REPORT

Brandown Pty Ltd

Scoping Report

Submitted to:

NSW Department of Planning and Environment

Submitted by:

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Glossary

Term	Definition
BC Act	*Biodiversity Conservation Act 2016*
BOM	Bureau of Meteorology
C&D	Construction & Demolition
C&I	Commercial and Industrial
CLM Act	*Contaminated Land Management Act 1977*
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPA	Environment Protection Authority
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
The LEP	*Liverpool Local Environment Plan 2008*
ISEPP	*State Environmental Planning Policy (Infrastructure) 2007*
MNES	Matters of National Environmental Significance
POEO Act	*Protection of the Environment Operations Act 1997*
the Site	The area of Lot 90 and Lot 91, DP 1101411
RRF	Resource Recovery Facility
SEARs	Secretary's Environmental Assessment Requirements
SEPPs	State Environmental Planning Policies
SSD	State Significant Development
The Project	The project for which approval is being sought
Tpa	Tonnes per annum
WARR Act	*Waste Avoidance and Resource Recovery Act 2001*

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1.0 INTRODUCTION

1.1 Overview

Brandown Pty Ltd (the Proponent) operates an existing quarry, landfill and resource recovery facility at Lot 90 Elizabeth Drive Kemps Creek, NSW (the Site). Site activities commenced in 1964 with quarrying of clay and shale, followed by quarry reclamation through landfilling and Construction and Demolition (C&D) waste recycling. Existing site activities operate under development consent 341/96 issued by Liverpool City Council in 1998 as well as Environmental Protection licences EPL 5186 and 12618.

The Proponent proposes new resource recovery infrastructure and activities on the Site including a Refuse Derived Fuel (RDF) Production Facility, Mechanical Biological Treatment (MBT) Facility and a Cement Stabilisation Facility in addition to re-siting existing recycling infrastructure and associated ancillary structures (the Project).

The purpose of the Project is to facilitate increased resource recovery and more efficient operation on the Site.

Existing quarrying and landfilling operations would continue as per development consent 341/96 with no variation to existing consent conditions relating to quarrying or landfilling proposed.

1.2 The Proponent

Brandown Pty Ltd (the Proponent) is a privately owned company that operates the Resource Recovery Centre**,** General Solid Waste (Non Putrescible) Landfill and Quarry at Lot 90, DP 1101411, Elizabeth Drive Kemps Creek, NSW. An associated company of the Proponent, Ozsource Pty Ltd owns Lot 91, DP 1101411.

Brandown has owned and operated the Site since 1989 and employs over 55 staff in addition to a number of further indirect employees for monitoring and maintenance.

1.3 Site Location

Located within the Liverpool Local Government Area (LGA), the Site is located approximately 45 km west of central Sydney and 25 km west of central Parramatta and is accessed via Elizabeth Drive, which connects to the M7 motorway approximately 4 km east of the Site. The Western Sydney Airport site is to be situated approximately 5 km to the west of the Site, which is expected to commence operation in 2026.

The Site is zoned Rural RU4 Primary Production Small Lots under the *Liverpool Local Environmental Plan 2008* (the LEP) and is predominantly located within the Western Sydney Aerotropolis area and adjacent to the preliminary design route and the preferred corridor route of the M12, which sits to the immediate north of the Site.

The Site is generally surrounded by existing rural development to the West, Kemps Creek Bowling Club to the North West, Range Road leading to Elizabeth Drive to the North, Kemps Creek Nature Reserve/Western Sydney Parklands to the South and East and the Sydney International Shooting Centre to the East (refer to Figure 1). The nearest residential zoned land (zoned E4 Environmental Living) is located north of the Site, approximately 300 m from the edge of the Site across Elizabeth Drive.

1.4 Existing Operations and Approvals and Environmental Protection Licences

Commencing in 1964, Lot 90 has operated and had approval to extract clay on the Site. In 1989 reclamation of land and backfilling using non-putrescible building waste was approved (DA 457/89), while continuation of landfilling and the operation of a Recycling Facility and Crushing and Screening Facility were approved in 1991 (DA 687/91). Further infrastructure and resource recovery facilities were approved for the Site in 1998, which

also permitted the “continued quarrying of clay/shale and quarry reclamation by landfill (DA 341/96 conditions of consent, 1998).

Approved in 1998 by Liverpool City Council, DA 341/96 grants consent for “ development must be carried out generally in accordance with Development Application received 30 October 1995, Environmental Impact Statement and accompanying plans and additional information submitted 9 July 1996 and 9 April 1997”.

DA341/96 provides operating hours of 6am to 6pm Monday to Friday, 6am to 5pm Saturday and 8am to 5pm Sunday and construction/civil work permitted 7am to 6pm Monday to Friday and 8am to 1pm Saturday.

A number of uses are outlined in the above EIS on Lot 90 of the Site including:

- Quarrying of approximately 3.3 million m^3 clay/shale, sandstone and laminate to depths of 30m below natural surface, stockpiling of raw materials to a height 15 m above the surrounding land surface, and quarry reclamation by landfilling existing and future voids with non putrescible general solid waste as a result of the extraction program (with extraction capacity up to 200,000 cu.m per annum and landfilling rates up to 200,000 cum per annum).
- Operation of recycling infrastructure (including crushing and screening facility, C&D recycling facility, timber shredding and composting, and soil processing).
- Relocation of recycling facility and further waste infrastructure as the quarrying and landfilling progresses on the Site.
- The use of the northern section of the Site for offices, amenities, equipment workshop, weighbridge and gatehouse buildings and vehicle wheel wash.

The Site is subject to two Environmental Protection Licences (EPL) No: 5186 and 12618 issued under the *Protection of the Environment Operations Act 1997* (POEO Act). These EPLs specify various environmental and administrative conditions for scheduled activities of extraction and waste disposal and composting, resource recovery and waste types and storage and sets amenity and further conditions on the Site.

EPL No 5186 allows for extractive activities of up to 500,000 tonnes annual capacity to extract, process or store and any capacity for waste disposal (General Solid Waste (non putrescible excluding biosolids, waste tyres, asbestos waste) to landfill.

EPL No 12618 currently allows up to 50,000 tonnes of composting per annum and up to 500,000 tonnes of resource recovery waste processing and composting per annum (including asphalt, VENM, building and demolition waste, garden waste, wood waste, concrete slurry and CT1 soils).

Total waste material stored at the site may not exceed 295,000 tonnes at any time and not exceed the following stockpile tonnages (EPL 12618).

- 5,000 tonnes processed and unprocessed garden waste and wood waste;
- 225,000 tonnes unprocessed building and demolition waste;
- 5,000 tonnes unprocessed asphalt;
- 27,000 tonnes soil (CT1);
- 35,000 tonnes processed building and demolition waste;
- 2,500 tonnes processed asphalt; and
- 500 tonnes metal.

The site currently processes the following quantities per annum:

- Quarrying – Quarrying is intermittent on an annual basis. Approximately 200,000 cum per annum.
- Landfilling – Approximately 200,000 cum per annum. During the last year however landfilling was limited by available void space.
- Crushing and Screening – approximately 250,000 tonne per annum.
- Construction and Demolition Recycling Facility –approximately 250,000 tonne per annum.
- Composting – up to approximately 20,000 tonne per annum.
- Soil Processing Facility - approximately 150,000 to 250,000 tonne is anticipated to be processed this year, subject to demand due to the magnitude of infrastructure works under way in Western Sydney.

Under the proposal, existing quarrying and landfilling operations would continue as per development consent 341/96 with no variation to existing consent conditions relating to quarrying or landfilling proposed. The Project also proposes no change to existing resource recovery, processing and stockpiling limits.

1.5 Purpose of this Report

The Project is considered to be State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*.

This Scoping Report has been prepared to support a SSD application and to support the request for Secretary's Environmental Assessment Requirements (SEARs) for the Project, which would inform the preparation of an Environmental Impact Statement (EIS) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report provides the strategic need for the Project, a description of the Project, statutory approval requirements as well as the identification of key potential environmental issues that may be associated with the Project to inform the SEARs and the subsequent EIS.

Figure 1: Aerial photo of the Site and surrounding area (Nearmap, 2018)

