



CESSNOCK  
DEVELOPMENT CONTROL PLAN

*PART E*  
*SPECIFIC AREAS*



**E.1: Ellalong Lagoon Catchment Area**

## Amendment History

<b>Version No.</b>	<b>Nature of Amendment</b>	<b>Date in Force</b>
1	Initial adoption by Council in 1995 (DCP 21)	15 November 1995
2	Consequential Amendments to site-specific DCP's arising from the Cessnock DCP 2006	1 December 2006
3	Incorporation into Part E: Specific Areas	30 March 2007
4	Consequential amendments as a result of Cessnock Local Environmental Plan	23 December 2011

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## **E.1 ELLALONG LAGOON CATCHMENT AREA**

### **1.1 INTRODUCTION**

This Chapter covers the land areas which drain into Ellalong Lagoon via the creek systems (Map 1). The Chapter has been prepared in view of the fact that many activities that take place within the catchment effect water quality in the lagoon and associated waterways. Unwanted impacts on water quality may, among other things, result from waste products from intensive animal keeping, poorly installed or maintained domestic sewerage systems and sedimentation from soil erosion. The greater the extent of vegetation clearing, the greater the risk of soil erosion.

The lagoon can only tolerate a certain level of development and associated nutrient and waste runoff. Therefore, the amount of development shall be limited through control of lot sizes and dwelling house numbers in order to minimise unwanted impacts on water quality. Of particular concern is the need to ensure that allotments are capable of disposing of domestic sewerage on site. This means that soil types shall be suitable and areas available for disposal, shall be adequate.

Another limitation to development within the village is localised flooding which has resulted in damage to property in the past. Flood risk has been minimised by directing development away from flood affected land.

In order to help protect water quality and reduce the impacts of flooding, the following measures are introduced into the Chapter:

- 1) Consideration of vegetation clearing within the catchment;
- 2) Requirements for the installation of domestic effluent disposal;
- 3) Limits on the future subdivision of land within the RU5: Village zone;
- 4) Requirements for minimum lot sizes for new dwelling houses;
- 5) Requirements regarding soil erosion control; and
- 6) Requirement relating to flood affected land.

All of the above matters must be taken into account in the assessment of an application to build, subdivide or undertake any form of development within Ellalong Village and catchment. Landholders and developers are strongly encouraged to carefully read this Chapter, paying particular attention to matters identified in items 1-6 noted above. Council's planning staff should be contacted for clarification of any provisions within this Chapter.

#### **1.1.1 Application**

This Chapter applies to land within the Ellalong Lagoon Catchment Area, zoned RU2: Rural Landscape, RU5: Village and R5: Large Lot Residential as indicated on Map 1.

The provisions of the plan apply to two separate precincts within the catchment area as shown on Map 1. The Village Precinct which includes that area zoned RU5: Village and the Rural Precinct which includes the remainder of the catchment area zoned R5: Large Lot Residential and RU2: Rural Landscape.

#### **1.1.2 Purpose**

This Chapter provides more detailed provisions than contained in the Local Environmental Plan. Its purpose is to give detailed guidance to people wishing to develop land in the Ellalong Lagoon Catchment Area. This Chapter also indicates Council's objectives and policies for the catchment area which can form a basis for negotiation, should a departure from the provisions be sought.

### **1.1.3 Objectives**

- (a) To ensure that the water quality of Ellalong Lagoon, which is already under stress, does not deteriorate further.
- (b) To guide subdivision of land to ensure that allotments created meet the objectives of this Chapter.
- (c) To control the erection of dwelling house and dual occupancy developments to ensure that they are appropriately sited to take account of on-site constraints.
- (d) To reduce nutrient load entering Ellalong Lagoon by ensuring that effluent from residential and rural areas is adequately contained and treated where necessary.
- (e) To reduce sediment transfer through adequate control over clearing of land and development works.
- (f) To ensure that new developments are not adversely affected by flooding nor exacerbate existing flood levels.
- (g) To promote the use of land within RU2: Rural Landscape zoning for agricultural purposes, whilst ensuring that a high standard of environmental management is incorporated into existing and future developments.

