Section 1
Introduction

PREAMBLE

This section introduces the Project proposed by Dellara Pty Ltd to operate a waste and resource management facility adjacent to Patons Lane, Orchard Hills in western Sydney. The proposed facility would incorporate a waste recycling and recovery centre and ancillary waste emplacement capable of accepting general (non-putrescible) solid waste.

This section includes:

- *an outline of the scope and format of the document;*
- *details of the Proponent, Dellara Pty Ltd;*
- *relevant background to the Project;*
- *a discussion on the proposed approach towards environmental management and documentation; and*
- *identification of the personnel involved in the Project design, document preparation and specialist consultant investigations.*

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1.1 SCOPE

This *Environmental Assessment* has been prepared by R.W. Corkery & Co. Pty. Limited to support an application for project approval by Dellara Pty Ltd ("the Proponent") to develop and operate a waste and resource management facility (the "Project") on a 60ha property at Orchard Hills (the "Project Site"). **Figure 1.1** displays the location of the Project Site, approximately 3km south of the M4 Motorway in western Sydney. A copy of the application for project approval (Application No. MP09_0074) is included as **Appendix 1**.

This *Environmental Assessment* describes the existing environment within and surrounding the Project Site including the current status of the clay/shale extraction area and the Proponent's plans to continue clay/shale extraction. The planned development and operation of a waste and resource management facility would provide for the progressive rehabilitation of the expanding clay/shale extraction area and providing an important facility for contributing to the management of waste in western Sydney.

Apart from describing the proposed development and operation of the Project, this *Environmental Assessment* provides information on the mitigation measures and management controls the Proponent would adopt to avoid or reduce potential impacts of the Project on the surrounding environment. The residual impact(s) are described and proposed monitoring outlined to assess the ongoing performance of the Project. The *Environmental Assessment* has been prepared in accordance with the provisions of Part 3A, Section 75 of the *Environmental Planning and Assessment Act 1979*.

The Project was declared a Major Project by the Director-General of the NSW Department of Planning under the provisions of *State Environmental Planning Policy (Major Development) 2005* (SEPP Major Development) on 11 November 2008. This declaration was made on the basis that the Project fell within the criteria in Clause 27(3) of Schedule 1 in SEPP Major Development, that is:

- "development for the purpose of resource recovery or recycling facilities that handle more than 75 000 tonnes per year".

The Project, if approved, would also assist to maintain a supply of light-firing clay/shale to the Sydney brick industry as well as increase the opportunities for commercial enterprises to minimise their environmental footprint through improved recycling and re-processing.

1.2 DOCUMENT FORMAT

The *Environmental Assessment* has been structured to address the specific environmental assessment requirements nominated by the Director-General of the Department of Planning (the Director-General's requirements – **Appendix 2**), which themselves have been based on the requirements of the Department of Planning and other relevant State and local government agencies. The *Environmental Assessment* has been compiled in a single volume which includes eight sections of text, including a reference section and glossary, and a set of appendices.

