnel using the same methods but at different times o Spatial and temporal changes (because of the environmental dynamics) – Relative per cent differences for intra- and inter-laboratory duplicates.				
Basis for assessment criteria	✓	✓	✓	✓
– Table listing all selected assessment criteria and references – Rationale for and appropriateness of the selection of criteria – Assumptions and limitations of criteria				
Results	✓	✓	✓	✓
– Summary of previous results, if appropriate – Summary of all results, in a table that: o Shows all essential details such as sample numbers and sampling depth o Shows assessment criteria o Highlights all results exceeding the assessment criteria				
– Site plan showing all sample locations, sample identification numbers and sampling depths	✓	*Include this section*		
– Site plan showing the extent of soil and groundwater contamination exceeding selected assessment criteria for each sampling depth.	(S)	*A summary is adequate if detailed information was included in an available referenced previous report*		
	(N)	*Include only if there is to be no further site investigation*		
	N/A	*Not applicable*		

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Site characterisation	✓	✓	✓	✓
– Assessment of type of all environmental contamination, particularly soil and groundwater – Assessment of extent of soil and groundwater contamination, including off-site effects – Assessment of the chemical degradation products – Assessment of possible exposure routes and exposed populations (human, ecological).				
Remedial action plan	N/A	N/A	✓	✓(S)
– Remediation goal – Discussion of the extent of remediation required – Discussion of possible remedial options and how risk can be reduced – Rationale for the selection of recommended remedial option – Proposed testing to validate the site after remediation – Contingency plan if the selected remedial strategy fails – Interim site management plan (before remediation), including e.g. fencing, erection of warning signs, stormwater diversion – Site management plan (operation phase): o Site stormwater management plan o Soil management plan o Noise control plan o Dust control plan, including wheel wash (where applicable) o Odour control plan o Occupational health and safety plan – Remediation schedule				
– Hours of operation	✓	*Include this section*		
– Contingency plans to respond to site incidents, to obviate potential effects on surrounding environment and community	(S)	*A summary is adequate if detailed information was included in an available referenced previous report*		
– Identification of regulatory compliance requirements such as licences and approvals	(N)	*Include only if there is to be no further site investigation*		
– Names and phone numbers of appropriate personnel to contact during remediation	N/A	*Not applicable*		

Report sections and information to be included	Preliminary site investigation	Detailed site investigation	Remedial action plan	Validation & ongoing site monitoring
Remedial action plan (continued)	N/A	N/A	✓	✓(S)
– Community relations plans, where applicable – Staged progress reporting, where appropriate – Long-term site management plan.				
Validation	N/A	N/A	N/A	✓
– Rationale and justification for the validation strategy including: o Clean-up criteria and statistically based decision-making methodology o Validation sampling and analysis plan – Details of a statistical analysis of validation results and evaluation against the clean-up criteria – Verification of compliance with regulatory requirements set by the EPA, WorkCover and local government.				
Ongoing site monitoring	N/A	N/A	N/A	✓
– Ongoing site monitoring requirements (if any), including monitoring parameters and frequency – Results of monitoring analyses including all relevant QA/QC reporting requirements stated above – Ongoing site/equipment maintenance, e.g. containment cap integrity – Details of party(ies) responsible for maintenance and monitoring program.				
Conclusions and recommendations	✓	✓	✓	✓
– Brief summary of all findings – Assumptions used in reaching the conclusions – Extent of uncertainties in the results				
– Where remedial action has been taken, a list summarising the activities and physical changes to the site	✓	*Include this section*		
– A clear statement that the consultant considers the subject site to be suitable for the proposed use (where applicable)	(S)	*A summary is adequate if detailed information was included in an available referenced previous report*		
– A statement detailing all limitations and constraints on the use of the site (where applicable)	(N)	*Include only if there is to be no further site investigation*		
– Recommendation for further work, if appropriate.	N/A	*Not applicable*		

APPENDIX C

Title Details

TITLE TREE
Lot A DP 327582

1 Rosemead Road Hornsby
Folio Identifier A/327582 (title attached)
DP 327582 (plan attached)
Certificate of Title Volume 4509 Folio 11
Certificate of Title Volume 1307 Folio 166
24th, October, 2019
Registered Proprietor:
BEST-PRACTICE EDUCATION GROUP LIMITED

APPENDIX D

Summary of Proprietor(s)

SUMMARY OF PROPRIETOR(S)

Lot A DP 327582

Year	Proprietor(s)
(Lot A DP 327582)	
2019 – todate	Best-Practice Education Group Limited
2019 – 2019	Roger William Blazey
2007 – 2019	Judith Mary Blazey
2002 – 2007	Roslyn Skinner Graeme Warrington Skinner
1996 – 2002	Richard Merritt Mason Valerie Merritt Marchant Raymond Leigh Marchant
1996 – 1996	Richard Merritt Mason Valerie Merritt Marchant Raymond Leigh Marchant
1996 – 1996	Richard Merritt Mason Valerie Merritt Marchant Colin Campbell Merritt Mason
1996 – 1996	Richard Merritt Mason Philip Merritt Mason Colin Campbell Merritt Mason Valerie Merritt Marchant
1995 – 1996	Richard Merritt Mason Philip Merritt Mason
1990 – 1995	Thomas Richard Mason, school master Blanche Sophia Mason, his wife
(Lot A DP 327582 – Area 3 Roods 23 ¼ Perches – CTVol 4509 Fol 11)	
1953 – 1990	Thomas Richard Mason, school master Blanche Sophia Mason, his wife
1931 – 1953	Jean Baker Harbison, wife of John Wesley Harbison, medical practitioner
(Lots 14, 15 & 16 DP 3369 – Area 1 Acre 1 Rood 8 ¾ Perches – CTVol 1307 Fol 166)	
1928 – 1931	Frederick William Watson, grazier
1900 – 1928	Anne Roberts, wife of Oscar Garibaldi Roberts, jeweller

