SECTION 27 – WEST DENMAN URBAN RELEASE AREA

Overview

The West Denman Urban Release Area comprises approximately 133 hectares of land which is zoned RU5 – Village Zone under the Muswellbrook Local Environment Plan 2009 (MLEP2009).

The Release Area land has been identified as an extension to the Denman urban area to provide additional serviced land for housing. It is anticipated that the land has the capacity for up to 750 residential lots, which would be developed in stages. The West Denman urban release area is shown in **Figure 1**.

The Release Area is located to the northwest of the existing town of Denman, and is currently accessed from Almond Street. West Denman is separated from Denman (to the east) by a rail line used by freight (coal) trains. Road crossings of the railway line are located at Kenilworth Street and Ogilive Streets. Most of the housing in Denman and the majority of urban services, including the school, hospital and town centre are located on the eastern side of the railway line. The town's leisure facilities, including swimming pool, playing fields and golf course, are located on the western side of the railway line.

The closest point of the Release Area is located approximately 1.2 kilometres from the school and the town centre.

The land is gently undulating. It slopes to the east, with low ridges to the north and south and a steep escarpment beyond the DCP boundary to the west.

The Release Area is generally contained in a basin which extends to largely wooded slopes in the west, northwest and southwest. Three catchments affect the land; the smallest catchment in the southeast, the largest catchment in the centre of the land running east-west, and another small catchment in the northeast. These catchments drain to the east via three outlets.

The Release Area has sweeping views of the rural river flats to the east, and of the steep rugged wooded escarpment to the west. This provides a very picturesque setting for the proposed development.

The Release Area is in a number of ownerships. A co-ordinated approach to the development of the land is important to the sound and efficient development of the land. The spatial size of the urban release means that it is likely to take several decades to develop, and accordingly the sequencing of development and staging of the provision of new and upgraded public amenities, services and infrastructure is important to ensure efficient cost effective development.

INTRODUCTION

Application

This Section applies to all land with the West Denman Urban Release Area, as shown outlined with a thick blue line on the map at **Figure 1**.

Relationship to other Plans and chapters of the Development Control Plan

This Section supplements the provisions of the Muswellbrook Local Environmental Plan 2009, and the other chapters of the Muswellbrook Development Control Plan. Of particular relevance are the provisions of Chapter 6 - Residential Development, and Chapter 7 - Village Zones, of the Muswellbrook Development Control Plan.

For many developments, this Chapter will provide an overview and/or supplementary controls, with most of the controls applying to the development being contained in other chapters of the Muswellbrook Development Control Plan.

Where there is an inconsistency between provisions of this Chapter and those of other Chapters of the Muswellbrook Development Control Plan, this Chapter prevails.

A range of other Council plans, policies and strategies also apply to the Release Area, as may a range of State Government plans, policies and strategies.

Council officers should be consulted if there is doubt as to the applicability of a specific policy, plan, strategy or provision to the Release Area.

Development proponents are advised to seek professional advice regarding the requirements that may apply to their proposal.

Note: all figures in this Section are conceptual and schematic in nature.

Figure 1: West Denman Urban Release Area and DCP boundary

Purpose

The purpose of this Chapter is to provide detailed controls to guide development in the West Denman urban release area.

Aim

The aim of this Chapter is to:

a) Ensure that new development maintains the village character of Denman.

b) Ensure the new development provides a seamless extension to the existing urban area of Denman.

c) Ensure the release area develops in a coherent well co-ordinated manner.

d) Facilitate the efficient provision of services to the Release Area.

e) Provide a conceptual development pattern.

f) Provide an access plan for vehicles, bicycles and pedestrians.

g) Provide a framework for water management.

h) Provide an open space and biodiversity plan.

i) Provide a framework for the logical and orderly extension of infrastructure.

j) Provide objectives and controls which complement and supplement those of the other chapters of the Muswellbrook Development Control Plan.

Contents

Figures

27.1 STRUCTURE PLAN

The Structure Plan at **Figure 2** shows the basic development principles of the site.

It shows the development concept that applies to West Denman. It provides guidance for individual developments to enable them to contribute to an overall development plan.

Even though the zoning of the land permits a wide variety of land uses, it is considered that the development will consist almost entirely of residential uses (which include large lot residential). It is unlikely that a shop or similar commercial land use will develop because the Denman town centre is very close, and because there is no through traffic to expand the commercial catchment beyond the adjacent residential area. If commercial development were to be proposed, the preferred location is on Almond Street south of the riparian area, and north of Kenilworth Street, in order to maximise its viability and convenience.