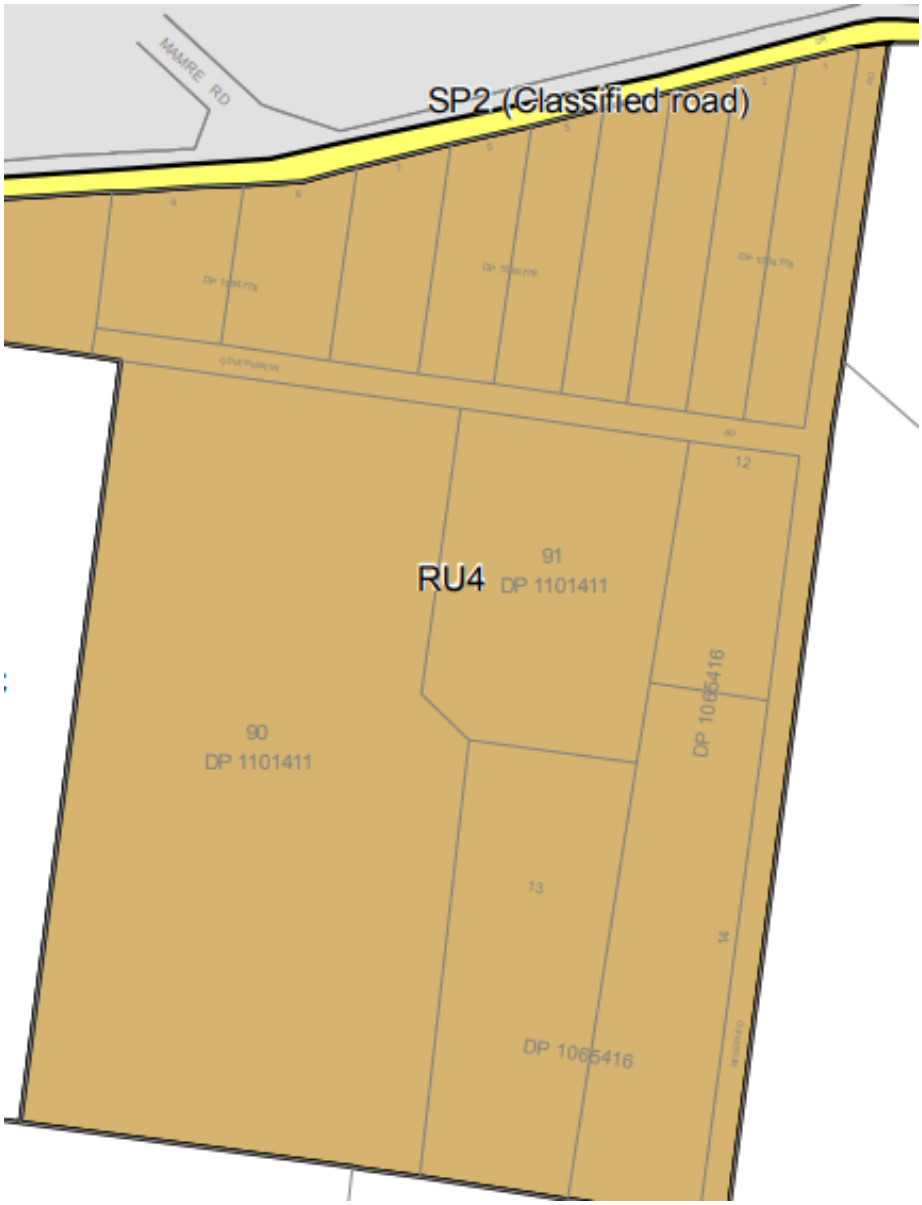

Figure 2: Zoning of the Site and surrounds (Liverpool Local Environment Plan 2008)

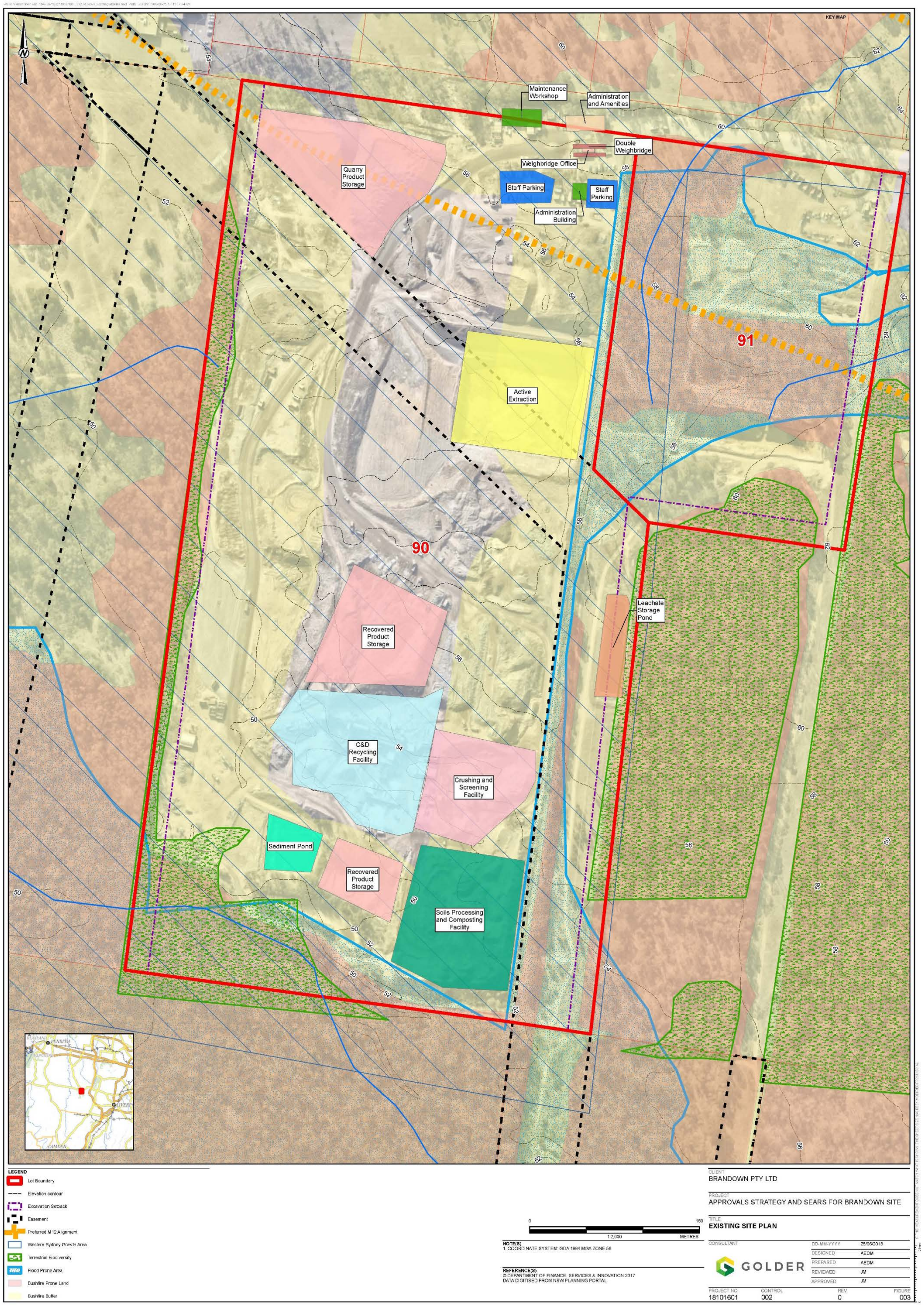

Figure 3: Existing Site layout on the Site

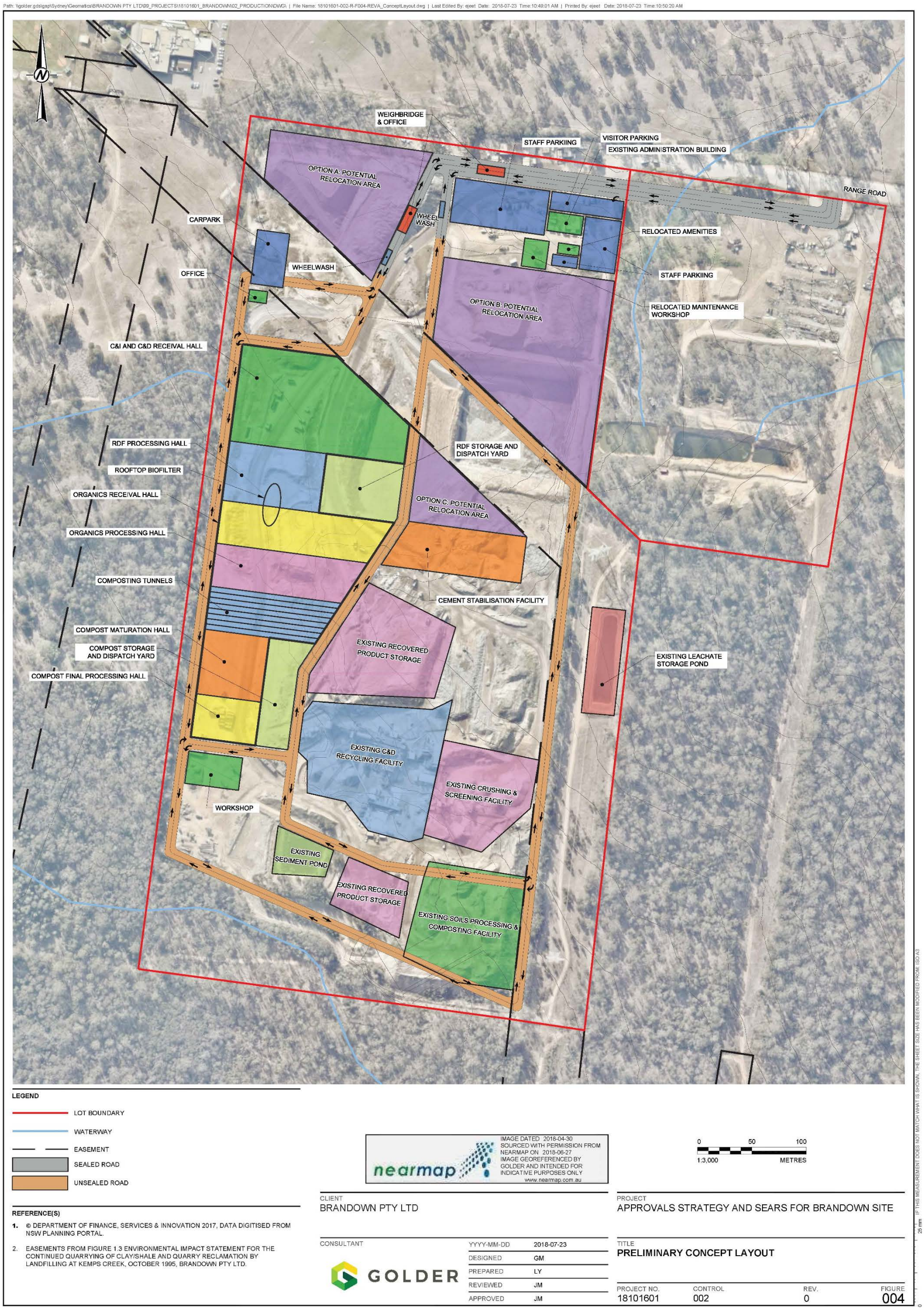

Figure 4: The Project Site layout

2.0 STRATEGIC NEED AND PROJECT JUSTIFICATION

2.1 Strategic Need

The Project is aligned with a number of legislative and strategic drivers.

