

Residential Subdivision (Concept Plan and Stage 1) at Chelsea Gardens and Coomungie Lands

Independent Report to the Southern Regional Planning Panel

PPSSTH-7 (DA 20/0227)

31 May 2022



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**Independent Planning Consultant commissioned
by the Department of Planning and Environment on behalf of
the Southern Regional Planning Panel**

EXECUTIVE SUMMARY

The proposal involves a residential subdivision of land known as Chelsea Gardens Coomungie Lands at 141 Yarrowa Road and 32 Lovelle Street Moss Vale ('the site'). The application proposes a concept plan for the entire site comprising a maximum of 1,200 lots as well as detailed works for Stage 1 of the subdivision comprising 177 lots located in the southwestern portion of the site (adjoining Yarrowa Road) ('the proposal').

The Southern Regional Planning Panel ('the Panel') is the consent authority as the proposal is regionally significant development. The Panel has been considering the proposal in detail since August 2021 and have requested additional and amended information be provided as well as commissioning an independent engineering consultant to assess the water and sewer servicing arrangements as well as an independent planning consultant to complete a planning assessment. This report provides an outcome of the planning review, including consideration of the independent engineering review.

The application was notified in accordance with the Council's Community Participation Plan, with seven (7) submissions received. Various state agencies have also provided general terms of approval and concurrence as required by the planning controls.

The key issues identified in this assessment included:

- The provision of water and sewer services to the site;
- Traffic generation and potential impacts to the local road network
- Integrated water cycle management
- Boundary interfaces and visual impacts
- Contributions and arrangements for designate stat public infrastructure

Other key issues included managing the constraints of the site, the provision of public open space, potential heritage impacts, the design of the subdivision and consistency of the proposal with the site-specific DCP for the site and ecological concerns.

The proposal has satisfied the preconditions to the grant of consent as well as having obtained concurrence where required. A Clause 4.6 request was received for a variation to the minimum

lot size development standard for a proposed public open space reserve which was found to be satisfactory.

The proposal is generally consistent with the planning controls, the site is suitably zoned for the proposal and the constraints of the site have been satisfactorily addressed. The proposal will assist in providing additional housing opportunities in a location which has the benefit of services provided within the Moss Vale town centre and is located to allow for future pedestrian connections to the town centre.

The proposal represents a logical extension of the urban area of Moss Vale and the proposal is satisfactory having regard to internal road network and connections to the local road system, the location and amount of public open space and the provision of infrastructure. The provision of water and sewer servicing to the site has been the subject of significant review and assessment and is considered to be satisfactory when implemented in accordance with the Water and Sewer Strategy 2022. The proposal is considered to be in the public interest.

The proposal is considered acceptable subject to recommended conditions and is recommended for approval.

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1. INTRODUCTION

Development Application No 20/0227 proposes a residential subdivision of land known as Chelsea Gardens Coomungie Lands at 141 Yarrowa Road and 32 Lovelle Street Moss Vale ('the site'). The application proposes a concept plan for the entire site comprising a maximum of 1,200 residential lots as well as detailed works for the first stage of the proposed subdivision ('Stage 1') comprising 177 lots located in the southwestern portion of the site, adjoining Yarrowa Road ('the proposal').

1.1 Background to the DA

The application was lodged on 27 August 2019 with Wingecarribee Shire Council ('the Council') and is *regionally significant development* pursuant to Section 4.5(b) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act') and Section 2.19 of *State Environmental Planning Policy (Planning Systems) 2021* as the proposal has a capital investment value of more than \$30 million (Clause 2 of Schedule 6). Accordingly, the Southern Regional Planning Panel ('the Panel') is the consent authority.

The relevant environmental planning instruments and policies include the *Wingecarribee Local Environmental Plan 2010* ('WLEP 2010') and the *Moss Vale Township Development Control Plan - Section 21: Chelsea Gardens Coomungie Precinct* ('the DCP').

