EPS

GLENFIELD RECYCLING FACILITY
STATE SIGNIFICANT DEVELOPMENT
SUPPORT DOCUMENTATION

Prepared for Glenfield Waste Services
Prepared by Environmental Property Services

Cambridge Avenue, Glenfield NSW 2167

Quality Assurance & Version Control Table				
Project: SSD Support Documentation – Glenfield Recycling Facility				
Client:	Glenfield Waste Services			
Rev No.	**Date**	**Our Reference**	**Author**	**Reviewer**
V01	1/11/2013	GWS SSD Support Documentation	T.Kelly	EPS Internal
Checked by	7/11/2013			S.McCall
Approved by	7/11/2013			S.McCall

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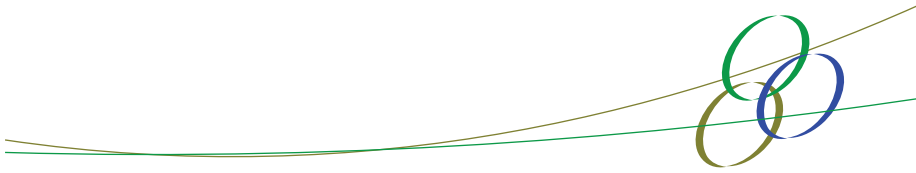

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1 INTRODUCTION

Glenfield Waste Services (GWS) is proposing to develop a Materials Recycling Facility on land owned by the GWS Group within the bounds of the current landfill site at Glenfield, NSW. The facility is proposed to recycle a maximum of 450,000 tonnes of material per year.

The information within this document has been provided to support a request for Director General Requirements for the proposal to initiate the State Significant Development approval process and for the preparation of an Environmental Impact Statement under Part 4 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act).

The document provides information regarding the applicant, the proposal and its imperative, as well as the potential environmental impacts both positive and negative. It also provides the relevant background information and an overview of the proposed community and key stakeholder consultation process to be undertaken as part of proposal assessment process.

1.1 Project Summary

Comprising an area of approximately 100 hectares, the GWS site has been operated by L.A Kennett Enterprises Pty Ltd as a non-putrescible landfill and resource recovery centre for in excess of 30 years. Straddling two local Government areas, consent for the site's use as a waste depot was obtained from Campbelltown Council in June 1979 and from Liverpool Council in January 1991.

GWS wishes to further reduce waste sent to landfill by increasing the proportion of recycling undertaken onsite. Commensurate with typical activities within the Sydney Metropolitan Area the disposal of waste to landfill has historically been the primary approach to waste disposal at Glenfield. Recycling presents a more environmentally sustainable option compared to landfilling. In addition to assisting to ease the pressure on Sydney's well documented landfill supply constraints, recycling conserves raw materials, energy and water, reduces the production of greenhouse gas emissions and other pollutants and contributes to the achievement of the State government's recycling goals set in the *NSW 2021* document.

GWS propose to intensify current recycling operations and to relocate recycling activities to unfilled (virgin) land in order to facilitate effective environmental licensing. It is proposed that onsite recycling will be primarily sourced from commercial and industrial (C&I) and construction and demolition (C&D) waste. The C&I waste will be limited to natural and manufactured timbers, green waste, metals, plastics (hard and soft) and glass. The C&D waste will predominantly consist of concrete, brick, asphalt, terracotta etc. as well as virgin excavated natural material (VENM) and excavated natural material (ENM).

Separate to the existing landfill operation, the existing recycling facility is proposed to be expanded and re-located to a section of currently unused land in the southern portion of the site. The location has been selected to address Office of Environment & Heritage (OEH) advice that setting up and licencing a waste recycling facility on virgin (unfilled) land is strongly preferred from an Environmental Protection Agency (EPA) licencing perspective on account of land contamination delineation and management.

1.2 The Applicant & Land Owners

The applicant for the proposal is L.A Kennett Enterprises Pty Ltd.

Glenfield Waste Services is located across 10 land titles, all held in ownership by either; JC & FW Kennett Pty Ltd or Figela Pty Ltd with one title also held jointly with HL Kennett. The land owners also comprise ownership of the operational entity of GWS, being L.A Kennett Enterprises Pty Ltd.

The proposed recycling facility will be located within the southern portion of the GWS site, across the following parcels of land:

- Lot 1 DP 113201 (0.4148ha) Owner: JC & FW Kennett Pty Ltd
- Lot 2 DP 333578 (1.346ha) Owner: JC & FW Kennett Pty Ltd
- Lot 3 DP 736881 (25.31ha) Owner: Figela Pty Ltd
- Lot 91 DP 1155962 (29.49ha) Owner: JC & FW Kennett Pty Ltd

A Land Title Survey Plan illustrating the land titles and ownership is included at Appendix 1.

1.3 Project Definition

The Materials Recycling Facility is considered best defined through the *State Environmental Planning Policy (Infrastructure) 2007* as ***waste or resource management facility*** which means a waste or resource transfer station, a resource recovery facility or a waste disposal facility.

The recycling works fit within the definition of ***resource recovery facility*** which means a facility for the recovery of resources from waste, including such works or activities as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from waste gases and water treatment, but not including re-manufacture of material or goods or disposal of the material by landfill or incineration.

The Materials Recycling Facility also fits the definition of ***waste or resource transfer station*** which means a facility for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.

The existing GWS operations are licenced as a non-putrescible landfill operation. Therefore, any material that cannot be recycled is forwarded directly to the GWS landfill operations and as such landfill operations do not form part of this SSD proposal.

2 SITE DESCRIPTION

The following information provides an overview of the regional and local context of the proposal, surrounding development and the location of key infrastructure and environmental features.

2.1 Regional and Local Context Overview

2.1.1 Regional Context

The Glenfield Waste Site is located approximately 30km south west of the Sydney Central Business District (CBD), and approximately 22km west of Port Botany. The south west region of Sydney is recognised as one of Australia's fastest growing urban regions, characterised by a strong economy and unique natural environment. The NSW Department of Planning and Infrastructure (DoPI) has released a plan to provide housing, employment opportunities and regional infrastructure within the 'South West Growth Centre', with an anticipated population growth of 300,000 people.

The key transport infrastructure servicing the growth within the region and connecting with or near the site includes:

- Hume Highway;
- M5 – South Western Motorway;
- M7 Motorway;
- Cumberland and South Passenger Line;
- Southern Sydney Fright Line; and
- East Hills Rail Line.

Figure 2-1 below illustrates the regional context of the site and key transport infrastructure.