## **1.2 DEVELOPMENT GUIDELINES**

### **1.2.1 Natural Constraints**

Development and land use in the catchment area is subject to a number of constraints and natural hazards. Primarily, these relate to flooding, soils and effluent disposal, sediment transfer, and the need to control runoff to protect water quality in Ellalong Lagoon.

The Village Precinct (Map 1) is affected by flooding associated with Quorrobolong Creek and the upper reaches of the Lagoon, and with a tributary creek which affects land in the vicinity of Hunter, John and Truro Streets.

The Rural Precinct (Map 1) contains significant areas of "Protected Lands" (slopes greater than 15°) where the approval of the Hunter – Central Rivers Catchment Management Authority is generally required prior to the removal or injuring of a tree/s. Clearing on other heavily vegetated land should also be prevented unless it can be demonstrated that additional sediment will not be mobilised and transported off-site.

Ellalong Village is underlain by duplex soils (podzolics). These soils have poor drainage, infiltration and permeability characteristics. Soil characteristics represent a constraint to development and necessitate the setting of a minimum lot size to accommodate the disposal of treated effluent.

In considering development and subdivision applications, Council will have particular regard to the following matters, and may impose conditions relating to them:

- 1.2.2 Subdivision of Land;
- 1.2.3 Erection of Dwellings / Dual Occupancies;
- 1.2.4 Effluent Disposal;
- 1.2.5 Erosion Control;
- 1.2.6 Flooding;

### **1.2.2 Subdivision of Land**

#### **a) Planning Principles**

- To ensure a Village character is maintained in the Village Precinct.
- To ensure that a level of subdivision occurs that is in keeping with land capability with minimal impact on natural systems from soil erosion and nutrient loading.
- To ensure that dwelling houses can be sited to maximise energy efficiency, minimise the risk from flooding and permit adequate irrigation areas for aerated wastewater treatment systems.

#### **b) Specific Controls**

##### **i) Requirements**

- a) This applies to land within the RU5: Village Zone shown as hatched or cross-hatched as per Map 7.
- b) Land shown as hatched shall not be subdivided for residential purposes, unless each proposed allotment has a minimum area of not less than 1,500m<sup>2</sup>. Council may require a larger area in the case of identified on-site constraints relating to drainage or domestic effluent disposal.
- c) No further subdivision for residential purposes is permitted on the land shown as cross-hatched.

##### **ii) Orientation and Configuration**

Lots shall be designed such that:

- a) there is sufficient area for the dwelling house, associated outbuildings and irrigation area for an aerated wastewater treatment system (refer to Conceptual Lot Layout at Map 2) in the RU5: Village Zone. Allotments shall be capable of containing irrigated effluent water within the property boundaries. There shall be no opportunity for runoff onto adjoining allotments, public places, drainage channels or natural water courses;
- b) there is sufficient area for proposed dwelling houses to be sited so that they can take advantage of unobstructed sunlight and prevailing winds patterns, in order that they can achieve the greatest possible thermal comfort with the minimum use of mechanical heating and cooling systems;
- c) where lots abut minor watercourses, sufficient area is required for a riparian buffer strip having a minimum width of 10 metres along the water course;
- d) where lots abut major watercourses such as Quorrobolong, Sandy and Cony Creeks, a riparian buffer strip with a width of between 10 and 100 metres, is to be provided within the new lot, depending upon availability of land.

##### **iii) Trees and Vegetation**

Substantial belts, of natural vegetation shall be retained particularly along natural drainage lines, riparian buffer zones, ridges and steep slopes, provided that bushfire hazards are taken into account. In all cases, clearing of vegetation shall not occur unless it is certain that additional sediment will not be mobilised off-site.