The *National Waste Policy: Less waste, more resources* (Department of the Environment, Water, Heritage and the Arts, 2009) came into effect in November 2009 and is a collaborative policy that sets the direction for waste management and resource recovery from 2010 to 2020 in Australia. The aims of the policy are to:

- Avoid the generation of waste and reduce the amount of waste (including hazardous waste) for disposal;
- Manage waste as a resource;
- Ensure that waste treatment, disposal, recovery and re-use is undertaken in a safe, scientific and environmentally sound manner; and
- Contribute to the reduction in GHG emissions, energy conservation and production, water efficiency and the productivity of the land.

Six key directions were established to achieve the aims of the National Waste Policy, and are detailed in the National Waste Policy Implementation Plan. Key directions include:

- Improving the market: Efficient and effective Australian markets operate for waste and recovered resources, with local technology and innovation being sought after internationally.
- Pursuing sustainability: Less waste and improved use of waste to achieve broader environmental, social and economic benefits.

The Project is consistent with these key directions by reusing and recovering materials that would otherwise go to landfill, and providing products that can be beneficially used including Refuse Derived Fuels (RDF), compost through the MBT in addition to the existing recycled products provided by the existing operations on the Site.

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) establishes the waste hierarchy that prioritises avoidance, followed by recycling, recovery and disposal, while the *Protection of the Environment Operation Act 1997* (POEO Act) establishes the waste levy as a financial incentive for recycling over disposal.

The key waste policy tool under this framework is the NSW "Waste and Resource Recovery Strategy 2014-21", which includes the following goals:

- Avoiding and reducing waste generation;
- Increasing recycling – with target recycling rates by 2021-22 of 80 per cent for Construction and Demolition (C&D) waste and 70 per cent for commercial and industrial (C&I) waste; and,
- Diverting more waste from landfill to alternative uses, such as recycling and energy recovery.

The NSW State Government 2021 plan re-commits the government to achieving the WARR Strategy recycling targets as a key priority Goal 23.

The Project is also aligned with the Greater Sydney Commission's 2018 "Greater Sydney Region Plan: *A Metropolis of Three Cities"* that aims to:

- Set a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters;
- Inform district and local plans and the assessment of planning proposals;

- Assist infrastructure agencies to plan and deliver for growth and change and to align their infrastructure plans to place-based outcomes; and
- Inform the private sector and the wider community of the growth management and infrastructure investment intentions of government.

In relation to waste, the Greater Sydney Region Plan's Planning Priority W19 seeks to optimise self-sufficiency through developing greater localised precinct-wide waste processing capacity that promotes efficiency. The location of the Project including its proximity to identified major projects to be constructed and its access to transport links including the M7 makes the Site a strategic resource recovery asset that would play a key role in achieving this vision.

In addition, Objective 35 identifies that more waste should be re-used and recycled to support the development of a circular economy and that while "…the provision of waste management is an essential service to communities. Existing waste management facilities do not have the capacity to accommodate projected growth" (Greater Sydney Commission's 2018). Furthermore, existing waste management facilities need to be protected from residential encroachment and at the same time address ongoing environmental issues such as odour, noise, truck movements and dust.

The Western City District Plan (a subplan of the "Greater Sydney Region Plan: *A Metropolis of Three Cities") also states:*

There is diminishing capacity in existing landfill sites in Greater Sydney, with more waste being sent to landfill outside the region. This increases costs to the community. Additional sites for resource recovery within Greater Sydney would reduce waste going to landfill and the associated transport costs. Therefore, retaining industrial land locally for waste management and recycling is critical.

Land use plans need to address opportunities to develop recycling and waste management facilities.

2.2 Need for the Project

As a long established quarry and recycling business in Western Sydney, the Proponent supports the strategic need and legislative drivers for waste recovery. The Project directly contributes to meeting the NSW Government's waste strategies and targets. The Site is ideally located for the Project because:

- The Site is located in western Sydney to service a number of major urban areas (including; Liverpool, Penrith and Fairfield LGAs) and major projects in Western Sydney (M12, Western Sydney Airport);
- The Site is readily accessible from major transport links including Elizabeth Drive, the M7 and is adjacent to the preferred route alignment for the M12;
- Land use of the Site has a long history of quarrying, C&D landfilling and recycling operations that is compatible with neighbouring developments and land uses;
- As an existing waste facility, the waste management footprint (including for new waste infrastructure) and subsequent impact to the environment would be reduced, enabling continued waste operations at an existing facility within the district and allowing continued utilisation of existing waste management infrastructure;
- Proposed new infrastructure including the MBT and RDF would contribute to further diverting waste from limited landfill capacity including organics, C&I and C&D, which is a demonstrated need through Commonwealth and NSW State Targets and the Strategic Need discussion (refer to Section 2.1).
- The Site is adequately separated from sensitive receivers to enable potential adverse environmental impacts (i.e. air and noise) to be managed and/or mitigated. This is demonstrated by the ongoing operation

of the Site that meets all relevant legislative requirements and that no complaints by surrounding landholders or Liverpool City Council have been recorded for the Site.

- The Site provides contingency to secure future waste disposal options and to complement future alternate resource recovery management options in the Western Sydney Region.

The Project is supported by strong market drivers for quarried materials and waste recovery. Construction activity in residential, non-residential and infrastructure sectors has expanded rapidly, particularly in the Western Sydney District in recent years and is forecast to continue.

The Project would also result in additional waste being diverted from landfill through proposed new infrastructure including the MBT and RDF. This would not only reduce the transport and environmental costs to the community but would result in beneficial reuse thereby supporting the development of a circular economy and addressing the capacity to accommodate projected growth as identified by the Greater Sydney Commission's 2018 "Greater Sydney Region Plan: *A Metropolis of Three Cities"*. The Project would provide the western region with additional capacity waste throughput. This in turn would assist in reducing pressure on Sydney's remaining landfill capacity.

The Site of the Project is strategically located to service high levels of housing growth in Western Sydney in addition to large public infrastructure projects scheduled over the next decade and beyond. This will underpin strong demand for quarried materials and C&D waste recycling capacity in addition to C&I and organic waste streams. Key public projects, which the Project is well placed to service include the M9, M12, Western Sydney Airport, the Northern Road upgrade and WestConnex. It is noted that the majority of these major infrastructure projects are proposing or approved to undertake 24 hour construction activities due to their strategic importance. Recycling capacity and licence conditions will be needed to meet this demand.

The Project will contribute to the objectives of relevant legislative and strategic policy through providing for more efficient recovery of resources and providing materials to projects and relevant industries within the vicinity of the Site where existing waste management facilities are anticipated to not have the capacity to accommodate projected growth (Greater Sydney Commission's 2018). With the Site having a history of extractive and resource recovery uses, the Project will ensure this land use activity will operate more efficiently, while also introducing the acceptance of waste streams that will further divert waste from landfill and provide for beneficial reuse, thereby further contributing to reducing costs and improving recovery yields. Thus there is a clear and demonstrated strategic need and project justification at the Site.

2.3 Alternatives

The Site of the Project has been identified as the most suitable for a number of reasons, including the previous and existing land use that is proposed to be continued, efficiencies associated with utilising existing infrastructure and with enabling future operations, good natural buffers to potential offsite receivers, minimising impacts associated with proposing a new site in addition to utilising good road access and proximity to relevant markets and waste generation sources.

Enabling future waste recovery operations around an existing inert landfill with supporting infrastructure on the Site is considered preferred as the difficulty in securing approval for new landfills suggests landfill constraints will emerge, and more waste will be sent to landfills outside the region, resulting in increased costs to the community. This is supported by statements made in the Western City District Plan (refer to Section 2.1). In addition enabling continued and more efficient waste operations at an existing facility, utilisation existing waste management infrastructure will result in lower environmental and economic costs to the Proponent, customers and ultimately the wider community. These costs will likely become more acute if the aim to stop the transportation of waste from the Sydney basin to Queensland is successful.

3.0 PROJECT DESCRIPTION

3.1 Overview

The Project involves the following modifications to existing operations:

- Extended operational hours of the existing recycling operations – 24 hour receival and dispatch and between 12 and 24 hour plant operation depending on the site activity;
- Re-siting of weighbridges, maintenance workshop and amenities buildings and ancillary structures; and
- Re-siting of the existing Crushing and Screening Facility, the C&D Recycling Facility, Composting Facility and the Soil Processing Facility. It is noted that relocation of the recycling infrastructure was also anticipated in the original EIS and approval.

New infrastructure and operational activities would include:

- Refuse Derived Fuel (RDF) Production Facility.
- Mechanical Biological Treatment (MBT) Facility.
- Cement Stabilisation Facility.

The Project also includes the following new ancillary infrastructure; new weighbridge, parking, two wheel washes, administration and amenities buildings. The Project would utilise or relocate existing buildings where possible.

Under the proposal existing quarrying and landfilling operations would continue as per development consent 341/96 with no variation to existing consent conditions relating to quarrying or landfilling proposed.

Quarrying and landfilling would continue to be undertaken in general accordance with the previously approved Staging Plans as presented in Appendix A. Referring to these plans, quarrying and landfill on the Site has been undertaken generally in accordance with these plans with cells 8, 6, 5, 4, 3, 2 and 1 having been excavated and landfilled. Quarrying is currently being undertaken in Cell C7, which will then be landfilled in accordance with development consent 341/96.

The Project proposes no change to existing processing and stockpiling limits for the existing Crushing and Screening Facility, C&D recycling facility, Composting Facility and/or Soil Processing Facility.

3.2 Site Layout

The existing layout for the Site is presented in **Figure 3** and the proposed layout for the Project is present in Figure 4 and is described following.

The Site comprises Lot 90 in DP 1101411 a rectangular shaped lot, approximately 30 ha in area, orientated North South. A 70 m wide power easement transects the northern portion of the Site and runs along the southern eastern boundary. There is an excavation set back of 20 m from the western and eastern boundary.

There is an area identified on existing mapping as containing terrestrial biodiversity in the South West corner and perimeter landscaping surrounds the Site. The Site also includes Lot 91 DP 1101411 in providing road access.

3.3 Access

The current main entrance to the Site is from Elizabeth Drive via Range Road.