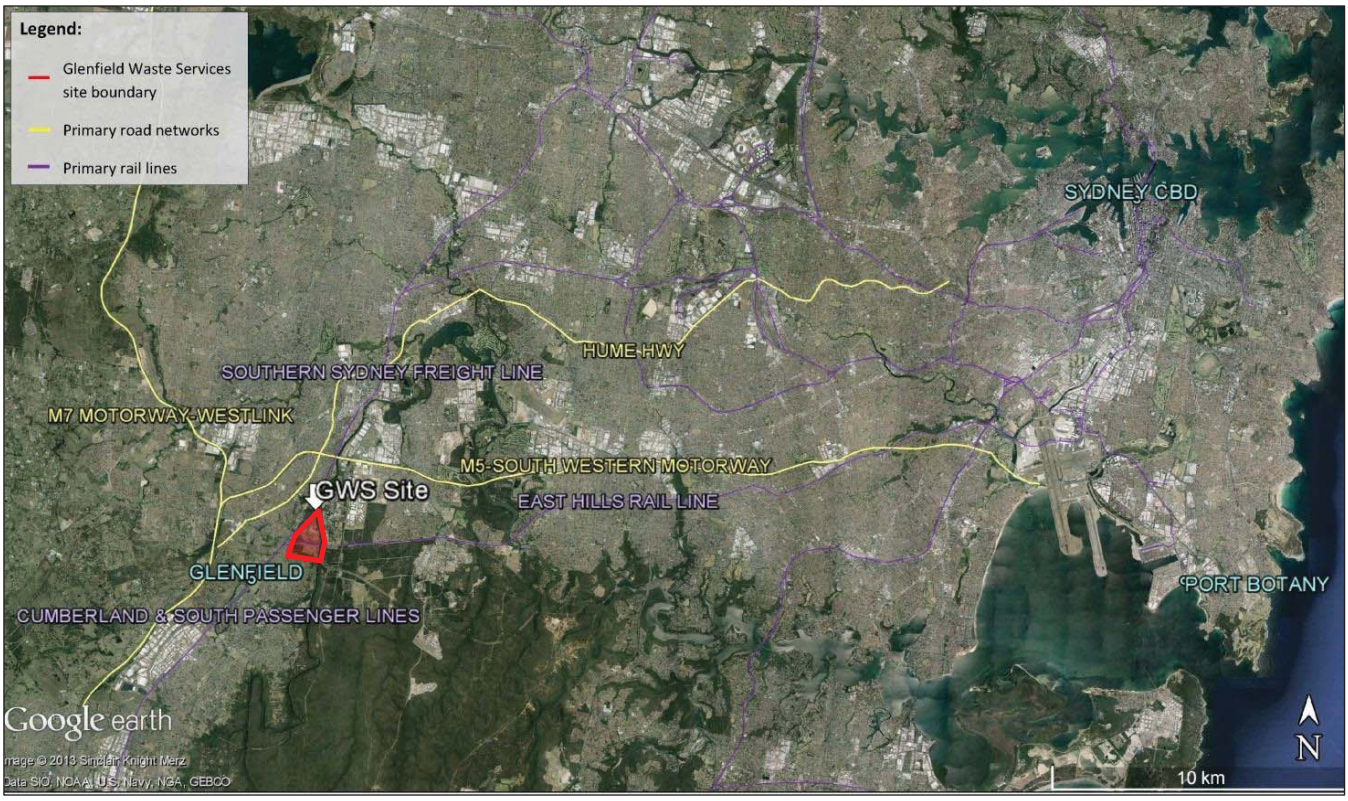


Figure 2-1: Regional context
(Source: Aerial Imagery is supplied by Google Earth Pro Licence)

2.1.2 Local Context

The proposed facility is located within the boundaries of the existing GWS site at Cambridge Avenue, Glenfield New South Wales. The site currently consists of a northern and southern portion of land, divided by the East Hills Railway line. The northern portion is predominantly located within Liverpool City Council's Local Government Area (LGA), while the southern portion is located within Campbelltown City Council's LGA.

Notably, the Glenfield Waste site is bounded to the west by the Southern Sydney Freight Line and traversed by the northern extension of the South West Rail Link which has undergone substantial upgrades since 2009. The new Glenfield Transport Interchange and Glenfield Station, which opened in September 2012, is located approximately 500m south west of the Glenfield Waste site.

2.2 Site Description

The portion of the GWS site north of the East Hills Rail Line consists of sand and sandstone extraction activities and a non-putrescible solid waste landfill. The portion of the site south of the East Hills Rail Line contains completed landfill cells, the principal site access, office and administration buildings and the current waste sorting (recycling) operations.
Figure 2-2 illustrates the northern and southern portions of the Glenfield site as separated by the East Hills Rail Line.

The following key features characterise the Glenfield waste site:

- The site is triangular in shape and covers a total area of approximately 100ha;
- The site is bounded to the east by the Georges River;
- The site is bounded to the west by the Southern Rail & South Sydney Freight Lines;
- The site is bounded to the south by an existing residential area;
- The site has a relatively flat topography with undulating slopes due to the current waste activities in the northern portion of the site; and
- The site directly fronts Cambridge Avenue to the south, which is the main entrance to the site.

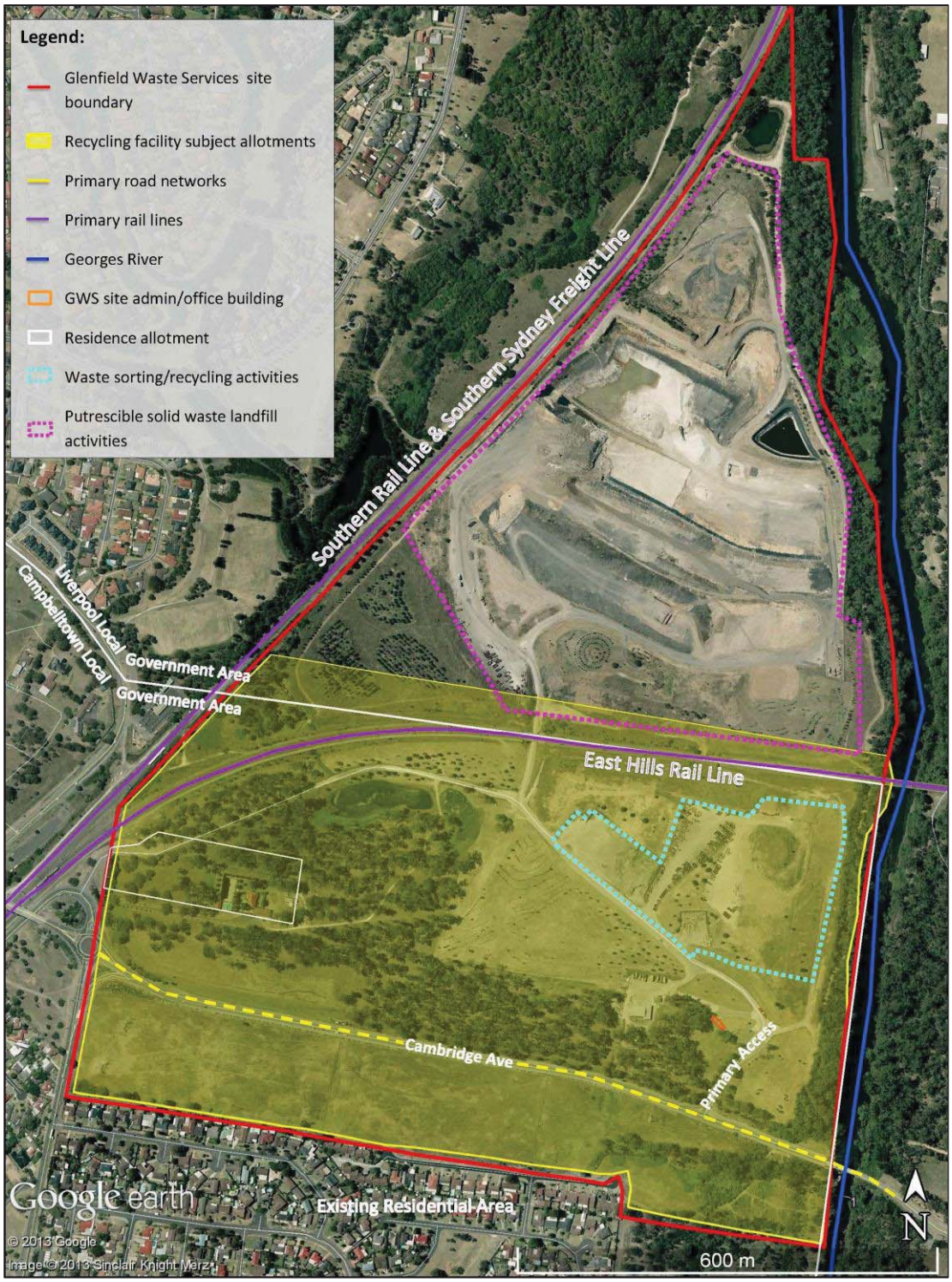


Figure 2-2: Site Overview

(Source: Aerial Imagery is supplied by Google Earth Pro Licence)

2.2.1 Property Zoning

Pursuant to the *Campbelltown (Urban Area) Local Environmental Plan* 2002 the land proposed for the waste recycling facility is in the Zone 1(a) – Rural A Zone.