Clearing of land within 'Protected Lands' (Map 1) requires permission from the Hunter – Central Rivers Catchment Management Authority. Landholders are advised to consult with the Authority prior to tree removal or clearing on protected lands.

iv) Drainage

In the Rural Precinct, rural lots are to be designed so that small farm dams can be placed in natural drainage lines to act as artificial wetlands to aid in reduction of annual phosphorus load entering Ellalong Lagoon. Conditions of development consent will be applied in this regard to lots being created for the purposes of intensive agricultural uses. For non-intensive agricultural uses, these environmental management controls are encouraged.

v) Public Utilities

Domestic electricity supply is to be provided to the boundary of each allotment created.

### 1.2.3 Erection of dwelling houses

a) ***Planning Principles***

- To ensure that new dwelling houses are designed and located to take into account the requirements for effluent disposal.
- To ensure that all residential development is located to take into account on-site constraints including drainage, flooding and soil erosion.
- To encourage the preservation of village character by:
  - separation of dwelling houses;
  - design and layout that provides for privacy;
  - visual screening through landscaping; and
  - siting of dwelling houses to maximise solar access.

b) ***Specific Controls***

i) Requirements

- a) This applies to land within the RU5: Village Zone shown as hatched or cross-hatched (Map 7).
- b) Subject to no significant on-site constraints relating to drainage or domestic effluent disposal, a person may erect a dwelling house on an allotment of land shown as hatched (Map 7), if the allotment has an area of not less than 1,500 m<sup>2</sup>.
- c) Subject to no significant on-site constraints relating to drainage or domestic effluent disposal, a person may erect a dwelling house on an existing allotment of land shown as cross-hatched (Map 7).

ii) Dwelling house

- a) Buildings should not be located on prominent ridges or other areas where roofs may intrude into the skyline when viewed from surrounding areas.
- b) Dwelling houses are to be located in such a manner that an aerated wastewater treatment system and associated irrigation area is able to be located in a logical position on the site (refer to Conceptual Lot Layouts at Map 2).

iii) Setbacks

- a) In the Village Precinct, the minimum setback of a building from the road frontage of an allotment is 6.0 metres. This setback may be varied depending on the circumstances of the case.
- b) In the Rural Precinct the minimum setback from the road frontage of an allotment shall be 18 metres in the RU2: Rural Landscape zone and 12 metres in the R5: Large Lot Residential zone.

iv) Building Materials

External cladding of dwelling houses and ancillary buildings shall be sympathetic to the local rural landscape in terms of colour and materials. Using building colours that echo the surrounding environment (ie. natural colours in the mid-tonal range or darker) have the effect of making the buildings appear to blend into the background. Highly reflective materials should be avoided where these are visible from the street or neighbouring properties.

v) Landscaping

- a) Where possible, buildings shall be screened from roads and public places by way of landscaping (preferably predominantly with species native to the locality) or by positioning of buildings relative to topographical features.
- b) Irrigation areas for the disposal of effluent from aerated wastewater treatment systems are to be landscaped with species suitable for damp or swampy areas, as listed in Table 1.

**Table 1  
Typical Plant Species for Effluent Disposal Areas**

<b>Scientific Name</b>	<b>Habit</b>
<i>Acacia floribunda</i>	shrub
<i>Acacia fimbriata</i>	tree
<i>Acacia melanoxylon</i>	tree
<i>Banksia robur</i>	shrub
<i>Callistemon 'Harkness'</i>	shrub
<i>Callistemon salignus</i>	shrub
<i>Callistemon viminalis</i>	shrub
<i>Carex fascicularis</i>	hedge
<i>Carex gaudichaudiana</i>	hedge
<i>Eucalytus viminalis</i>	tree
<i>Grevillea laurifolia</i>	ground cover
<i>Grevillea rivularis</i>	shrub
<i>Melaleuca armillaris</i>	shrub
<i>Melaleuca bracteata</i>	shrub
<i>Melaleuca hypericifolia</i>	shrub
<i>Melaleuca nesophila</i>	shrub
<i>Melaleuca styphelioides</i>	tree
<i>Pittosporum undulatum</i>	ground cover
<i>Restio tetraphyllus</i>	shrub

vi) Development in proximity to Ellalong No. 1 Mine Ventilation Shaft

- a) Care shall be exercised to avoid noise from the ventilation shaft impacting on adjoining residents. The Australian Standard 2107-1987 recommends that the maximum design sound level for recreational areas within residential buildings be 40dB(A). The recommended level for sleeping areas is 30 dB(A).