The Council undertook an assessment of the application and provided an assessment report to the Panel dated 21 July 2021 which recommended approval subject to draft conditions. The Panel considered the assessment report at a public determination meeting held on 4 August 2021 and resolved to defer the determination of the application to resolve numerous issues, including:

- rural/urban interface of the site
- proposed road layout and access points to the local road network
- special character areas on the site
- confirmation of the lot yield of the proposed subdivision
- bushfire and landscaping issues
- ownership of the proposed reserves

- location of a playground in the heritage conservation area
- location of the neighbourhood commercial hub
- the provision of reticulated water, sewerage and local road infrastructure to the site.

Council considered the Panel's deferral and sought further information from the applicant and subsequently prepared a supplementary report to the Panel dated 13 October 2021 recommending the applicant further address the servicing issues. The Council's supplementary report considered that the other issues raised by the Panel in its deferral had been resolved and provided a revised set of draft conditions for the Panel's consideration dated 13 October 2021.

The Panel considered the Council's supplementary report in a meeting on 25 October 2021 and discussed several key issues including requesting from Council various key background documents and further information in relation to Clause 2.11 of the DCP (water and sewer servicing). The Panel also decided to commission an independent engineering consultant and an independent planning consultant to assist the Panel with resolving the various servicing and planning issues.

The Panel requested that the independent engineering consultant review all relevant documentation in relation to the provision of water and sewer services for the proposed subdivision, undertake a peer review of the JMD Development Consultants report (dated 18 August 2021) and source documents it references. The independent engineer was also requested to advise whether water and sewerage infrastructure can be feasibly and logically implemented in a timely fashion, to adequately service the proposal (including when and by whom various stages of work are required). The engineering review has now been completed and is considered further in this report.

The independent planning consultant was requested to assess the adequacy of the proposed water and sewerage arrangements following receipt of the independent engineering advice and assess whether it satisfied Clause 2.11 of the DCP, as well as consider whether any plans required amendments and whether the draft conditions of consent were adequate.

A Panel briefing was held on 21 April 2022 where the progress of the independent planning assessment was provided. The Panel was informed that there was still information which was outstanding from both the Council and the applicant and that this outstanding information prevented the planning assessment from being finalised (generally the issues outlined in the

Planning Interim Report. As) a result, the Panel's record of briefing requested that the applicant and Council provide information requested by the independent Planning Consultant.

The Panel also requested at this briefing that the independent planning consultant assess the additional information provided by the applicant and Council.

A further Panel briefing was held on 28 April 2022 with the applicant, Council and independent consultants. At this meeting, the water and sewer expert advice was presented by the independent engineering expert. A number of issues arising from this report were discussed and the Panel requested in the Record of Briefing further information from the applicant and the Council be provided. The information requested by the Panel is outlined in Section 2 of this Report, which has now been provided.

1.2 Reason for the Report

This report has been prepared to document the outcome of the independent planning review commissioned by the Department on behalf of the Panel as requested in item 3(b) at the Panel's meeting of 25 October 2021.

The Panel requested that the independent planning consultant:

- assess the adequacy of proposed water and sewerage arrangements following receipt of independent engineering advice (Item 3(b)(i))
- Identify any plans which will require amendment as a result of updates provided in response to the Panel's deferral conditions and comment on the implications for the Panel's consideration of the application (Item 3(b)(ii))
- Review the recommended DA consent conditions (Item 3(b)(iii))
- Prepare a report documenting the outcome of this review and recommendations to the Panel (Item 3(b)(iv))

Section 2 of this Report addresses the Panel's request and documents the outcome of the independent planning review.

In order to review the proposal and provide the required recommendations to the Panel, particularly in relation to the recommended conditions and whether any amended plans were required, a more comprehensive assessment of the application was necessary and has been undertaken. Also, as a result of the provision of additional information from the applicant and the Council arising from the Panel's Record of Briefings, there has not been a comprehensive assessment of the deferral conditions included in a subsequent consolidated report. These additional issues required further assessment than had been undertaken in Council's assessment reports.

Given the complexity of the proposal and the number of issues which were raised by the Panel in their deferral of the application, it has also been impossible to separate some of the issues from the overall assessment of the application. This assessment of all the issues is detailed in this Report.