Access via Lot 91 has been presented in Figure 4 and would be assessed as part of the EIS. All traffic would enter through the newly constructed access point. Material and waste loads would be directed through one of

the weighbridges depending on the required destination for processing. Staff and visitors entering the Site would not pass over the weighbridges.

Due to uncertainty surrounding the proposed M12 corridor alignment, further options for site access have been considered. Access is currently proposed via the adjacent Lot 91. However, it is understood that RMS are considering provision of other access roads as part of the M12 development, which may provide further options for access to the Site. The Proponent will continue to consult with RMS through the EIS development process to ascertain the optimal access for the Site.

3.4 Easement

The following developments are proposed within the 70 m wide power easement in addition to those already existing at the Site:

- Car parking; and
- Additional haul roads.

The car park and haul roads would be located in accordance to vertical and horizontal clearances identified in Appendix B of TransGrid Guidelines for Third Party Development during detailed design Vehicles and plant within the easement would have a height less than 4.3 metres when fully extended. Proposed development within the easement will not obstruct or restrict Transgrid access or maintenance plant.

Consultation will be undertaken with Transgrid during the development of the EIS and appropriate approval obtain for development within the easement where required.

3.5 Weighbridges

The existing site weighbridge would be relocated approximately as per Figure 4 depending on future site access. This weighbridge would service the quarrying, landfilling, crushing and screening, composting, soil processing and C&D recycling operations.

An additional weighbridge would be constructed at the entrance to the RDF and MBT facility as a standalone operation. The approximate location of the weighbridges are presented in Figure 4. These locations would be refined during detailed design.

3.6 Parking

The Project would provide parking spaces for visitors North of the existing administration building. Parking for staff would be provided to the West and East of the administration building. A third area for staff parking would be provided to the north of the proposed office building within the power easement. These locations are approximate and would be refined during detailed design.

3.7 Administration, Maintenance and Amenities

The existing administration building would be unchanged from its current location.

The maintenance workshop and amenities buildings would be relocated south of the administration building. These additional facilities would provide offices, lunchrooms and amenities for the staff and storage for maintenance equipment. The approximate proposed locations of administration, maintenance and amenities buildings are shown in Figure 4. These locations would be refined during detailed design.

3.8 Crushing and Screening Facility

The existing Crushing and Screening Facility is located in the South of the Site as shown in Figure 1. The Crushing and Screening activities include sorting, crushing and screening of bricks and concrete to produce

road bases, manufactured sands, and aggregates for use in the civil and building industries. Existing crushing and screening operations would continue to operate at this location as per the current consent conditions until such a time that quarrying is required to be undertaken in this footprint. The Crushing and Screening Facility would be re-sited to an alternative location depending upon landfilling progress. Potential locations for re-siting are shown in Figure 4.

Dependent upon technical assessment results (such as identified offsite amenity impacts) to be provided as part of the EIS, re-siting the Crushing and Screening Facility on the Site would include upgrade of the current equipment and housing some elements of infrastructure and equipment within a building.

3.9 Construction and Demolition Recycling Facility

The existing Construction and Demolition Recycling Facility is located in the South of the Site as shown in the Existing Site Figure 3. C&D recycling activities include the sorting, screening and production of: soils for landscaping; wood for mulch; compost and biomass for coal replacement in cement manufacture and masonry that is transferred to the crushing operation.

Similar to the Crushing and Screening Facility, existing Construction and Demolition Recycling operations would continue at this location as per the current consent conditions until quarrying progress is such that quarrying is required to be undertaken in this footprint.

The C&D Recycling Facility would be transferred to an alternative location depending on landfilling progress. Potential relocation location options are shown in Figure 4.

Dependent upon technical assessment results (such as identified offsite amenity impacts) to be provided as part of the EIS, re-siting the Construction and Demolition Recycling Facility on the Site would include upgrade of the current equipment and housing some elements of infrastructure and equipment within a building.

3.10 Composting Facility

The existing composting facility is located South of the existing Crushing and Screening Facility as shown on Figure 3. Current composting activities would continue at the Site in accordance with existing consent conditions and the Site EPL conditions.

As with the C&D Recycling Facility and the Crushing and Screening Facility, the composting area would be re-sited to accommodate future quarrying, potential relocation options are shown in Figure 4. Dependent upon technical assessment results (such as identified offsite amenity impacts) to be provided as part of the EIS, re-siting the Composting Facility on the Site would include upgrade of the current equipment and housing some elements of infrastructure and equipment within a building.

3.11 Soil Processing Facility

The existing Soil Processing Facility is located in the South of the Site as shown in the Existing Site Figure 3. Soil processing activities comprise sorting incoming soil material using grapples on an excavator and mobile screening machines.

As with the C&D Recycling Facility and the Crushing and Screening Facility, and the Composting Facility, the Soil Processing Facility would continue to operate as per the current consent conditions and would be re-sited to accommodate future extraction activity. Potential relocation options are shown in Figure 4.

Dependent upon technical assessment results (such as identified offsite amenity impacts) to be provided as part of the EIS, re-siting the Soil Processing on the Site would include upgrade of the current equipment and housing some elements of infrastructure and equipment within a building.

3.12 Refuse Derived Fuel Production Facility

RDF is an alternative to fossil fuels and is commonly used in the cement manufacturing and power generation industries. RDF is primarily a plastic- based material derived from C&D and C&I waste streams. The proposed development would process dry, non-putrescible C&I and mixed light C&D. This waste stream usually contains a mix of timber, metals, plastics, cardboard and paper and small amounts of concrete, bricks and rubble.

The proposed RDF facility would process an approximate throughput of 250,000 tonnes per annum.

The RDF production facility would be located on the western side of Lot 90 as shown on Figure 4 and be completely enclosed within a building with the exception of a storage area for stockpiling baled RDF prior to dispatch. The facility will have a maximum height of 16 metres and have a footprint of approximately 100 to 150 metres in width, and a length of 370 metres. The building walls will be constructed using precast/tilt-up concrete panels and/or colorbond sheeting depending on location throughout the structure. The building would be under negative pressure with air discharge to a biofilter located on the facility rooftop. The building would comprise 3 separate sections separated by concrete fire break walls to reduce fire risk.

The source material of the RDF facility will be derived from residuals from the existing C&D facility on the Site and additional C&I and C&D residual waste from the Greater Sydney area, including other recycling facilities.

Initial sorting and screening of the incoming C&D and C&I waste loads would be undertaken in the receival hall. Material is sorted to remove ferrous and non-ferrous metals and inert fractions. Aggregates, soil, bricks, and concrete would be removed for further processing at the Crushing and Screening Facility.

RDF feed would be fed into the primary shredder in the Receival Hall for preparation for processing. In the RDF Processing Hall the material would undergo several screening and separation processes to remove any unsuitable material and allow for secondary shredding prior to baling.

The area of the building may include:

- Receival Hall;
- Processing Hall; and
- Dispatch Yard.

Processing equipment would include but may not be limited to:

- Primary shredder;
- Screening equipment;
- Magnetic separation;
- Eddy current separation;
- Multiple optical sorters;
- Density separation equipment;
- Secondary shredding equipment;
- Baler/wrapper; and
- Front end loaders, forklift and excavator.

3.13 Mechanical Biological Treatment Facility

The MBT Facility would be located south of the RDF Production Facility along the western portion of the Site as shown on Figure 4 and process an approximate throughput of up to 250,000 tonnes per annum.

The structure of the MBT facility will range in width from 150 metres to 100 metres, have a length of 370 metres and have a maximum height of 16 metres.

The facility would be fully enclosed and under negative pressure with air discharge to the biofilter. The building walls will be constructed using precast/tilt-up concrete panels and/or colorbond sheeting depending on location throughout the structure.

The Mechanical Biological Treatment process is based on a combination of mechanical separation, manual sorting, and biological composting technologies. The waste will be sourced from specialist C&I waste collectors from the in the greater Sydney area. There is also the possibility of securing a contract for a domestic FOGO collection from a Sydney metropolitan Council as these contracts come due for renewal in ensuing years.

Initial sorting, resource recovery and screening of the incoming loads would be undertaken in the receival hall. Organics would be fed into the primary shredder in the receival hall and undergo primary screening to remove any inert materials. The product would undergo aerobic composting within ventilated fully enclosed maturation tunnels for several weeks. The composted product would then be allowed to cure in the curing hall. The cured composted product would then be refined in the final processing hall. Product would be stored in the Product Storage Area for dispatch.

Any non putrescible residual waste would be disposed of to the onsite landfill or an appropriately licenced facility and any residual putrescible waste would be disposed of in an appropriately licenced landfill off site.

The MBT Facility would comprise areas as follows:

- Organics Receival hall;
- Organics Processing hall;
- Maturation tunnels;
- Curing hall; and
- Final processing hall; and
- Product storage area.

Processing equipment would include but not limited to:

- Primary shredder;
- Screening equipment;
- Magnetic separation;
- Eddy current separation;
- Multiple optical sorters;
- Density separation equipment; and
- Front end loaders, forklift and excavator.

3.14 Cement Stabilisation Facility

The Cement Stabilisation Facility would be located East of the RDF Production Facility as shown on Figure 4. The facility would treat up to 50,000 tonnes roadbase and sand per annum sourced from the crushing plant operations.

The area would comprise silos for storage of cement, storage tanks for additives and soil material stockpiles, bunded mixing area and area for product stockpiling.

Processing equipment would include:

- Feed hopper;
- Pugmill;
- Stockpile conveyor; and
- Front end loader.

3.15 Stormwater

The Site is relatively flat with stormwater generally draining towards a drain along the eastern and western boundary of the Site and directed towards a sediment pond in the south of the Site. The existing stormwater drainage system for the Site would be supplemented, where required, to accommodate the Project Utilities and Services.

3.16 Water Supply

Water demand would be met through a combination of:

- A connection to existing mains water supply on Elizabeth Drive; and
- Onsite stormwater storage dams.