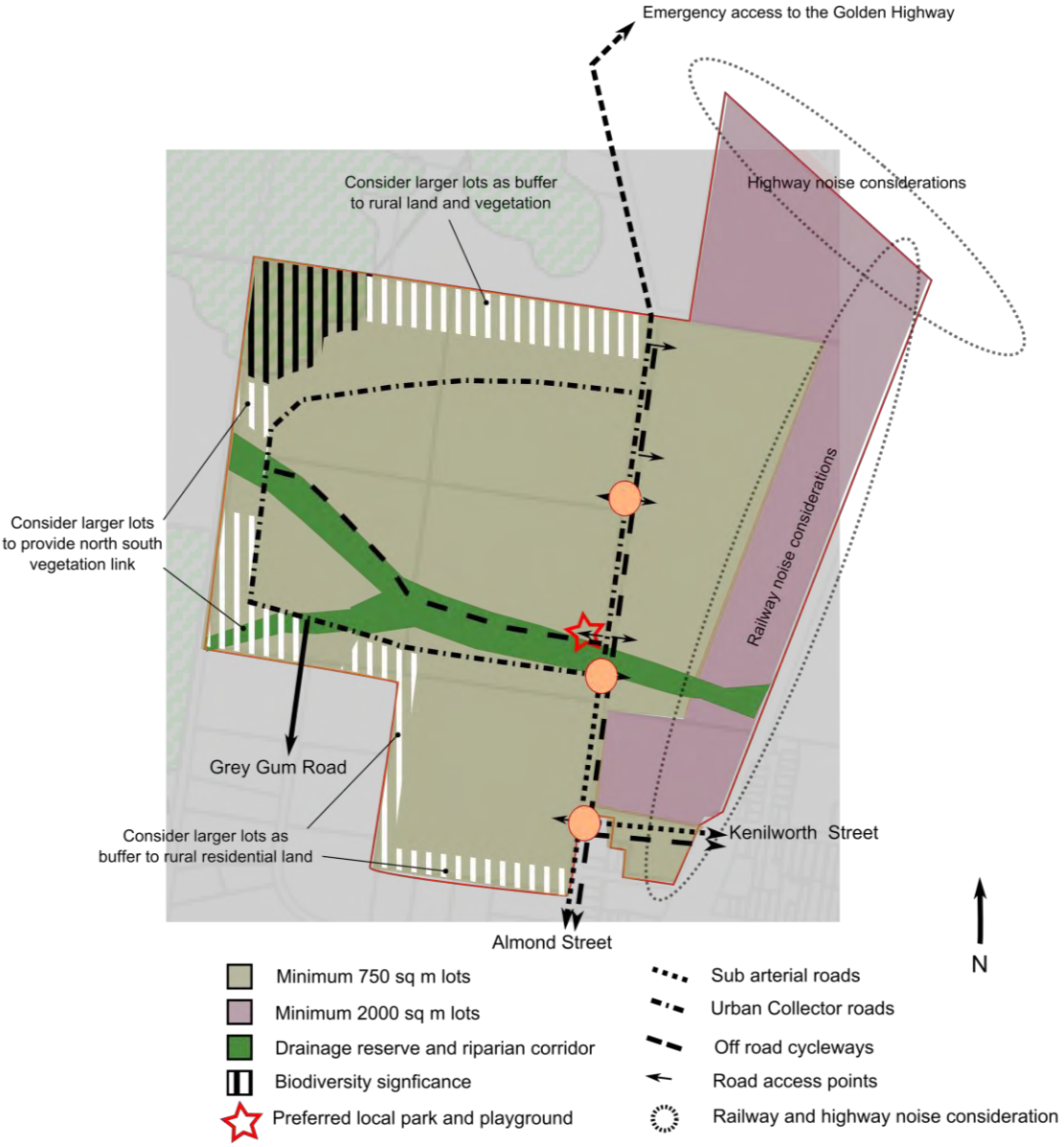
Objectives:

a) The development of West Denman is well co-ordinated across a number of land parcels and owners.
b) West Denman is a seamless extension of the existing urban area.
c) A quality development is achieved.

Controls:

(i) Consent will not be granted for development which is not generally consistent the Structure Plan at **Figure 2**.
(ii) Infrastructure provision should be optimised at a catchment level in order to maximise sharing and the ease of expansion of infrastructure and utilities.
(iii) Subdivision layout must not prejudice the ability of neighbouring sites to deliver the outcomes sought by this Plan, including infrastructure efficiencies, housing yield, environmental enhancement and connectivity.
(iv) Land for potential urban residential development within the area designated for a minimum 750 sq. m lot size may be considered for rural residential or large lot "lifestyle" subdivision if environmental studies demonstrate that lower residential densities are a desirable use of the land due to biodiversity, slope, and noise or landscape buffering.

Figure 2: West Denman Structure Plan



27.2 STAGING PLAN

The Staging Plan provides a guide to the sequence of land development.

Objectives:

a) To ensure that development of the land is efficient and cost effective.
b) To facilitate the logical expansion of urban infrastructure.
c) To ensure residents have access to urban infrastructure and services
d) To provide a mechanism for flexibility in the staging of development where this is justified and the timing impacts are mitigated.
e) To provide the basis for the equitable sharing of infrastructure costs.

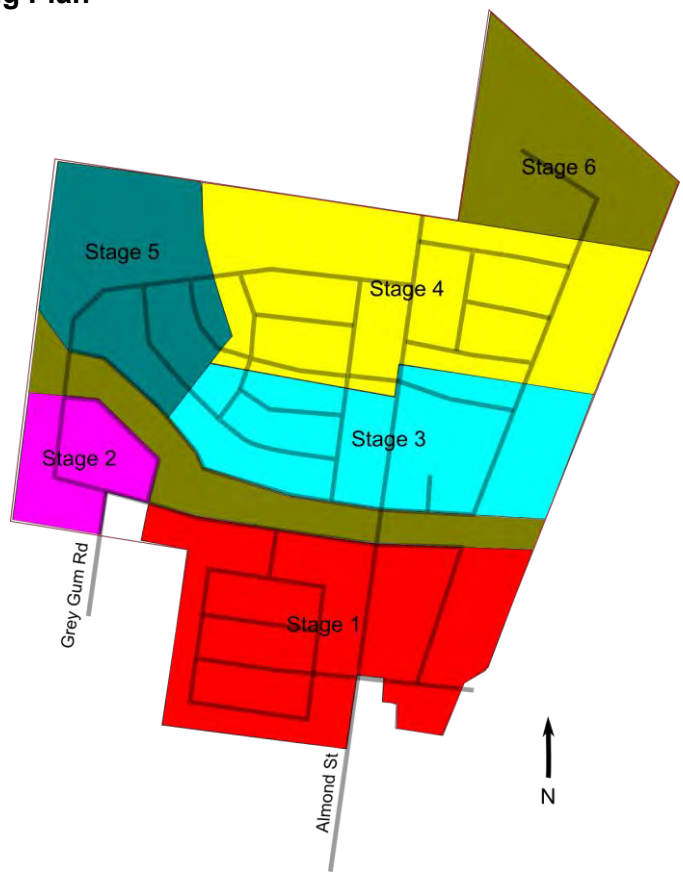
Controls

(i) The development of land is to be generally consistent with the Staging Plan shown in **Figure 3**.
(ii) Each Stage may be subdivided into substages. The substages should be identified in a report to accompany the development application for subdivision, together with a description of the substages and the impact of the substage sequence on the provision of infrastructure.
(iii) The upgrading of Almond Road to urban standards is an early objective of the Staging Plan.
(iv) Development of land inconsistent with the Staging Plan can occur if the proposed sequence is justified by a supporting study, to the satisfaction of the consent authority. The supporting study must be lodged prior to or with the relevant development application.
(v) At a minimum, the issues to be addressed in a supporting study to vary the staging sequence include:
- Impacts on the availability of urban services and infrastructure including open space, pedestrian and cyclist to residents.
- Impacts on the development of other land/development stages
- Servicing strategy.
- Cost impacts on other parties, including servicing authorities.