Campbelltown City Council has submitted a Planning Proposal to zone the southern portion of the Glenfield Waste Site in the Campbelltown LGA as IN1 General Industrial, SP2 Infrastructure (Car Parks) and SP2 Infrastructure (Railway) as either the first amendment or part of the Standard Instrument Local Environmental Plan (SILEP). A Gateway Determination in respect of this planning proposal was issued on the 6th August 2013.

2.2.2 Existing Environment and Site Operations

As previously outlined, a number of scheduled activities are currently undertaken within the Glenfield Waste Site, including:

- Excavation of winnable material, including sand, clay, shale and sandstone;
- Waste management of non-putrescible solid waste, which includes sorting the material and recycling a portion of the waste;
- Crushing of excavated and imported sandstone material for use as aggregate or road base product; and
- Disposing of waste to landfill within the site.

Due to the nature of these activities, GWS carries out its activities in accordance with the provisions of the Environmental Protection Licence (EPL) (EPL 4614) as issued by the Environmental Protection Authority (EPA) under Schedule 1 of the *Protection of the Environment Operations Act 1997*.

3 STATUTORY AND STRATEGIC PLANNING

The following section outlines the key legislation, planning instruments and existing approvals relevant to the proposed development. A detailed assessment of all relevant legislation would be undertaken as part of the Environmental Impact Statement (EIS).

3.1 Commonwealth Legislation

3.1.1 Environment Protection and Biodiversity Conservation Act 1999

The primary objective of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is to 'provide for the protection of the environment, especially those aspects of the environment that are Matters of National Environmental Significance' (Matters of NES). Environmental approvals under the EPBC Act may be required for an 'action' that is likely to have a significant impact on Matters of NES.

Where there is potential for a proposal to have a significant impact on any Matter of NES, or it is unclear whether the proposal may have a significant impact, a Referral under the EPBC Act will be submitted to the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) for approval, concurrent with the State Significant Development process.

An EPBC Act protected matters search for the site did not reveal any significant concerns from the proposal with regard to Matters of NES. The project EIS will include a detailed assessment on EPBC and NES matters following further informed assessments to confirm if a referral under the EPBC Act is required.

3.2 NSW Legislation

The following legislation is considered relevant to the proposal.

3.2.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) forms the statutory framework for planning approval and environmental assessment in NSW.

The project is considered 'State Significant Development' (SSD) in accordance with Division 4.1 of Part 4 of the EP&A Act, as it is a type listed in Schedule 1 of the *State Environmental Planning Policy* (SEPP) - *State and Regional Development*.

An important distinction for State Significant Development is the requirement of all applicants to apply to the Director-General of the Department of Planning and Infrastructure for Director General Requirements (DGR's), prior to the preparation of an Environmental Impact Statement (EIS). The requirement for an EIS is specified by s78A (8A) of the EP&A Act.

The EIS must then comply with any DGR's issued for the proposal, in addition to complying with the requirements of the EP&A Regulation. Having triggered as SSD, the proposal cannot also trigger as Designated Development as specified by s77A (2) of the EP&A Act.

3.2.2 Protection of the Environment Operations Act 1997

The proposed material recycling facility will require an Environment Protection Licence (EPL) from the EPA under the *Protection of the Environment Operations Act 1997* which is a separate EPL from the existing landfill EPL current for the site. The EPL triggers are based on the following scheduled activities contained in Schedule 1 of the Act:

Resource recovery – Clause 34 defines the recovery of general waste as:

> *"the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and processing, otherwise than for the recovery of energy"; and*

Waste storage – Clause 42 defines waste storage as:

> *"the receiving from off site and storing (including storage for transfer) of waste".*

The relevant criteria for a resource recovery facility to be declared a schedule activity under Clause 34 is:

> *"involves processing more than 120 tonnes of waste per day or 30,000 tonnes of waste per year less than 50% by weight of the waste received in any year requires disposal after processing".*

The relevant criteria for waste storage to be a declared a schedule activity under Clause 42 is:

> *"receiving more than 30,000 tonnes of waste per year from off-site".*

Initial discussions with the EPA regarding the proposal have been undertaken and have guided the location of the proposal within the GWS site. An appropriate application for an EPL will be made to the EPA following receipt of development consent. Following discussion with the EPA, the new EPL area will be delineated by a plan of survey and the existing EPL (4614) will be modified to accommodate the new EPL.

It is noted that Clause 89K of the EP&A Act states:

(1) An authorisation of the following kind cannot be refused if it is necessary for carrying out State significant development that is authorised by a development consent under this Division and is to be substantially consistent with the consent:

e. An environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 (for any of the purposes referred to in section 43 of that Act),

3.3 Provisions of Relevant Environmental Planning Instruments

The following planning instruments are considered relevant to this proposal.

3.3.1 State Environmental Planning Policy (State and Regional Development) 2011

The project is considered 'State Significant Development' in accordance with Division 4.1 of Part 4 of the EP&A Act, as it is a type listed in Schedule 1 of the *State Environmental Planning Policy* (*State and Regional Development) 2011*. Specifically, Clause 23 of Schedule 1 lists "*Waste and Resource Management Facilities*" as State Significant Development if the development triggers one of the six sub-clauses. The following provisions trigger this proposal as State Significant Development:

2) Development for the purpose of waste or resource transfer stations in metropolitan areas of the Sydney region that handle more than 100,000 tonnes per year of waste.
3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

The proposed recycling facility is classified as SSD in accordance with this definition as it is located within the Sydney metropolitan area and is expected to recycle up to 450,000 tonnes of material per year, exceeding the SSD trigger of 100,000 tonnes set out above. Accordingly, the appropriate government approval process for the proposal is State Significant Development under Part 4 of the EP&A Act.

3.3.2 State Environmental Planning Policy (Infrastructure) 2007

The aim of the *State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)* is to facilitate the effective delivery of infrastructure across NSW. The ISEPP allows for certain types of infrastructure to be permissible with or without consent or as Exempt or Complying Development.