3.17 Construction of the Project

Construction methods would be determined at the time of construction in accordance with the project approval conditions. Estimated construction time is approximately 6 months. Construction would be carried out in accordance with the Construction Environmental Management Plan and Construction Quality Assurance Plan and would comprise the following activities:

- Bulk earthworks;
- Roadworks for internal access routes;
- Re-siting of ancillary infrastructure and construction of two wheel washes, new weighbridge, workshop, offices, amenities and ancillary infrastructure;
- Construction of hardstand areas;
- Construction of concrete storage bunkers;
- Construction of RDF Production Facility;
- Construction of MBT Facility;
- Construction of Cement Stabilisation Facility;
- Construction of stormwater management infrastructure; and

At a later date as required:

- Re-siting of the Crushing and Screening Facility, the C&D Recycling Facility, Composting Facility and the Soil Processing Facility.

Bulk earthworks: This would involve minor excavation and filling in the West of the Site to create building pads for the RDF Production Facility and MBT Facility and filling along the northern boundary for access road construction. Other areas where filling and grading may be required would be confirmed within the EIS.

Roadworks: the construction of the entry roads would have a construction period of approximately 3 months and involve the preparation of base and sub-base layer, asphalt or concrete and sealing where required and associated stormwater drainage and collection.

Weighbridge and ancillary infrastructure: Construction of the weighbridge would have a construction period of approximately 1 month and involve installation of concrete access ramps, construction of weighbridge office and amenities building and cantilever roof. Construction of the ancillary infrastructure and buildings would have a construction period of approximately 3 months.

Hardstand areas: Gravel and soil hardstand areas would be constructed by placement and compaction of selected fill for site processing activities.

RDF Production Facility and MBT Facility: Construction of the RDF Production Facility and MBT Facility would be undertaken concurrently over a period of approximately 6 months. Construction works would include foundation treatment, construction of concrete slab and building structure and installation of processing equipment.

Cement Stabilisation Facility: Construction of the cement stabilisation facility would take approximately 3 months and involve installation of cement silos and construction of concrete storage bunkers. Silos and storage tanks would be constructed off site and delivered fully assembled.

Stormwater management infrastructure: Construction of stormwater management infrastructure would include installation of culverts, storage dams, and drainage channels. Construction period would be approximately 1 month.

3.17.1 Equipment

Equipment necessary for the construction of the Project would include dozers, graders, compaction equipment, backhoes, excavators, rollers, truck, concrete pumping equipment, air compressors, concrete vibrators and saws, mobile cranes and welders.

3.17.2 Construction Environmental Management

Prior to construction a Construction Environmental Management Plan (CEMP) would be prepared. All construction works would be undertaken in accordance with the construction environmental controls presented within the EIS and include consideration of relevant Project approval conditions.

3.17.3 Construction hours

Standard construction hours of 07:00 to 16:00 Monday to Friday and 08:00 to 13:00 on Saturdays with no work on Sundays and public holidays is proposed. The construction phase duration is expected to be 6 months.

3.17.4 Work Force

The construction workforce would vary throughout the construction period depending on the activities underway. Typically, the construction workforce would be up to 20 persons (under normal conditions) and vary up to 50 persons (during high activity events).

3.18 Operation of the Project

3.18.1 Hours of Operation

It is proposed that the Project would receive waste and dispatch products 24 hours a day all year, including public holidays. Plant operation would be varied per activity and would be between 24 hr and 12 hours per day. The technical assessments completed for the EIS will consider the proposed operational hours for each activity.

3.18.2 Workforce

A total of up to 100 personnel is estimated for the operation of the Project.

3.18.3 Environmental Management During Operation

A detailed description of environmental management during operation would be provided in the EIS and would include:

- Traffic and transport management;
- Materials and waste management;
- Landscape and visual impact management;
- Water Management;
- Air quality management; and
- Noise, vibration and lighting management.

4.0 STRATEGIC AND STATUTORY CONTEXT

This section provides an overview of the Project in relation to relevant strategic and legislative planning requirements. A detailed assessment of all the relevant legislation would be undertaken as part of the EIS.

4.1 Commonwealth Legislation

The *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for the protection and management of Matters of National Environmental Significance (MNES), including the following:

- World heritage properties;
- National heritage places;
- Ramsar wetlands of international importance;
- Listed threatened species and communities;
- Listed migratory species;
- Commonwealth marine environment;
- The Great Barrier Reef Marine Park;
- Nuclear actions (including uranium mines); and
- A water resource, in relation to coal seam gas development and large coal mining development

The requirement for a Commonwealth approval is assessed through a referral process to the Commonwealth Department of Environment and Energy. If the Commonwealth Minister for Environment and Energy determines that a Project is likely to have a significant impact, the Project would become a controlled action and approval of the Commonwealth Minister is required.

The need for a referral is based on two triggers. The first is that it must relate to NES matters. The second is that it must have a significant impact on such matters.

An initial assessment of the Project against MNES suggests that the Project would not have a significant impact upon these matters and therefore referral to the Commonwealth Minister for Environment and Energy is not considered required. This would be further assessed during technical assessment completed during the EIS.

4.2 NSW Legislation

4.2.1 Environmental Planning and Assessment Act 1979

The NSW EP&A Act and the accompanying *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) provide the statutory and regulatory framework for the environmental assessment and approval of development in NSW. Part 4 of the EP&A Act provides for the assessment of 'development' that requires development consent, whilst Division 4.1 of Part 4 provides for control the assessment of State Significant Development (SSD).

State Environment Planning Policy (State and Regional Development) 2011 (SRD SEPP) identifies projects that trigger SSD. The Project would be considered SSD under Clause 23 of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*, which refers to:

23 Waste and resource management facilities

(3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

Designated Development

The Project is also considered to be designated development as specified in Schedule 3 of the EP&A Regulation, which relevantly identifies the following types of development as 'designated development'

Clause 32 - Waste management facilities or works

(1) Waste management facilities or works that store, treat, purify or dispose of waste or sort, process, recycle, recover, use or reuse material from waste…

Integrated Development

Integrated Development includes development proposals that require development consent and one or more further specific approvals under additional legislation. Where integrated approval is required the development application must be submitted to the relevant approval body for assessment. The Project triggers integrated development under the POEO Act.

4.2.2 Other Legislation

The EIS would provide a review of the Project against relevant legislation. Legislation that may be applicable to the Project includes, but may not be limited to:

- *Protection of the Environment Operations Act 1977 (POEO Act):* The Project would be a Scheduled Activity as per Schedule 1 of the POEO Act, and would consequently require amendment to the existing EPLs for the Site under Section 48 of the POEO Act.
- *Biodiversity Conservation Act 2016* (BC Act): The BC Act provides for the protection and management of threatened species, populations and ecological communities in NSW.
- The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act): The WARR Act aims to encourage the most efficient use of resources to reduce environmental harm and ensure that resource management is undertaken in a logical, sustainable and organised manner. The Project would promote resource recovery and therefore be consistent with the WARR Act.
- *Roads Act 1993*: Roads and Maritime Services would be consulted during the preparation of the EIS.

4.2.3 Environmental Planning Instruments

Local Planning Instruments – Zoning and Permissibility

The relevant local planning instrument is the *Liverpool Local Environment Plan 2008* (the LEP). The Project site is zoned as RU4: Primary Production Small Lots. A "resource recovery facility" is not permitted in this zoning under the LEP. However, as discussed above, the Mining SEPP and the ISEPP permits the establishment and operation of extractive industries and construction and demolition recycling with development consent.

In addition, the Project is also considered an 'existing use', as defined by the EP&A Act, which is the use of a building, work or land that was lawfully commenced, but subsequently became a prohibited use under an environmental planning instrument, such as the commencement of the LEP. Notwithstanding the prohibited status of a development, the EP&A Act provides express protection for such uses until such time as those uses are abandoned.

Clauses 41 and 42 of the EP&A Regulation provide that an existing use may, amongst other things, be enlarged, expanded or intensified, subject to various qualifications. An existing use may also be changed to another use, if the other use is not prohibited. That process requires the granting of development consent. That process also requires that a use is presumed to be abandoned if it ceases to be actually so used for a continuous period of 12 months.

The Site has operated lawfully and continuously as extraction, landfill and resource recovery for over 53 years including when the LEP made resource recovery a prohibited use on the Site. As such, the Site and the Project is permissible as an existing use under the EP&A Act.

State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) may be applicable to the Project, and would be considered within preparation of the EIS as required:

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

In accordance with Section 7(3) of the Mining SEPP:

Development for any of the following purposes may be carried out with development consent:

a) extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent),

As the LEP permits agriculture within the RU4 zoning, extractive industries are permissible with development consent on the Site. Furthermore:

(4) Co-location of industry
If extractive industry is being carried out with development consent on any land, development for any of the following purposes may also be carried out with development consent on that land:

a) the processing of extractive material,
b) the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,
c) facilities for the processing or transport of extractive material,
d) concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix.

Therefore, activities including C&D waste recycling are permissible on the Site (Lot 90 and/or Lot 91) where extractive industries are being carried out with development consent.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

Pursuant to Division 23 of the ISEPP development permitted with consent includes:

121 Development permitted with consent

(3) Development for the purpose of the recycling of construction and demolition material may be carried out by any person with consent on land on which development for the purpose of industries, extractive industries or mining may be carried out with consent under any environmental planning instrument.

As discussed above, the Mining SEPP authorises extractive industries to be permissible on the Site and therefore Section 121(3) of the ISEPP permits C&D recycling with development consent.

In addition, the ISEPP identifies development that is considered to be Traffic Generating Development. As per Schedule 3 of the ISEPP, a recycling facility …of any size or capacity is considered to be a Traffic Generating Development. The EIS will assess traffic impacts in accordance with the ISEPP including consultation with RMS.

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

SEPP 33 links the permissibility of a development proposal to its safety and environmental performance. The Project is within the definition of a “potentially hazardous industry” or “potentially offensive industry” under SEPP 33. A screening assessment to determine the need for a preliminary hazard analysis would be undertaken by the Proponent, the findings of which would be presented in the EIS.

