



# **Appendix B to Attachment 1 to Item 4.5.2.**

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## **Appendix B – Tech Memo 1**

Date of meeting: 12 March 2024

Location: Council Chambers

Time: 6:30 p.m.



# Technical Memorandum

Memo No.	01	Date of Issue	25 May 2023
Subject	Hawkesbury Landfill Management Strategy	Discipline	Waste Management
Project Title	Hawkesbury Landfill Management Strategy	Project No.	30019111
Document No.	01	Revision	01
Author	Thomas Carberry		
Reviewed by	Louise Bochner	Approved by	Matt Fraser
Prepared for	Hawkesbury City Council	Attention to	Sam Swain

## 1. Purpose/Introduction

SMEC has been engaged by Hawkesbury City Council (HCC) to investigate potential options for expansion and continued use of the Hawkesbury Waste Management (HWM) Facility (the Facility) located at the Driftway, South Windsor, NSW. The purpose of this Technical Memorandum is to review the planning and environmental constraints associated with the Project.

It is understood that the Facility currently accepts around 24,000 tonnes of waste per year and a new landfill cell (Cell 6) is being developed to extend the lifetime of the landfill to approximately 2026. A number of options are being considered by HCC in managing waste services beyond the likely capacity of the current facility in 2026, including expansion of the existing facility, re-use of the site for other waste management services (i.e. transfer stations), or closure and relocation.

### 1.1 Site Description

The Facility is located within the Hawkesbury Local Government Area (LGA) north of The Driftway and on land formally identified as Lot 194 DP823986 and Lot 192 DP729625 (the Site). The Site is bounded by Blacktown Road to its north-east and the Royal Australian Air Force (RAAF) Richmond airbase is located approximately 3km north of the Site. The Western Sydney University's Hawkesbury campus is located west of the Site on land identified as Lot 181 DP39768.

### 1.2 Planning Context

The Site is zoned SP1 Waste Management Facility in accordance with *Hawkesbury Local Environmental Plan 2012* (HLEP 2012). It is understood that HCC own seven Lots south of the Driftway (Table 1-1), which were subject to a Planning Proposal in September 2020 to reclassify the use from 'community' land to 'operational' land and provide a 250m buffer between the Facility and the surrounding dwellings. It is noted that these lots are located within the Penrith LGA and are zoned RU4 Primary Production Small Lots in accordance with *Penrith Local Environment Plan 2010* (PLEP 2010).