The proposed activity does not fall within the provisions of exempt or complying development under the ISEPP. Clause 120 identifies land for prescribed zones relevant to Clause 121 as follows:

> *Prescribed zone means any of the following land use zones or a land use zone that is equivalent to any of those zones:*
> *(a) RU1 Primary Production,*
> *(b) RU2 Rural Landscape,*
> *(c) IN1 General Industrial,*
> *(d) IN3 Heavy Industrial,*
> *(e) SP1 Special Activities,*
> *(f) SP2 Infrastructure.*

The current land zoning is Zone 1(a) – Rural A Zone and the proposed rezoning of the relevant portion of the site is to IN1 General Industrial. The equivalent zone of Zone 1(a) – Rural A Zone under the draft Campbelltown Standard Instrument Local Environmental Plan is RU2, as outlined in the NSW Housing Code Equivalent Zones (established for the application of the *SEPP (Exempt and Complying Development Codes) 2008*). Therefore the current and proposed zoning meets the definition of a prescribed zone pursuant to Clause 121 of the ISEPP. Clause 121 of the ISEPP outlines the following development as permitted with consent:

> *(1) Development for the purpose of waste or resource management facilities, other than development referred to in subclause (2), may be carried out by any person with consent on land in a prescribed zone.*
> *(2)* ***Development for the purposes of a waste or resource transfer station may be carried out by any person with consent on:***
> ***(a) land in a prescribed zone****, or*
> *(b) land in any of the following land use zones or equivalent land use zones:*
> *(i) B5 Business Development,*
> *(ii) B6 Enterprise Corridor,*
> *(iii) IN2 Light Industrial,*
> *(iv) IN4 Working Waterfront, or*
> *(c) land on which development for any of the following purposes is permitted with consent under any environmental planning instrument:*
> *(i) industry,*
> *(ii) business premises or retail premises,*
> *(iii) freight transport facilities.*
> *(3) Development for the purpose of the recycling of construction and demolition material, or the disposal of virgin excavated natural material (as defined by the Protection of the Environment Operations Act 1997) or clean fill, 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.*

The proposal is a development as referred to in subclause (2) (a), therefore pursuant to Clause 122 of the ISEPP the operation of a waste management and recycling facility is permissible with development consent.

3.3.3 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33), clause 12 outlines that a Preliminary Hazard Analysis (PHA) must be prepared to determine the risk of the proposal:

> *A person who proposes to make a development application to carry out development for the purposes of a potentially hazardous industry must prepare (or cause to be prepared) a preliminary hazard analysis in accordance with the current circulars or guidelines published by the Department of Planning and submit the analysis with the development application.*

A potentially hazardous industry is defined within SEPP 33 as a development for the purpose of any industry which, if the development were to operate without employing any measures to reduce or minimise its impact, would pose a significant risk to human health, life or property, or to the biophysical environment.

Due to the nature of the proposal, which encompasses 'cement works, crushing, grinding, and separating works generally' as listed in Appendix 3 of the document *Hazardous and Offensive Development – Applying SEPP33*, a PHA assessment will be required as part of the project EIS.

3.3.4 Greater Metropolitan Regional Environmental Plan 1999 No. 2 – Georges River Catchment

Located within the Georges River Catchment area, the *Greater Metropolitan Regional Environmental Plan 1999 No. 2 – Georges River Catchment* (GMREP) must be considered.

Clause 7 of the Planning Control and Consultation Table within the GMREP outlines the following development as permissible within the catchment area with development consent:

> *Hazardous or offensive industry (as defined in State Environmental Planning Policy No 33—Hazardous and Offensive Development) of a type that has the potential to pollute and to lower water quality in the Georges River or its tributaries.*

Having been identified as a potentially hazardous or offensive development under SEPP 33, the consent authority must have regard to the specific matters for consideration outlined in the GMREP.

Further, Clause 7 states that:

> *Development consent required unless located on either flood liable land or land within 40 metres of any water course within the Catchment, in which case it is prohibited.*

The proposal is not located within 40m of a water course, nor is it located within flood liable land, which in accordance with the Floodplain Development Manual 2005, is land subject to a probable maximum flood event. The proposal is permissible pursuant to the GMREP with development consent.

3.3.5 Campbelltown (Urban Area) Local Environmental Plan 2002

The *Campbelltown (Urban Area) Local Environmental Plan 2002* zoning plan outlines the land proposed for the waste recycling facility as Zone 1(a) – Rural A Zone.

As outlined previously, a Gateway Determination was made on the 6th August 2013 in respect of a Planning Proposal to zone the Glenfield Waste Site at Cambridge Avenue to IN1 General Industrial, SP2 Infrastructure (Car Parks) and SP2 Infrastructure (Railway). The wider site area rezoning is being undertaken concurrently.

Pursuant to the ISEPP, the current and proposed zoning meets the definition of a prescribed zone and therefore the proposal is permissible with consent.

4 PROJECT DESCRIPTION

4.1 Overview

GWS is proposing to develop a materials recycling facility within the site of existing operations at Glenfield. The facility will have a capacity to process recycling of 450,000 tonnes per annum of non-putrescible waste, primarily C&I and C&D waste for reuse in secondary markets. The proposal will be located across approximately 5ha in four differentiated but contiguous areas and positioned to avoid existing landfill cells. Each area will facilitate recycling of different materials. Site entry and egress for transport of material will utilise existing site access locations along Cambridge Avenue and Railway Parade respectively. The proposed site layout is illustrated in Figure 4-1 below:

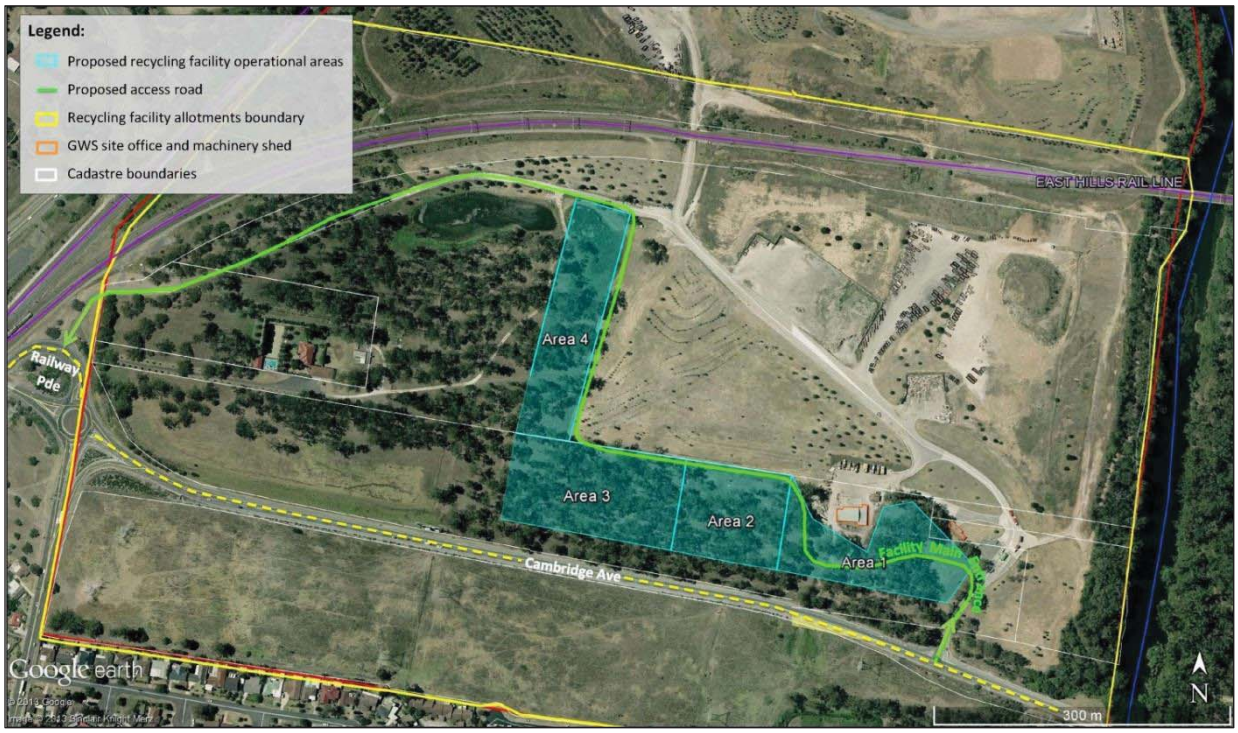


Figure 4-1: Recycling Facility area (approximately 5ha) and access road
(Source: Aerial Imagery is supplied by Google Earth Pro Licence)

4.2 Site Development

A number of site upgrades and provision of additional facilities will be required to assist the development proposal. These works include:

- Clearing and grading of the site to provide a level working area for the storage of materials and operation of machinery;
- Installation of stormwater management systems;

- Upgrade of existing water retention & distribution systems for on-site dust management;
- Provision of other utility services (electricity, communications, etc.) as required;
- Installation of operational fixtures including site office and truck wheel wash bay;
- Construction of internal one-way road and parking area;
- Sealing of part of an existing internal road;
- Construction of material storage bays; and
- Landscaping, fencing and signage.