APPENDIX E

Deposited Plans

LAND REGISTRY SERVICES

Cadastral Records Enquiry Report : Lot A DP 327582

Ref : NOUSER

Locality : HORNSBY
LGA : HORNSBY

Parish : SOUTH COLAH
County : CUMBERLAND

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This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps

Page 1 of 3

LAND REGISTRY SERVICES

Cadastral Records Enquiry Report : Lot A DP 327582

Ref : NOUSER

Locality : HORNSBY
Parish : SOUTH COLAH
LGA : HORNSBY
County : CUMBERLAND

	Status	Surv/Comp	Purpose
DP240146			
Lot(s): 6			
DP1138865	REGISTERED	SURVEY	EASEMENT
Lot(s): 9			
DP1004153	REGISTERED	COMPILATION	ROADS ACT, 1993
DP790852			
Lot(s): 2			
DP1138865	REGISTERED	SURVEY	EASEMENT
DP1175381	REGISTERED	SURVEY	SUBDIVISION
DP1010235			
Lot(s): 801			
DP240146	HISTORICAL	SURVEY	SUBDIVISION
DP1004153	HISTORICAL	COMPILATION	ROADS ACT, 1993
DP1031754			
Lot(s): 1, 2			
DP712000	HISTORICAL	SURVEY	SUBDIVISION
DP1063184			
Lot(s): 120			
DP587388	HISTORICAL	COMPILATION	SUBDIVISION
DP703203	HISTORICAL	SURVEY	SUBDIVISION
DP1105354			
Lot(s): 1, 2			
DP7679	HISTORICAL	SURVEY	UNRESEARCHED
DP1196144			
Lot(s): 21, 22			
DP945668	HISTORICAL	SURVEY	UNRESEARCHED

Caution: This information is provided as a searching aid only. Whilst every endeavour is made the ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For **ALL ACTIVITY PRIOR TO SEPTEMBER 2002** you must refer to the RGs Charting and Reference Maps.

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Page 2 of 3

LAND REGISTRY SERVICES

Cadastral Records Enquiry Report : Lot A DP 327582

Ref : NOUSER

Locality : HORNSBY
LGA : HORNSBY
Parish : SOUTH COLAH
County : CUMBERLAND

Plan	Surv/Comp	Purpose
DP3369	COMPILATION	UNRESEARCHED
DP7679	SURVEY	UNRESEARCHED
DP17235	SURVEY	UNRESEARCHED
DP17856	SURVEY	UNRESEARCHED
DP125654	COMPILATION	DEPARTMENTAL
DP172269	COMPILATION	UNRESEARCHED
DP175404	COMPILATION	UNRESEARCHED
DP230470	SURVEY	SUBDIVISION
DP240146	SURVEY	SUBDIVISION
DP303750	COMPILATION	UNRESEARCHED
DP305252	COMPILATION	UNRESEARCHED
DP306626	SURVEY	UNRESEARCHED
DP311686	COMPILATION	UNRESEARCHED
DP313534	COMPILATION	UNRESEARCHED
DP315299	COMPILATION	UNRESEARCHED
DP323898	COMPILATION	UNRESEARCHED
DP327582	SURVEY	UNRESEARCHED
DP331077	COMPILATION	UNRESEARCHED
DP332945	COMPILATION	UNRESEARCHED
DP344446	COMPILATION	UNRESEARCHED
DP361718	COMPILATION	UNRESEARCHED
DP366784	COMPILATION	UNRESEARCHED
DP412118	COMPILATION	UNRESEARCHED
DP413998	COMPILATION	UNRESEARCHED
DP414827	COMPILATION	UNRESEARCHED
DP455470	COMPILATION	DEPARTMENTAL
DP455472	COMPILATION	DEPARTMENTAL
DP521521	COMPILATION	SUBDIVISION
DP532806	SURVEY	SUBDIVISION
DP535320	SURVEY	SUBDIVISION
DP538319	COMPILATION	SUBDIVISION
DP551013	COMPILATION	SUBDIVISION
DP556814	SURVEY	SUBDIVISION
DP557112	SURVEY	SUBDIVISION
DP582773	SURVEY	SUBDIVISION
DP620465	COMPILATION	SUBDIVISION
DP626635	COMPILATION	SUBDIVISION
DP663306	COMPILATION	DEPARTMENTAL
DP703203	SURVEY	SUBDIVISION
DP712000	SURVEY	SUBDIVISION
DP790852	SURVEY	SUBDIVISION
DP971152	SURVEY	UNRESEARCHED
DP971374	SURVEY	UNRESEARCHED
DP1010235	COMPILATION	CONSOLIDATION
DP1031754	SURVEY	SUBDIVISION
DP1063184	SURVEY	SUBDIVISION
DP1105354	SURVEY	SUBDIVISION
DP1157797	COMPILATION	CROWN LAND CONVERSION
DP1196144	UNRESEARCHED	SUBDIVISION
DP1196144	SURVEY	SUBDIVISION

Caution: This information is provided as a searching aid only. Whilst every endeavour is made the ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For **ALL ACTIVITY PRIOR TO SEPTEMBER 2002** you must refer to the RGs Charting and Reference Maps.

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Page 3 of 3

Req:R145854 /Doc:DL 2387422 /Rev:05-Feb-2010 /NSW LRS /Pgs:ALL /Prt:24-Oct-2019 08:17 /Seq:1 of 2
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'97-01T

TRANSFER

Real Property Act, 1900

2387422 H

Office

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

A/327582

(B) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
268D	R.F. DYNON & ~~Dynon~~ Co DX 9102 DEE WHY REFERENCE (max. 15 characters):

(C) **TRANSFEROR** RICHARD MERRITT MASON and PHILIP MERRITT MASON

(D) acknowledges receipt of the consideration of provisions of Will of Blanche Sophia Mason (dec'd)

and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) subject to the following **ENCUMBRANCES** 1. ..... 2. ..... 3. .....