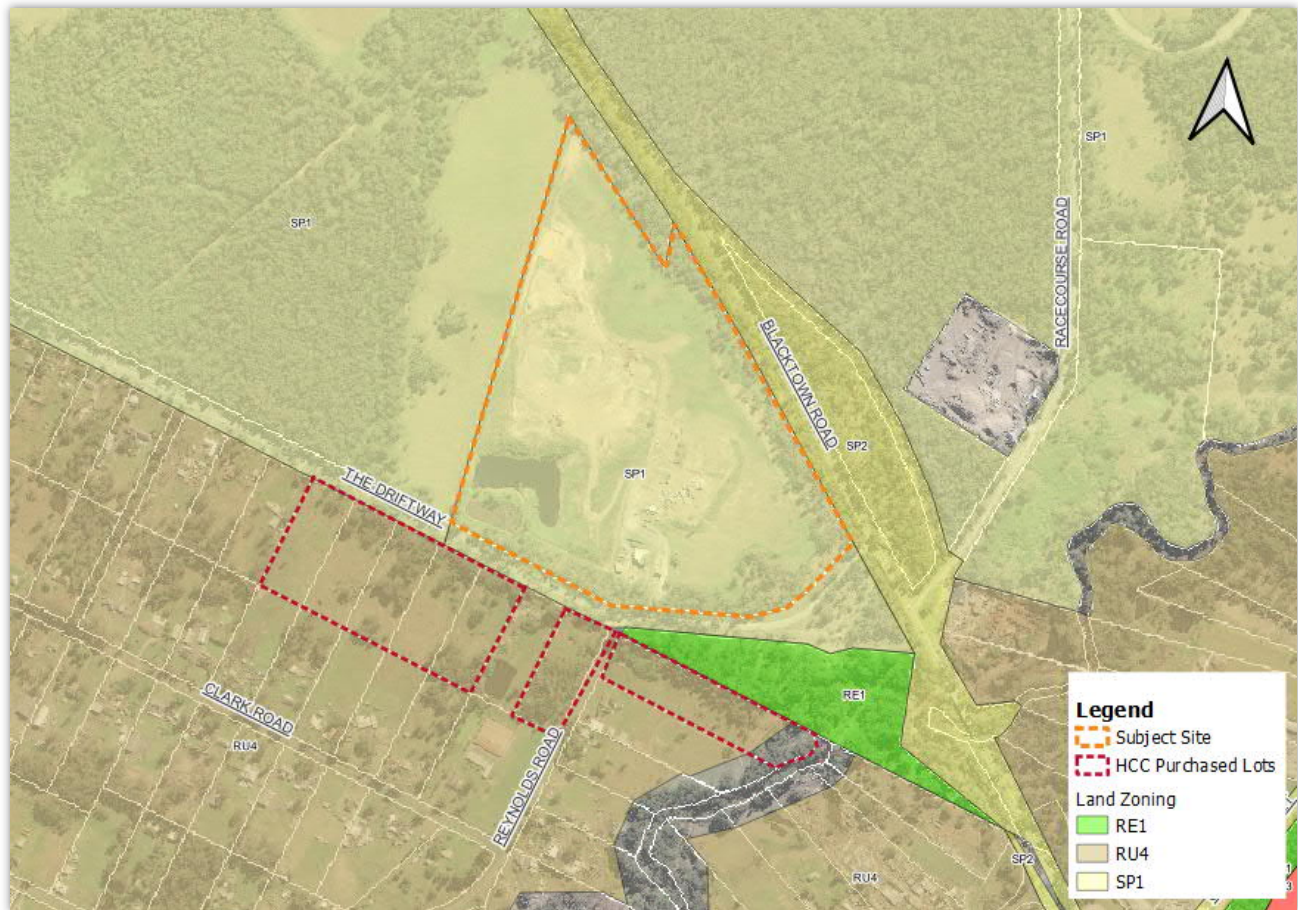


Figure 1-1 | Site location and zoning

Table 1-1 | Description of HCC sites located south of the Driftway

Lot & DP	Zoning	Area (Ha)	Current Land Use	LGA
Lot 1 DP2591	RU4, E2	2.98	Vacant land	Penrith
Lot 24 DP25020	RU4	1.58	Vacant land	Penrith
Lot 22 DP25020	RU4	1.61	Vacant land	Penrith
Lot 21 DP25020	RU4	1.61	Vacant Residential dwelling	Penrith
Lot 20 DP25020	RU4	1.61	Vacant land	Penrith
Lot 19 DP25020	RU4	1.61	Vacant land	Penrith
Lot 18 DP25020	RU4	1.61	Vacant Residential dwelling	Penrith

### 1.3 Development History

Table 1-2 | Summary of the previous DAs submitted for the Facility

DA	Development	Determination	Date
DA0005/17	Community resource recovery facility	Approved	07/04/2017

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DA	Development	Determination	Date
DA0424/08	Training and educational building and a recycling and waste transfer station	Approved	26/11/2005
DA0183/05	Training and educational building and a recycling and waste transfer station	Withdrawn	28/11/2005
DA1599/02	Pre-treatment facility	Withdrawn	17/10/2003
DA0409/02	Removal of soil from soil excavations	Approved	26/06/2002
DA0238/02	Additions to the gatehouse building	Withdrawn	18/04/2002
B1274/91	Construction of a shed	Approved	08/11/1991
DA0253/87	Extension to waste management facility	Approved	20/10/1987

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## 2. Options Assessment

### 2.1 Option 1: Landfill and/or Facilities Expansion

#### 2.1.1 Expansion into Lot 32 DP1270808

Lot 32 DP1270808 is located directly north-west of the Site and has been identified by HCC as a potential site to expand landfill operations, or for the location of facilities such as a waste-transfer station, food-and-organics facility (FOGO) or solar farm (Error! Reference source not found.). It is noted that Lot 32 DP1270808 is Crown Land managed by the Western Sydney University. Crown Land approval would be required for expansion onto this site. It is understood that HCC are in the process of determining the feasibility of purchasing this land