Map 4 shows the location of the 40dB(A) contour surrounding the ventilation shaft and a shaded area in which it is expected the 40dB(A) sound level will be exceeded. Where possible, dwelling houses on those allotments affected by the 40dB(A) contour should be located outside of the shaded area. All new dwelling houses on affected allotments must comply with Australian Standard 2107-1987.

Applicants must submit with their application, a report from a recognised Acoustic Consultant, demonstrating compliance with the standard.

- b) Clearing of land within this shaded area will not be permitted without the submission of an acoustic report, indicating that such clearing will not increase background noise levels at nearby residences beyond acceptable levels.

vii) Flood Affected Land

- a) 30 lots within the Village Precinct are affected by the 1% AEP flood event. These lots are in the vicinity of Hunter, John and Truro Streets (Map 5). Twenty-seven (27) of these lots are vacant. No development will be permitted on 14 of the lots which are worst affected (Table 2). Development may be permitted on the remainder of the allotments, provided minimum floor heights are 500mm above the 1% AEP flood level (Section 1.2.6 Flooding).

**Table 2  
Allotments Effected by Flooding<sup>1</sup>**

LOCATION	LOT NUMBERS	
	No Development Permitted	Development Permitted but with restrictions
Hunter Street North	11, 12, 13, 14	10
Hunter Street South	16, 17, 18, 19, 20, 21	223 <sup>2</sup> , 24 <sup>2</sup> , 25 <sup>2</sup> , 26 <sup>2</sup> , 27, 28
John Street	38, 39	25, 40, 41, 42, 43, 44 <sup>2</sup> , 45
Truro Street	37, 37A	35, 36
<b>Total Allotments</b>	<b>14</b>	<b>16</b>
<b>Total Owners</b>	<b>5</b>	<b>13</b>

1 1% AEP flood contour plus 500mm freeboard.

2 Existing improvements.

viii) Effluent Disposal Systems

All dwelling houses and major extensions to existing dwelling houses will be required to install an aerated wastewater treatment system with an associated irrigation area, rather than a septic tank system. Refer to Section 1.2.4 Effluent Disposal for further detail.

## 1.2.4 Effluent Disposal

### a) *Planning Principles*

- To reduce nutrient-enriched runoff received in Ellalong Lagoon and associated waterways, and in particular, to reduce the annual phosphorus budget entering the Lagoon.
- To ensure that developments within the Ellalong Lagoon catchment are serviced by appropriate, well maintained wastewater treatment systems.

### b) *Specific Controls*

#### i) Effluent Disposal from Dwellings and Dual Occupancy Developments

- a) All dwelling houses and dual occupancy developments (where permitted), and major extensions to existing dwellings, which in the opinion of Council will lead to an increase in the number of residents, will be required to install an approved effluent disposal system.
- b) Owners and subsequent owners of dwelling houses equipped with aerated wastewater treatment systems will be required to enter into a maintenance agreement with a suitably qualified person, whereby quarterly servicing of the system is carried out and a subsequent report forwarded to Council for monitoring purposes within seven (7) days of its receipt by the owner.
- c) Prior to consideration of an application to install an effluent disposal system, a complete assessment of the site including a soil analysis shall be carried out by a recognised soil scientist to determine the requirements for effluent disposal. A report prepared by the consultant shall be lodged with all subdivision applications, development applications and septic tank applications.
- d) All aerated effluent treatment systems shall comply with Council's policy for the installation and operation, the appropriate Australian Standards and the Department of Health guidelines. In installation and operation, particular attention should be given to the following matters:
  - siting of irrigation areas to avoid run off onto neighbouring properties or into stormwater drainage systems or watercourses;
  - the spray irrigation area shall be clearly defined and Council approval shall be gained prior to the relocation of disposal areas;
  - the ongoing performance of effluent disposal systems shall be continually monitored. To ensure that systems are operating, Council requires quarterly servicing and completion of service records;
  - disposal areas shall be turfed and/or landscaped to the satisfaction of Council.
- e) A Section 88B 'restriction as to user' is to be placed over the identified waste water disposal area on new or existing allotments, prohibiting any alteration to the area including earthworks or structures without the approval of Council.