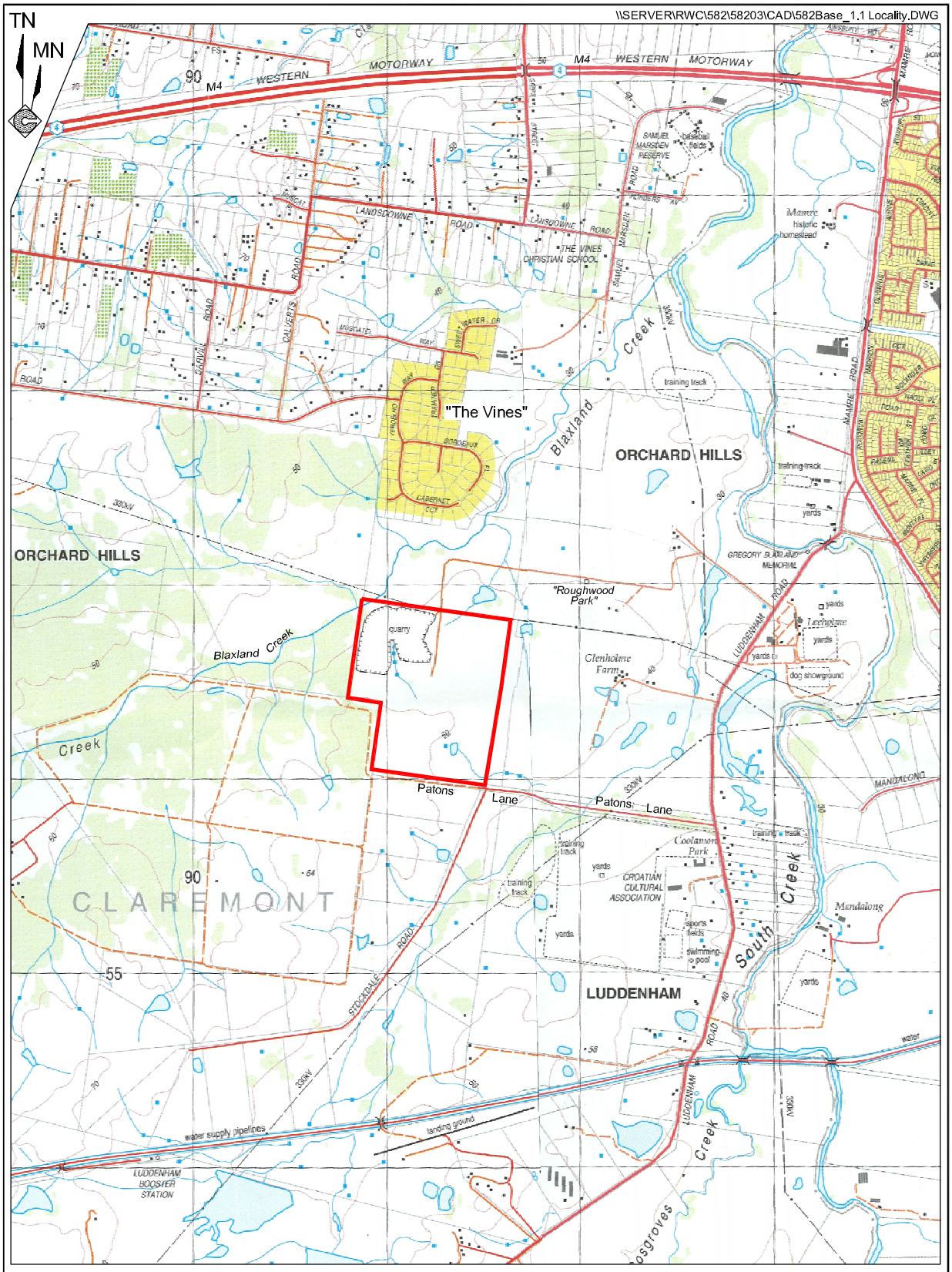

Figure 1.1
LOCALITY PLAN

The format of the *Environmental Assessment* has been structured as follows.

Section 1: introduces the Project, the Proponent and relevant background information about the Project. Information on the approvals process is also provided together with information on the proposed ongoing documentation, responsibilities for environmental management and management of investigations for the *Environmental Assessment*.

Section 2: provides a description of the Project commencing with a description of waste sources and classification, geology and resources, site layout and establishment, recycling and re-processing activities, clay/shale extraction, and employment and infrastructure. Information on rehabilitation is also included.

Section 3: provides a summary of the consultation undertaken with the local community and relevant government agencies, identifies relevant State legislative and statutory requirements, summarises and prioritises key environmental aspects and issues for assessment and provides an environmental risk analysis of these issues prior to the implementation of mitigation measures.

Section 4: presents a description of the existing environment, proposed management and mitigation measures, and assesses the potential impacts and maintenance /monitoring requirements for the key issues identified in Section 3.

Section 5: provides a draft statement of commitments compiled by the Proponent to record the range of activities and controls that would be adopted during the environmental management and monitoring for the entire Project.