Note: If the timing of development is inconsistent with the Staging Plan there may be implications for the quantum or timing of infrastructure works or contributions required as a result of that development, so as to ensure other stages are not disadvantaged or to ensure that residents have sufficient access to urban services and infrastructure.

(vi) Clause 7.4 (2) of the Muswellbrook Local Environmental Plan 2009 states that development consent must not be granted for subdivision development on land in the RU5 Village Zone until the land is adequately serviced with water and sewerage, or arrangements have been made to service that are satisfactory to the consent authority.
(vii) All land in West Denman is to be serviced by reticulated water and sewerage services unless a servicing study and strategy is undertaken which justifies an alternative means of providing such services. The servicing strategy must be to the satisfaction of the consent authority prior to the granting of development consent.
(viii) Any offsite easements and infrastructure required to enable runoff from any Stage of the Urban Release Area to be conveyed to waterways in a managed fashion are to be registered and the infrastructure connected prior to the release of Linen Plan for that Stage.

Figure 3: Staging Plan



27.3 SERVICING STRATEGY

Figure 4 shows the conceptual hydraulic servicing strategy for West Denman. In general, water supply will be initially available from the south western corner of the release area, and the sewer will drain to the southeastern corner.

Objectives:

a) To ensure services are available in a cost effective manner.
b) To minimize the life cycle costs of the provision and operation of service infrastructure.
c) To connect all lots to reticulated services.

Controls:

(i) Consent will not be granted for the subdivision of land unless a Servicing Strategy has been lodged to the satisfaction of the consent authority.
(ii) The required Servicing Strategy should address:
- The provision of hydraulic, telecommunication and electricity services.
- Proposed utilities networks and their relationship to adjacent properties, including links to adjacent properties.
- Capacities of the utility services and the impact of the proposed development on remaining service capacity.
- Options for utility service provision and a preferred option.
- Implications of the servicing options for other landowners in the release area.
- Proposed cost sharing arrangements with other landowners for any

shared utility infrastructure including facility upgrades.

- Details of consultations with servicing authorities in the preparation of the Servicing Strategy.
- Compliance with Council's overall servicing strategy for Denman (note: a preliminary draft Servicing Strategy for hydraulic services is shown at **Figure 5**).

(iii) Development will be required to pay for the upgrade of lead in and other major infrastructure, such as carrier mains, pumping stations, reservoirs and treatment plants.

(iv) Variations from the Council's Servicing Strategy may only occur if justified by a supporting study to the satisfaction of the consent authority. At a minimum, the supporting study must addresses the environmental, capital and operational costs and implications of the variation including the implications for other development stages.

(v) The provision of easements may need to occur if required by the consent authority. Easements will be required to be negotiated between adjoining landowners. Prospective developers should contact Council regarding Council's interest in being involved in specific negotiations.