2. RESPONSE TO PANEL BRIEF

The Panel's request stated the following in Section 3(b) of the Record of Briefing dated 25 October 2021:

- a. *An independent planning consultant to:*
- i. *Assess the adequacy of proposed water and sewerage arrangements following receipt of independent engineering advice in relation to Panel deferral matter 2(b) in the Record of Deferral dated 13 August 2021, and whether the information provided is capable of satisfying the requirements of Clause 2.11 Section 21 Moss Vale Township DCP (Chelsea Gardens – Coomungie).*
 - ii. *Identify any plans which will require amendment as a result of updates provided in response to the Panel's deferral conditions and comment on the implications for the Panel's consideration of the application.*
 - iii. *Review the recommended DA consent conditions to ensure the proposed conditions:*
 - *Appropriately address water, sewer and road infrastructure matters having regard to Council memorandum dated 21.10.21 and the independent engineering advice*
 - *Are appropriately linked to either Concept Plan, Stage 1 or both*
 - *Are internally consistent*
 - *Reflect the recommendations of the assessment reports*
 - *Reference all relevant plans and documents*
 - iv. *Prepare a report documenting the outcome of the review and recommendations to the Panel*

These matters are considered below. This report constitutes a response as required by Section 3(b)(iv) of the Panel's Record of briefing dated 25 October 2021.

2.1 Adequacy of the Proposed Water and Sewer Arrangements

The Panel commissioned an independent engineering consultant to review all of the relevant documentation in relation to the provision of water and sewer services for the proposed subdivision and undertake a peer review of the JMD Development Consultants report (dated

18 August 2021) including the source documents it references. The engineering review has now been completed by Decentralised Water Australia ('DWA') in a final report dated 28 April 2022 ('the DWA Report').

The DWA Report concluded that the proposed water and sewerage arrangements are satisfactory, discussed in Section 5 of this Report, subject to the imposition of recommended conditions of consent (**Attachment A**). The DWA Report noted that both the Council and the applicant considered that the most appropriate way to implement the servicing strategy/staging plan is through conditions of consent rather than with a separate agreement. DWA considers this to be reasonable as it allows the opportunity for adaptive planning of infrastructure at each detailed DA for subsequent stages of development.

The Panel also requested that this planning assessment consider whether the information provided is capable of satisfying the requirements of Clause 2.11 of the DCP, which states:

A water and sewer servicing strategy is required for the development. The strategy must include the ultimate development potential and be supported by water and sewerage modelling and consider existing capacity within the reticulation networks and treatment facilities. The strategy must be completed to the satisfaction of council and consider levels of service provisions.

Water infrastructure may include reservoirs, water pumping stations, trunk and reticulation mains, other water network upgrades and WTP upgrades.

Sewer infrastructure may include sewage pumping station, sewer trunk and reticulation mains, other sewer network upgrades and STP upgrades.

Scheme Plans for water, sewer and stormwater services are to be provided by the Applicant. These plans will document the planned provision of water, sewer and stormwater infrastructure for the development. The Scheme Plans will identify where trunk and reticulation services (such as sewer mains and man holes, water mains, pumping stations) will be provided, and give an indication of likely timing. The Scheme Plans will be approved by Council prior to granting consent.

Variations to the approved Scheme Plans will only be approved by Council where the applicant can demonstrate to Council's satisfaction that the proposed changes are

consistent with the approved Scheme Plans.

Standard service allocations for water and sewer assets in footpaths to be adopted as per Section 3.5 and in compliance with WSAA Codes and Guide to Codes and Practices for Street Opening.

The *Water and Sewer Infrastructure Staging Plan* prepared by Premise dated 11 May 2022 ('the Water and Sewer Strategy 2022') outlines the proposed provision of water and sewer servicing to the site including the supply of water, the provision of sewer services and the associated reticulation infrastructure which is required both on and off the site.

This Strategy has been developed in consultation with Council and outlines the short, medium and long term strategies for upgrades to the water and sewer services in the area. The DWA Report concluded that the modelling and the Strategy is satisfactory and stated that further modelling will be required in future stages as there is some uncertainty in the future provision of the required water and sewer upgrades. This is not uncommon when an area is deficient in infrastructure as is evident at this site.