Section 6: evaluates and justifies the Project in terms of biophysical, economic and social considerations, and the goals and guidelines of Ecologically Sustainable Development. A conclusion regarding the overall assessment of the Project completes this section.

Section 7: presents a Reference list for the various source documents referred to for information and data used during the preparation of the *Environmental Assessment*.

Section 8: presents a Glossary of Technical Terms, Acronyms, Symbols and Units explaining the technical terms, acronyms, symbols and units used throughout the *Environmental Assessment*.

Appendices: present the following additional information.

i) A copy of the Proponent's Major Projects Application.

ii) The Director-General's requirements and Coverage of Government Agency Requirements.

The *Environmental Assessment* has been prepared with the input of 11 specialist consultancies, all of which have prepared a total of 12 stand-alone specialist environmental assessments. Their assessments have been compiled into a two volume *Specialist Consultant Studies Compendium* which has been placed on exhibition with the *Environmental Assessment*. The contents of the 12 stand-alone reports are summarised into the appropriate section(s) of the *Environmental Assessment*.

1.3 THE PROPONENT

The Proponent for the Project is Dellara Pty Ltd which is an associate company of Roderick Holdings. Roderick Holdings was established in 1977 and is involved in Project Management (civil works), Property Development and Property Investment throughout NSW. Dellara Pty Ltd is currently negotiating with an established and experienced waste management company to operate the proposed facility and be in partnership with the operation.

1.4 BACKGROUND AND CONTEXT

The following chronology provides a summary of the Project Site's planning and operational history to date.

- 23 November, 1981 – Penrith City Council granted Development Consent (DA No. 116/80) for clay/shale extraction on the site to the applicant Vacik Pty Ltd.
- 7 November, 1986 – Penrith City Council approved an application by Vacik Pty Ltd to modify DA No. 116/80 to allow quarry traffic to and from the site to access Luddenham Road via adjoining land to the north.
- 13 November 1989 – Penrith City Council refused an application by Vacik Pty Ltd to modify Development Consent DA No. 116/80 to progressively rehabilitate the site using non-putrescible industrial and building waste. The application was refused on the grounds that the proposal was not 'substantially the same development' as originally approved.
- 25 June, 1991 – Vacik Pty Ltd lodged an appeal in the NSW Land and Environment Court against the decision of Penrith City Council to refuse their application to modify consent DA No. 116/80 to progressively rehabilitate the site using non-putrescible industrial and building waste.
- 18 February, 1992 – Stein J. dismissed the appeal by Vacik Pty Ltd in the NSW Land and Environment Court on the grounds that the proposed modification was 'not substantially the same development' as originally approved in DA No. 116/80.
- Vacik Pty Ltd sold the Project Site to Erskine Park Quarry (NSW) Pty Ltd who subsequently operated the quarry to supply brick manufacturing raw materials and construct perimeter bund walls. During this period, a range of unauthorised construction and demolition wastes were imported onto site and incorporated within the northern and northeastern bund walls – at a height exceeding the height permissible under Development Consent 116/80.
- 19 August 2008 – Dellara Pty Ltd purchased the Project Site.
- 11 November 2008 – The Proponent's proposal for a "Waste Recycling and Management Facility" on the site was declared by the Director-General of the NSW Department of Planning to be a Major Project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies.

Figure 1.2 displays an aerial photograph of the Project Site (taken on 4 August 2007) featuring disturbance across the bulk of the site. The principal areas of disturbance relate to:

- two extraction areas;
- four dams and a sump;
- an extensive set of perimeter bund walls; and
- an internal road network and various buildings.

1.5 THE NEED FOR THE PROJECT

In 2003, Resource NSW (now within the Department of Environment, Climate Change and Water (DECCW) – Sustainability Programs Division) introduced the *NSW Waste Avoidance and Resource Recovery Strategy 2003* (the "Waste Strategy 2003"). The Waste Strategy 2003 was introduced as the principal document to guide State and Local Government agencies, industries and the broader community in waste prevention and avoidance, re-use and recycling.