(F) **TRANSFEREE**

T TS (s713 LGA) TW (Sheriff)	RICHARD MERRITT MASON, PHILIP MERRITT MASON, COLIN CAMPBELL MERRITT MASON and VALERIE MERRITT MARCHANT **TENANCY:** TENANTS IN COMMON IN EQUAL SHARES

(G)

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. **DATED** 13 . 8 . 96

Signed in my presence by the Transferor who is personally known to me.

Diane G. Fuller
Signature of Witness

DIANE G. FULLER
Name of Witness (BLOCK LETTERS)

56 Campbell Drive, WAHROONGA.
Address of Witness

R Mason
Signature of Transferor

CONTINUED ON ANNEXURE "A"

Signed in my presence by the Transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

RICHARD DYNON
Solicitor for

Signature of Transferee

INSTRUCTIONS FOR FILLING OUT THIS FORM ARE AVAILABLE FROM THE LAND TITLES OFFICE

CHECKED BY (office use only)

AUSDOC Office Pty. Ltd.

Req:R145854 /Doc:DL 2387422 /Rev:05-Feb-2010 /NSW LRS /Pgs:ALL /Prt:24-Oct-2019 08:17 /Seq:2 of 2
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"A"

This is annexure "A" to the Transfer between Richard Merritt Mason and Philip Merritt Mason (as Transferors) and Richard Merritt Mason, Philip Merritt Mason, Colin Campbell Merritt Mason and Valerie Merritt Marchant (as Transferees) dated the 13th day of August 1996

Signed in my presence by the Transferor who is personally known to me:

P Van den Heuvel
.....
Signature of Witness

PATRICIA VAN DEN HEUVEL
Name of Witness (BLOCK LETTERS)

42 Melbourne St WARRANDERA 2700
.....
Address of Witness

.....
Signature of Transferor

Office of the Registrar-General /Src:GLOBALX /Ref:advlegs

97-01T

TRANSFER

Real Property Act, 1900

2687235 J

Office of State Revenue use only

N.S.W. STAMP DUTY

$7240.00

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title. If appropriate, specify the share transferred.

A/327582 as regards a one-quarter share

(B) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
~~2680~~ 374	WBC REFERENCE (max. 15 characters): 28956645 MPC-BH3

(C) **TRANSFEROR** PHILIP MERRITT MASON

(D) acknowledges receipt of the consideration of $250,000.00

and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) subject to the following **ENCUMBRANCES** 1. 3.

OFFICE OF STATE REVENUE (N.S.W. TREASURY) 1996/97 S27 ALTERATION NOTED

(F) **TRANSFEREE**

T TS (s713 LGA) TW (Sheriff)	RICHARD MERRITT MASON

(G) **TENANCY:**

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. **DATED**

Signed in my presence by the Transferor who is personally known to me.

Signature of Witness

RICHARD DYNON

Name of Witness (BLOCK LETTERS)

685 PITTWATER ROAD DEE WHY

Address of Witness

Signature of Transferor 29/9/96

Signed in my presence by the Transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

RICHARD DYNON
Solicitor for

~~Signature of~~ Transferee

INSTRUCTIONS FOR FILLING OUT THIS FORM ARE AVAILABLE FROM THE LAND TITLES OFFICE

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eq:R145853 /Doc:DL 2687236 /Rev:27-Jan-2010 /NSW LRS /Pgs:ALL /Prt:24-Oct-2019 08:17 /Seq:1 of 1
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97-01T

TRANSFER

Real Property Act, 1900

2687236 G

Office of State Revenue use only

N.S.W. STAMP DUTY
011196 6825 04 20118379 8/01 $7240.00

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

A/327582 as regards a one-quarter share

(B) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
~~268B~~ 374	WBC REFERENCE (max. 15 characters): 28956645 MPC-B#3

(C) **TRANSFEROR** COLIN CAMPBELL MERRITT MASON

(D) acknowledges receipt of the consideration of $250,000.00

and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) subject to the following **ENCUMBRANCES** 1. ..... 2. ..... 3. .....

(F) **TRANSFEREE**

T TS (s713 LGA) TW (Sheriff)	RAYMOND LEIGH MARCHANT **TENANCY:**

(G)

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. **DATED** .....

Signed in my presence by the Transferor who is personally known to me.

D. L. Steinhardt
Signature of Witness

DOROTHY STEINHARDT.
Name of Witness (BLOCK LETTERS)

43 Chestnut Ave. Armidale
Address of Witness

C Mason
Signature of Transferor

29/9/96

Signed in my presence by the Transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

RICHARD DYNON
Solicitor for

Richard Dynon
Signature of Transferee

INSTRUCTIONS FOR FILLING OUT THIS FORM ARE AVAILABLE FROM THE LAND TITLES OFFICE

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eq:R152983 /Doc:DL 2687237 /Rev:27-Jan-2010 /NSW LRS /Pgs:ALL /Prt:25-Oct-2019 09:13 /Seq:1 of 1
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97-01T

TRANSFER

Real Property Act, 1900

2687237 E

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N.S.W. STAMP DUTY
011196 6825 04 20118379 8/03 $10.00

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

A/327582 as regards a one-half share

(B) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
~~268D~~ 374	WBC REFERENCE (max. 15 characters): 28956645 MAC-B113

(C) **TRANSFEROR** RAYMOND LEIGH MARCHANT and VALERIE MERRITT MARCHANT as Tenants in Common in equal shares

(D) acknowledges receipt of the consideration of $250,000.00

and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) subject to the following **ENCUMBRANCES** 1. ..... 2. ..... 3. .....