#### ii) Effluent from Rural Uses

- a) New intensive agricultural uses (including poultry sheds, horse stables, piggeries, cattle feed lots and dog kennels) will not be permitted in the catchment unless it can be demonstrated to the satisfaction of Council, that the development will not result in an increase in the export of nutrients and sediments off-site.

- b) Council may require the submission of a land management plan with development proposals, indicating the means of controlling nutrients and sediments, such as the construction of artificial wetlands in small farm dams on natural drainage lines. Further information in this regard can be found in Council's "Ellalong Lagoon Catchment Management Study".

iii) Protection of Watercourses

Conditions of development consent for particular proposals may require the establishment of riparian buffer strips along watercourses (see "Ellalong Lagoon Catchment Management Study" for further detail).

### 1.2.5 Erosion Control

a) ***Planning Principles***

- To minimise the transfer of sediment into natural watercourses and Ellalong Lagoon in order to maintain its existing wetland attributes.

b) ***Specific Controls***

i) Clearing of Land

Those intending to remove trees or clear vegetation within the Ellalong Lagoon Catchment Area (Map 1) and the RU2: Rural Landscape and R5: Large Lot Residential zones, shall obtain the approval of the Hunter – Central Rivers Catchment Management Authority.

Clearing within the area identified on Map 6, shall be minimised in order to avoid a worsening of flood damages within the flood affected part of the village.

Within the RU5: Village zone, applicants are referred to CLEP, Clause 5.9 – Preservation of trees or vegetation.

ii) New Development

- a) All development is to be undertaken in accordance with Council's 'Engineering Requirements for Development' for the catchment area, which incorporates erosion and sediment control measures, and specifies requirements for all new building and development works.
- b) Conditions of development consent may be imposed requiring specific erosion control works to be undertaken for particular developments and the construction of erosion control measures, such as sediment basins.

### 1.2.6 Flooding

a) ***Planning Principles***

- To ensure that the development of land within the catchment is not located within areas subjected to flooding and that this development does not increase the severity of existing flooding.
- To ensure that natural systems which retard and control flooding frequency and severity are not destroyed.

**b) Specific Controls**

i) Erection of Dwelling houses and Associated Development

Development will be restricted or prohibited on land indicated as flood affected on Map 5. Table 2 indicates those allotments upon which no further development will be permitted and those upon which development will be permitted, subject to certain restrictions.

ii) Restrictions on Development in Flood Affected Areas

- a) No structures (including dwelling houses, garages, sheds, outhouses, swimming pools, bridges, or similar) which are likely to restrict the free passage of flood waters will be permitted.
- b) Dwelling houses permitted on allotments in the floodway area as listed in column 3 of Table 2, will have a finished floor height which is a minimum of 500 mm above the 1% AEP flood level.
- c) Filling of land, inclusive of driveways or walkways, will not be permitted unless it can be shown by hydraulic assessment that earthworks will not exacerbate flooding on adjoining properties or have a adverse impact on the behaviour of downstream floodwaters.
- d) Fences within the flood affected area are to be single strand wire fences which allow for the free passage of floodwaters and minimise the collection of debris. No solid fences or other wire mesh-type fences will be permitted.

iii) Clearing of vegetation within the sub-catchment which drains through the north-western corner of Ellalong Village (Map 6) shall be minimised in order to avoid increases in stormwater discharge and flood levels experienced downstream within the village.

## **1.3 APPENDIX**

### **1.3.1 Supporting Studies**

The following documents have been referred to in this Chapter and may be of assistance to applicants:

Cessnock City Council, *Cessnock Local Environmental Plan 1989*, as amended.

Cessnock City Council, *Contribution Plan for Residential Development in the City of Cessnock*.