The Council have also concluded that the Water and Sewer Strategy 2022 satisfies the requirements of Clause 2.11 of the DCP. Accordingly, it is considered that Clause 2.11 of the DCP has been satisfied via the Strategy and that recommended conditions of consent have been outlined in **Attachment A**.

2.2 Plans and information

The Panel requested that the independent planning consultant identify any plans which will require amendment as a result of updates provided in response to the Panel's deferral conditions and comment on the implications for the Panel's consideration of the application.

Deferral conditions

The deferral conditions are considered to be the matters raised at the Panel's public determination meeting of 13 August 2021 in which the determination of the application was deferred and included the following:

- rural/urban interface of the site

- proposed road layout and access points to the local road network
- special character areas on the site
- confirmation of the lot yield of the proposed subdivision
- bushfire and landscaping issues
- on-going ownership of the proposed reserves
- location of a playground in the heritage conservation area
- location of the neighbourhood commercial hub
- provision of reticulated water, sewerage and local road infrastructure to the site

In response to these deferral conditions, a number of amended plans were provided including:

- Amended concept plan (Revision E dated 30 August 2021);
- Amended road hierarchy plan (Revision E dated 30 August 2021);
- Indicative plans - special character areas (SK33, SK34 & SK35 Revision D dated 30 September 2021); and
- Indicative lot yield (Revision A dated 30 August 2021).

The Panel at meetings held on 21 April 2022 and 28 April 2022 requested further information (and reasons for deferral) following reviews by the independent planning and engineering consultants, which included the following:

21 April 2022 Meeting:

From the applicant:

- (a) Updated Clause 4.6 request
- (b) Revised concept plan
 - (i) future collector road leading from NE corner of site as an extension to proposed east-west road along northern edge of Stage 5 (required by TfNSW and SVPA)
 - (ii) Location of proposed water and sewer servicing infrastructure (sewer pump stations and proposed additional water reservoir)
 - (iii) Future ownership and use of “managed lands” in in NE proposed Stage 3A (Dwg No SK33, 30/9/21).
- (c) Amended stage 1 subdivision plan:
 - (i) Clarification of proposed lot numbers for future reserves (lots 1181 & 1182)
 - (ii) Lot widths for the proposed residential allotments

- (iii) Proposed Lots 1301, 1302 and 1303 consolidated into one residue
- (iv) Proposed roundabouts (road & drainage design plans)

A revised Clause 4.6 request, a revised concept plan provided (Revision F dated 27 April 2022) and revised stage 1 subdivision plans (Revision F dated 27 April 2022) were all provided prior to the 28 April 2022 meeting.

From the Council:

- (a) The following documents:
 - (i) *Detailed Environmental Site Assessment* prepared by Harvest Scientific Services dated 13 October 2020
 - (ii) *Flooding report* referred to in Council's engineering referral.
 - (iii) *Integrated Water Cycle Management* report prepared by Orion Consulting dated 5 March 2020.
 - (iv) *Moss Vale – Traffic Model Audit Report* prepared by Transport Modellers Alliance dated January 2021
 - (v) Agency consultation letters and GTAs from NRAR
 - (vi) Revised staging plan provided on 3 December 2021.
- (b) Advice on consultation with local service providers
- (c) Schedule of contributions
- (d) Details of Council's consideration of potential traffic generating impacts on the local road network
- (e) Confirmation of the land ownership arrangements for the provision of the future road (SVPA)
- (f) Comment on the applicant's response to 1(b)(iii) above, once provided.
- (g) Confirmation Council is satisfied the water and sewer servicing strategy satisfies clause 2.11 of the DCP.

The documents were provided as well as the details on consultation with the energy provider and the schedule of contributions. The traffic modelling report has been provided as well as confirmation that the proposed new north-east road is located within a road reserve (further discussed in the key issues section). Council also advised that it is prepared to take on ownership and maintenance of the 'managed lands' and that Council is satisfied the water and sewer servicing strategy satisfies clause 2.11 of the DCP. Water and sewer is discussed further in Section 5 of this Report.

