1.0 Introduction

This chapter provides the relevant background to the project including the site and planning history, the context of the project and the approvals regime. The structure of the report is outlined to enable a broad understanding of the scope of the environmental assessment in relation to the relevant statutory requirements.

1.1 Background

Boral Bricks Pty Ltd (Boral) currently carries out quarrying and brick making activities at 235 Martin Road, Badgerys Creek (Project Site) within the Liverpool Local Government Area (LGA) to the west of Sydney (refer **Figure 1**). The Project Site operates under consent issued by the Local Government Appeals Tribunal on 27 September 1976 (Council Ref: 1024/ 1976), as modified on 7 September 2006 (Council Ref: 921/2006).

The 1976 consent refers to a Deed of Agreement (the Deed) between Liverpool City Council (LCC) and Pacific Brick Company Pty Limited dated 30 September 1976. The Deed refers to the Tribunal award and contains conditions regulating extractive activities on the site and financial arrangements between the Company and LCC (refer to **Appendix A**).

The Deed imposes a 30 year lifespan for activities on the site from 27 September 1976 (cl. 12) and restoration of the land to the *'reasonable satisfaction of Council when operations on said land in connection with the development have been completed' (cl. 10).* During 2006, HLA Envirosciences Pty Limited (now trading as AECOM) assisted Boral with a Section 96(1A) application under the *Environmental Planning and Assessment Act 1979* (EP&A Act), to modify the consent to enable operations to continue on the site. A modification was granted by Council on 7 September 2006 for continued operations for a further four years. The modified consent is set to expire on 27 September 2010. Consequently, where it is stated that the Deed of Agreement is applicable for a 30 year period from 1976 onwards, the requirements of the Deed of Agreement remain during site operation up to the 27 September 2010 (refer to **Appendix A**). It is noted that a Section 96 modification lodged with LCC to extend site operations for a further 12 months as further security for site operations was approved by LCC on 3 September 2010.

Boral is now seeking approval for continued quarrying and brick making operations on the Project Site beyond 2011, the subject of this Environmental Assessment (EA).

1.1.1 The Proponent

The Proponent for the proposal is Boral Bricks Pty Ltd, a fully owned subsidiary of Boral Limited.

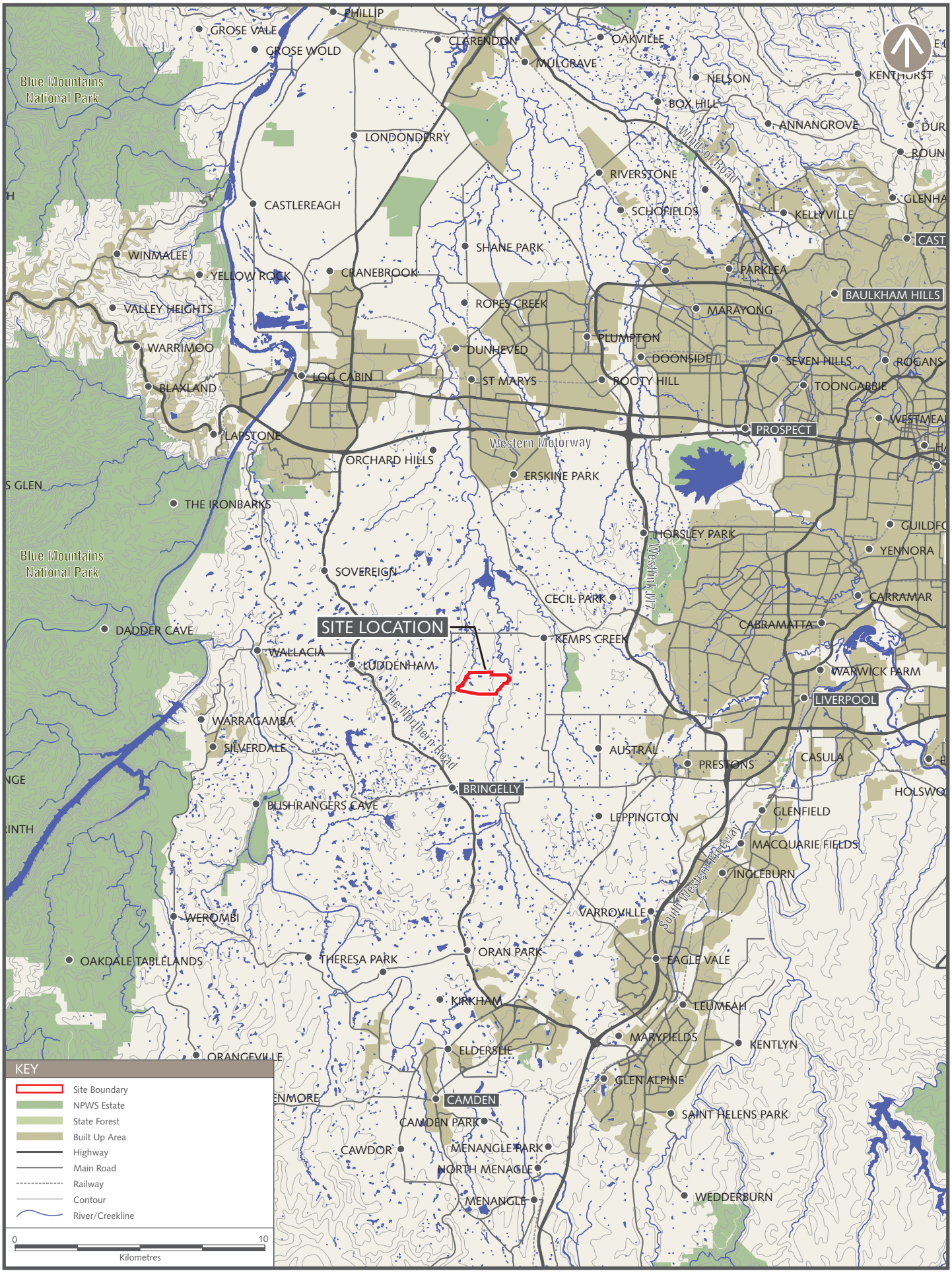
Boral Limited is Australia's largest building and construction materials supplier. It produces and distributes a broad range of construction materials, including quarry products, cement, flyash, pre-mix concrete and asphalt; and building products, including clay bricks and pavers, clay and concrete roof tiles, concrete masonry products, plasterboard, windows and timber.