State Environmental Planning Policy No 44 – Koala Habitat (SEPP 44)

SEPP 44 encourages the conservation and management of areas of natural vegetation that provide habitat for koalas. Liverpool City Council is listed in Schedule 1 of SEPP 44 as an area of potential koala habitat. An assessment of the presence of koalas within the Project would be undertaken and presented in the EIS.

NSW Energy from Waste Policy

The NSW Energy from Waste Policy (EfWP) sets the policy framework and technical criteria that apply to facilities in NSW proposing to thermally treat waste or proposing to produce material to be used for energy. As identified within section 3.12, the Project includes an RDF facility, processing dry, non-putrescible C&I and mixed light C&D to produce material to be used for energy offsite. As such, to appropriately address the EfWP, further detail will be provided in the EIS on incoming waste streams, compliance with resource recovery criteria, potential contaminated waste management, composition of halogenated substances, fuel destination, compliance with export requirements and consistency with the WARR Strategy.

4.2.4 Strategic Planning

As identified in Section 2.1, the Project is aligned with and consistent with the Greater Sydney Commission's 2018 "Greater Sydney Region Plan: *A Metropolis of Three Cities"* and the Western City District Plan (a subplan of the Greater Sydney Region Plan).

In relation to waste, the Greater Sydney Region Plan's Planning Priority W19 seeks to optimise self-sufficiency through developing greater localised precinct-wide waste processing capacity that promotes efficiency. The location of the Project including its proximity to identified major projects to be constructed and its access to transport links including the M7 (and future M12) makes the Site a strategic resource recovery asset that would play a key role in achieving this vision.

The Western Sydney District Plan identifies the need to retain industrial land locally for waste management and recycling such as being proposed by the Project. In addition, the Project directly addresses the Western Sydney District Plan's stated aim to develop recycling and waste management facilities within the region, which will support the development of a circular economy and address the capacity to accommodate projected growth identified within the Greater Sydney Region Plan.

The Site sits within and adjacent to the borders of the Western Sydney Aerotropolis (formerly the Western Sydney Airport Growth Area), which is designated by the NSW Government to promote better access to jobs, infrastructure and services as Greater Sydney's newest economic hub. While not located within one of the three initial precinct planning areas identified within the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan, it is considered the Project is consistent with this plan, which will be further addressed within the EIS.

The Site is partially located within the most outer ring of the OLS mapping for the Western Sydney Airport. The maximum heights of the Site and proposed infrastructure are well below and will not exceed the OLS limits.

The Site is adjacent to the preferred corridor route of the M12 with the M12 Motorway Access Strategy (March, 2018) identifying with the preliminary design route and the preferred corridor route are located to the immediate north of the Site with this access strategy also identifying a new access road to the Site (refer to Figure 3 of the M12 Motorway Access Strategy (March, 2018). The Proponent has consulted with RMS on this issue and would continue to consult with RMS on the M12 alignment and further issues associated with the Project as part of the EIS.

5.0 MATTERS AND IMPACTS

A preliminary environmental risk analysis has been completed to assist in the identification of key issues for the Project based upon likelihood and consequence of potential adverse impacts. The findings of the Preliminary Risk Assessment is presented in Appendix C. The assessment of risk is based upon knowledge of the Site including previous desktop and intrusive investigations, existing conditions of consent and licences and further identification of environmental constraints and opportunities related to the Site and the activities being proposed as part of the Project. The environmental risk analysis would be further developed and provided as part of the EIS, incorporating further site investigation and identified mitigation measures, the SEARs, and community and stakeholder liaison, to ensure all issues associated with the Project are addressed appropriately. The identified potential key issues and how they would be addressed in the EIS are provided below.

5.1 Waste Management

The Site has two EPLs, which authorises a number of scheduled activities including landfilling, resource recovery and waste storage in addition to the existing conditions of consent. Waste management employed throughout the operation of the Project would facilitate the maximisation of reuse and resource recovery opportunities, and minimise impact on the surrounding community and environment. Once fully operational, the facility would handle a number of waste streams as identified within the Project Description (refer to Section 3.0). Handling of the waste streams received and processed at the Site would be further detailed in the EIS.

Risks associated with the Project include:

- Receipt of non-conforming wastes at the Site not permitted to be handled.
- Unplanned disruption to landfill operations resulting in large quantities of residual waste from waste processing being stored on site.

The EIS would identify and discuss the waste management streams relating to the Project. This would involve identifying, quantifying and classifying all waste streams received and processed at the Site in accordance with relevant assessment documentation including obligations under the POEO Act and the NSW Department of Environment, Climate Change and Water, Waste Classification Guidelines (2009). In addition the EIS would address potential waste management impacts associated with the Project and identify management and mitigation measures for resource use and waste.

5.2 Traffic, Access and Car Parking

As identified in Section 3.3, while access is proposed via the adjacent Lot 91, further options for site access may be considered due to RMS potentially providing alternative access roads as part of the proposed M12 corridor alignment. The Proponent will continue to consult with RMS through the EIS development process to ascertain the optimal access for the Site.

Access via Lot 91 is been presented in Figure 4. All traffic would enter through the newly constructed access point via Range Road from Elizabeth Drive. Material and waste loads would be directed through one of the weighbridges depending on the required destination for processing. Staff and visitors entering the Site would not pass over the weighbridges.

The Project would provide parking spaces for visitors North of the existing administration building. Parking for staff would be provided to the West and East of the administration building. A third area for staff parking would be provided to the north of the proposed office building within the power easement.

Construction of the Project would require the use of heavy vehicles to deliver construction plant, equipment and materials to the Site. The construction period would also result in increased use of light vehicles on the

surrounding road network associated with the construction workforce. However, it is anticipated that traffic impacts during the construction phase of the Project are likely to be minimal.

During operation the Project would result in an increase in truck and vehicle movements associated with transportation of waste to and from the Site and on site operations. In addition, the Project would likely result in traffic congestion and reduced network efficiency during operation due to extended hours. This may result in changed interaction between heavy and light vehicles and plant resulting in increased potential for accidents occurring on the Site.

The EIS will include a Traffic Impact Assessment that would identify and assess the impacts associated with the Project including:

- The current and future capability of local and regional road infrastructure;
- The type and frequency of heavy vehicles proposed to utilise the Site;
- The suitability of the Project layout to accommodate the change to traffic vehicle movements;
- Details of the internal road layout network and parking in accordance with Australian Standards.

The EIS would include recommendations to mitigate the likely impacts of the Project on the road network including operational management plans and the suitability of the existing road network to accommodate the Project. In addition appropriate consultation with RMS would be undertaken to satisfy the requirements of ISEPP.

5.3 Noise and Vibration

Background noise levels are largely influenced by existing operations at the Site and the surrounding road network including Elizabeth Drive to the North. The nearest residential receivers are located approximately 300 m from the Northern edge of the Site across Elizabeth Drive.

During construction and operation of the Project, noise emissions would vary depending on the activities being undertaken. Potential noise-sensitive receivers may be impacted by traffic generated by the Site and the operation of plant and equipment. The extent of impacts would vary according to the relationship of the construction works to the receiver location, intervening structures and the construction activity. However, given the background noise and intervening structures, noise impacts to sensitive receivers are expected to be medium prior to mitigation and management measures which may include full or partial enclosure of infrastructure and equipment, the establishment and maintenance of noise bunds and/or re-siting of existing plant on the Site.

A noise and vibration assessment would be undertaken as part of the EIS to determine the potential impacts of the Project during construction and operation. This assessment will:

- Identify nearby sensitive receptors;
- Establish existing ambient and background noise levels at the potentially most affected off-site receiver locations;
- Identify sound power levels for each piece of equipment or process;
- Assess operational and construction noise impacts in accordance with the Noise Policy for Industry (2017) and the Interim Construction Noise Guideline respectively;
- Assess traffic noise consistent with EPA's Road Noise Policy;
- Identify feasible and reasonable noise mitigation measures.

5.4 Air Quality and Greenhouse Gas

Previous air quality studies of activities on the Site have identified that air quality and dust deposition levels on the Site are within appropriate legislative requirements and consequently potential impacts upon the surrounding area are low. However, during construction and operation of the Project, it is likely there would be additional dust generation and particulate emissions including from earthworks, processing, storage and transport, vehicles, and plant in addition to potential greenhouse gas emissions of plant and vehicles and odours from waste during operation.

An air quality and greenhouse gas assessment would completed as part of the EIS to identify and assess the potential impacts of emissions of key pollutants and cumulative particulate matter to inform mitigation and management measures for the design and operation of the Project.

5.5 Landscape and Visual

The Project seeks to optimise existing activities on the Site in addition to providing for additional resource recovery infrastructure. As such, the visual impacts of the Project would be similar to current activities on the Site. However, the Site is located adjacent to Kemps Creek Nature Reserve/Western Sydney Parklands and has the potential to impact upon the visual amenity of park users, in addition to residential receivers to the north. Despite this views to and from residential receivers are generally shielded by vegetation and Elizabeth Drive to the North.

Assessment of the Project upon landscape and visual amenity would be assessed during the EIS. This would include:

- Identification of the visual qualities present, including the existing landscape character of the region, sensitive locations, catchments and key viewpoints;
- An assessment of the visual impacts of the Project including the magnitude of change to existing views and the visual sensitivity of the viewers;
- The identification of feasible and reasonable measures to mitigate impacts with identified mitigation measures incorporated in the Project design.

5.6 Soil and Water

The Site is relatively flat with stormwater generally draining towards a drain along the eastern and western boundary of the Site and directed towards a sediment pond in the south of the Site. The existing stormwater drainage system for the Site would be supplemented, where required, to accommodate the Project and to ensure discharges are within generally agreed expectations of Liverpool City Council.

While Lot 91 of the Site contains land classified as flood prone land the Project is proposing the construction of a road at this location and therefore flooding potential is anticipated to be medium to low.