Lot 32 DP1270808 is zoned as SP1 Education Agriculture under the HLEP 2012. The HLEP 2012 notes that the purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to the development for that purpose, is development permitted with consent. As waste management facilities and waste transfer stations are not considered an ancillary use for the current zoning, a Planning Proposal initiated by Council for rezoning (to SP1 Waste Management Facility, or similar) would be required to facilitate the required land use followed by a Development Application (DA) for the intended development type (i.e. solar farm, FOGO, waste transfer station).

##### 2.1.1.1 Biodiversity

The northern and western sections of Lot 32 DP1270808 are almost entirely mapped as containing biodiversity values under the HLEP Terrestrial Biodiversity Map (Figure 2-1). A review of the Protected Matters Search Tool (PMST) does not reveal any matters of National Environment Significance (NES), with the closest site identified as the 'Windsor Downs Nature Reserve' which is located approximately 1km south east of the Site. Wetland mapping under the HELP identifies a wetland approximately 500m west of the Site. Further assessment would be required detailing the impacts of any proposed development to biodiversity on and surrounding Lot 32 DP1270808 as well as a review of the potential triggers under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act).

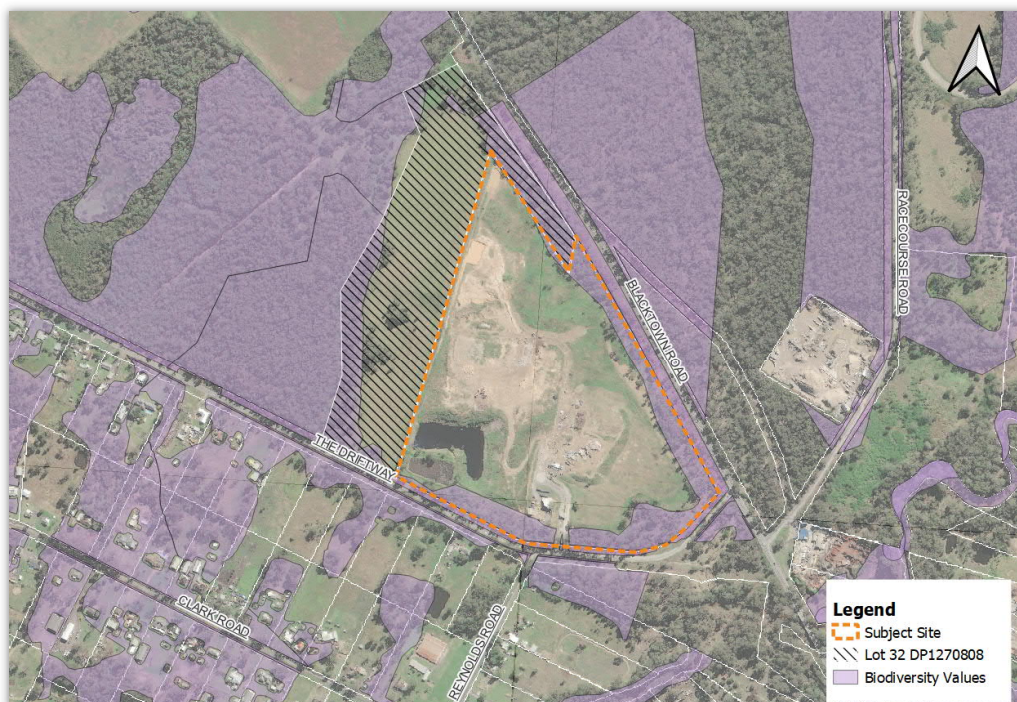


Figure 2-1 | Location of Lot 32 DP1270808 as a potential area to expand the existing facility

### 2.1.1.2 Flooding Impacts

Based on available flood information, it is noted that the northern portion of Lot 32 DP1270808 and a significant portion of Lot 194 DP823986 is subject to flooding during a 1% AEP flood event. The extents of flooding in the area would need to be considered for any future development in these areas, inclusive of providing safe access to and from the Site.