The key outcomes identified for waste avoidance and recovery in Waste Strategy 2003 were:

- preventing and avoiding waste;
- increasing recovery and use of secondary materials;
- reducing toxicity in products and materials; and
- reducing litter and illegal dumping.

The Waste Strategy 2003 also set performance targets for the recycling of major waste streams in NSW by 2014. These included increasing the amount of municipal waste recycled from 25% to 66%; commercial and industrial (C&I) waste from 28% to 63%; and construction and demolition (C&D) waste from 65% to 76%.

The Waste Strategy 2003 has since been updated by the Waste and Avoidance Strategy 2007 (the "Waste Strategy 2007"), which continues to provide guidance and priorities for action to ensure that efficient resource use and impacts on the environment are considered. The Waste Strategy 2007 was produced in light of current national and international practice, emerging trends and challenges. The Waste Strategy 2007 focuses on solid wastes that, unless recovered and diverted to beneficial uses, would be disposed of to solid and inert waste facilities throughout NSW.

In addition to the Waste Strategy 2007, the NSW Government has adopted the *State Plan, A Direction for NSW* (the "State Plan"). The State Plan comprises five focus areas, including one titled “Environment for Living”. Reducing waste, conserving resources and recycling contributes to the priorities listed in the Environment for Living chapter of the State Plan.

The most recent Performance Report for the Waste Strategy 2003 was published in 2006 (the "2006 Performance Report"). **Table 1.1** has been extracted from the 2006 Performance Report and provides a summary that compares the amount of waste generated and recycled in NSW between 2002-03 and 2004-05 for all waste streams.

In 2004-05, Sydney recycled 49% of its total waste, which represented an increase of 1% since 2002-03. Over the same period, Sydney increased its overall waste generation per capita by 3% (DECC, 2007).

Figure 1.2
THE EXISTING SITE

In terms of the amount of materials recycled in Sydney, the 2006 Performance Report also provided the following comparison between 2002-03 and 2004-05 for the three main waste streams.

- Municipal waste recycling increased from 33% to 37%.
- Commercial and Industrial (C&I) waste recycling increased from 33% to 35%.
- Commercial and Demolition (C&D) waste recycling reduced from 68% to 66%.

The reduction in the amount of C&D waste recycled was attributed to better measures to appropriately dispose of asbestos waste and demolition waste that was contaminated with asbestos (DECC, 2007).

Table 1.1
NSW Waste Generation and Recycling

Area/Region	Total Generation (tonnes)	% Recycled (all waste streams)
2004-05		
NSW	13,118,000	46%
Sydney	8,901,500	49%
Hunter, Central Coast and Illawarra	2,268,000	50%
Regional and rural NSW	*1,948,500	*22%
2002-03		
NSW	11,804,000	45%
Sydney	8,513,500	48%
Hunter, Central Coast and Illawarra	1,968,500	47%
Regional and rural NSW	*1,322,000	*28%
* Rural and regional data is limited: indicative figures only.		
Source: DECC (2007)		

The Waste Strategy 2007 identified a number of emerging drivers and challenges to meeting the 2014 performance targets, including the growing demand for infrastructure to facilitate the ever consolidating Metropolitan Region. Facilities will need to be in locations that optimise logistics including distance travelled, access issues and the relationship to the network of facilities. The Waste Strategy 2007 also identifies that recycling of C&I waste continues to be the biggest and hardest stream to tackle (DECC, 2007).

The need for this Project is therefore derived from environmental, social and economic benefits, which include:

- provision of the necessary infrastructure to achieve the 2014 recycling performance targets established in the Waste Strategy 2003 and retained in the Waste Strategy 2007, combined with the ever expanding amount of waste generation, particularly in Sydney;
- provision of important infrastructure to service the proposed Employment Lands and the Western Sydney Employment Hub identified in the NSW State Government's Metropolitan Strategy for Erskine Park and Eastern Creek;
- provision of waste recycling infrastructure that is ideally located in terms of accessibility between Sydney's planned northwest and southwest growth sectors;