(F) **TRANSFEREE**

T TS (s713 LGA) TW (Sheriff)	RAYMOND LEIGH MARCHANT and VALERIE MERRITT MARCHANT

(G) **TENANCY:** Joint Tenants

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. **DATED** .....

Signed in my presence by the Transferor who is personally known to me.

L E van Aalderen
Signature of Witness

L E VAN AALDEREN
Name of Witness (BLOCK LETTERS)

11 Lalla Place Umina
Address of Witness

RL Marchant

V Marchant
Signature of Transferor

Signed in my presence by the Transferee who is personally known to me.

L E van Aalderen
Signature of Witness

L E VAN AALDEREN
Name of Witness (BLOCK LETTERS)

11 Lalla Place Umina
Address of Witness

RL Marchant

V Marchant
Signature of Transferee

INSTRUCTIONS FOR FILLING OUT THIS FORM ARE AVAILABLE FROM THE LAND TITLES OFFICE

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Req:R145852 /Doc:DL 8243234 /Rev:07-Jan-2002 /NSW LRS /Pgs:ALL /Prt:24-Oct-2019 08:17 /Seq:1 of 1
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Form: 01T
Release: 1
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(1) X

TRANSFER

New South Wales
Real Property Act 1900

8243234P

PRIVACY NOTE: this information is legally required and will become part of the public record

STAMP DUTY

Office of State Revenue use only

OFFICE OF STATE REVENUE (N.S.W. TREASURY)

CLIENT No. 3647303 STAMP No. 81
STAMP DUTY $2 00 SIGNATURE
TRANSACTION No. 014801 DATE 27/11/01
ASSESSMENT DETAILS:

(A) TORRENS TITLE Folio Identifier A/327582

(B) LODGED BY

Delivery Box	Name, Address or DX and Telephone	CODES
24J	CTB Reference: 044157	T TW (Sheriff)

(C) TRANSFEROR RICHARD MERRITT MASON, VALERIE MERRITT MARCHANT & RAYMOND LEIGH MARCHANT

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of $ 2,000,000.00 and as regards

(E) ESTATE the land specified above transfers to the transferee an estate in fee simple

(F) SHARE TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEREE ROSLYN SKINNER & GRAEME WARRINGTON SKINNER

(I) TENANCY: Joint Tenants

(J) DATE 10/11/01

I certify that the person(s) signing opposite, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Signature of witness:

Name of witness: RICHARD DYNON
Address of witness: 685 PITTWATER RD DEE WHY

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Signature of transferor: X R Mason X R L Marchant X V Marchant

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

Signature:

Signatory's name: JUDITH PATRICIA KAINE
Signatory's capacity: transferees' solicitor

Page 1 of 1 number additional pages sequentially

All handwriting must be in block capitals.

Land and Property Information NSW.

) Office of the Registrar-General /Src:GLOBALX /Ref:advlegs

Form: 03AE
Licence: 01-05-051
Licensee: LEAP Legal Software Pty Limited
Firm name: Lane & Lane Lawyers Hornsby

TRANSMISSION APPLICATION

by an Executor, Administrator or Trustee

New South Wales
Section 93 Real Property Act 1900

AP178006P

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

(A) TORRENS TITLE	A/327582		
(B) REGISTERED DEALING	NUMBER	TORRENS TITLE	
(C) LODGED BY	DOCUMENT COLLECTION BOX 392C	NAME, ADDRESS OR DX, TELEPHONE, AND CUSTOMER ACCOUNT NUMBER IF ANY SYDNEY LEGAL AGENTS LLP: 128005Y REFERENCE: LANE & LANE / 478620	CODE AE
(D) DECEASED REGISTERED PROPRIETOR	JUDITH MARY BLAZEY		
(E) APPLICANT	ROGER WILLIAM BLAZEY		

(F) The abovementioned applicant, being entitled as executor of the will of the deceased registered proprietor (who died on) 7/4/2018 pursuant to Probate No. 2018/00219685 granted on 31 August 2018 (a certified copy of which is lodged herewith) hereby applies to be registered as proprietor of the estate or interest of the deceased registered proprietor in the abovementioned land

DATE

(G)

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

Signature:

Signatory's name: Fiona Jean Sephton
Signatory's capacity: Licensed Conveyancer

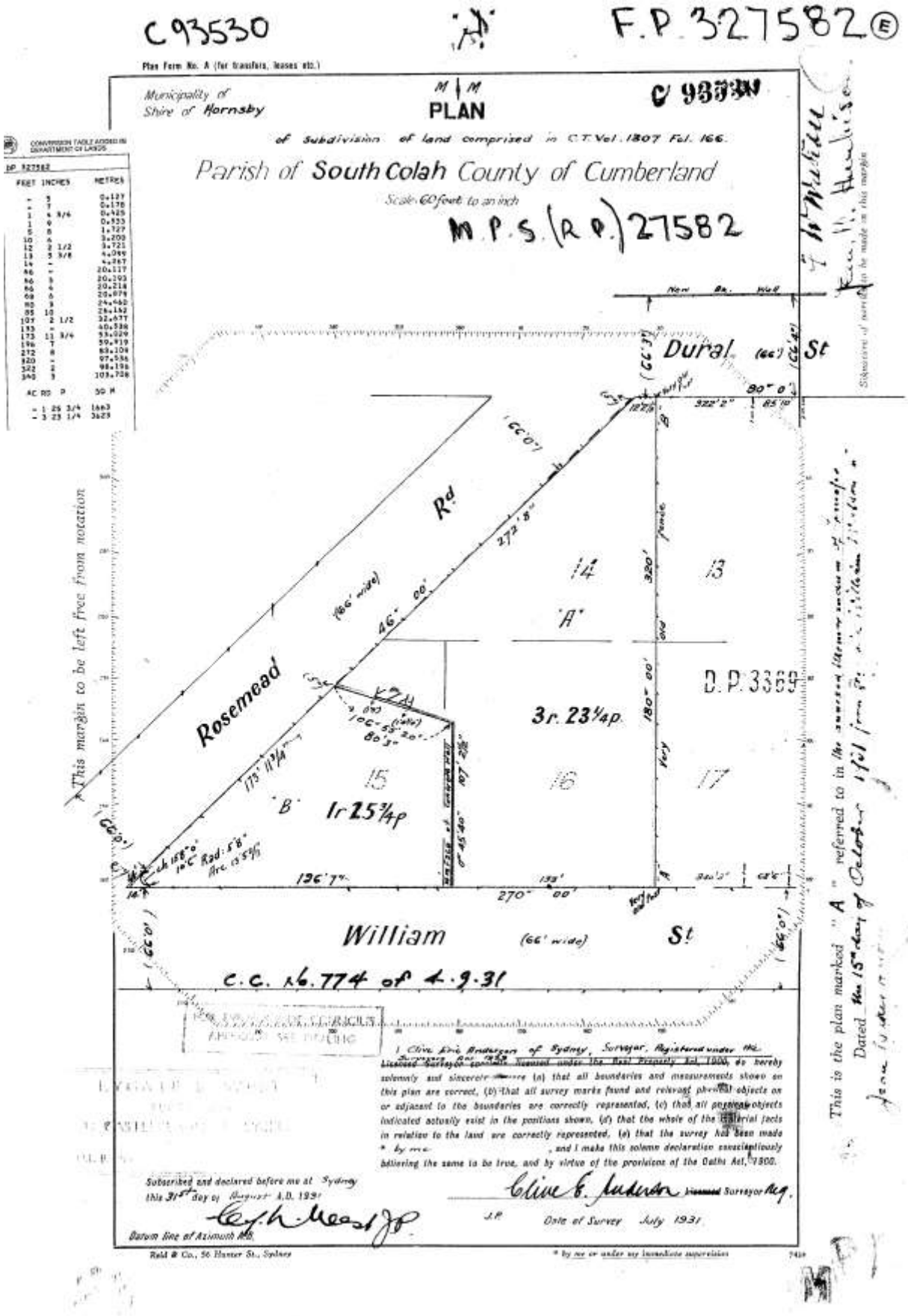
(H) *This section is to be completed where a notice of sale is required and the relevant data has been forwarded through eNOS.*
The applicant's agent certifies that the eNOS data relevant to this dealing has been submitted and stored under
eNOS ID No. 1796493 Full name: Fiona Jean Sephton Signature

*s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation

ALL HANDWRITING MUST BE IN BLOCK CAPITALS.

Evidence sighted and returned ~~office use only~~: C/L Probate

Page 1 of 1


C93530
F.P. 327582
Municipality of Shire of Hornsby
M/M
PLAN
of Subdivision of land comprised in C.T. Vol. 1807 Fol. 166.
Parish of South Colah County of Cumberland
Scale 60 feet to an inch
M.P.S. (R.P.) 27582
Dural (66') St
Rd
Rosemead
14
13
"A"
D.P. 3369
3r. 23¼p.
15
16
17
"B"
1r 25¾p
William (66' wide) St
C.C. 16.774 of 4.9.31
This margin to be left free from notation
Date of Survey July 1931

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
24/10/2019 8:14AM

FOLIO: A/327582

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 4509 FOL 11

Recorded	Number	Type of Instrument	C.T. Issue
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
19/2/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
10/3/1995	O78643	TRANSMISSION APPLICATION	EDITION 1
16/8/1996	2387422	TRANSFER	EDITION 2
13/12/1996	2687235	TRANSFER	
13/12/1996	2687236	TRANSFER	
13/12/1996	2687237	TRANSFER	
13/12/1996	2687238	MORTGAGE	EDITION 3
29/7/1999	6044159	DEPARTMENTAL DEALING	
19/10/2001	8039500	DEPARTMENTAL DEALING	EDITION 4
3/1/2002	8243233	DISCHARGE OF MORTGAGE	
3/1/2002	8243234	TRANSFER	
3/1/2002	8243235	MORTGAGE	
3/1/2002	8243236	MORTGAGE	EDITION 5
30/10/2007	AD525018	DISCHARGE OF MORTGAGE	
30/10/2007	AD525019	TRANSFER	
30/10/2007	AD525020	MORTGAGE	EDITION 6
9/9/2018	AN695392	DEPARTMENTAL DEALING	EDITION 7 CORD ISSUED
26/2/2019	AP87114	DISCHARGE OF MORTGAGE	EDITION 8
10/4/2019	AP178006	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 9
28/8/2019	AP494548	TRANSFER	
28/8/2019	AP494549	MORTGAGE	EDITION 10 CORD ISSUED

END OF PAGE 1 - CONTINUED OVER

advlegs PRINTED ON 24/10/2019

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
24/10/2019 8:14AM

FOLIO: A/327582 PAGE 2

Recorded	Number	Type of Instrument	C.T. Issue

*** END OF SEARCH ***

advlegs PRINTED ON 24/10/2019

Obtained from NSW LRS on 24 October 2019 07:14 AM AEST

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NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: A/327582

SEARCH DATE	TIME	EDITION NO	DATE
24/10/2019	8:13 AM	10	28/8/2019

NO CERTIFICATE OF TITLE HAS ISSUED FOR THE CURRENT EDITION OF THIS FOLIO.
CONTROL OF THE RIGHT TO DEAL IS HELD BY NATIONAL AUSTRALIA BANK LIMITED.