1.1.2 Planning History

An outline of the planning history including modifications to consent and more recent development applications is provided in **Table 2**.

Table 2: Planning History of Boral Badgerys Creek

Name/Item	Issued by	Description	Status	Date
Consent 1024/1976	Government Appeals Tribunal	Consent granted subject to conditions of Deed of Agreement	Approved	27 September 1976
Section 96 Mod. Consent 921/2006	LCC	Modification to 1976 consent to extend operations on the site for a further four years.	Approved	7 September 2006
DA 764/2009	LCC	Development Application (DA) for the upgrade of the brick making facility to include a new brick unloading machine (Dehacker).	Approved	31 March 2009



AECOM

REGIONAL CONTEXT

Environmental Assessment

Boral Quarry and Brick Making Facility, Badgerys Creek

Figure 1

Name/Item	Issued by	Description	Status	Date
Section 96 Modification DA1024/1976/B	LCC	Modification to consent to allow for a further 12 months of operation at the site.	Approved	NA

1.1.3 Existing Works and Infrastructure

The existing operations on the Project Site involve the quarrying of clay and shale for the production and packing of bricks and their dispatch to offsite locations. Key features of the Project Site are shown in **Figure 2**, including:

- Three existing quarry pits (Pits 1, 2 and 3);
- A brick handling and production facility (brick making facility);
- A bricks finished goods storage yard (brick product storage area);
- Raw material and unusable material stockpiles;
- Water storage and sedimentation ponds; and
- Access roads.

The quarrying activities currently yield approximately 361,000 tonnes per annum (tpa) and brick production is in the order of 200,000 tpa. Further detail on existing operations is provided in **Section 4.1** of this EA.

1.2 Project Context

The existing extraction works and brick making facility is a significant business unit of Boral Bricks and, subject to appropriate approvals, the facility is expected to continue to operate for many years into the future. The brick making facility would therefore require a continuing source of feedstock material to make bricks.

A substantial amount of valuable clay resource remains on the site and it is important that this resource be fully utilised to ensure a steady ongoing supply of building materials for the construction industry. This brick making facility would play a vital role in both providing resources to facilitate urban development in Western Sydney and the expanding future development of greenfield land in the vicinity of the subject site under the *Sydney Metropolitan Strategy - City of Cities: A Plan for Sydney's Future* (*Sydney Metropolitan Strategy*). The project would also contribute directly and indirectly to employment within Western Sydney.