4.3 Site Operation

4.3.1 Operational Process

The operations carried out on site will primarily comprise:

1. Receipt of waste materials.
    a. Materials are first evaluated by undertaking source checks prior to arrival on site, and spot checks upon arrival at the site.
    b. Materials received will be charged based on vehicle GVM. The addition of a weighbridge for future operations is included in the development application, although this would not be constructed until further certainty regarding potential waste levy charges for recycling materials is known.
2. C&I materials are separated into different waste streams and stockpiled in relevant areas on site. Mechanical or manual sorting and processing is then undertaken.
    a. Green waste and timber is stockpiled for mulching and sale.
    b. Paper/cardboard and plastics are separated for baling and recycling.
    c. Metals and glass are separated for recycling.
3. C&D materials are processed by the following methods depending on the type of treatment required:
    a. Breakdown/pre-processing — material that is delivered to the site in large sections (over 600mm) is first broken down into manageable sizes using a pulveriser attached to a 40 tonne excavator;
    b. Initial processing (pulverising) to remove reinforced steel, this is done using standard type excavator. The steel, once removed is separated and stored until taken off-site for recycling;
    c. The pulverised material is then crushed using mobile plant;
    d. The crushed material will then be blended into finished product and stockpiled for sale. This function will be carried out using a front-end wheel loader;
    e. The finished product will be loaded and weighed for dispatch using machinery buckets with weighing capabilities that connect via Wi-Fi back to the administration office for purchase invoicing; and
    f. A water cart equipped with spray nozzles will be kept onsite permanently to be used systematically and/or in periods of high wind for dust management.

4.3.2 Materials Received and Produced

The proposed recycling facility intends to recycle and process waste produced by the C&D and C&I sectors to produce goods for resale to the construction markets. Strict quality controls will be used to ensure the quality of the incoming materials, and this in turn will underpin the quality of the final saleable product. Quality control management:

- Ensures the quality of incoming materials;
- Avoids raw material stockpile cross contamination; and
- Allows tracking of the materials source and progress through the facility.

Based on the experience of GWS existing operations, the quantity of waste generated by the proposed facility that cannot be reused or recycled is considered to be minimal. This is because all impurities removed in the crushing process (for example, wood and scrap metal) will be sorted and re-distributed to the appropriate recycling section of the facility. Anticipated waste classifications which are to be accepted and processed on site are:

- C&I waste (typically paper/cardboard, plasterboard, ceramics, natural and manufactured timbers, metal, green waste, plastics (hard and soft) and glass);
- C&D waste (asphalt, concrete, brick, crushed concrete, concrete plant washout, concrete waste from batching plants);
- Foundry sand;
- Virgin Excavated Natural Material (VENM) – including sandstone; and
- Excavated Natural Material (ENM).

In line with the current process adopted at GWS, the Recycling Facility will not accept hazardous materials such as asbestos and chemical waste. Additionally all personnel will be required to undertake asbestos awareness training as part of the site induction process and ongoing training program.

Recycled products produced on site and sold back into the construction markets are expected to include:

Material/Product Type	Applications
Recycled Aggregates	Landscaping, filter material, concrete products, pipes manufacture, asphalt products, road applications, backfill, concrete blocks, and drainage materials.
Recycled Pipe Bedding	For the application of and not limited to bedding sand and fill under concrete slabs.
VENM/ENM	Engineered and non-engineered fill applications such as subgrade replacement, reinforced earth wall fill, pavement applications.
Recycled General Fill	Filter material, select fill, re-enforced earth wall select fill, fill for

	structural applications.
Road base	Engineered and non-engineered applications. which applies to and is not limited to local roads, highways, hardstand and car parks
Timber Mulch	Landscaping, chicken bedding for agriculture purposes, council use.
Green Waste	Erosion control, composting

The small amount of residual material which cannot be recycled will be placed in the existing GWS landfill.

4.3.3 Site Capacity

The materials to be handled within the proposed facility are as follows:

- **Area 1:** Green waste, timber, cardboard, paper, plastics & metal etc.
- **Area 2:** Recycling area for C&D waste.
- **Area 3:** VENM/ENM processing from excavation and storage of processed road sub-base material.
- **Area 4:** Possible expansion area for VENM/ENM Processing.

In total, the facility is expected to process a maximum volume, in the order of 450,000 tonnes of material per annum, distributed across the four areas.

4.3.4 Plant and Equipment

The following mobile machinery will primarily carry out the processing of the materials on site:

- Two to four x Front end loaders;
- Two to three x Excavator (40t) - with concrete pulveriser;
- Two to three x Excavator (40t) – with bucket that feeds the crushing/screening units; and
- Three to four mobile crushing/screening units – primary and secondary. Each screening unit contains dust suppression measures.

4.3.5 Hours of Operation and staffing

The GWS site is currently approved to operate from 6:30am to 4:30pm with no restrictions recorded for days of operation. Consistent with current hours the recycling facility is proposed to operate between the hours of 6.30am to 4.30pm Monday to Friday and 8am to 4pm on Saturdays. Access until 6pm Monday to Friday will be required for maintenance.

Occasional out-of-hour access will be required to cater for night road works and similar operations. It is expected that any such out-of-hours' work will be infrequent and unobtrusive.

The facility will operate within the approved hours nominated by the regulating authority. The operating hours will be clearly displayed at the entry to the site.

The proposed recycling facility is anticipated to employ 20 staff during the operational stage of the development. In addition, during the construction period, approximately 5 full time equivalent jobs will be created.

4.3.6 Site Access

Traffic access to the facility will utilise the existing main southern entry of the GWS site which enters from Cambridge Avenue. Trucks will be entering via Cambridge Avenue to an inspection point and then proceed to a receival area. A one-way internal road will be constructed which will guide traffic along the perimeter of the facility before re-joining the existing GWS internal road network to facilitate site traffic egress at Railway Parade.

An existing internal road of approximately 550 metres is proposed to be sealed to reduce acoustic and dust emissions and allow trucks to safely reach speeds of 40km prior to leaving the site. The length of the exit roadway and a speed of approximately 40km per hour is required to safely allow debris caught in wheel axles to dislodge while still within the confines of the GWS site.

5 COMMUNITY AND STAKEHOLDER CONSULTATION

Consultation will occur with all relevant stakeholders during the preparation of the EIS. This will provide the opportunity for interested parties to gain a thorough understanding of the proposal and to provide feedback which can then better inform the project's design and operations.

Recognising the importance of community and stakeholder consultation, and particularly the invaluable information that can inform the design and operation of the facility, GWS have prepared a detailed Consultation Program which provides the necessary tools and activities to assist the consultation process.

Primarily the key stakeholders comprise relevant government agencies, local business and industry, and the wider community as described below.