28 April 2022 Meeting:

From the applicant:

1. Technical expert advice on any amendments required to the proposed arrangements for the stage 1 sewer service strategy in light of:
 - a. Limitations identified in the DWA Final Report section 3.1.2
 - b. Change of service provider to True Water Australia from the provider of the Package Wastewater Treatment System Assessment Report (Aerofloat, 2020)
2. Addendum to SEE assessing the impact of any amendments arising from technical advice in point 1 above.
3. Confirmation of verbal advice provided at the meeting in relation to sewer easements on private land and the proposed transition arrangements to the Council operated Moss Vale Treatment Plant once constructed.
4. Water and Sewer Infrastructure Staging Plan based on the draft terms of agreement letter from Wingecarribee Shire Council (WSC) dated 8 April 2022.

The applicant provided the Water and Sewer Strategy 2022 in response to the Panel's and DWA's request and confirmed that the approved Aerofloat system would be installed (regardless of the operator). Further advice from SEEC was also provided in relation to the irrigation area and an addendum to the SEE has been provided. The issue of easements on private property was not further addressed although Council accepts this proposed location for the sewer easements. This issue will be further considered in the WICA process.

From the Council:

5. Comment on the material received from the applicant under points 1 and 2, in light of the DWA Final Report section 3.1.2.
6. Advice on whether it supports the proposed sewer easement arrangements

The Council supports the Water and Sewer Strategy 2022, including the location of proposed easements. These issues are considered in detail in Section 5 of this Report.

In relation to the Panel's request to identify any plans which will require amendment as a result of updates provided in response to the Panel's deferral conditions and comment on their implications, there is no further information required to be requested. The requested

information has now been provided and is satisfactory. The water and sewer issues and other key issues are considered further in Sections 5 and 7 of this report, respectively.

2.3 Recommended Draft Consent Conditions

The Panel requested that a review of the recommended DA consent conditions be undertaken to ensure the proposed conditions:

- Appropriately address water, sewer and road infrastructure matters having regard to Council memorandum dated 21.10.21 and the independent engineering advice
- Are appropriately linked to either Concept Plan, Stage 1 or both
- Are internally consistent
- Reflect the recommendations of the assessment reports
- Reference all relevant plans and documents.

A review of the draft conditions as proposed by the Council dated 13 October 2022 found that the conditions were poorly drafted and did not adequately provide the required conditions at the various stages (concept and stage 1 applications).

The Council has had the opportunity to review the conditions and commented on two (2) conditions including the concurrence conditions (Condition A33) and the requirement to modify DA 21/0772 (condition B12). The concurrence conditions are provided by Water NSW while the condition to modify DA 21/0772 is required to ensure consistency between the current application and the approved interim plant.

Accordingly, a revised set of draft conditions are provided at **Attachment A** for the Panel's consideration. These revised draft conditions include additional conditions which address both the water and sewer issues (including those recommended in the DWA Report) as well as the other key issues which were evident following a thorough assessment of the proposal as outlined in Section 7 of this Report.

3. THE SITE AND LOCALITY

3.1 Background to the Site

The site has a long history of potential future use for residential development, having formed part of Council's *Wingecarribee Residential Growth Strategy 2007-2020* and in 2006, the site was added to the possible housing release sites in *Wingecarribee Our Future Strategic Plan 2002*. The then Director-General endorsed the Strategy as part of the finalisation of the principal LEP.

In 2008, the *Sydney-Canberra Corridor Regional Strategy* was released, which identified a short fall in housing in the Wingecarribee area, with Moss Vale (1,400 lots) identified as an appropriate locations for the majority of greenfield development planned for in the short to medium term.

Various versions of a rezoning and planning proposals for the site were prepared which culminated in Amendment 43 to the *Wingecarribee Local Environmental Plan 2010* ('WLEP 2010') being made on 27 October 2017, which rezoned the site from RU2 Rural Landscape to R2 Low Density Residential, R5 Large Lots, RE1 Public Recreation, and a small area of B1 Neighbourhood Centre. The rezoning also incorporated amendments to the minimum lot size controls on the site, permitting 450sqm lots concentrated in the centre of the site, lots over 2000sqm situated on the top of the ridge line connecting Moss Vale Hill and the hill south-east of the site, and lots over 600sqm proposed across the remainder of the site. The zoning and minimum lot size maps are considered in Sections 6 and 7 of this report.