- provision of a Waste Recycling Facility to support Penrith's growth as a Regional City to service the northwest sub-region as set out in the NSW Government's Metropolitan Strategy;
- commercially viable utilisation of an existing disturbed site to provide required waste recycling infrastructure, appropriate rehabilitation of the land form via residual waste emplacement and continued future extraction of the remaining clay/shale resources (subject to demand);
- provision of direct employment for approximately 20 full time people and further indirect employment;
- rehabilitation of a commercially unviable clay/shale quarry that would provide a final landform consistent with the surrounding rural landscape;
- sustainable re-use of an existing disturbed landform;
- reduction in greenhouse gas emissions through recycling of C&D and C&I waste;
- provision of a source of reusable building, construction and landscaping materials (in accordance with resource recovery exemptions, where applicable); and
- assistance in addressing the scarce commodity of landfill space currently approved and available in Sydney.

Further discussion relating to the need for the project and justifiable demand is provided in Section 3.2.3.1 as it relates to the matters for consideration as nominated within State Environmental Planning Policy (Infrastructure) 2007.

1.6 THE PROJECT APPROVAL PROCESS

Table 1.2 presents the component stages of the overall approvals process for a major project and provides an indicative project timetable currently being followed by the Proponent. Based upon the submission of an adequate *Environmental Assessment* for exhibition during April 2010, the determination of the Application by the Minister for Planning (*Stage 12* of **Table 1.2**) could occur by August 2010.

Table 1.2
Approvals Process for a Major Project and the Proponent's Indicative Timing

Page 1 of 2

Stage	Activity	Indicative Timing
1 ➔	A draft "*Preliminary Environmental Assessment*" for the Project is prepared and submitted to the Department of Planning for distribution to relevant government agencies.	Completed
2 ➔	A Planning Focus Meeting is convened for all relevant government agencies to attend a briefing about the Project and a site inspection.	Completed
3 ➔	The Proponent writes to the Department of Planning lodging its Application for Project Approval and the final *Preliminary Environmental Assessment*.	Completed
4 ➔	The Department of Planning receives the written requirements of the government agencies consulted and issues the Director-General's requirements for the Project.	Completed 20 May 2009

Table 1.2 (Cont'd)
Approvals Process for a Major Project and the Proponent's Indicative Timing

Stage	Activity	Indicative Timing
5 ➔	The Proponent commences consultation with the local and wider community – which continues throughout the entire process.	Commenced January 2009 and ongoing
6 ➔	An *Environmental Assessment* is provided to the Department of Planning for consideration and assessment of adequacy by the Department and other government agencies (prior to it being placed on public exhibition).	October 2009 (First Adequacy) March 2010 (Second Adequacy)
7 ➔	The final revision of the *Environmental Assessment* is lodged with modifications reflecting the comments provided by the various government agencies (First Adequacy) and Department of Planning (Second Adequacy). The Department of Planning will place all documents on public exhibition and notify neighbours and other stakeholders about the Project and the exhibition period.	April 2010*
8 ➔	Review of the *Environmental Assessment* during the exhibition period by the community and government agencies.	April/May 2010*
9 ➔	The Department of Planning seeks from the Proponent a response/clarification of issues raised in the submissions from government agencies and the community.	May 2010*
10 ➔	The Proponent provides a response to the issues raised and, if necessary, a revised Statement of Commitments.	June 2010*
11 ➔	The Department of Planning prepares its assessment report based on all documentation submitted by the Proponent, government agencies and the community. If considered appropriate by the Minister, the application will be referred to a Planning Assessment Commission.	July 2010*
12 ➔	Determination by the Minister for Planning, ie. either approval or refusal.	August 2010*
Note: * Estimated timing only		

1.7 ENVIRONMENTAL MANAGEMENT AND DOCUMENTATION

1.7.1 Environmental Management

The development and operation of the ongoing clay/shale extraction activities, recycling and re-processing facility and the waste emplacement activities would be the ultimate responsibility of the Managing Director of Dellara Pty Ltd.

The overall day-to-day management of all activities on the Project Site would be the responsibility of an experienced Site Manager employed by a well established and experienced waste management company. The Site Manager would be responsible for implementing the conditional requirements of the project approval, environment protection licence and all related documentation.