LAND

LOT A IN DEPOSITED PLAN 327582
AT HORNSBY
LOCAL GOVERNMENT AREA HORNSBY
PARISH OF SOUTH COLAH COUNTY OF CUMBERLAND
TITLE DIAGRAM DP327582

FIRST SCHEDULE

BEST-PRACTICE EDUCATION GROUP LIMITED (T AP494548)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 AP494549 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

advlegs PRINTED ON 24/10/2019

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* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. GlobalX hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900. Note: Information contained in this document is provided by GlobalX Pty Ltd, ABN 35 099 032 596, www.globalx.com.au an approved NSW Information Broker.

APPENDIX F

Noel Child
Summary of Qualifications, Capability & Experience

1 PERSONAL DETAILS

Full Name: Noel George CHILD
Profession: Consultant in Environmental Assessment and Management
Date of Birth: 6th December 1946
Nationality: Australian
Experience: > 30 Years
Address: 22 Britannia Road, Castle Hill, NSW, 2154
Contact: **Phone**: 61 2 9899 1968 **Fax**: 61 2 9899 1797 **Mobile:** 0409 393024

2 CAPABILITY AND EXPERIENCE - SHORT SUMMARY

Noel Child is a successful and experienced commercial and technical professional with over 30 years' experience in a variety of senior level appointments and assignments, within both the corporate and private sectors, with a particular focus on strategic, infrastructure and environmental applications.

Noel's experience includes senior management at both the State and National levels in the Australian petroleum industry, and a number of senior consultancies for both government and corporate clients. His record reflects the ability to develop and achieve positive commercial outcomes through effective planning and communication; critical and objective analysis; and quality task completion and delivery at both the personal and team level.

His management responsibilities have included transport, environmental, safety, and general operational activities at a national level, while his formal professional training includes strategic management, environmental, engineering and business disciplines. He has undertaken a number of senior corporate appointments with distinction and been successfully involved in the ownership and operation of a major petroleum distribution and marketing company in regional Australia. More recently, working through his own businesses Environment Australia and NG Child & Associates, he has applied his knowledge and experience in the areas of strategic management, infrastructure development, energy and the environment on a consultancy and contractual basis to a number of private and public-sector clients, both nationally and internationally.

Noel has had post-graduate training in several technical and commercial disciplines, and provides specialised teaching input, by invitation, to post graduate engineering and business management courses conducted by the Faculties of Business and Engineering at Sydney's University of Technology. He has strong affiliations with a number of international corporations and agencies and has worked closely with both the regulators and the regulated in a number of aspects of environmental management, assessment and performance. He has also been recognised as an independent expert on engineering, and environmental issues by the Land and Environment Court of NSW.

Noel has a detailed understanding of environmental engineering and associated processes and has specific experience and expertise in the fields of acoustics, air quality, electromagnetic field assessment, electrolysis and stray current assessment, contaminated site assessment, and liquid and solid waste management. He also provides post graduate teaching input on environmental engineering issues to post graduate courses at the University of Technology, Sydney, and La Trobe and Monash Universities in Melbourne.

3 EDUCATION, QUALIFICATIONS AND AFFILIATIONS

BE, PhD (Chemical Engineering), UNSW, Sydney
Master of Business Studies, University of New South Wales, Sydney
B.Sc. (Hons) Applied Chemistry (Environmental), University of Technology, Sydney
Graduate Diploma (Environmental Engineering and Management), UNSW, Sydney
Qualified Environmental Auditor, Standards Australia
Member, Royal Australian Chemical Institute, 1972/2020
Member, Institution of Engineers, Australia, 1972/2020
Member, Clean Air Society of Australia and New Zealand, 1992/2020
Member, Australian Natural Gas Vehicle Council, 1996/2004
Executive Director, Australasian Natural Gas Vehicles Council, 2003/2004
Visiting Fellow, Institute for Sustainable Futures, UTS, 1995/2002
Research Fellow, Faculty of Civil & Environmental Engineering, UTS, 1996/2020
Research Associate, New York Academy of Sciences, 2000/2020

4 RECENT ASSIGNMENTS & EXPERIENCE

Kaunitz Yeung Architecture (2016) – Electromagnetic field and air quality assessments of a childcare centre development project at 60 Dickson Avenue Artarmon NSW.

Australian Consulting Architects (Current) – Electromagnetic, stray current and electrolysis assessments of development projects a Field Place Telopea; Windsor Road Vineyard; Camden Valley way Horningsea Park and others.

Futurespace/Renascent (Current) – Environmental assessment of proposed childcare centre development at Waterloo Road Macquarie park and Cleveland Street Strawberry Hills, including general environmental, acoustic assessment, air quality and electromagnetic field assessment.

Thyssen Transrapid Australia (Current) – Adviser on technical and operational issues associated with the development and construction of a high-speed magnetic levitation train systems within the People's Republic of China, and elsewhere, including electrolysis, electromagnetic and stray field effects.

Trumen Corporation (Current) – Environmental assessment, including acoustic and contamination assessment and certification, of mixed use and childcare centre development projects at Waine Street Freshwater, Fitzroy Street Marrickville, and at Huntley Street Alexandria, NSW.

Commonwealth Bank (Current) – Environmental assessment, including general, acoustic, air quality, electromagnetic field and wind impact assessment, of a new childcare centre development to be located on Level 2 of Darling Park Power 2, Sussex Street, Sydney.

First Impressions Property – Environmental assessment of a proposed childcare centre at Ralph Street Alexandria NSW, including Preliminary (Stage 1) Site Contamination Assessment, and Electromagnetic Field Assessment.

LEDA Holdings – Environmental Assessment of a proposed childcare centre at 32 Cawarra Road Caringbah NSW, including general environmental, acoustic, air quality and electromagnetic field assessments.