The water and sewer servicing augmentation requirements, potential traffic impacts on the surrounding local and arterial road network and managing impacts to adjoining land and site constraints were significant issues considered throughout this rezoning process.

Development Consent History

The following development consents have been issued for the site which are relevant to the proposal:

- *DA 19/1183* - A similar Concept DA and concurrent detailed (Stage 1) DA was lodged with Council on 11 February 2019 (DA 19/1183), which was subsequently withdrawn in March 2019 at the request of the Council to facilitate the development of the Site Specific DCP. Council continued to review the draft Site Specific DCP in preparation for Council endorsement and public exhibition.

- *DA 20/0445 - Exhibition Home/Sales Centre and Signage* – This application was lodged on 11 October 2019 for an exhibition home/sales centre and signage on the Yarra Road frontage of the site. The vehicle entry point is along Yarra Road and not at the corner of Yarra Road and Mount Broughton Road, however, this is a temporary access point and must be removed when this display centre is removed (Condition 76), which currently exists on the site.

- *DA 21/0772 – Interim Wastewater Treatment System* – This application was lodged on 10 November 2020 for the construction and operation of an Interim Wastewater Treatment System ('IWTS') to service Stage 1 of the current proposal at the site until the upgraded Moss Vale Sewerage Treatment Plant ('MVSTP') is available to receive the wastewater. This application is integrated development as approval under Section 91 of the *Water Management Act 2000* from NRAR was required as well as concurrence from Water NSW pursuant to Clause 11(1) of *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*. This application was approved on 24 February 2021 as a deferred commencement requiring the approval of DA 20/0227 to occur prior to general conditions of consent being activated. Other relevant conditions of significance include:
 - Condition No 6, which requires a decommissioning plan to be issued to Council for approval prior to the issue of any construction certificate and the plan is to be commenced prior to the issue of the subdivision certificate for Stage 2 (of the current proposal); and
 - Condition 37, which includes the concurrence conditions from Water NSW and includes, among other matters, that no lots post-Stage 1 of the subdivision shall be connected to this temporary system and that stage 3 of the temporary system shall not be constructed and commissioned until issuance of a Subdivision Certificate for Stage 2 of the current proposal.

This interim plant is considered further in the key issues section of this report.

- *State Voluntary Planning Agreement (SVPA)* - A State Voluntary Planning Agreement ('SVPA') has been executed between the Minister for Planning and Public Spaces and Prime Moss Vale Pty Ltd ('the applicant') on 17 July 2021. This SVPA provides that the applicant will make a development contribution by providing a Monetary Contribution of \$3,466.67 per urban lot created for the purpose of contributing to the provision of designated State public infrastructure in relation to each lot.

The SVPA requires the construction of an intersection upgrade at Illawarra Highway/Fitzroy/Throsby Park Road and a road connection to the north-east of the site to this new intersection to allow a road connection between site and the Illawarra Highway which will reduce traffic passing through the Moss Vale town centre. DPIE issued a Satisfactory Arrangements Certificate pursuant to Clause 6.1 of the WLEP 2010 dated 3 August 2021 on the basis of this executed SVPA. This SVPA is further considered in the key issues section of this report.

3.2 The Site

The site is located on the southern edge of the Moss Vale township in the Southern Highlands of NSW, approximately 130 kilometres south-west of Sydney. The Hume Motorway, linking Moss Vale with Sydney and Goulburn, is located to the northwest of the site and the Illawarra Highway to the north-east of the site, which connects the area with Albion Park on the coast. The site location is illustrated in **Figure 1**.

The site is located on the eastern site of Yarrowa Road and consists of two (2) separate (adjoining) allotments comprising a total area of 124 hectares. The legal description of the site is Lot 3 in DP 706194 (No 32 Lovelle Street comprising 80 hectares, 'Chelsea Gardens') and Lot 12 in DP 8660366 (No 141 Yarrowa Road comprising 44 hectares, 'Coomungie').