Figure 4: Servicing concept plan

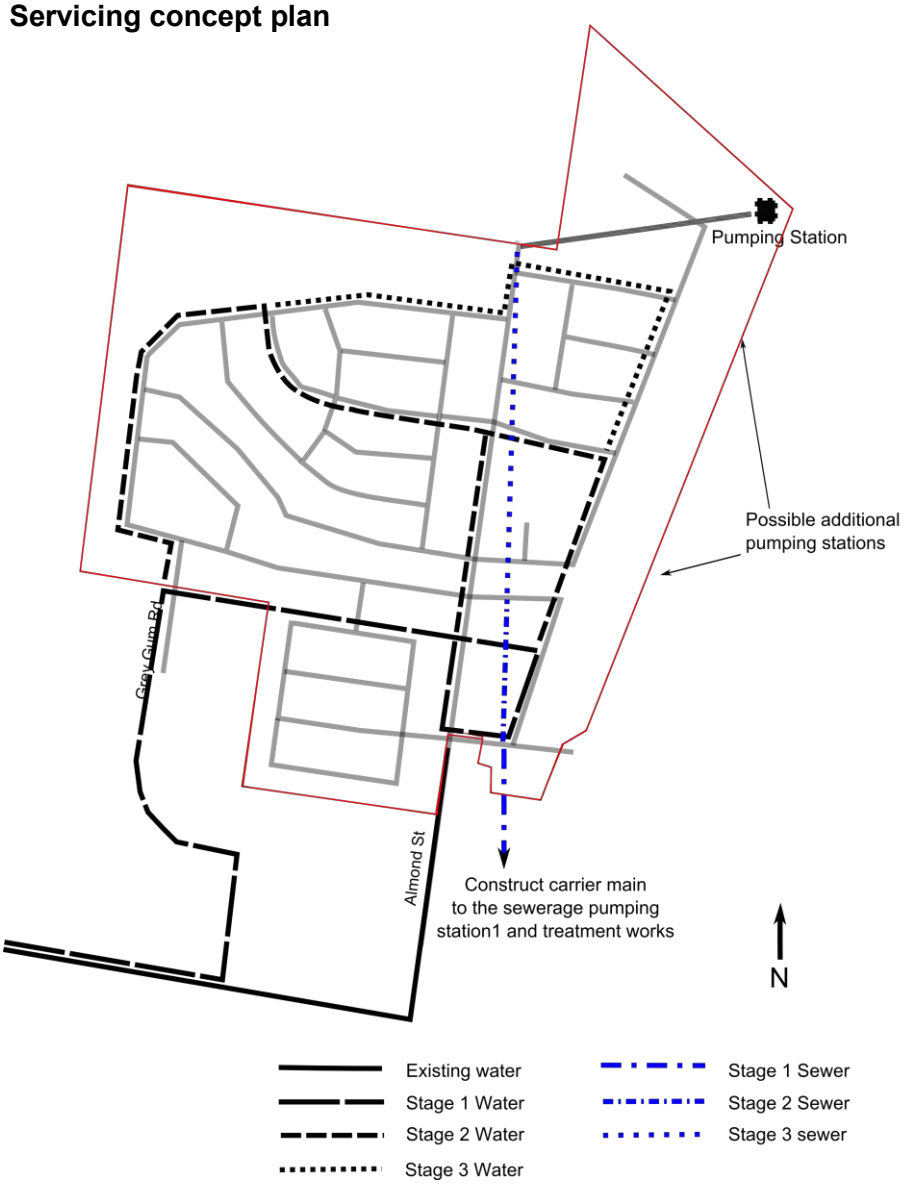
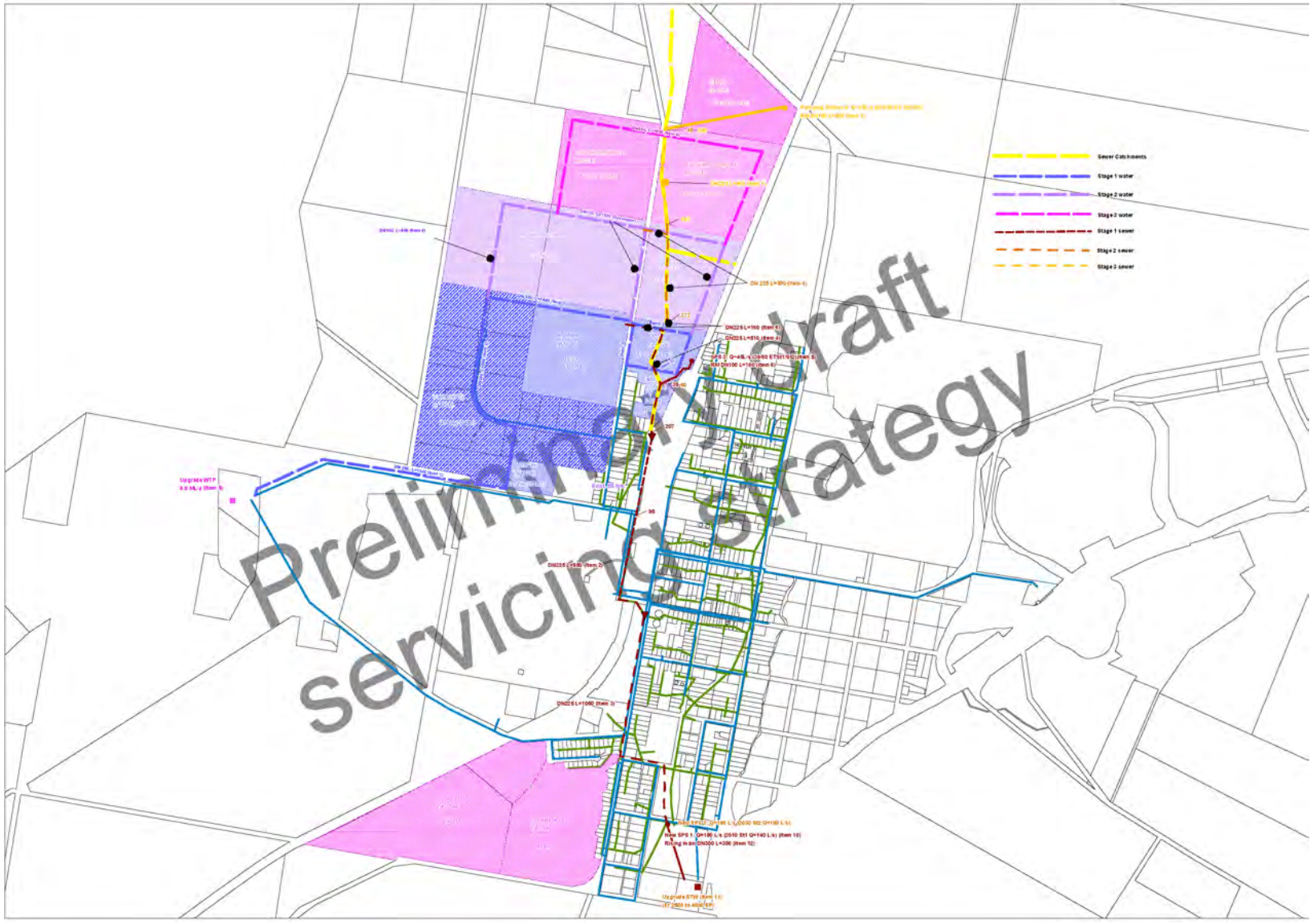


Figure 5: Preliminary draft servicing strategy for Denman



27.4 TRANSPORT

Figure 6 shows the concept transport plan for West Denman.

Objectives

a) To ensure residents have access to safe convenient vehicular, pedestrian and bicycle networks.
b) To maximise vehicular, cyclist and pedestrian connectivity within the release area and to other parts of Denman.
c) To provide safe crossings of the railway line.
d) To ensure railway crossings are designed and constructed to the ARTC's requirements, based on an assessment of rail and vehicle movements.
e) To provide for safe and convenient pedestrian and bicycle movement throughout the release area and to important destinations in Denman.
f) To encourage low vehicle speeds throughout the Release Area.
g) To discourage "shortcuts" from the Golden Highway through the release area to Denman and other localities.
h) To ensure that the impact of development on transport infrastructure outside of West Denman is considered.

Controls

(i) Consent will not be granted for the subdivision of land unless a Transport Management Plan has been lodged to the satisfaction of the consent authority. The Transport Management Plan should address such matters as traffic volumes, triggers for the provision of infrastructure and upgrades, an assessment of the impact of the development on the road system internal and external to the site and Urban Release Area, railway crossings, pedestrian and cyclist networks, identification of road upgrades, intersection upgrades and the cumulative impact of development on the road network, at a minimum.
(ii) The road, cycle and pedestrian network is to be generally consistent with the concept plan shown in **Figure 6**.
(iii) The positioning and design of movement networks must give priority to:
- facilitating efficient walking, cycling and public transport networks and;
- retaining and complementing natural topography, such as views and drainage.