Lot 90 contains a small area to the south of the Site as flood prone, however this area is not proposed to be developed as part of the Project.

An assessment of the potential impacts of the Project on groundwater, surface water and waste water at the Site and its immediate surrounds would be completed as part of the EIS. This assessment would include:

- Identifying, assessing and managing any potential risks associated with contamination as a result of uncontrolled release of fuel, leachate or waste waters from increased processing activities during operation.
- Identifying management for clean and sediment laden surface water.

- Assessment of hydrological conditions for the site and the project.
- Identification of management and mitigation measure utilising the hierarchy of mitigation measures to address these issues and incorporate into the Project design.

5.7 Hazards and Dangerous Goods

Existing operations on the Site involve the use and storage of hazardous and dangerous goods including diesel, LPG, oils, greases and hydraulic fluids for plant and infrastructure. Proposing to continue to utilise and store these materials, the Project may be classified as a “potentially hazardous industry” or “potentially offensive industry” under SEPP 33. As such, a screening assessment to determine the need for a preliminary hazard analysis would be undertaken by the Proponent, the findings of which would be presented in the EIS.

The EIS would confirm the types, quantities, storage locations and transport movements of dangerous goods proposed to be utilised for the Project. Where any exceedance of relevant thresholds are identified, the EIS would include a comprehensive Preliminary Hazard Analysis (PHA) to determine the cumulative risks associated with the Project.

5.8 Socio-Economic

A socio-economic assessment would be undertaken in accordance with relevant standards and would include consideration of strategic planning documents such as the Western Sydney Priority Growth Area (WSAGA) and the accompanying Land Use and Infrastructure Plan (LUIP) and relevant statistics and further documents that address socio-economic considerations.

Given that the Project seeks to optimise and expand an existing land use on the Site with a similar footprint, it is considered unlikely there would be significant social or economic impacts. Potential construction impacts of the Project are anticipated to be localised and the Project would support ongoing operations and employment at the Site and provide ancillary waste services to the local economy.

5.9 Biodiversity

With the Project seeking to predominantly utilise the existing footprint on the Site to optimise waste recovery, it is considered unlikely there will be high potential impacts upon biodiversity within the Site and surrounding area. This includes the Project design seeking to avoid potential biodiversity impacts on the South of the Site and on Lot 91. However, due to the proximity of the Site to Kemps Creek Nature Reserve/Western Sydney Parklands and the potential to impact upon fauna through increased waste acceptance, a Biodiversity assessment would be completed as part of the EIS. This would be in accordance with the *Biodiversity Conservation Act 2016* to identify if a further Biodiversity Assessment Report is required where a biodiversity threshold is reached.

5.10 Bushfire

Lot 91 of the Site contains land classified as bushfire prone with surrounding buffer area in accordance with relevant mapping and the LEP. However, as the Project is proposing to construct a road only on Lot 91, it is not considered there is a significant risk during construction and operation during the Project. Despite this medium to low assessment the EIS will address the potential for bushfire hazards to ensure that the Project addresses any relevant requirements for building or development appropriately.

5.11 Heritage

A search of relevant publicly available databases conducted on 20 June 2018 did not identify any items or areas of Aboriginal heritage or non-Aboriginal heritage significance within or in close proximity to the Site. As a result of previous disturbance at the Site there is limited potential for the discovery of unexpected items of heritage value.

5.12 Cumulative Impacts

The EIS would include an assessment of known cumulative impacts of the Project in relation to the Site and surrounding area. This section of the EIS would:

- Outline how cumulative impacts have been addressed in relation to known strategic planning documentation that affect the Site;
- Acknowledge the inherent cumulative impact assessment built into some established assessment methodologies e.g. for air quality and traffic;
- Determine whether the project, in combination with the other impacts, may cause a significant or unacceptable change to an environmental, social or economic matter, now or in the future; and
- Determine, to the extent possible, the project's relative contribution to those cumulative impacts.

6.0 COMMUNITY AND OTHER STAKEHOLDER ENGAGEMENT

The Proponent is committed to consulting with the all stakeholders including government agencies, Liverpool City Council and the local community. This will ensure that stakeholders have the opportunity to understand the Project and its context and can provide appropriate input and feedback to the Project assessment and determination.

During the preparation of the EIS the Proponent will consult with the following:

- Liverpool City Council;
- Environment Protection Authority;
- Department of Planning and Environment;
- Office of Environmental and Heritage;
- Roads and Maritime Services; and
- Nearby land owners and occupiers that may be affected by the Project.

The EIS will describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, adequate explanation will be required in the EIS.

7.0 CAPITAL INVESTMENT VALUE

The capital investment value for the Project is estimated at $50 million.

8.0 CONCLUSION

The Proponent is seeking to provide new resource recovery infrastructure and facilitate operational efficiencies on the Site.

The key construction components of the Project would include:

- Bulk earthworks;
- Roadworks for internal access routes;
- Re-siting of ancillary infrastructure and construction of two wheel washes, new weighbridge, workshop, offices, amenities and ancillary infrastructure;
- Construction of hardstand areas;
- Construction of concrete storage bunkers;
- Construction of RDF Production Facility;
- Construction of MBT Facility;
- Construction of Cement Stabilisation Facility;
- Construction of stormwater management infrastructure; and
- Re-siting of the Crushing and Screening Facility, the C&D Recycling Facility, Composting Facility and the Soil Processing Facility

The key new operational components of the Project would include:

- Processing of up to 250,000 tpa of organic waste at an MBT Facility.
- Processing of up to 250,000 tpa of non-putrescible waste at an RDF Facility.
- Processing up to 50,000 tpa of roadbase and sand at a Cement Stabilisation Facility.

The Project would be assessed as SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* and as such, requires the preparation of an EIS and consent from the Minister for Planning and Environment.

The potential environmental impacts of the Project without mitigation have been identified and assessed as part of a preliminary environmental risk assessment. The potential key impacts of the Project identified as having a medium risk include:

- Traffic, Access and Parking;
- Waste Management;
- Landscape and Visual Amenity;
- Stormwater Runoff, Contamination and Flooding;
- Air Quality and Greenhouse Gases;
- Noise and Vibration;
- Hazardous and Dangerous Goods;
- Bushfire; and

- Biodiversity.

Low risk impacts of the Project included flooding, socio-economic impacts and heritage as identified in the risk assessment (Appendix C).

The environmental risk analysis would be further developed and provided as part of the EIS, incorporating further site investigation and identified mitigation measures, the SEARs, and community and stakeholder liaison, to ensure all issues associated with the Project are addressed appropriately. All environmental issues would be further assessed within the EIS, with technical studies being completed where required. Mitigation and management measures would be identified and proposed within the EIS to reduce environmental impacts to an acceptable level where required.

In addition to addressing the above environmental issues, the EIS would include the following in accordance with Schedule 1 of the EP&A Regulations:

- A detailed description of the Project including its components, construction activities and potential staging;
- A comprehensive assessment of the potential impacts on the key issues including a description of the existing environment, assessment of potential direct and indirect and construction, operation and staging impacts;
- Description of measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the potential impacts; and
- Identify and address issues raised by stakeholders.

9.0 IMPORTANT INFORMATION ABOUT YOUR REPORT

Your attention is drawn to “Important Information Relating to this Report” (LEG04, RL2), which is attached as **APPENDIX C** of this Report. The statements presented in this document are intended to advise realistic expectations of the Report and ensure that all parties who may rely on this Report are aware of the responsibilities each assumes in so doing.

10.0 REFERENCES

Department of Environment and Climate Change (DECC) (2009), *Waste Classification Guidelines Part 1: Classifying Waste*, DECC NSW

Department of the Environment and Energy (2016), *Australian National Waste Report 2016*, Australian Government

Department of the Environment, Water, Heritage and the Arts (2009) *National Waste Policy: Less waste, more resources* Australian Government

Department of Planning and Environment (DP&E) (2017), *Forecast Overview*, State of New South Wales, accessed June 2018, http://www.planning.nsw.gov.au/Research-and-Demography/Sydney-housing-supplyforecast/Forecast-overview

Department of Premier and Cabinet (2011), *NSW 2021: A Plan to Make NSW Number One*, NSW Government

Greater Sydney Commission (2018), *A Metropolis of Three Cities*, State of New South Wales, accessed June 2018, https://www.greater.sydney/metropolis-of-three-cities/sustainability/efficient-city/more-waste-re-used-and-recycled-support

Greater Sydney Commission (2018), *Western Sydney District Plan*, State of New South Wales, accessed June 2018 https://www.greater.sydney/western-city-district-plan/sustainability/efficient-city/reducing-carbon-emissions-and-managing

NSW Environment Protection Authority (EPA) (2014), NSW Waste Avoidance and Resource Recovery Strategy 2014-21, NSW EPA, Goulburn Street, NSW

NSW Environment Protection Authority (EPA) (2015), *State of the Environment 2015*, NSW EPA, Goulburn Street, NSW

NSW Environment Protection Authority (EPA) (2017), *Reforms to the Construction Waste Recycling Sector – Explanatory Paper,* NSW EPA, Goulburn Street, NSW

NSW Environment Protection Authority (EPA) (2014) Waste and Resource Recovery Strategy 2014-21 NSW EPA, Goulburn Street, NSW

NSW Roads and Maritime (RMS) (2018) “M12 Motorway Access Strategy” Roads and Maritime, Parramatta

NSW Department of Planning and Environment (DP&E) (2017), “Western Sydney Priority Growth Area” accessed June 2018, https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Employment-Area/Map

NSW Environment Protection Authority (EPA) (2017) Noise Policy for Industry NSW EPA, Goulburn Street, NSW

NSW Department of Planning and Environment (DP&E) (2018), “Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan” accessed September 2018, https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis

NSW Environment Protection Authority (EPA) (2008) Interim Construction Noise Guideline. NSW EPA, Goulburn Street, NSW