Boral is therefore seeking approval to continue operations on the site beyond September 2010 to meet the continued demand for its products. Boral proposes to continue extraction across the site, including the continued extraction of raw materials from an existing pit located in the south eastern section of the site known as Pit 3, moving north to establish a new pit (Pit 4) and expanding operations in the future to land in the northern portion of its landholding (Pit 5). Boral has commissioned AECOM to prepare this EA in support of an application for approval for the continuation of operations on the site as described in **Chapter 4**.

1.3 Location

The Project Site is located in the suburb of Badgerys Creek within Liverpool LGA. Badgerys Creek is approximately 41 km south west of Sydney and 17 km west of Liverpool. It is a small community comprising rural residences, agricultural activities, quarrying and industry. The locality supports a number of small rural residential holdings and a limited number of larger agricultural properties, agricultural enterprises (chicken farms, nurseries) and market gardens. The region forms part of the South West Growth Centre (SWGC) under the *Sydney Metropolitan Strategy* with Liverpool identified as a major centre and the site earmarked for 'future industrial' development. The regional context of the site is shown in **Figure 1**.

The site is bound by Badgerys Creek to the west, Inghams Chicken to the south, South Creek to the east and a large commercial nursery and rural residential properties to the north. The site location is shown in **Figure 3**.

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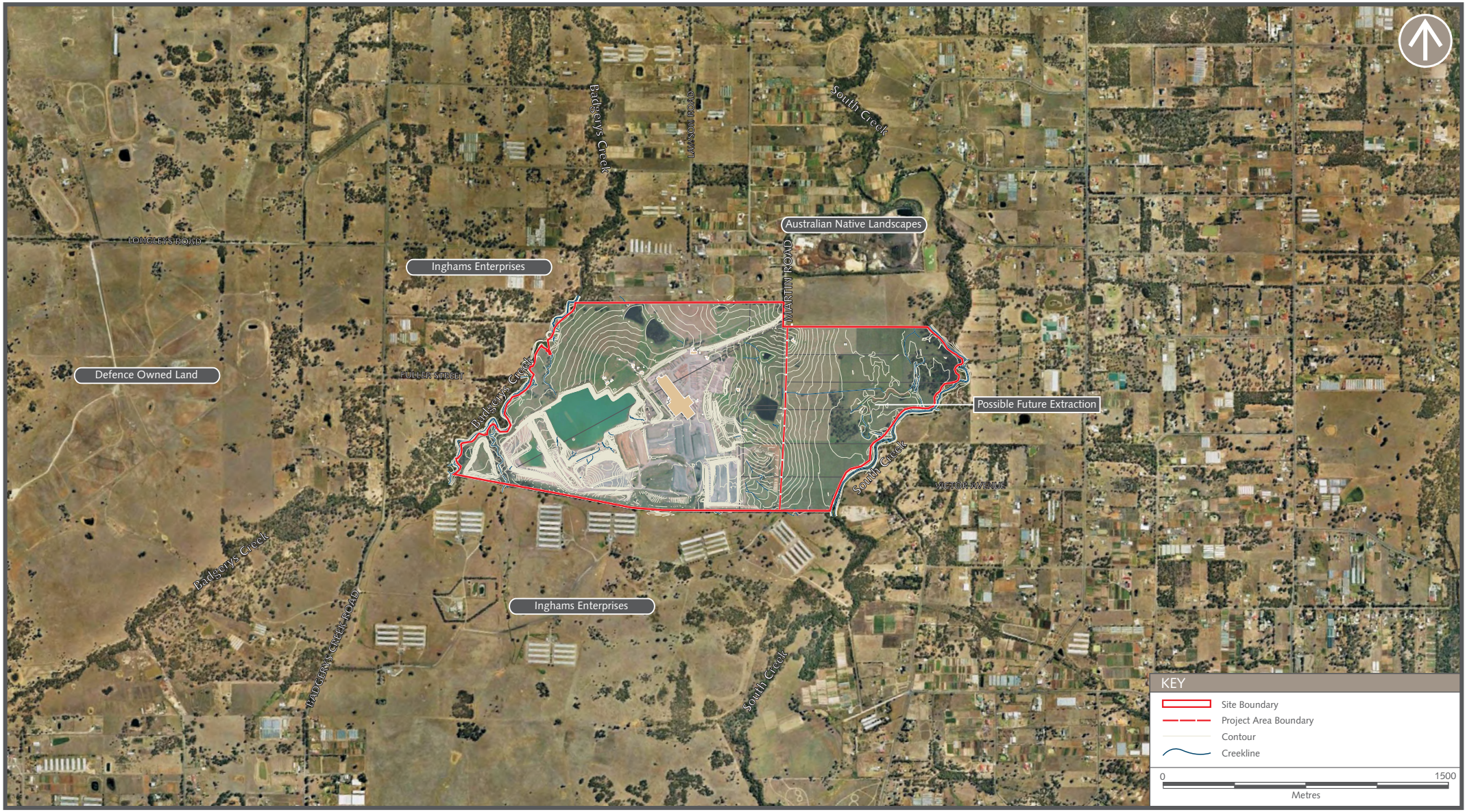
EXISTING PROJECT SITE LAYOUT