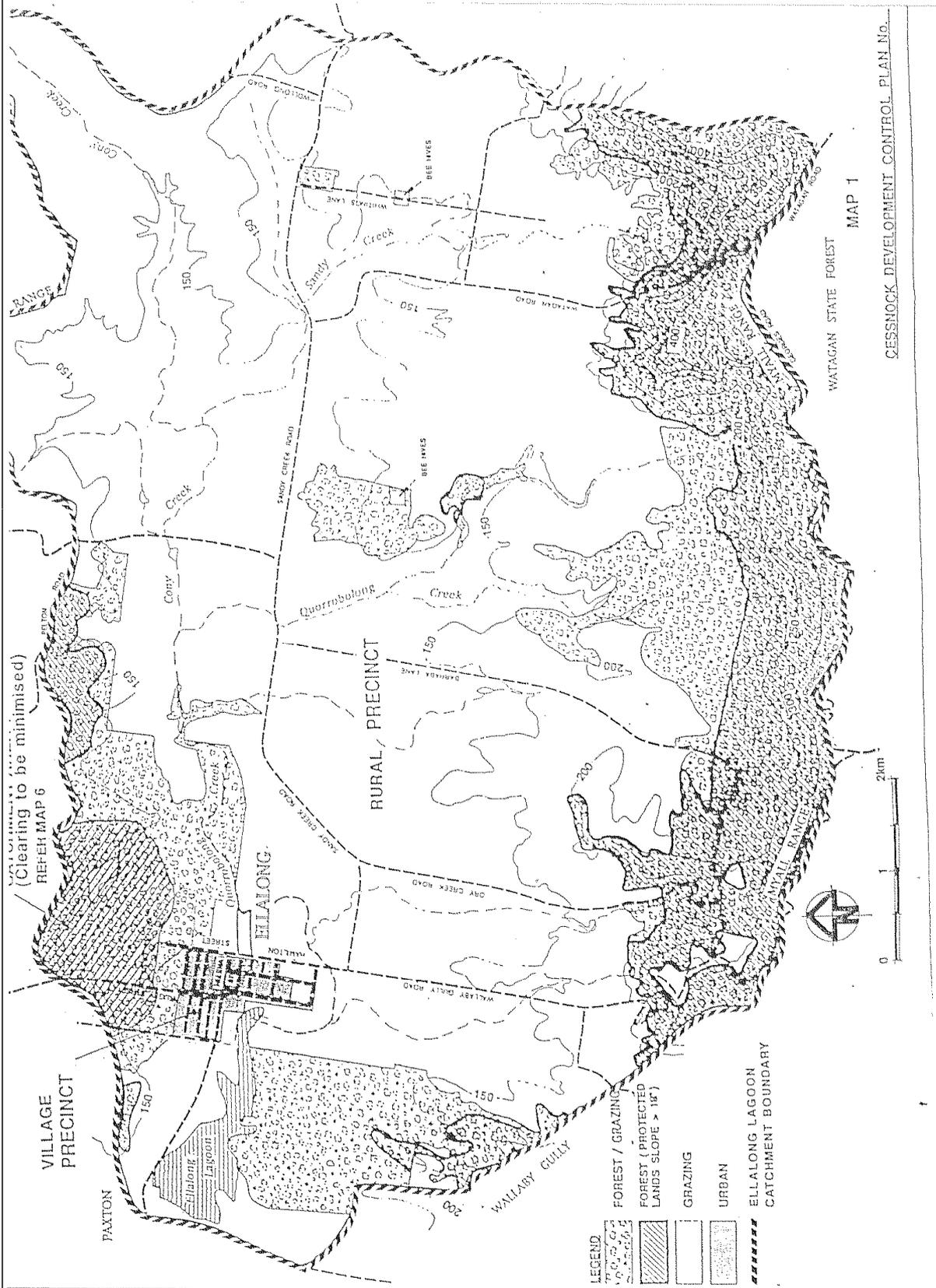
Cessnock City Council, *Contribution Plan for Rural Roads*.