TransGrid (2018), TransGrid Easement Guidelines Third Party Development, accessed 4 October 2018, https://www.transgrid.com.au/being-responsible/public-safety/living-and-working-with-powerlines/Documents/Easement%20guidelines%20for%20third%20party%20developers.pdf

Legislation

Biodiversity Conservation Act 2016

Environmental Planning and Assessment Act 1979

Environmental Planning and Assessment Regulation 2000

Environmental Protection and Biodiversity Conservation Act 1999

Liverpool Local Environmental Plan 2008

Protection of the Environment Operations Act 1997

Roads Act 1993

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

State Environmental Planning Policy No 44 – Koala Habitat

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

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (State and Regional Development) 2011

Waste Avoidance and Resource Recovery Act 2001

Signature Page

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https://golderassociates.sharepoint.com/sites/26981g/deliverables/deliverables/18101601-002-r-rev3 scoping report/18101601-002-r-rev3 scoping report kr.docx

APPENDIX A

DA 341/96 Staging Plan

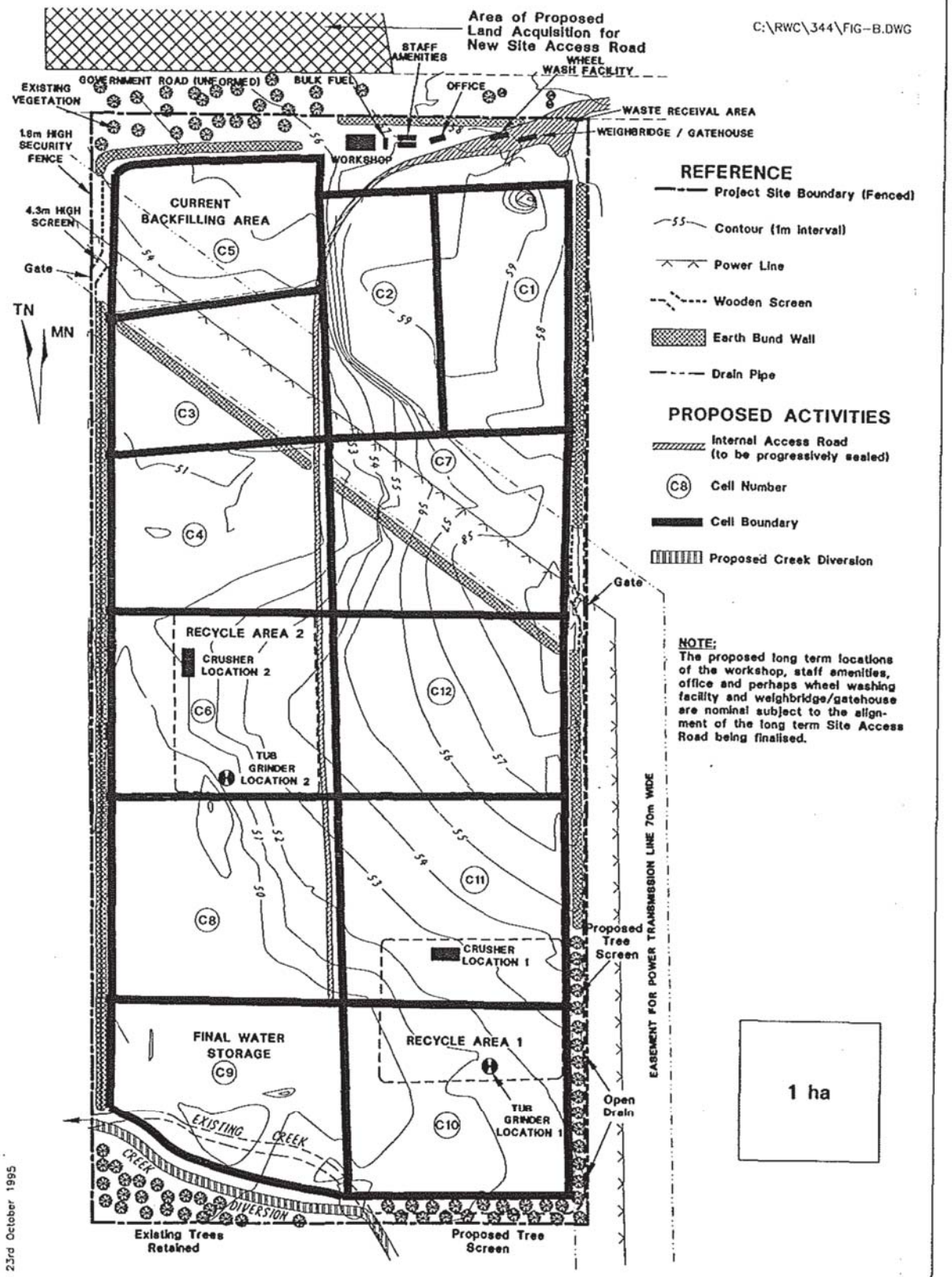

Figure B
PROPOSED SITE LAYOUT

R.W. CORKERY & CO. PTY LIMITED

APPENDIX B

Preliminary Risk Register

Identified Risk	Description	Unmitigated Risk
Traffic and Transport	Increase in traffic congestion and reduced network efficiency during construction	Medium
	Increase in traffic congestion and reduced network efficiency during operation due to extended hours and increased site activities.	Medium
	Accidents occurring on site as a result of increased interaction between heavy and light vehicles and plant due to increased site activities.	Medium
Waste management	Receipt of non-conforming wastes at the Site not permitted to be handled.	Medium
	Unplanned disruption to landfill operations resulting in large quantities of residual waste from waste processing being stored on site.	Medium
Landscape and Visual	Road user and sensitive receivers' views are permanently altered during construction and operation.	Medium
Soils and Geology	Soil erosion due to operation and construction activities.	Medium
	Contamination of soil as a result of uncontrolled release of leachate or waste waters from increased processing activities during operation.	Medium
	Contamination of soil as a result of uncontrolled release of fuel from fuel storage tank or refuelling area.	Medium
Water Quality and Hydrogeology	Sediment laden runoff during construction and operation.	Medium
	Contamination of surface water or groundwater as a result of uncontrolled release of waste waters from processing activities.	Medium
Air Quality and Greenhouse Gas	Increased vehicle and plant emissions increasing contribution to greenhouse gas emissions during construction and operation.	Medium
	Dust from construction and operations reducing local air quality.	Medium

Identified Risk	Description	Unmitigated Risk
	Odours from waste during operations affecting sensitive receivers.	Medium
Noise and Vibration	Noise and vibration impacts on the amenity of sensitive receivers during construction and operation.	Medium
Bushfire	Increased potential for bushfire hazard.	Medium
Biodiversity	Proposal attracts additional vermin and pest species due to increased waste acceptance.	Medium
Flood	Flooding impacts from development of the site.	Low
Social	Potential changes in market and property values due to development of the Proposal.	Low
Cultural Heritage	Impacts to unanticipated heritage items during construction.	Low

APPENDIX C

Important Information Relating to this Report

The document ("Report") to which this page is attached and which this page forms a part of, has been issued by Golder Associates Pty Ltd ("Golder") subject to the important limitations and other qualifications set out below.

This Report constitutes or is part of services ("Services") provided by Golder to its client ("Client") under and subject to a contract between Golder and its Client ("Contract"). The contents of this page are not intended to and do not alter Golder's obligations (including any limits on those obligations) to its Client under the Contract.

This Report is provided for use solely by Golder's Client and persons acting on the Client's behalf, such as its professional advisers. Golder is responsible only to its Client for this Report. Golder has no responsibility to any other person who relies or makes decisions based upon this Report or who makes any other use of this Report. Golder accepts no responsibility for any loss or damage suffered by any person other than its Client as a result of any reliance upon any part of this Report, decisions made based upon this Report or any other use of it.

This Report has been prepared in the context of the circumstances and purposes referred to in, or derived from, the Contract and Golder accepts no responsibility for use of the Report, in whole or in part, in any other context or circumstance or for any other purpose.

The scope of Golder's Services and the period of time they relate to are determined by the Contract and are subject to restrictions and limitations set out in the Contract. If a service or other work is not expressly referred to in this Report, do not assume that it has been provided or performed. If a matter is not addressed in this Report, do not assume that any determination has been made by Golder in regards to it.

At any location relevant to the Services conditions may exist which were not detected by Golder, in particular due to the specific scope of the investigation Golder has been engaged to undertake. Conditions can only be verified at the exact location of any tests undertaken. Variations in conditions may occur between tested locations and there may be conditions which have not been revealed by the investigation and which have not therefore been taken into account in this Report.

Golder accepts no responsibility for and makes no representation as to the accuracy or completeness of the information provided to it by or on behalf of the Client or sourced from any third party. Golder has assumed that such information is correct unless otherwise stated and no responsibility is accepted by Golder for incomplete or inaccurate data supplied by its Client or any other person for whom Golder is not responsible. Golder has not taken account of matters that may have existed when the Report was prepared but which were only later disclosed to Golder.

Having regard to the matters referred to in the previous paragraphs on this page in particular, carrying out the Services has allowed Golder to form no more than an opinion as to the actual conditions at any relevant location. That opinion is necessarily constrained by the extent of the information collected by Golder or otherwise made available to Golder. Further, the passage of time may affect the accuracy, applicability or usefulness of the opinions, assessments or other information in this Report. This Report is based upon the information and other circumstances that existed and were known to Golder when the Services were performed and this Report was prepared. Golder has not considered the effect of any possible future developments including physical changes to any relevant location or changes to any laws or regulations relevant to such location.

Where permitted by the Contract, Golder may have retained subconsultants affiliated with Golder to provide some or all of the Services. However, it is Golder which remains solely responsible for the Services and there is no legal recourse against any of Golder's affiliated companies or the employees, officers or directors of any of them.

By date, or revision, the Report supersedes any prior report or other document issued by Golder dealing with any matter that is addressed in the Report.

Any uncertainty as to the extent to which this Report can be used or relied upon in any respect should be referred to Golder for clarification

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