(iv) A subdivision certificate will not be issued to a specific development unless pedestrian and cycle links consistent with this DCP link to the existing urban area of Denman at the same time as the initial development of that land.
(v) An off road shared pedestrian path/cycleway is be to constructed as shown in **Figure 6** and is required to connect to the existing shared off road pedestrian paths/cycleways to the town centre and school.
(vi) Alternative access points other than those identified in **Figure 6** are to be supported by a traffic study to the satisfaction of the consent authority.
(vii) Almond Street is to be traffic calmed to reduce vehicle speeds and to ensure the safety of four way road intersections. A mixture of roundabouts and four way stop signs is encouraged. Roundabouts should be designed to be compatible with the traditional rural town

rectilinear road pattern. The preferred location of roundabouts is shown in **Figure 6**. Any change to the preferred location of roundabouts or other road infrastructure is to be addressed in a traffic study to accompany the development application for subdivision, and is to be to the satisfaction of the consent authority.

(viii) The upgrading of Almond Street and Grey Gum Road to urban standards is an early objective of this Plan.

(ix) Subdivision road networks should have no dead ends unless unavoidable. The use of low speed "share ways" to connect cul de sac heads and the like is acceptable.

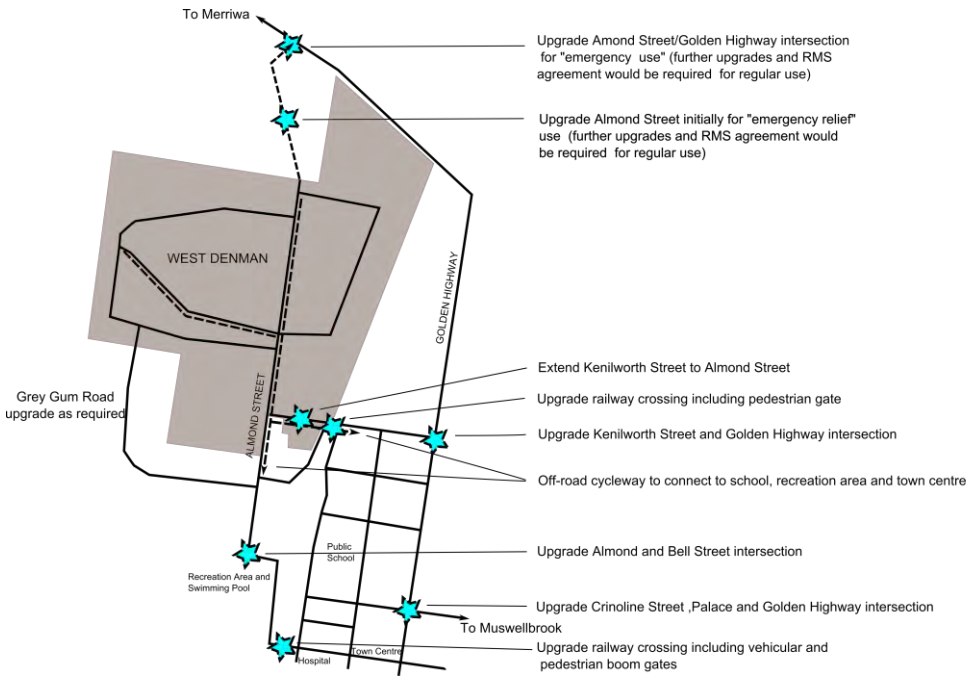
(x) A number of offsite road, intersection, cycleway and pedestrian networks upgrades will be required in conjunction with the development of the land, such as those shown in **Figure 7**. A Section 94 Plan will support these works.

(xi) A pedestrian facility including pedestrian gates is to be provided in accordance with ARTC requirements at the railway crossing at Ogilive and Kenilworth Streets, to a standard which maximises safety to children.

(xii) The Ogilive Street vehicular rail crossing is to be upgraded to a boom gate control.