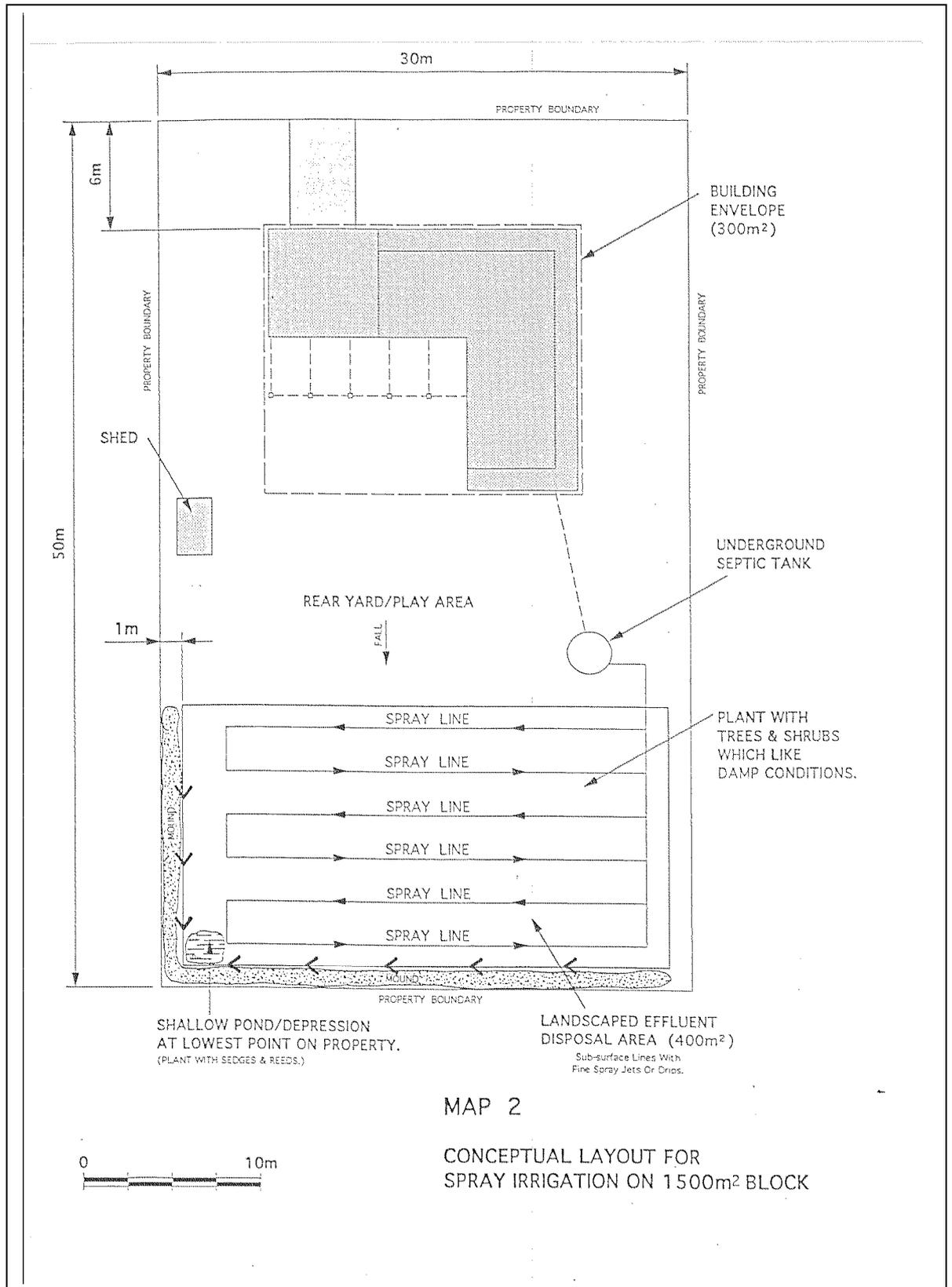
Wayne Perry & Associates 1993, *Ellalong Flood Study*.

Wayne Perry & Associates 1993, *Ellalong Lagoon Catchment Management Study*.

### **1.3.2 Supporting Maps**

Map 1





**NB. THERE IS NO MAP 3.**

