



Attachment 13 to Item 10.1.1.

Riparian Assessment Report

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Location: Council Chambers

Time: 6:30pm



ESEA

Environmental Services & Education Australia

Redbank Expansion Area (Kemsley Park) Riparian Assessment

22 July 2024

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22 July 2024

Mark Regent
Project Director
Redbank Communities
76 Arthur Philip Drive
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Dear Mark

Redbank Expansion Area (Kemsley Park) Riparian Assessment

This riparian assessment has been prepared by Environmental Services & Education Australia (ESEA) on behalf of Redbank Communities in support of a planning proposal for rezoning and subdivision works at the Redbank Expansion Area (Kemsley Park) under Part 4 of the *Environmental Planning and Assessment Act 1979*.

The report includes an assessment of all drainage lines within the Redbank Expansion Area (Kemsley Park) in accordance with the *Water Management Act 2000* (WM Act) and *Fisheries Management Act 1994* (FM Act) and investigates the required provisions related to construction within, and management of, riparian areas.

This report includes information on the categorisation of drainage lines within the subject site, relevant legislative requirements, and recommendations on appropriate impact avoidance and mitigation measures for those riparian corridors impacted by the proposed development.

Yours sincerely



Clayton Woods
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1 INTRODUCTION

1.1 Background

The Redbank Expansion Area (Kemsley Park) is a 34 ha parcel of land described as Lot 260 DP1237271 (Figure 1-1). It is also identified as 322 Grose Vale Road, Grose Vale NSW 2753. The subject site is in the Hawkesbury City Council local government area (LGA) and Hawkesbury City Council (Council) is the approval authority.

The subject site is located approximately 55 km northwest of Sydney CBD, 12 km northwest of Windsor town centre, 2.5 km northwest of the Hawkesbury River, and 2 km west of North Richmond town centre. The site occurs adjacent to the 180 ha Redbank North Richmond residential estate, which upon completion, is expected to provide approximately 1,400 dwellings for an estimated 3,900 residents.

The Redbank Expansion Area (Kemsley Park) features an undulating landform and a network of feeder drains and gullies leading to several man-made dams (Figure 1-3). The site was historically utilised as grazing paddock for cattle and comprises part of the curtilage of the former Yobarnie Keyline Farm, which is listed on the State Heritage Register. The farm was one of the two properties in which the Keyline system was first developed by P.A Yeomans. The Keyline system refers to a system of soil improvement, erosion control, water storage, cultivation and irrigation on undulating topography which has since been adopted by farmers worldwide. The elements from the Keyline system can be physically seen through the remnant dams and the interconnected feeder and irrigation drains across the subject site.

1.2 Proposed Development

The current rezoning planning proposal for the Redbank Expansion Area (Kemsley Park) seeks Hawkesbury City Council's consent for land rezoning to R2 – Low Density Residential, R5 – Large Lot Residential and several RE1 – Public Recreation zoned open space areas. The rezoning will support a future development application for Torrens Title subdivision of the site into approximately 300-350 residential lots. Future development will include the construction of new roads and associated civil infrastructure (Figure 1-2), as well as the following works:

- Removal of approximately 7.72 ha of native vegetation;
- Cut and fill bulk earthworks, including the infilling of declassified Streams J, K, M, N and O;
- Civil works including lot benching, creation of inter-allotment drainage and construction of retaining walls;
- Torrens Title subdivision creating approximately 300-350 residential lots, and several RE1 – Public Recreation zoned open space areas;
- Construction of local roads extending from the approved road network;
- Extension of utility services; and
- Landscaping and public domain works.

The proposed works will result in the removal of several declassified channels (identified as Streams J, K, M, N and O) from within the Redbank Expansion Area (Kemsley Park). Some works will occur within 40 m of the upper bounds of the classified section of Stream O, which occurs within the

adjacent Redbank site to the north (Figure 1-4). Works in this area require referral to the NSW Office of Water in accordance with Section 91 of the *Water Management Act 2000*.

1.3 Objective

This Riparian Assessment has been prepared by Environmental Services & Education Australia Pty Ltd (ESEA) on behalf of Redbank Communities in support of a planning proposal under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this assessment is to provide the following information on the study area:

- Confirm the application of legislation and current policy relating to the management of drainage lines throughout the site;
- Identify watercourses on the site that fit the definition of protected waters for the purposes of the *Water Management Act 2000* (WMA);
- Determine potential impacts to riparian areas, as relevant under the *Water Management Act 2000* and *Hawkesbury Development Control Plan 2002*;
- Determine potential aquatic impacts, as relevant under the *Fisheries Management Act 1994* and *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*; and,
- Outline measures to mitigate potential impacts to any riparian and aquatic habitat during the construction and operation of the proposed development.

Biodiversity Impacts for non-riparian areas within the Redbank Expansion Area (Kemsley Park) are addressed in a separate BDAR report prepared by ESEA (2024).

1.4 Scope

The waterways that are the subject of this report, as defined in the Minutes of Meeting between DWE and Buildev NSW (MR) Pty Ltd (Figure 1-4), include:

- The upper bound of Steam O (which is classified only downstream to the northeast of the common boundary with the adjacent Redbank site).