Environmental Assessment

Boral Quarry and Brick Making Facility, Badgerys Creek

Figure 2



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PROJECT SITE LOCATION

Environmental Assessment

Boral Quarry and Brick Making Facility, Badgerys Creek

Figure 3

1.4 Approvals Process

The Project involves the extraction of clay, shale, and sandstone, associated brick making and ancillary activities as per current operations, however there would be some expansion of activities.

To enable continued operations on the site, Boral is seeking approval for:

- Extraction in the order of 420,000 tpa;
- Brick making activities; in the order of 252,000 tpa; and
- Ancillary activities as described in **Section 1.4.2** below.

The Project falls within the definition of an 'extractive industry' under Group 2, Clause 7 of Schedule 1 of the *State Environmental Planning Policy (Major Development) 2005* (SEPP 2005), being:

> *(1) Development for the purpose of extractive industry that:*
>
> *(a) extracts more than 200,000 tonnes of extractive materials per year, or*
>
> *(b) extracts from a total resource (the subject of the development application (or other relevant application under the Act)) of more than 5 million tonnes.*

The Project is therefore eligible for assessment as a Major Development under Part 3A of the EP&A Act. The Minister has issued a declaration that the project is a 'major development' and has issued authorisation for the submission of a Concept Plan (**Appendix B**).

Boral is therefore seeking approval to continue quarrying and brick making activities on the Project Site beyond the expiry of the existing consent.

1.4.1 Concept Plan Approval

The subject site is zoned RU1 under the relevant local environmental plan, being *Liverpool Local Environmental Plan 2008* (LLEP 2008).

Under LLEP 2008, the quarry component of the project is defined as 'extractive industry', a permissible use within the RU1 zone. The brick making component is undefined under LLEP 2008 and is subsequently prohibited in the RU1 zone.

The original consent/Deed of Agreement covered the extraction and brick plant components of the development, described as 'clay extraction and brick and clay products industry'. The Deed and associated consent was clearly issued prior to the gazettal of LLEP 2008 and the preceding instrument, *Liverpool Local Environmental Plan* 1997 (LLEP 1997) under which the zoning of the Project Site is/was established. Conditions of the Deed relating specifically to the brick making facility indicate that the brick making component has always been considered an intrinsic part of 'the development'. As such, it is considered likely that the site benefits from existing use rights. However, in order to remove ambiguity with regard to the permissibility of the brick making component of the project and to provide certainty for Boral regarding the future operations at the site, it is proposed that a Concept Plan Approval be sought for the project, to resolve the permissibility issues surrounding the brick making facility.

Part 3A of the EP&A Act allows the Minister for Planning to issue Concept Plan Approval for certain Major Development. Section 75O of the EP&A Act provides that the Minister has the discretion to consider the compliance of the proposal with Environmental Planning Instruments (EPIs), including proposals that would otherwise be prohibited by an EPI, as follows:

> *In deciding whether or not to give approval for the concept plan for a project, the Minister may (but is not required to) take into account the provisions of any environmental planning instrument that would not (because of section 75R) apply to the project if approved. However, the regulations may preclude approval for a concept plan for the carrying out of a class of project (other than a critical infrastructure project) that such an instrument would otherwise prohibit.*

There is currently no provision under the EP&A Regulation that precludes approval of a Concept Plan that would otherwise be prohibited by an EPI. The Proponent is therefore seeking Concept Plan Approval for the project. The Minister has issued authorisation for the submission of a Concept Plan for the project (see **Appendix B**).

1.4.2 Concurrent Project Approval

As described above, the Proponent is seeking concurrent Project Approval for the continuation of operations on the site, comprising:

- Extraction from existing and future new pits across the site in the order of 420,000 tpa; and
- Brick making activities; in the order of 252,000 tpa.