Universal Property Group (Current) – Environmental assessment of a proposed multi building, multi-level residential development at Garfield Street, Wentworthville NSW, including general environmental, site and soil contamination and preliminary geotechnical assessments.

McCormack (Current) – Stage 2, 3 and 4 Environmental Site Assessment of 7,9 & 11 Bayard Street, Mortlake, NSW as part of the process of assessing the site for medium density residential development and obtaining a site audit statement confirming the suitability of the site for this purpose. Work inclusive of the assessment of all relevant environmental impacts.

Gundagai Meat Processors (Current) – Review and enhancement of solid and liquid waste processing and management systems at GMP's Gundagai abattoir, including the on-site treatment of waste streams from meat processing and other operations.

Campbelltown City Council (Current) – Peer review of acoustic assessments submitted to Campbelltown City Council regarding assessment of the acoustic impacts of proposed developments including a major truck maintenance facility and the expansion of Macarthur Square shopping centre, including the conduct of noise measurements.

Brenchley Architects (2009 - Current) – Acoustic assessments of proposed residential and commercial developments at Elizabeth Street Sydney; Spit Road Mosman, Botany Road Waterloo, Cranbrook Street, Botany and Bellevue Hill Road, Bellevue Hill NSW.

BJB Design (2009 - Current) – Acoustic, air quality and odour assessments of residential and commercial developments at Botany Road, Botany and Cranbrook Street Botany.

Bovis Lend Lease (Current) – Environmental assessment of a major development site at Darling Walk, Darling Harbour NSW, including a detailed review of air quality, electromagnetic field and acoustic issues for review by the NSW Department of Planning.

Penrith City Council (2012/13) – Preparation of the Penrith City Council response to the NSW Government Long Term Transport Plan, including consideration of transport and associated environmental issues affecting the Penrith Local Government Area.

Harry Azoulay & Michael Bell Architects (2012) – Assessment of the environmental impacts on and from a proposed childcare and early learning centre at Chatswood, NSW. Assessments lodged with and adopted by Willoughby City Council.

Wollondilly Shire Council (2012) – Preliminary environmental assessment and review of the proposed development of a second Sydney airport at Wilton, including a preliminary assessment of acoustic impacts.

White Horse Coffee (2011) – Air quality and odour assessment regarding a boutique coffee roasting and drying operation at 7/3-11 Flora Street, Kirrawee, and NSW.

Sydney Skips & Galaxy Waste (Current) – Environmental assessment of a proposed waste recycling facility to be located on a potentially contaminated site at Stephen Road, Botany, NSW, including a detailed review of all relevant engineering and environmental issues, and the preparation of relevant documentation including assessment reports for review by Botany City Council.

Michael Bell Architects & Clients (2004 to Current) – Assessment of the environmental impacts, including acoustic impacts, associated with various childcare centre applications in suburban Sydney, and the Sydney CBD, including the development of plans for the management and control of such impacts.

ABC Learning Centres Pty Ltd (2005 - Current) – Provision of professional services re the environmental assessment of prospective childcare centre developments, including issues relating to acoustics, air quality, odour, soil, and groundwater contamination.

NSW Roads & Traffic Authority (2004 to Current) – Review of international technologies, systems & applications in relation to the treatment of motor vehicle exhaust emissions and associated air pollution within and discharged from road tunnels, in accordance with the conditions of approval for the M5 East Motorway

Federal Airports Corporation (1995/1996) – Preliminary environmental and ground transport studies for the proposed Sydney West Airport, including consideration of all relevant environmental issues.

Isuzu-GM (2003 to Current) – Representations to Environment Australia and the Department of Transport and regional Services regarding the emission performance standards of Japanese sourced medium and heavy natural gas trucks, with the aim of having the current Japanese emission standard accepted within the Australian design Rule 80 series of vehicle emission standards.

City of Sydney (2005 - 2007) – Assessment of air quality and odour issues associated with a proposed redevelopment of craft studios and associated facilities at Fox Studios, Moore Park, Sydney, and review of air quality monitoring stations in the Sydney CBD area, in part as a basis for monitoring the air quality and potential health cost impacts of transport congestion and modes.

Warren Centre for Advanced Engineering, University of Sydney (2000 to 2003) – Contribution to the report "Sustainable Transport for Sustainable Cities", a major government and private enterprise funded study into the future sustainability of transport in Sydney and adjoining regions, including in particular a review of associated environmental issues. Study received the 2003 Bradfield Award for Engineering Excellence from the Australian Institute of Engineers.

United Kingdom Department of the Environment (1994) – Contribution to the development of revised environmental guidelines for air, soil and groundwater water quality.

United States Environmental Protection Agency (1994) - Contribution to an international team developing strategies for the control and management of air pollution in seven major US cities.

5 CORPORATE EXPERIENCE

NG Child & Associates

- **1992--Present**, Managing Principal - Responsible for all aspects of the conduct of a private engineering and environmental consultancy, including administration, marketing, team coordination and technical and professional delivery.

Western Fuel Distributions Pty Limited, Australia

- **1984-92** Managing Principal. - Responsible for all aspects of the management and development of one of the largest private petroleum distributorships then operating in Australia, with a peak annual sales volume of 70 million litres, turnover of $30 million per annum, a direct staff of thirty, and a network of some 40 retail and wholesale agency outlets. This position included direct personal accountability for all aspects of storage, distribution and environmental performance.

Caltex Oil Australia Limited

- **1982-84** General Manager, Marketing and Operations. Responsible for the management and operation of Caltex Australia's marketing, storage, warehousing, distribution, environmental and safety functions, including seaboard terminal and marine operations.
- **1980-82** National Consumer Marketing Manager. Responsible for Caltex Australia's national consumer, industrial and distributor marketing activities.