5.1 Government Agencies, Authorities and Utilities

The following government agencies, authorities and utilities are considered key stakeholders in the proposal:

- NSW Department of Planning and Infrastructure;
- NSW Office of Environment and Heritage (Environmental Protection Authority);
- NSW Department of Trade and Investment (formerly Industry and Investment NSW);
- NSW Office of Water;
- NSW Department of Primary Industries;
- Commonwealth Department of Sustainability, Environment, Water, Population and the Communities; and
- Campbelltown City Council.

Initial discussions and correspondence have already been entered into with the EPA which is generally supportive of the proposal and as discussed has already provided feedback which has informed the location of the proposal within the greater GWS site.

Campbelltown City Council has also been informed of the proposal and their feedback has been encouraging, as the development provides employment opportunities and recycling which will benefit the local community.

5.2 Local Business and Industry

GWS has strong links within the local business community and wider Sydney waste industry. Consultations with these waste stream providers, as well as the likely consumers of the recycled end products will underpin the success of this proposed development.

5.3 Community Groups

The following community groups are considered key stakeholders in the proposal:

- Tharawal Local Aboriginal Land Council and other indigenous stakeholder groups;
- The community, including all land owners with the potential to be impacted by the proposal; and
- Local business and community groups.

GWS have a strong history of community liaison which has benefited the relationship between the GWS operations and the community over many years. Notably, over the past 10 years, GWS has not received a complaint from the local community in respect of any operations undertaken within the site.

With a view to maintaining this established method of communication, GWS will maintain a controlled consultation program to inform the local community and capture community feedback as the proposal progresses.

6 PRELIMINARY ASSESSMENT

The following sections describe the potential impacts of the development, including environmental impacts on both the natural and built environments, plus the social and economic impacts on the locality. This section also provides a brief outline of the strategies proposed to address any impacts identified.

The following matters are ranked as having highest priority for potential environmental impact based on a preliminary risk assessment and are further expanded in the following sections:

- Environmental Management;
- Air Quality – Dust & Odour;
- Noise & Vibration;
- Hydrology;
- Visual Amenity;
- Soil & Contamination; and
- Flora & Fauna.

Lower priority matters include:

- Cultural Heritage;
- Hazard & Risk;
- Greenhouse Gas Emissions;
- Socio-Economic Impact;
- Energy;
- Utility Services; and
- Cumulative Impacts.

6.1 Environmental Management

GWS has extensive experience in the management of facilities as proposed, including the implementation and upkeep of environmental management strategies to ensure the ongoing viability of facilities while minimising any possible environmental impact. A Construction Environmental Management Plan will be prepared to implement the relevant environmental controls for the construction of the Recycling Facility.

Consistent with present activity, the facility will operate under the control of an Operational Environmental Management Plan (OEMP). This will document management procedures and monitoring programs to ensure that the operations are conducted in a manner which provides adequate protection for the environment.

The OEMP would be expected to cover the following:

- Emergency response;
- Statutory Requirements;
- Description of the Facility;
- Environmental management issues;
- Environment & management procedures;
- Monitoring requirements; and
- Auditing and review requirements for the OEMP.

Specific sections within the OEMP would include:

- Stockpile Management Plan;
- Surface Waste Water Management Plan;
- Noise Management Plan;
- On-site Traffic Management Plan;
- Dust Management Plan; and
- Asbestos Awareness Training.

6.2 Air Quality

6.2.1 Dust

While there is the potential for some dust to be generated during the construction stage, the development is proposed for virgin uncontaminated land. Dust mitigation measures including water suppression will be utilised during construction to minimise the impact to the neighbouring operations and adjoining lands.

Consistent with current activities, a Dust Management Plan will be implemented within the OEMP to ensure that dust impacts are minimised at all stages of operation. This will include the provision of water suppression infrastructure, both installed on-site as well as the mobile crushing plant being fitted with similar capability.

6.2.2 Odour

The proposed facility will only be accepting C&I and C&D (non-putrescible) waste. These solid waste streams, which include green waste, comprise a substantial proportion of the waste already received elsewhere on the GWS site and currently recycled or deposited into landfill. Over the lifetime of its operation, the landfill has not experienced any odour issues with neighbouring land owners, and this underpins the expectation that odour impacts will not be a substantial issue for this project.

Nonetheless, this issue will need to be adequately addressed in the Environmental Impact Statement and an Air Quality assessment for dust and odour will be prepared.

6.3 Noise & Vibration

A Preliminary Noise Assessment has been completed by SLR Acoustic Consultancy to assess the potential noise impacts of the proposed facility.

The potential noise levels were assessed against the requirements of the existing site EPL, under the assumption that any new EPL created for the proposed precinct would reasonably adopt similar requirements.

The report recommended that to ensure that post development noise levels comply with the requirements of the existing site EPL, that the height of the existing noise bund (which runs along the northern side of Cambridge Avenue) be increased and a fence constructed atop to provide appropriate additional noise shielding. These recommended works have already been installed on site.

The report concluded that based on the background noise levels recorded, the requirements which the existing EPL imposes on the site provide adequate protection to the surrounding land users. Furthermore, estimated noise levels from the proposed facility indicate that with appropriate noise controls in place, the operation is likely to meet the current EPL noise conditions.

An updated Noise & Vibration Assessment will be undertaken as part of the Environmental Impact Statement and will consider construction noise & vibration and operational equipment noise & vibration, including noise generated from additional vehicle movements to and from the site along access routes.

6.4 Hydrology

A Flood and Stormwater Management Assessment will be prepared as part of the Environmental Impact Statement and will include assessment of hydrological impacts of the development, groundwater, flood management and mitigation measures (if required), operational water use, water quality management, accident spill management measures, water balance calculations and water cycle management. The site will be graded to ensure that stormwater run-off is directed to stormwater treatment devices, capturing all rainfall across the development footprint, passing through appropriate sedimentation and water quality controls and piped into a retention pond on site. The retention pond will be designed and augmented as necessary to provide adequate available water for dust suppression measures and operational requirements across the site.

During the construction of the proposed facilities, appropriate erosion and sediment controls will be implemented to mitigate environmental impact and will be detailed in the assessment.

Campbelltown City Council current flood studies do not include the site. The most detailed flood study, that includes the site, is the *Upper Georges River Flood Study* prepared by the Department of Land & Water Conservation in conjunction with the Liverpool City Council in December 2000. Preliminary flood investigations for the GWS site has been prepared by Hard & Forester surveyors, based on the Department of Land and Water Conservation, *Upper Georges River Flood Study.* This shows that the portion of the site for this proposal, and indeed the majority of the greater GWS site is above the 1 in 100 and Probable Maximum Flood levels.

6.5 Traffic & Transport

To facilitate the estimated maximum 450,000 tonnes of material processed per year it is estimated that there will be approximately 100 to 130 truck movements per day dependent upon the size of trucks.

A Traffic & Transport Assessment, to determine the impacts during both the construction and operational phases, will be undertaken as part of the Environmental Impact Statement and recommendations will be incorporated into the design of the facility and OEMP. The assessment will include detailed assessment of truck size and movement numbers and truck access routes to and from the site for major arterial roads. The assessment will consider truck entry queuing and on-site parking.

6.6 Visual Amenity

The proposal is anticipated to result in minor to negligible visual amenity impacts to traffic along Cambridge Avenue, and for a limited number of dwellings along Fergusson Street and Goodenough Street. It is proposed to ameliorate any impacts by retaining a circa 40m wide vegetated buffer within the GWS site along the length of Cambridge Avenue.

A Visual Impact Statement will be prepared for the Environmental Impact Statement.

6.7 Soil & Contamination

The site is underlain by Triassic age Ashfield Shale, (part of the Wianamatta Group) as well as Quaternary alluvium, comprising medium grained sand, clay and silt, associated with the Georges River system and tributaries.