Key works and ancillary activities included in the project are:

- Continuation of extraction of raw materials from Pit 3;
- Establishment of new quarry areas commencing with the Pit 4 to the north of the existing Pit 3 and potentially extending into areas further to the north subject to geological and environmental considerations;
- Stockpiling of raw and unusable materials;
- Water management works ; and
- Other ancillary activities such as loading/unloading, brick storage and delivery and receipt of raw materials as described in **Chapter 4** of the EA.

1.4.3 Preliminary Environmental Assessment

A Preliminary Environmental Assessment (PEA) lodged with the DoP outlined the environmental interactions of the Project with the surrounding area. A risk analysis carried out as part of the PEA allowed the key environmental issues of significance to be identified and following the analysis, AECOM identified the level of environmental assessment required for inclusion in the EA.

The PEA identified the following environmental issues as having a medium priority for assessment in the EA:

- Air Quality
- Water
- Noise and vibration
- Traffic and transport
- Land use
- Rehabilitation

Additional environmental issues were identified in the PEA, however, the potential impacts associated with these were expected to be minimal or of low priority. Each of these issues is subject to a lower level of assessment as part of the EA and appropriate mitigation measures and environmental safeguards have been identified in the Statement of Commitments (SoC) (**Chapter 22**) to ensure potential impacts are minimised and managed.

1.4.4 Director-Generals Requirements

Section 75F of the EP&A Act requires an EA to be prepared in accordance with the requirements of the Director-General of the DoP. A request for these requirements was made in November 2009.

The Director-General's Requirements (DGRs) were issued on 4th March 2010, a copy of which is included as **Appendix B** to this EA.

1.4.5 Planning Focus Meeting

A Planning Focus Meeting (PFM) was held on the Project Site on 4th November 2009. Representatives of the DoP, the NSW Department of Environment, Climate Change and Water (DECCW) and LCC were in attendance. As part of this process, a copy of the PEA was distributed to relevant agencies and views were sought regarding issues to be included in the DGRs. This process provided the opportunity for key statutory authorities to establish the requirements for the form and content of the EA. The DGRs are included as **Appendix B** to this EA and are addressed in **Chapter 6** of this EA.

1.4.6 Stakeholder Consultation

During the preparation of this EA, key stakeholders were identified. These stakeholders included local community groups as well as key government agencies. Throughout the preparation of the EA, these stakeholders have been kept informed of the progress of the Project and issues raised by these stakeholders have been addressed as part of the EA. Further details on stakeholder consultation are provided in **Chapter 6**.

1.4.7 EA Exhibition

The EP&A Act requires that the EA be placed on exhibition for public review for a minimum period of 30 days.

1.5 Purpose of this Report

This EA has been prepared by AECOM on behalf of the Proponent as part of an application for Concept and concurrent Project Approval for the continuation of operations of the quarry and brick making facility at the Project Site.

In accordance with Part 3A of the EP&A Act, the DGRs for the Project were issued on 4th March 2010. This EA has been prepared pursuant to those requirements and addresses the matters listed by the Director-General.

The purpose of this EA is to:

- Explain the nature of the works and activities comprising the Project;
- Assess the potential environmental impacts of these works and activities on the physical, social and economic environment (having regard to both existing and future land use); and
- Identify mitigation measures to be implemented to minimise and manage potential impacts associated with the Project.

The key recommendations and management measures described in the EA have been incorporated into the SoC for the Project, detailed in **Chapter 22**. The SoC outlines the Proponent's commitment to environmental management and would form a key component of any conditions of approval issued for the Project.

1.6 Structure of the EA

The EA has been structured to provide information to address relevant statutory requirements as outlined in **Table 3**.

Table 3: Outline of Report Structure

Chapter	Issues Addressed
Chapter 1	Provides a background to the Project, including information about the Proponent such as location, licenses, existing and proposed works and activities. The purpose and structure of the EA is also outlined.
Chapter 2	A detailed description of the Project Site and surrounding area linked to the Project is given.
Chapter 3	Identifies the need for the Project, alternatives, and consequences of not proceeding.
Chapter 4	An overview of and description of the proposed activities and locations of the works.
Chapter 5	Describes the legislative context of the Project, including the approvals required.
Chapter 6	Discussion of formal procedures proposed and/or undertaken with other agencies, as well as the community, stakeholders, and relevant authorities as part of the approvals process.
Chapter 7	Provides a summary of the prioritisation process undertaken to identify the key environmental issues.