Figure 2-2 | 1% AEP flood extent (blue) (Source: HCC, 2023)

### 2.1.1.3 Designated Development

Designated Development provisions are listed in the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation). A review of Schedule 3 of the EP&A Regulation states that Part 2, Section 45 2(b)(iii) for waste management facilities with a storage capacity of more than 30,000 tonnes per year is a trigger for Designated Development. The Facility has a storage capacity of between 5,000 – 50,000 tonnes per annum (TPA). Additionally, Section 45 (4)(f) is a trigger for Designated Development and relates to proximity of the Site to a Residential Boundary. It is noted that there are multiple dwellings located directly south of the Driftway and expansion into Lot 32 DP1270808 would need to be sited appropriately to avoid this trigger. The Acid Sulfate Soils Map under the HELP also identifies the Site as containing acid sulfate (Class 5 soils).

#### 45 Waste management facilities or works

(4) Development for the purposes of a waste management facility or works is designated development if the facility or works are located—

- (a) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area of State significance, or
- (b) in an area of high watertable, highly permeable soils, acid sulfate, sodic or saline soils, or
- (c) in a drinking water catchment, or
- (d) in a catchment of an estuary where the entrance to the sea is intermittently open, or
- (e) on a floodplain, or
- (f) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the consent authority's opinion, considering topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood because of noise, visual impacts, vermin, traffic or air pollution, including odour, smoke, fumes or dust.

Clause 48 of Schedule 3 to the EP&A Regulations provides exemptions for alterations or additions to existing development as follows:

#### 48 Alterations or additions to existing approved development

- (1) Development involving alterations or additions to development, whether existing or approved, is not designated development if, in the consent authority's opinion, the alterations or additions do not significantly increase the environmental impacts of the existing or approved development.
- (2) In forming its opinion, a consent authority must consider the following—
  - (a) the impact of the existing development, including the following—
    - (i) previous environmental management performance, including compliance with the conditions of any consents, licences, leases or authorisations by a public authority and compliance with any relevant codes of practice,
    - (ii) rehabilitation or restoration of any disturbed land,
    - (iii) the number and nature of all past changes and their cumulative effects,
  - (b) the likely impact of the proposed alterations or additions, including the following—
    - (i) the scale, character or nature of the proposal in relation to the development,
    - (ii) the existing vegetation, air, noise and water quality, scenic character and special features of the land on which the development is, or will be, carried out and the surrounding locality,
    - (iii) the degree to which the potential environmental impacts can be predicted with adequate certainty,
    - (iv) the capacity of the receiving environment to accommodate changes in environmental impacts,
  - (c) proposals to mitigate the environmental impacts and manage residual risk,
  - (d) proposals to facilitate compliance with relevant standards, codes of practice or guidelines published by the Department or other public authorities.

Note 1— The *Environmental Planning and Assessment Act 1979*, section 8.8 does not extend to development that is not designated development under this section even if it is State significant development.

Note 2— This section does not apply in relation to an application for modification of a development consent.

As expansion of the landfill site into Lot 32 DP1270808 is not an existing or approved development an Environmental Impact Statement (EIS) would be required to support the proposed works.

#### 2.1.1.4 Environmental Protection Licence

Environmental Protection Licence requirements are listed in the *Protection of Environmental Operations Act 1997* (PEEO Act). Environment Planning Licence (EPL) 5293 applies to the Facility and permits 5,000 – 50,000 TPA to receive organics (composting), and 5,000 – 50,000 TPA for land-based extractive activities. EPL 5239 does not specify a scale (TPA) for waste processing (non-thermal treatment) or waste disposal by application to land.

An amendment to EPL 5239 would be required to increase the total tonnage of waste received for the Facility associated with expansion into Lot 32 DP1270808.

#### 2.1.2 Option 2: Additional uses of the Facility

Option 2 includes the construction of possible facilities identified as a waste-transfer station, food-and-organics facility (FOGO) or solar panels within the existing boundary of the Facility (Lot 194 DP823986 and Lot 192 DP729625) and on the historic landfill site. The construction of these developments is permitted with consent pursuant to the zoning provisions of the HLEP 2012.