Figure 6: Transport Concept Plan

Figure 7: External transport implications



27.5 OPEN SPACE

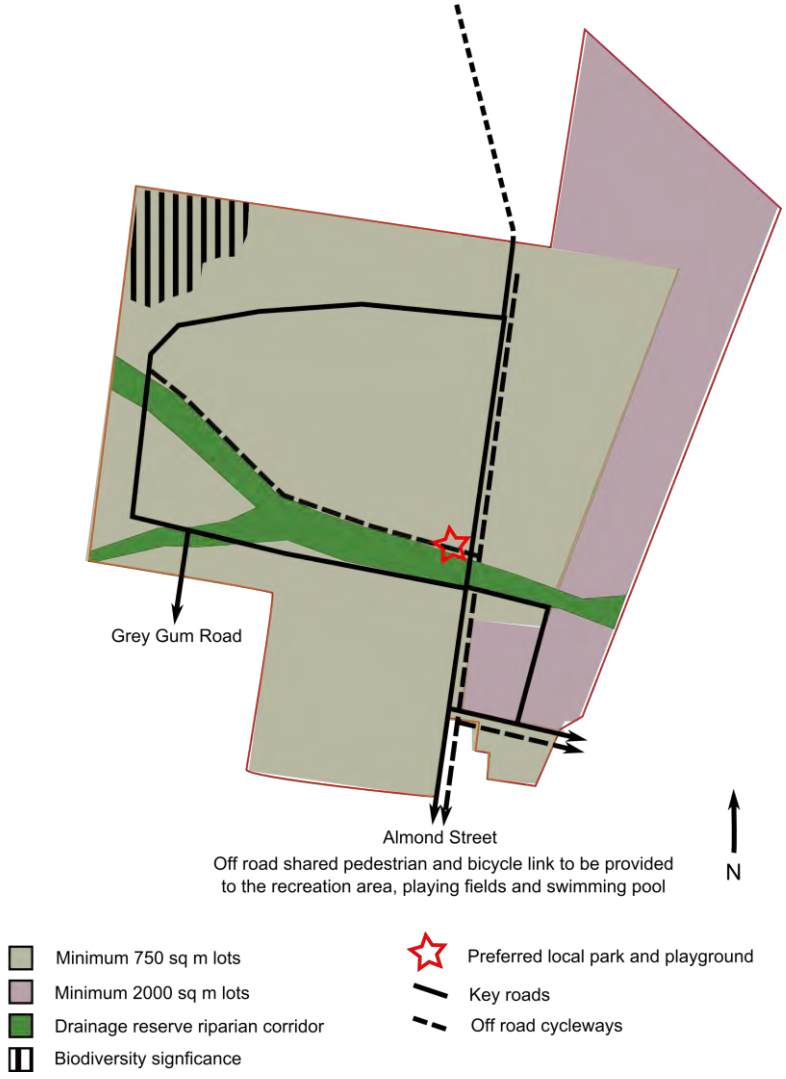
Objectives

a) Open Space is to provide for a variety of recreational, aesthetic and environmental purposes.
b) Open space should be easily maintained.
c) Open space should provide informal and formal settings.

Controls

(i) Open space is to be provided generally in accordance with the Open Space Concept Plan at **Figure 8**.
(ii) A local park with an area of not less than 0.5ha with various facilities, including a playground should be provided, preferably at the location shown in the Open Space Concept Plan
(iii) Multiple use open space should remain usable for its intended purpose, and not compromised for extended periods by such matters as wet soils.
(iv) Riparian vegetation along the main watercourse drainage reserve is to be re-established using native species.
(v) The drainage reserve riparian corridor is not to be less than 40 metres in width (i.e. 20m either side of the re-established ephemeral creek) or 20 metres, as relevant, at any point unless otherwise justified to the satisfaction of the consent authority and as required by the NSW Office of Water.
(vi) Open space areas are to be linked by pedestrian and cycle paths to provide an accessible network of open space.
(vii) Where possible, roads or laneways/shareways are to border open space areas in order to provide passive surveillance and access.

Figure 8: Open Space concept



27.6 LANDSCAPE

Objectives

a) Existing native vegetation is to be retained and enhanced where possible.
b) West Denman is to exhibit a landscape similar to the existing urban area of Denman.
c) The scenic quality and local character of the area is maintained.
d) Landscaping should showcase and/or frame the rural vistas to the east, and the wooded escarpment to the west, where possible.
e) Vegetation links are re-established along the western boundary of the site between existing areas of woodland.

Controls

(i) Consent shall not be granted for the subdivision of land unless a landscape plan has been lodged to the satisfaction of the consent authority. A concept plan may be acceptable at the development application stage and a detailed plan at the construction certificate stage

(this should be confirmed with the consent authority prior to lodgement of a development application for subdivision). At a minimum the landscape plan is to contain details of the proposed landscaping of the public domain, including streets and open space. This landscape plan must be to the consent authority's satisfaction prior to the granting of development consent.

(ii) Landscape plans should include:
- A schedule of the species and the planting locations
- Technical details of the planting and initial maintenance regime
- An assessment of ongoing maintenance requirements.
- Landscape treatments, including paving and street furniture
- A guide to landscaping and plant species to be provided to prospective land purchasers.

(iii) Street trees are to be planted to:
- Soften the streetscape.
- Act as traffic calming measures through perceived narrowing the road.
- Provide shade to footpaths and roads.

(iv) The main watercourse drainage reserve is to be landscaped as a riparian area, with native vegetation.

(v) Larger lots are to be considered along the western edge of the urban release area in order to provide an APZ and to re-establish vegetation links between existing areas of woodland to the southwest and northwest of the site.

27.7 WATER MANAGEMENT

Objectives

a) The water balance of West Denman is to be as close as possible to natural conditions.
b) Drainage should be generally directed away from the existing urban area of Denman to the maximum feasible extent
c) Water management should seek to provide an effective treatment train in the context of minimising Council's long term maintenance requirements. The treatment train should consider source controls, water quality, water volume, on and off site detention, instream treatment measures, salinity management and the implications for receiving areas.
d) Runoff generated by more intense rainfall causes no downstream property damage or risk to public safety and to mimic the existing flow regime as near as possible.
e) Easements will be required to be negotiated between adjoining landowners prior to approval of development construction certificate.

Controls

(i) Consent will not be granted for the subdivision of land unless a Water Management (stormwater) Strategy has been lodged to the satisfaction of the consent authority.

(ii) Water management strategies are to be generally consistent with the Water Management Concept Plan at **Figure 9**. Note: **Table 1** of detention volumes and treatment areas is conceptual and subject to detailed calculation.

(iii) The quality and quantity of runoff of each stage of development is to be equivalent to the pre development state. Council will define each stage for the purposes of this Control.

(iv) Development of land inconsistent with the Water Management Strategy can occur if the proposed measures are justified by a supporting study, to the satisfaction of the consent authority. The supporting study must be lodged prior to or with the relevant development application.

(v) The supporting study is to include (but not limited to):

- Hydrological and flood analysis of the proposed strategy
- Impact on the overall Water Management Concept Plan
- Impact on other future urban development within West Denman
- Cost impact on Council (recurrent) and other future urban development (capital)
- Impact on upstream and downstream land and buildings
- Environmental impact.

(vi) The water management strategy for the main watercourse is to be designed to appear as a natural stable stream in a riparian corridor.

(vii) Stormwater strategy and design is to consider the context of the site along with upstream and downstream impacts.