The soils underlying the site (where they have not been removed by excavation) belong to the Blacktown soil landscape group. These soils are found on undulating rises on Wianamatta Shales. Soils are shallow to moderately deep on crests, upper slopes and well drained areas and deep on lower slopes and areas of poor drainage. The limitations of this soil landscape group are moderate reactivity, low soil fertility and poor drainage. As the proposal is to be situated on virgin unfilled land, there are not expected to be any significant site contamination issues.

The graded site will be capped with crushed sandstone or similar aggregate material to mitigate dust effects, aid stormwater management and will effectively provide a barrier to the existing latent ground conditions.

A geotechnical assessment, including contamination study will be undertaken as part of the Environmental Impact Statement.

6.8 Flora and Fauna

The GWS site has operated as a landfill site since gaining development consent in 1979. The development consent provides approval for clearing of vegetation for landfill operations. As the landfill operations have developed across the site, vegetated areas have been cleared. The proposed material recycling facility is located on a portion of the site with remnant trees. The understorey has been maintained through regular mowing to ameliorate bushfire hazard and reduce fuel loading.

The remnant trees within the proposal area essentially a monoculture of *Eucalyptus moluccana* of one age class and one stratum. However, broad landscape vegetation mapping shows that the site is potentially Shale Plain Woodland, a sub-unit of the Cumberland Plain Woodland that is listed as endangered under the *Threatened Species Conservation Act 1995*. Shale Plain Woodland is also listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999*.

Further ecological assessment of the site, vegetation, threatened species and habitats will be undertaken for the Environmental Impact Statement. This assessment will further inform on the potential of the proposal to result in an impact on threatened species, their habitats and ecologically endangered communities and whether the impacts can be avoided or ameliorated.

The subject site is not listed on the Critical Habitat Register for NSW.

6.9 Cultural Heritage

A search of the State Heritage Register and the Campbelltown (Urban Area) Local Environmental Plan 2002 heritage schedule confirm there is no significant European cultural heritage located on the site.

AHMS has prepared an Aboriginal heritage preliminary assessment report for the rezoning of the site which provides information relevant for this proposal. The assessment was undertaken in accordance with relevant guidelines and codes of practice and included input from Neil Sampson, a representative from the Tharawal LALC and Glenda Chalker, a representative from the Cubbitch Barta Aboriginal Corporation. The assessment found:

- Most of the site was heavily disturbed and/or previously developed and the potential for preservation of archaeological materials was low;
- Two areas were identified as having received limited impact i.e. an area of bushland in the western quadrant of the site and a minor tributary in the eastern quadrant of the transmission line; and
- There are four Aboriginal objects/sites identified within the undisturbed areas of the GWS site, although these are not located within the development footprint for this proposal.

Further cultural heritage assessment detail will be provided as part of the Environmental Impact Statement.

6.10 Hazards and Risk Impacts

Due to the nature of the proposal, which encompasses 'crushing, grinding, and separating works generally' as listed in Appendix 3 of the document *Hazardous and Offensive Development – Applying SEPP33*, a Preliminary Hazard Analysis will be required as part of the project EIS.

6.11 Other Considerations

The Environmental Impact Statement will also provide consideration of additional environmental aspects such as:

- Greenhouse Gas Emissions;
- Socio-Economic Impact;
- Energy;
- Utility Services; and
- Cumulative Impacts.

7 PROJECT JUSTIFICATION

7.1 Policy Context

The proposed Recycling Facility development is consistent with and would contribute to the delivery of NSW's recycling strategies and objectives for both C&D and C&I waste streams.

The *NSW 2021: A plan to make NSW number one* document sets a target for recycling to increase to levels of 63% of Commercial and Industrial Waste and 76% of Construction and Demolition Waste by the year 2014.

Table 1: Progress towards recycling targets

Waste sector	2000 baseline	2002–03	2004–05	2006–07	2008–09	2010–11	2014 target
Municipal	26%	30%	33%	38%	44%	52%	66%
Commercial and industrial	28%	34%	38%	44%	52%	57%	63%
Construction and demolition	65%	64%	62%	67%	73%	75%	76%
Overall	–	45%	46%	52%	59%	63%	n/a
Total tonnes recycled (millions)	–	5.3	6.0	8.0	9.5	10.7	n/a

Figure 7-1: Extract of NSW recycling targets
(Source: *NSW 2021: A plan to make NSW number one)*

In February 2013 the State Government released an additional Waste and Resource Recovery Initiative titled *Waste Less, Recycle More for NSW.* Amongst other measures, the initiative aims to 'enhance recycling and alternative waste treatment infrastructure across NSW'. The initiative document states that overall an additional 1,000,000 tonnes of waste needs to be recycled annually (based on 2010/2011 data) to achieve the nominated *NSW 2012* targets.

The creation of the proposed development would substantially contribute to these reported target progress figures and divert a large amount of C&I and C&D waste which is currently going to landfill. This recycling has the added benefit of reducing the burden on extractive resources.

The development is also consistent with other NSW recycling frameworks and studies including:

- *NSW Waste Avoidance and Resource Recovery Strategy 2007 (Department of Environment and Climate Change (now Office of Environment and Heritage), 2007)*, which 'provides a framework for contributing to the minimisation of environmental harm from waste disposal and through the conservation and efficient use of our resources';
- *Reducing Waste: Implementation Plan 2011-2015 (Department of Environment and Climate Change (now Office of Environment and Heritage), 2011).* Amongst other initiatives this plan refers to 'actively promoting and assisting waste and resource recovery infrastructure operators … to understand and negotiate government regulations and planning processes and promote innovative infrastructure solutions.'; and
- *Report into the Construction and Demolition Waste Stream Audit 2000-2005 (Department of Environment and Climate Change (now Office of Environment and Heritage), 2007).* The primary purpose of this study was to accurately determine the composition of C&D waste disposed of in the Sydney Metropolitan Area. The results of the study indicated that there are opportunities for recovery of up to 40% of the C&D waste that is currently lost to landfill. The proposed facility would directly address this opportunity.

GWS support these initiatives and are pleased to be able to contribute to improved environmental outcomes for the State.

7.2 Need for Proposal

Given that the dynamics of the waste industry in NSW have changed considerably over the past decade, the drive to set up facilities for recycling makes both economic and environmental sense. GWS has the opportunity to provide these recycling services to the greater south western Sydney, where currently there is a deficiency.

The geographical location presents a viable opportunity for transport across multiple LGA areas with diverse needs. Located within five kilometres of the South West Sector Growth Centre, the site is well located to manage this planned growth area of Sydney. Proximate major road infrastructure is accessible and earmarked for upgrades under the State's transport policy. Additionally, the potential for rail to be utilised into the future for origin and destination of a range of materials for the purposes of the construction industry and the export industry is also a valuable characteristic of the GWS site.

The demand for such a facility will enhance the recycled product approach to waste management by providing competitive rates to the broader community.

7.3 Site Suitability

The GWS site is considered ideal for a recycling facility such as the proposed.

- The site has been operating for decades as a resource recovery and landfill facility and the upgrade of additional recycling facilities is complimentary to this use;
- Ideally located to transport corridors, with close access to the intersection of the M5 and M7 Motorway's. Also adjacent to the South Sydney Freight Line (SSFL) with the potential for future 'waste by rail' capabilities;
- Situated in close proximity to the South-West Growth Centre which will be a considerable source of construction waste materials and consumer of recycled construction products over the coming decades;
- Large site enables operations to be buffered from surrounding land uses;
- Track record of operations (including associated environmental management) within the local community without complaint; and
- Alternative locations within the GWS site were considered for the proposed facilities. Originally the landowner's preference was to situate the recycling infrastructure on a previously filled portion of the site. However discussion with the Environmental Protection Authority indicated that their strong preference was for the development to occur on virgin land on account of land contamination delineation and management issues for EPL purposes.