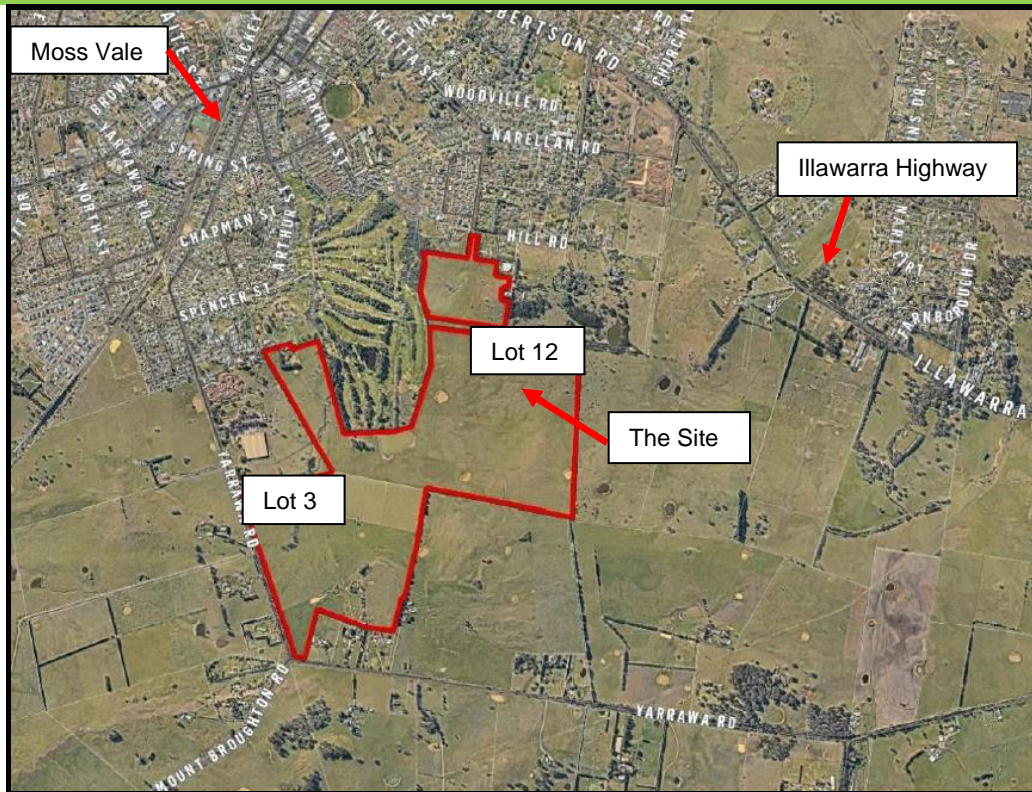


Figure 1: The Site Location (Source: Urbis, SEE)

Existing Development

The site is currently predominately pasture land, with a dwelling on each of the existing lots as well as associated fencing and outbuildings including stables, livestock shelters and buildings associated with dairying. A house and associated buildings is located in the north-west corner of the site on the crest of a hill that looks towards the south (to the west of the golf course) as well as dwelling in the southern portion of the site with access from Yarrawa Road.

A bridge has also been constructed across the unnamed tributary of Whites Creek located in the north-western part of the site. A sales office/display centre is also located on the site in the southern portion of the site adjoining Yarrawa Road.

Topography

The topography of the site is generally gently undulating with slopes of less than 10% with the site comprising a naturally formed amphitheatre which rises from Whites Creek to the hills surrounding the Moss Vale township. There are some steeper slopes (>20%) located in the north-eastern portion of the site and an area of elevated land along the eastern boundary. A

significant portion of the site has a northerly orientation due to this topography while there are also areas with an easterly aspect. The northern portion of the site generally has a southerly aspect arising from the sloping nature of the site in this area.

Drainage

The site is located within the upper reaches of the Whites Creek catchment. The existing site topography generally grades to the north/northwest with overland flows ultimately forming the Whites Creek watercourse at the northern boundary leading into the adjacent Moss Vale Golf Club. The creek traverses the northern portion of the site and flows in a north westerly direction. The proposal includes some site regrading and restoration of this creek line to a naturalistic stream environment with improved flow and habitat outcomes. The dams on the site are largely drainage features. A small section of the site in the eastern portion drains in an easterly direction towards a tributary of Kelly's Creek.