Section 10.3 of the NSW EPA Environmental Guidelines provides a number of criteria that development on closed or near closed landfills need to consider before it can be deemed suitable for development. This includes an assessment of contamination, consideration of the risk of gas accumulation, geotechnical assessments to ensure the site is sound for the proposed development, and that the proposed development does not compromise the functioning of the



environmental controls of the site. Given the Facility is located within proximity to a number of dwellings it is expected that an assessment of impacts to air quality and noise impacts would be needed to support this development.

### 2.1.3 Option 3: Facility closure

The final option being considered by HCC is the closure of the Facility and relocation to an alternative site. As noted above, a Planning Proposal reclassified seven lots of HCC owned land from 'Community' to 'Operational' land and introduced a control to restrict development on the site for new, renovated or intensified residential accommodation, whilst there is a waste or resource management facility located adjacent to these sites.

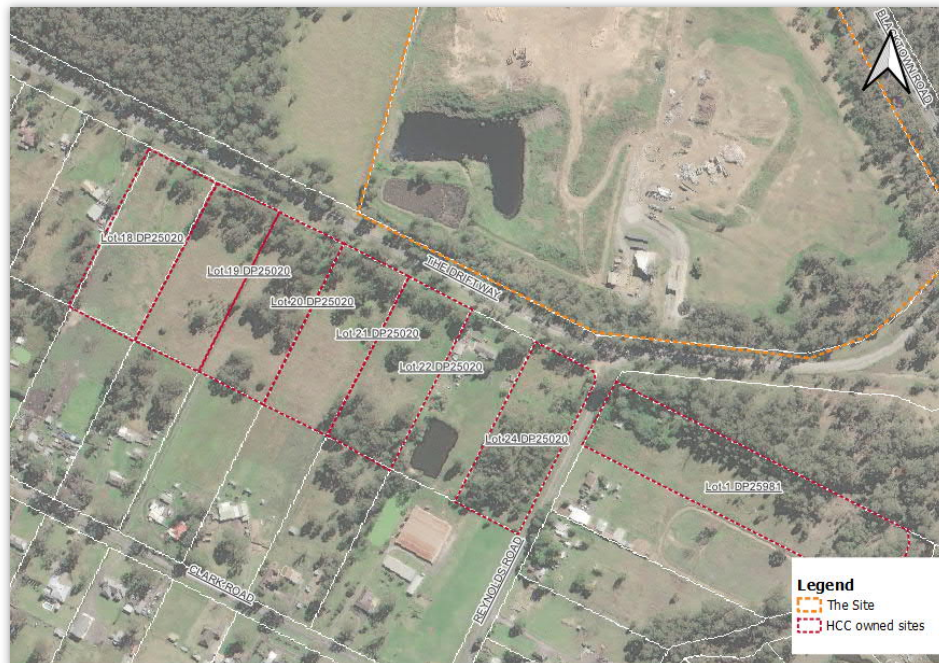


Figure 2-3 | Location of HCC owned sites

It is understood that HCC would like to develop the sites for either residential uses, or community uses such as sporting fields. The sites are located within the Penrith LGA and are subject to the provisions of Clause 7.28 of the PLEP 2010.

#### 7.28 Development on certain land in Londonderry

- (1) This clause applies to land identified as “Hawkesbury Reclassification” on the Clause Application Map.
- (2) This clause applies to the following development for the purposes of a specified land use—
  - (a) The erection of a new building
  - (b) A change of use of an existing building
  - (c) Development that will increase the gross floor area of an existing building
- (3) Development consent must not be granted for development unless the consent authority is satisfied that the waste management facility to the north of the land has permanently ceased to operate.

The PLEP 2010 defines *waste or resource management facility* to mean the following:

- (a) A resource recovery facility
- (b) A waste disposal facility
- (c) A waste or resource transfer station
- (d) A building or place that is a combination of any of the following things referred to in paragraphs (a)-(c).

As per clause 7.28(3), development of the HCC owned sites would not be possible if the Facility continues to operate as a waste management facility. Closure of the Facility would need to be in accordance with the closure and rehabilitation plan outlined in the Hawkesbury City Waste Management Facility Landfill Environmental Management Plan.