Golden Fleece Petroleum Limited

- **1977 - 1980** Manager Operations, NSW. Responsible for the overall management of the distribution, warehousing, seaboard terminal and lubricant production activities of Golden Fleece Petroleum in New South Wales, including environmental, occupational health and safety matters.

Esso Australia Limited

- **1976-77** SA Manager, Marketing and Operations. Responsible for all aspects of the management of Esso's petroleum, lubricant and LPG storage, distribution and marketing throughout South Australia.
- **1975-76** Refinery Manager. Responsible for all engineering, operational and environmental aspects of the joint Esso/Mobil refinery at Port Stanvac in South Australia.
- **1975** Manager, Process Operations, Port Dixon Refinery, Malaysia. Six-month special assignment at the Esso Petroleum Refinery, Port Dixon, Malaysia.
- **1971-75** Senior Analyst, Logistics and Corporate Strategy Departments, Esso Sydney Head office.

6 SOME REPORTS & PUBLICATIONS

- **High Speed Rail – Benefits for the Nation,** Keynote address at the UNSW Institute of Environmental and Urban Studies International High Speed Rail Seminar, August 2013.
- **High Speed Trains in Australia: Connecting Cities and Energising Regions**; with the Hon Peter Nixon AO, October 2010.
- **Sydney's High Residential Growth Areas: Averting the Risk of a Transportation Underclass**, World Transport & Environmental Forum, Reims France, June 2006.
- **The M5 East Road Tunnel: Implications for Ventilation, Air Quality and Emission Treatment Systems**, International Road Transport and Tunneling Forum, Graz Austria, May 2006.
- **Transport Fuels in Australia: The Folly of Australia's Increasing Reliance on Imported Crude Oil**, Submission to the Australian Senate Rural and Regional Affairs and Transport Committee Inquiry into Australia's Future Oil Supply and Alternative Transport Fuels, February 2006.
- **The Japan 2003 CNG Emission Standard & the Emission Performance of the Isuzu 4HF-1-CNG: The Case for Acceptance under ADR80**. Submission on behalf of Isuzu GM Australia to the Commonwealth Department of Transport and Regional Services, June 2004.
- **M5 East Freeway: A Review of Emission Treatment Technologies, Systems and Applications**, NSW RTA and NSW Department of Planning, April 2004.
- **Future Directions: Challenges & Opportunities in the Australian CNG Vehicle Industry**, ANGVC, December 2002
- **High Speed Rail in Australia: Beyond 2000** (with the Hon Peter Nixon), November 2000
- **Review of Options for the Treatment or "Filtration" of Tunnel Gases and Stack Emissions**, City of Sydney. January 2003
- **A Comparative Analysis of Energy and Greenhouse Performance: Austrans Ultras Light Rail System**, Bishop Austrans Limited, January 2003
- **Engineering and Environmental Aspects of Enclosing the Cahill Expressway Cutting**, City of Sydney, May 2001.
- **M5 East Motorway: Proposed Single Emission Stack at Turrella – Review of Air Quality Impacts and Consideration of Alternative Strategies**, Canterbury City Council, February 1999

7 PERSONAL & PROFESSIONAL REFERENCES

- The Hon Peter Nixon AO, Former Federal Transport Minister
- John Black, Professor Emeritus of Civil & Transport Engineering, University of NSW
- Mr Stephen Lye, Development Manager, Trumen Corporation, Sydney.
- Mr Peter Han, Project Director, Commonwealth Bank, Sydney
- Mr Michael Bell, Principal, Michael Bell Architects, Sydney.
- Mr Barry Babikian, Brenchley Architects
- Mr Luke Johnson, Assistant General Manager, Wollondilly Shire Council
- Mr Bernie Clark, Chief Executive, Thyssen Australia
- Mr Alan Ezzy, Former Chairperson, NSW Flood Mitigation Authority.
- Professor Vigid Vigneswaran, Faculty of Civil & Environmental Engineering, University of Technology, Sydney.
- Mr Merv Ismay, General Manager, Holroyd City Council, Sydney NSW
- Dr Jack Mundey, Past Chairman Historic Houses Trust, Environmentalist
- Alex Mitchell, Journalist

Noel G Child
30 April 2020

ATTACHMENT A
Client Reference List

Acre Woods Childcare Pty Ltd
Australian Commonwealth Environmental Protection Agency
Australian Consulting Architects
Australian Federal Airports Corporation
Australian Federal Department of Transport and Regional Development
Bovis Lend Lease
Brenchley Architects
Campbelltown City Council
Canterbury City Council, Sydney, NSW
Commonwealth Banking Corporation
Environment Protection Authority of NSW
Exxon Chemical
Fairfield City Council, Sydney, NSW
First Impressions Property
FreightCorp, Sydney, NSW
Futurespace
GM - Isuzu
Guangxi Environment Protection Bureau
Gundagai Meat Processors
Hong Kong Department of the Environment
Hornsby and Ku-ring-gai Councils, Sydney, NSW
John McCormack
Kaunitz Yeung Architecture
LEDA Holdings
Michael Bell Architects
Minter Ellison
Mobil Oil Australia, Associated
NSW Roads & Traffic Authority
Ove Arup & Partners
Qantas Airways
Queensland Ports Corporation
Renascent
Salibeau Pty Ltd
Shell Australia
Sinclair Knight Merz
Skouras and Mabrokardatos
Southern Sydney Regional Organisation of Councils (SSROC)
State Rail Authority of NSW
Stephen Davidson Property Investments
Sydney Skips & Galaxy Waste
The City of Sydney
The Western Sydney Alliance of Mayors
Thyssen Krup Transrapid Australia
Tom Howard QC
Trumen Corporation
UK Department of the Environment
United States Environment Protection Agency
University of Technology, Sydney
Warren Centre for Advanced Engineering, University of Sydney
Waverley Council, Sydney, NSW
Western Sydney Parklands Trust