(viii) Water management strategies should aim to achieve a:

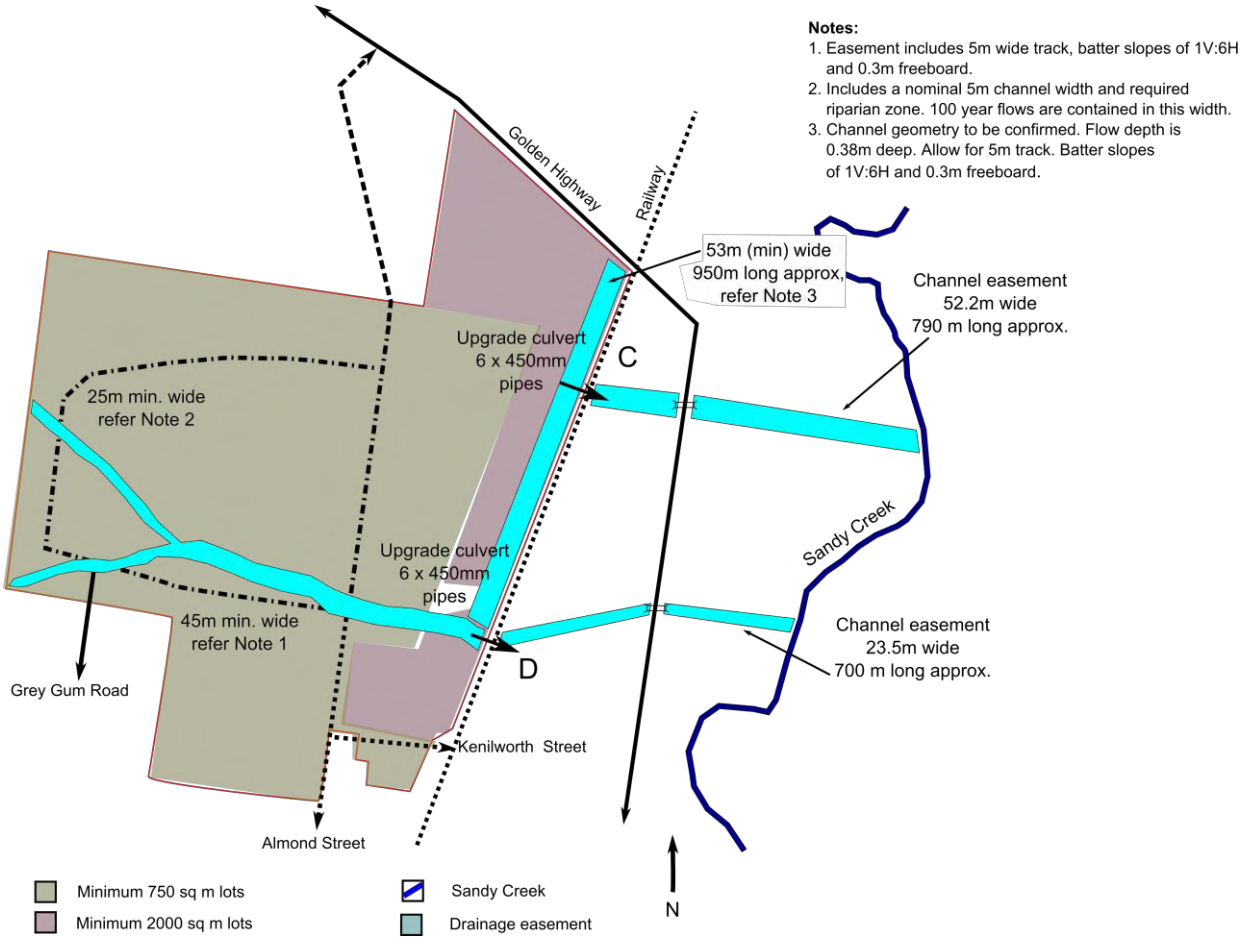
- Reduction of erosion.
- Reduction of flow velocity.
- Reduction of runoff volume through at source controls and water quality treatment.
- Maximum infiltration (note: the nature of the soils at West Denman may limit infiltration).
- Salinity management (note: a balance is required between this and the objective above and Council's advice should be sought in this regard)
- Drainage easements may need to be provided.

(ix) Contributions will be required towards the acquisition of a downstream drainage easement as shown in **Figure 9**. A Section 94 Plan will be developed to provide the funding mechanism for the levying of such contributions.

(x) Development is to comply with the provisions of Section 25 (Stormwater Management) of the Muswellbrook Development Control Plan.

(xi) Easements may need to be created in circumstances where water management infrastructure, such as detention basins, are located on land not included in that development. Easements are to be negotiated between adjoining landowners as required prior to the approval of the construction certificate of the development.

Figure 9: Conceptual Water Management Strategy



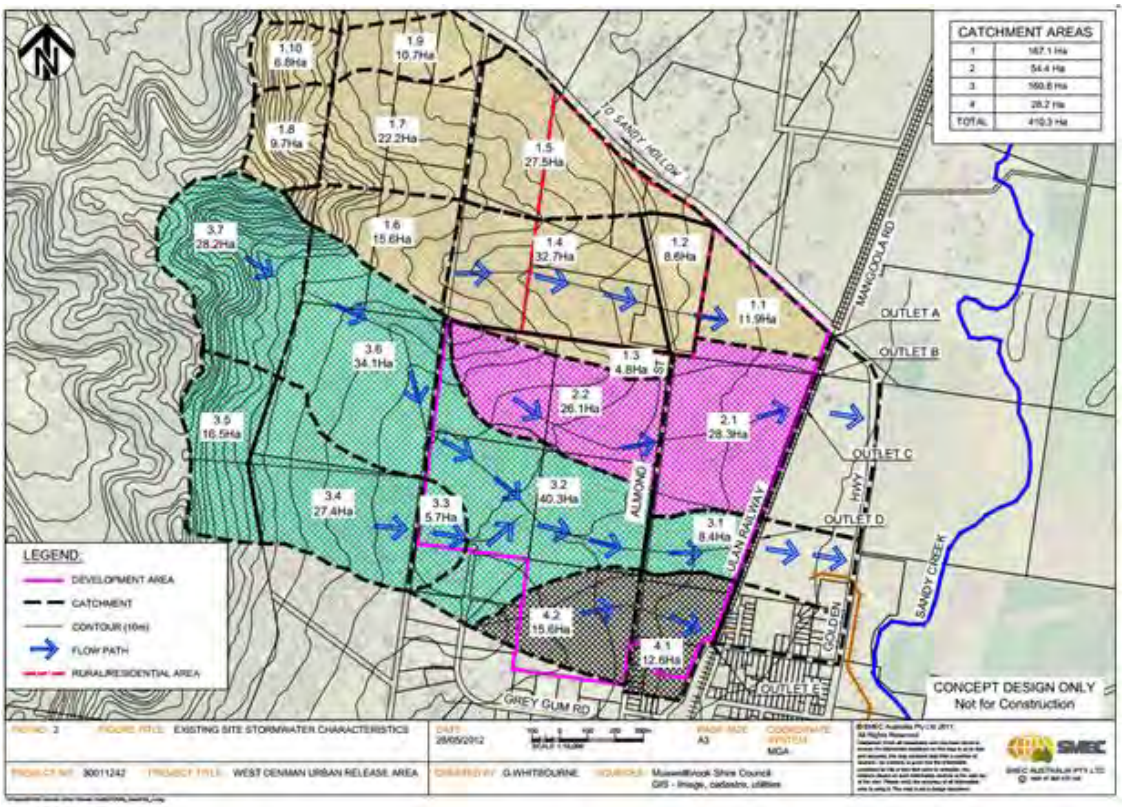
Note: Schematic concept only. Not for construction.