Chapter	Issues Addressed
Chapter 8-21	Reports and details environmental issues and assessment methods associated with the Project. This section: • Includes field and desktop studies; • Discusses environmental implications; • Considers cumulative impacts on the existing environment; • Outlines possible residual effects; and • Outlines environmental safeguards and mitigation measures.
Chapter 22	Details the Proponent's environmental management and commitments in relation to the Project.
Chapter 23	Provides an evaluation of the residual environmental risks associated with the Project.
Chapter 24	Provides a justification for the project in terms of environmental, economic and social considerations.
Chapter 25	Provides a conclusion to the environmental assessment.

2.0 Site and Context

The Project Site is located at Badgerys Creek, within the Liverpool LGA. As such, this chapter provides an overview of the Liverpool LGA, and a description of the physical characteristics of the Project Site and the location of project components across the site. The chapter also provides an overview of existing and future surrounding land use in order to provide an understanding of how the Project fits within the regional and local context.

2.1 Regional Context

The Project Site is situated within the Liverpool LGA which is bounded by Penrith and Fairfield to the north, Bankstown to the east, Sutherland to the southeast, Campbelltown City and Camden to the south, and Wollondilly to the west. Liverpool LGA covers an area of approximately 305 km² and comprises rapidly growing residential areas along with large industrial, commercial and rural areas and forms part of the SWGC under the *Sydney Metropolitan Strategy*. The Project Site is located in the suburb of Badgerys Creek, which is situated approximately 17km west of Liverpool, and is earmarked for 'future industrial' development under the Strategy. Badgerys Creek currently comprises rural residences, agricultural properties, market gardens, quarrying and industry. The Project Site is shown in its regional context in **Figure 1**.

The site is bound by Badgerys Creek to the west, Inghams Chicken to the south, South Creek to the east and Australia Native Landscapes (ANL) and rural residential properties to the north. The Blue Mountains National Park is located approximately 16 km to the west of the site.

The Project Site is located within the South Creek and Badgerys Creek catchments, which are part of the greater Hawkesbury Nepean catchment area. The eastern property boundary adjoins South Creek and the western property boundary adjoins Badgerys Creek. A small tributary of Badgerys Creek is located in the south-western portion of the site.

2.2 Concept Plan and Project Area

The Proponent is seeking Concept Plan and concurrent Project Approval for the continuation and expansion of its quarrying and brick making operations at the Project Site.

2.3 Project Site – Existing Environment

The Project Site is some 200 ha in area and is currently used for quarrying, brick production and associated activities. Existing features of the site include two completed quarry pits (known as Pits 1 and 2), an active quarry pit (known as Pit 3), three large sediment basins in the eastern and northern portions of the site, two smaller dams in the eastern and northern parts of the site, a brick making facility, various administration buildings, a bricks finished goods storage yard, car parks and internal road network. These features are generally contained within the western part of the site with the far eastern portion of the site adjacent to South Creek used for the agistment of stock and grazing by a dairy farmer who leases the land from the proponent. Additionally, the dairy farmer uses a single residence which is located in the north east of the Project Site on Martin Road adjacent to the northern boundary of the Project Site (see **Figure 2**). The underlying topography of the Project Site is relatively flat, however quarrying activities on the site have substantially altered the natural landform on the site with various voids and elevated stockpiles present in the active, western part of the site. The most prominent of these landforms is a rehabilitated stockpile in the far west of the site, known as the 'Western Stockpile'. This stockpile of unusable material is approximately 200m x 125m, with an average height of 10 m and has been revegetated with native grasses and trees. Other significant landforms on the site include the raw material stockpile in the centre of the site, as well as unusable materials stockpiles in the south and centre of the site.

Existing voids on the site comprise pits 1, 2 and 3. The largest of these – Pit 1 is located in the west of the site and is used as the main water storage for the Project Site as detailed in the *Soil and Water Management Plan* (SWMP) (ERM, 2002) for the site, included as **Appendix C** to this EA. Pit 2, adjacent to Pit 1 is also complete and is currently being backfilled and rehabilitated. Pit 3 is an active pit where quarry campaigns are currently focused. Three large sediment basins are located in the north and east of the site, along with two smaller dams in the vicinity of these basins.