The desire to improve recycling outcomes is clearly identified in the various waste related policies of NSW. As the South West Sector grows to accommodate the proposed 110,000 dwellings over the next 30 years, the demand for access to resource recovery facilities will increase in parallel.

The Glenfield Waste Site, with augmented recycling capacity, having operated for in excess of 30 years represents a logical solution to the well documented waste management and landfill supply constraints facing the Sydney Metropolitan area.

8 CAPITAL INVESTMENT VALUE

The capital investment required for the development of the proposed project is modest as GWS has the existing land area and machinery to undertake the works using GWS in house capabilities. Operating equipment will be transportable (mobile plant & equipment). The project will however result in positive economic multiplier effects throughout the regional and State economies.

Capital expenditure will include:

- Site works;
- Waste recycling facility;
- Water infrastructure;
- Electricity infrastructure; and
- Road and transport infrastructure.

In total the capital investment in the project is expected to be in the order of $450,000.

9 CONCLUSION

Glenfield Waste Services propose to develop a recycling facility within the bounds of the existing Glenfield Waste site along Cambridge Avenue, Glenfield.

The project is considered 'State Significant Development' (SSD) in accordance with Division 4.1 of Part 4 of the EP&A Act, as it is a type listed in Schedule 1 of the *State Environmental Planning Policy* (SEPP) - *State and Regional Development*. As such the proponent is seeking approval for the project under Section 89E of the EP&A Act.

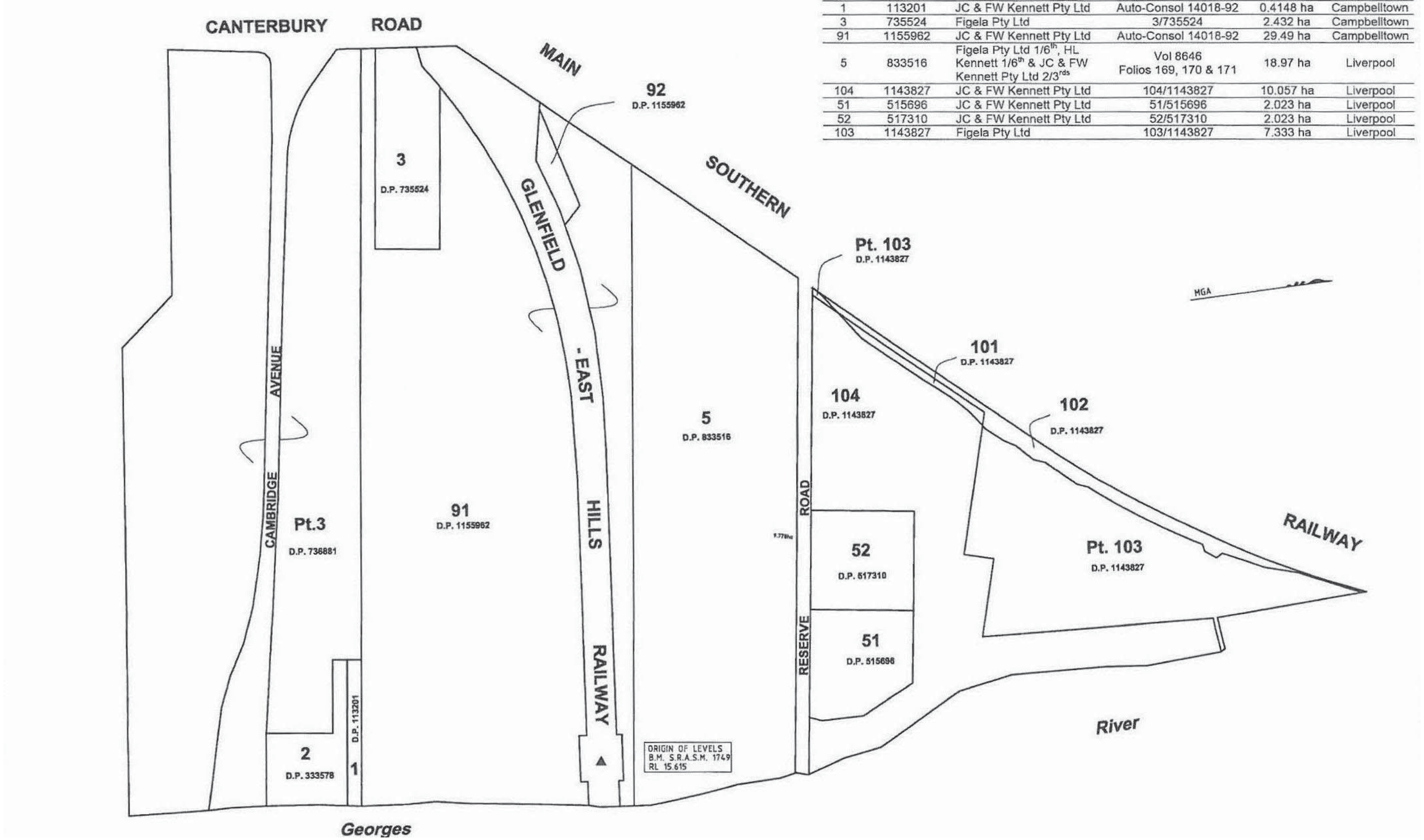
This document provides a description of the project for which approval is sought and provides the requisite information for the Department to provide the Director-General's Requirements to inform the future preparation of a detailed EIS by the proponent.

Upon receipt of the DGR's, the proponent will undertake the EIS to be submitted to the Department of Planning and Infrastructure in due course in support of the application for project approval.

Appendix 1

Land Title Survey Plan

Lot	DP	Owner	Title Reference	Area	LGA
3	736881	Figela Pty Ltd	3/736881	25.31 ha	Campbelltown
2	333578	JC & FW Kennett Pty Ltd	Auto-Consol 14018-92	1.346 ha	Campbelltown
1	113201	JC & FW Kennett Pty Ltd	Auto-Consol 14018-92	0.4148 ha	Campbelltown
3	735524	Figela Pty Ltd	3/735524	2.432 ha	Campbelltown
91	1155962	JC & FW Kennett Pty Ltd	Auto-Consol 14018-92	29.49 ha	Campbelltown
5	833516	Figela Pty Ltd 1/6th, HL Kennett 1/6th & JC & FW Kennett Pty Ltd 2/3rds	Vol 8646 Folios 169, 170 & 171	18.97 ha	Liverpool
104	1143827	JC & FW Kennett Pty Ltd	104/1143827	10.057 ha	Liverpool
51	515696	JC & FW Kennett Pty Ltd	51/515696	2.023 ha	Liverpool
52	517310	JC & FW Kennett Pty Ltd	52/517310	2.023 ha	Liverpool
103	1143827	Figela Pty Ltd	103/1143827	7.333 ha	Liverpool



Map Title:	Cadastral Boundaries of the Glenfield Waste Services Site							**Datum:**	AHD	**Date:**	8 Nov 2013
Location:	Glenfield, NSW Australia	**Author/ Reviewer:**	RM/ SM	**Version No:**	V01	**Map/ DWG No:**	**1** of **1**	**Scale:**	1:2500	**Job Ref:**	11009

Notes:
1. Levels relate to AHD
2. Boundaries, dimensions and areas are subject to site survey
3. Origin of levels S.R.A.S.M 1749 RL 15.615

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