Table 1: Detention volumes and treatment areas

Site	Lot/DP	Detention volume	Treatment Area
1	Lot 1 DP 128061	2700	2940
2	Lots 118,119,120, 121 DP 750924	15600	13400
3	Lot 1	5825	7700
4	Lot 122 DP 750924	2500	4200
5	Lot 2 DP 616013	1035	1200
6	Lot 10 DP 1118866	683	500
7 (not included in this DCP)	Lot 2 DP1031568, Lot 30,31 DP 1146210, Lot 101, 102, 103 DP1115573	4030	7900

Figure 10: Existing site stormwater characteristics

For reference only



27.8 BUILT FORM

Objectives

a) To provide a built form consistent with that of a rural town or village.
b) To locate dwellings where the impact of road or rail generated noise or vibration is minimised.

Controls

Note: Lot size controls are shown in the Muswellbrook Local Environmental Plan 2009.

(i) New dwellings with frontage to Almond Street and Kenilworth Street extended should have the appearance of a detached dwelling in order to maintain the low density streetscape typical of Denman.
(ii) Dwellings should be designed, sited and constructed to minimise the impact of highway or rail noise and vibration. This may include identifying designated building footprints on noise affected lots, or setbacks and larger lots adjacent to noise sources (see also the Section on Rail and Highway Noise and Vibration).
(iii) Development along the west and north-western boundary of the DCP area should give special consideration to managing the potential bushfire risk arising from the Environmentally Sensitive Land - Biodiversity in or adjacent to those localities.

27.9 BIODIVERSITY

Objective

Biodiversity is maintained or improved through the conservation and rehabilitation of important vegetation and habitat.

Controls

(i) Consent will not be granted for the subdivision of land identified in the Muswellbrook Local Environmental Plan as Environmentally Sensitive Land – Biodiversity unless a Vegetation Management Plan has been lodged to the satisfaction of the consent authority.
(ii) The Vegetation Management Plan is to include:
- Details of the location of significant vegetation, including trees with hollows.
- The location of building footprints relative to significant vegetation.
- Details of the proposed rehabilitation of significant vegetation.
- Details of the proposed ongoing vegetation management regime in the context of the proposed subdivision.

(iii) Measures such as larger lot size, building envelopes, restrictive covenants (i.e. 88b) and voluntary conservation agreements are to be used to protect biodiversity significance of the land over the long term. These measures are to be specified in the development application for the subdivision of the relevant land, and must be to the satisfaction of

the consent authority prior to the granting of development consent.

(iv) The main watercourse should be rehabilitated with suitable native species and landscape treatments as a riparian zone.

(v) Larger lots are to be considered along the western edge of the urban release area in order to re-establish vegetation links between existing areas of woodland to the southwest and northwest of the site.

27.10 RAIL AND HIGHWAY NOISE AND VIBRATION

Objective:

To ensure that future residences and other noise sensitive land uses are not unreasonably affected by railway or highway noise or vibration.

Controls

(i) Consent shall not be granted for the subdivision of land, or for noise sensitive development (including but not limited to dwellings, places of public worship, child care centres, hospitals, and educational establishments) within 200 metres of the Golden Highway or within 200 metres of the railway line unless:
- a noise and vibration assessment has been carried out, and
- suitable noise and vibration attenuation measures are identified

(ii) The noise and vibration assessment and proposed measures must be to the satisfaction of the consent authority prior to the granting of development consent.

(iii) In the case of the Golden Highway, the development when completed is to meet the requirements of AS 3671-1989 Acoustics- Road Traffic Noise Intrusion – Building, Siting and Construction intrusion – Building Siting and Construction.

(iv) In the case of the railway, the development is to meet a suitable noise and vibration intrusion standard specified by the consent authority (guidance can be obtained from the NSW Department of Planning and Infrastructure publication "*Development Near Rail Corridors and Busy Roads- Interim Guideline",* noting that this publication is principally directed to more intensively developed urban areas with a higher ambient noise level).

(v) Alternatively, in the case of noise and vibration levels affecting residential development, it is demonstrated that the following LAeq levels will not be not exceeded:
- in any bedroom in a residential building—35 dB(A) at any time between 10 pm and 7 am.
- anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB (A) at any time.
- vibration levels are to the satisfaction of the consent authority.

(vi) Noise and vibration attenuation measures undertaken to comply with the conditions of development consent for a subdivision may obviate the need for additional noise or vibration assessments and attenuation measures for subsequent developments on the land.

27.11 MINE SUBSIDENCE

Objective:

To avoid and manage the impacts of potential mine subsidence.

Control:

The Urban Release Area is located with a declared Mine Subsidence District. Accordingly, consent will not be granted for development unless prior approval has been obtained from the Mine Subsidence Board under the provisions of the Mines Subsidence Compensation Act 1961.