Remaining land comprising the Project Site is vacant or used for grazing purposes. Part of the site is leased to a dairy farmer who utilises the existing dairy buildings and grazes stock largely to the north and east of the brick making facility. The site is generally cleared of vegetation with the exception of the creek lines and some isolated stands of trees scattered across the site.

Access to the site is via a private road off Martin Road which runs off Elizabeth Drive (a designated B-double route). The internal road network consists of a number of unsealed haul roads.

2.4 Surrounding Land Use

2.4.1 Existing Environment

Land use in the surrounding area comprises a mix of agricultural, rural industrial and rural residential development set within a rural landscape. Prominent commercial land uses in the surrounding area include ANL – a large commercial nursery to the north of the site and Inghams Chicken – a large poultry farm to the south of the site (refer to **Figure 3**).

Rural residential development is the dominant land use in the surrounding area to the north, east and west. The nearest residence to the Project Site is some 250 m to the north of the site on Lawson Road.

2.4.2 Future Land Use

The Project Site is located within the SWGC under the Metropolitan Strategy. The strategy is a framework developed to promote and manage Sydney's growth and outline a vision for the future to 2031 based on anticipated population, economic and demographic trends. Further detail on this Strategy is provided in **Chapter 5** of the EA.

The SWGC is comprised of a number of precincts each of which is designated for a particular future land use. The Project Site is earmarked for future industrial development under the strategy and is surrounded by other industrial and residential precincts.

3.0 Project Need and Alternatives

This chapter provides an explanation of the need for the project and outlines a number of alternatives considered by the Proponent in relation to the carrying out of the Project, including the consequences of not proceeding.

3.1 Need for the Project

The proposed Project involves the continuation of quarrying and brick making activities within the Project Site which is currently operating as a quarry and brick making facility. The Project comprises the progressive extraction of shale and sandstone resources from within the lower Bringelly Shale geological unit and the production of bricks in a manner that minimises environmental and social impacts and maximises the use of resources and existing infrastructure.

Quarrying and brick making activities at the Project Site currently yield approximately 361,000 tpa of shale and sandstone and produce bricks in the order of 200,000 tpa. A draft discussion paper prepared by the NSW Department of Mineral Resources (DMR) as part of Structure Planning for the Metropolitan Strategy states that Bringelly Shale is the primary source of structural shale for the manufacture of bricks and pavers for the Sydney region. This draft paper specifically identifies the Project Site as an operating quarry with known regionally significant clay/shale resource reserves of some one million tonnes and further resources likely to occur within the site.

The significance of the resource was also recognised in the now repealed *Sydney Regional Environmental Plan 9 – Extractive Industries* (SREP9) which identified the Project Site as land containing extractive material of regional significance.

Boral is Australia's second largest producer of clay brick and pavers and also exports a small proportion of clay products to New Zealand and Japan and is increasingly supplying other countries within the Asia region. In Australia, demand for Boral's clay and concrete products is primarily driven by the construction of multi-unit and attached/detached housing.

Badgerys Creek is located within the SWGC, an area identified as part of the Metropolitan Strategy as a major growth centre. The Growth Centres are expected to accommodate 30 to 40 per cent of Sydney's new housing by 2031.The Project Site has been earmarked under the Metropolitan Strategy as 'future industrial' employment land. Surrounding areas have been earmarked for either 'future industrial' or 'residential' land use.

Continuation of quarrying at the site and the subsequent production of clay bricks and pavers significantly supports the construction industry, thereby supporting urban development within the SWGC and aligning with the proposed rezoning of the land to 'future industrial'.

The proposed continuation of quarrying and brick making activities at the Project Site would utilise existing surface infrastructure and facilities and as such, no upgrades or new infrastructure would be required. Continued quarrying would involve the establishment of new quarry areas, however, quarrying would continue to occur on a campaign basis, with activities being focussed on a single pit at any one time. The use of existing infrastructure including the brick making facility would provide an economically viable means of extracting, processing, manufacturing and transporting valuable shale and sandstone resource into bricks and pavers. The transport route for trucks entering and exiting the site is already well established and, given that operations at the site would continue without the need for the addition of new infrastructure, the transport routes could satisfactorily support the continuation of operations into the future.

3.2 Alternatives Considered

A number of alternatives were considered in relation to the proposed Project in relation to the location and depth of extraction, the continued use of the site for its existing use or the use of the site for other purposes.