The day-to-day responsibility of the ongoing clay/shale extraction area would be the responsibility of the Quarry Manager or Production Manager authorised under the *Mine Health and Safety Act 2004*. The Quarry Manager would report to the Site Manager and implement the components of the Project as outlined in this document relating to the extraction, stockpiling and despatch of clay/shale, together with the provisions of the Site Safety Management Plan.

Dellara Pty Ltd recognises the benefits of environmental responsibilities being assigned to all personnel on site. Accordingly, it is proposed that all site personnel will have environmental responsibilities included as part of their work description.

1.7.2 Environmental Documentation

The Proponent recognises that successful environmental management involves regular, organised documentation to ensure that, irrespective of personnel changes, all aspects of planning, environmental control, monitoring and responses to problems are properly recorded.

The Proponent is committed to the preparation of an overarching Landfill Environmental Management Plan that incorporates a series of individual plans and procedures. The plans and procedures would be prepared to show how the commitments in this document and relevant approval conditions would be implemented. All documentation would be regularly reviewed and updated, if required, to reflect the results of monitoring and on-site observations.

1.8 MANAGEMENT OF INVESTIGATIONS

The preparation of this *Environmental Assessment* has involved a study team managed by Mr Rob Corkery, M.Appl.Sc., B.Sc (Hons), Principal of R.W. Corkery & Co Pty. Limited, assisted by Mr Scott Hollamby, B.EnvSc (Hons) and Miss Tabitha Kuypers B.EnvMgt of the same company.

Mr Ben Haynes of Design Collaborative Pty Ltd assisted with consultation with government agencies and overall project direction.

The input to the *Environmental Assessment* from the Proponent was provided by Directors Mr Rick Miller – B.Econ, Dip Blg.Sc and Mr Andrew Drury. The Proponent has had a direct involvement with the Specialist Consultant team outlined as follows and with the selection of plant and equipment for the recycling and re-processing facility.

Strong emphasis has been placed upon a multi-disciplinary team approach to the design of the Project, the description of the existing environment and resultant impact assessment. The following consultancy firms were commissioned by the Proponent to prepare nominated specialist consultant studies for the Project.

- Planning and Visual Assessment: Design Collaborative Pty Ltd
  Mr Ben Haynes – B. ApplSc (Env. Hlth). Grad Dip(URP)
- Groundwater Assessment and Emplacement Cell Integrated Design: Aquaterra Consulting Pty Ltd
  Mr Anthony Dixon – M.E, M.ES, B.Eng(Hons)
- Soil and Flora Assessments: Geoff Cunningham Natural Resource Consultants Pty Ltd
  Mr Geoff Cunningham – B.Sc(Hons)
- Heritage Assessment: Archaeological Surveys & Reports Pty Ltd
  Mr John Appleton – B.A (Hons)

- Transport and Parking Assessment: Traffic Solutions Pty Ltd
  Mr Craig Hazell – Assoc.Dip. Eng
- Noise and Vibration Assessment: Wilkinson Murray Pty Limited
  Mr David Borella – B.Eng Mech
- Waste Classification: Douglas Partners Pty Ltd
  Mr Mike Nash – B.Sc(Masters), B.A(Masters)
  Ms Galia Nikolaeva – B.Forestry (Masters)
- Surface Water Assessment: GSS Environmental
  Mr Craig Bagnall – B.E(Env)(Hons)
  Ms Nicole Armit – M.EnvLaw, B.E(Env)(Hons)
  Mr Dean Jarvis – B.E(Env)(Hons)
- Surface Water Modelling: BMT WBM Pty Ltd
  Mr Mark Wainwright B.E(Civil)
- Fauna Assessment: Aquila Ecological Surveys
  Mr Paul Burcher B. Appl.Sc
- Air Quality and Greenhouse Gas Assessment: PAEHolmes
  Ms Judith Cox – B.Eng(Hons)
  Mr Phillip Henschke – B. Appl.Ecol

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