As per meetings onsite with the Department of Water & Energy on 02 February 2009, and as summarised above, Streams J, K, M, and N are to be declassified as DWE streams. Following ground truthing conducted in 2009, Stream O was put forward as a DWE Category 2 stream, which is accepted by DWE. The upper band of Stream O occurs at the northeast of the common boundary with the adjacent Redbank site.

ESEA understands that the streams to be extinguished (Streams J, K, M, N and O) within the Redbank Expansion Area (Kemsley Park) were previously agreed to in consultation with the former Department of Water and Energy (DWE) and that the agreement remains current following ongoing subdivisions of open space and urban lots already approved and in various stages of registration and occupation (Figure 1-5).

Notwithstanding this approval, ESEA understands it is Redbank's intention to extend the 'look and feel' of existing corridors downstream of dams and at the upper band of Stream O, albeit with a reduced cross-section to provide both trunk drainage, connectivity, and useability between the Redbank Expansion Area (Kemsley Park) and the adjacent Redbank site (Figure 1-5).



Figure 1-1 Location of the development site



Figure 1-2 Proposed development

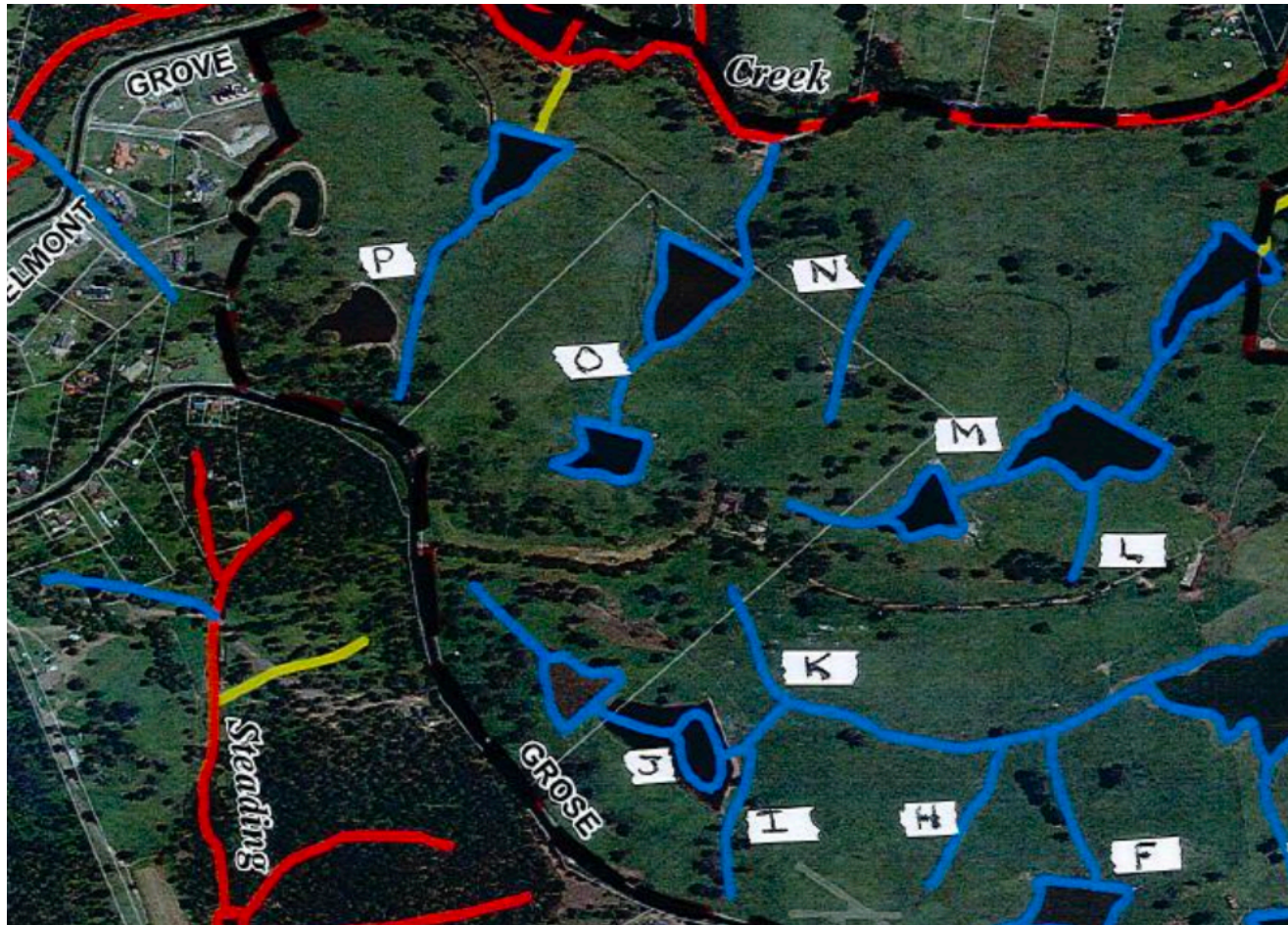


Figure 1-3 Labelled corridors within Redbank study area (Source: 'Ref B' from Minutes of Meeting between DWE and Buildev NSW (MR) Pty Ltd)