3.2.1 Location and Depth of Extraction

The alternatives considered in relation to the location and depth of extraction are detailed below:

- *Extraction from deeper geological units from within existing pits (Pits 1, 2 and 3)*. Considerable shale and sandstone resource has been identified and is present beneath the Bringelly Shale including the Ashfield Shale and the Hawkesbury Sandstone. The extraction of shale and sandstone from within deeper geological units would restrict the potential environmental and associated impacts of quarrying to a narrower geographic area. It is expected that in order to extract resource from within deeper geological units, and to penetrate the dense, Minchinbury Sandstone, alternative extraction techniques such as blasting may be required. At this stage, given the availability of more readily accessible resource across the site, it is not economically viable to extract material deeper than the average of 35 m. However, this option may become viable at some point in the future, beyond the twenty year life of the proposal. Boral wishes to preserve options for this form of extraction to occur in the long term on the Project Site and notes that this would be subject to further assessment and approval as relevant.
- *Location of proposed future Pits 4 and 5.* The locations of proposed Pits 4 and 5 have been chosen based upon geological and environmental considerations. The proposed pit locations have been chosen to target the required resource whilst avoiding significant vegetation, flood prone land and environmentally sensitive areas such as creek lines, with a setback from Pit 5 to Badgerys Creek proposed in excess of 50 m. Proposed Pits 4 and 5 represent the most economically viable and environmentally sustainable locations for quarrying to take place over the next 20 years.
- *Extraction in the East of the Project Site.* Suitable resource may exist in the eastern portion of the Project Site to justify future extraction in this location, however extensive geological investigation has not yet been undertaken on this part of the site. Sufficient resource exists in the western and northern portions of the site for continued production for the next twenty years, therefore quarrying is not proposed in the east over this time period. However, quarrying may take place in the eastern part of the site at some point in the future subject to geological and environmental investigations, market conditions and planning approval.

3.2.2 Use of the Project Site

The option of ceasing quarrying and brick production on the site in favour of another use was also considered.

- *Cessation of extraction and rehabilitation of the land for a 'future industrial' land use in accordance with the intent of the Metropolitan Strategy.* Rehabilitation options are many and varied and could include the retention of voids and utilisation for water storage (Pit 1) or as sites for industrial development. Alternatively, the site could be rehabilitated and levelled to allow its subdivision and later use for industrial development. Whilst this would be in line with the current intent for future land use as expressed under the Metropolitan Strategy, this would not allow for the full utilisation of resources existing on the site, does not comply with the current zoning, and would pre-empt future land use and development in the surrounding area. The loss of the significant resource existing on the site would also have implications for the construction industry and potentially the cost of housing.
- *Cessation of quarrying and brick making operations at the site and closure of the site.* This option would leave the remaining valuable resource on site, rather than being productively used and is not considered to have economic or social merit given that the site is already operating as a well regarded business, with strong future potential given the growing housing market in the greater Sydney region.

3.2.3 Do Nothing

The 'Do Nothing' option would involve Boral continuing to operate until the expiration of its existing consent in September 2010, beyond which operations at the Project Site would have to cease as they would no longer have the required approval. This option would have the same implications as those discussed in **Section 3.2.2** above, with the loss of a regionally significant resource with subsequent flow-on effects for the local and regional economy. As discussed above, this option is not considered to have economic or social merit.

3.3 Consequences of Not Proceeding

Not proceeding with the continued operation of the Badgerys Creek quarry and brick making facility would result in the subsequent closure of the quarry and brick making facility with the following potential implications:

- Loss of employment for 76 full time staff and 10 contractors during quarry campaigns;
- Loss of construction material and associated contribution to the regional and State economy;
- Potential sterilisation of a valuable resource;
- Failure to satisfy increasing resource demand, particularly in response to potential future urban development within the SWGC; and
- Indirect impacts to local businesses, particularly those such as the service stations, cafes and other various small businesses within the area that service both permanent and transient workers to and from the site.

3.4 Conclusion

Given the location of the site within the SWGC and projected population growth for the area, the demand for products and services for the construction industry is expected to increase considerably. The quarry and brick making facility at Badgerys Creek is situated in an ideal location to service the construction industry, located within the SWGC, thereby reducing the need to import bricks from regions outside of the area, hence reducing road haulage of bricks. Reduced road haulage distances to service the growing residential areas would not only reduce transport costs and therefore be of economic benefit, but would also be of environmental benefit, subsequently reducing greenhouse gas (GHG) emissions.

The continued operation of the Project Site would maintain local jobs and provide revenue to the State. The consequences of the project not proceeding would therefore be the loss of these significant economic and social benefits.

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