Vegetation

The vegetation on the site generally comprises exotic pasture, consisting of exotic grasses and herbs such Kikuyu, Rye Grass and Spear Thistle. The only native vegetation mapped during the field survey were two isolated *Eucalyptus radiata* (Narrow-leaved Peppermint) trees which represent remnants of Southern Highlands Shale Woodland in a 'scattered paddock tree' condition class. Smaller patches of exotic 'plantings' and 'weeds and exotics' were present throughout the study area, along with numerous dams mapped as artificial wetlands. Existing vegetation on the site is considered further in the key issues section of this report.

Heritage

There are no items of built heritage on the site, although there is known Aboriginal Cultural heritage significance on the site which is considered in Section 7 of this report.

Climate

The area can be subject to strong winds, with the strongest winds (>40kmh), both summer and winter tending from the west (from north-west to south-west). The site is reasonably exposed to these winds from the south and west and accordingly, effective windbreaks in a north-south direction across the site are required. The proposal provides three major

windbreaks, including along the Yarrowa Road buffer/frontage, the extension of the golf course corner to the local rise to the south through to the central portion of the site (Windbreak Park) and the eastern ridge line.

The site is illustrated in **Figures 2 to 9** below and is discussed further in the key issues section.

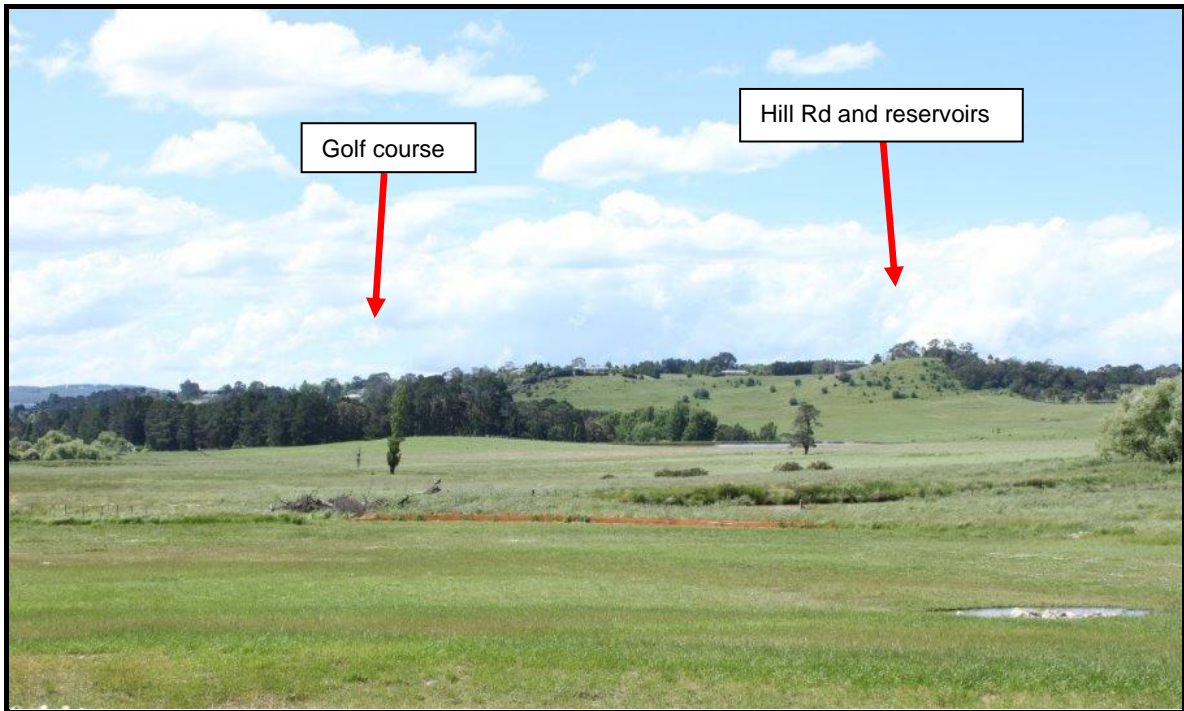


Figure 2: The site looking north towards the reservoirs from the display centre

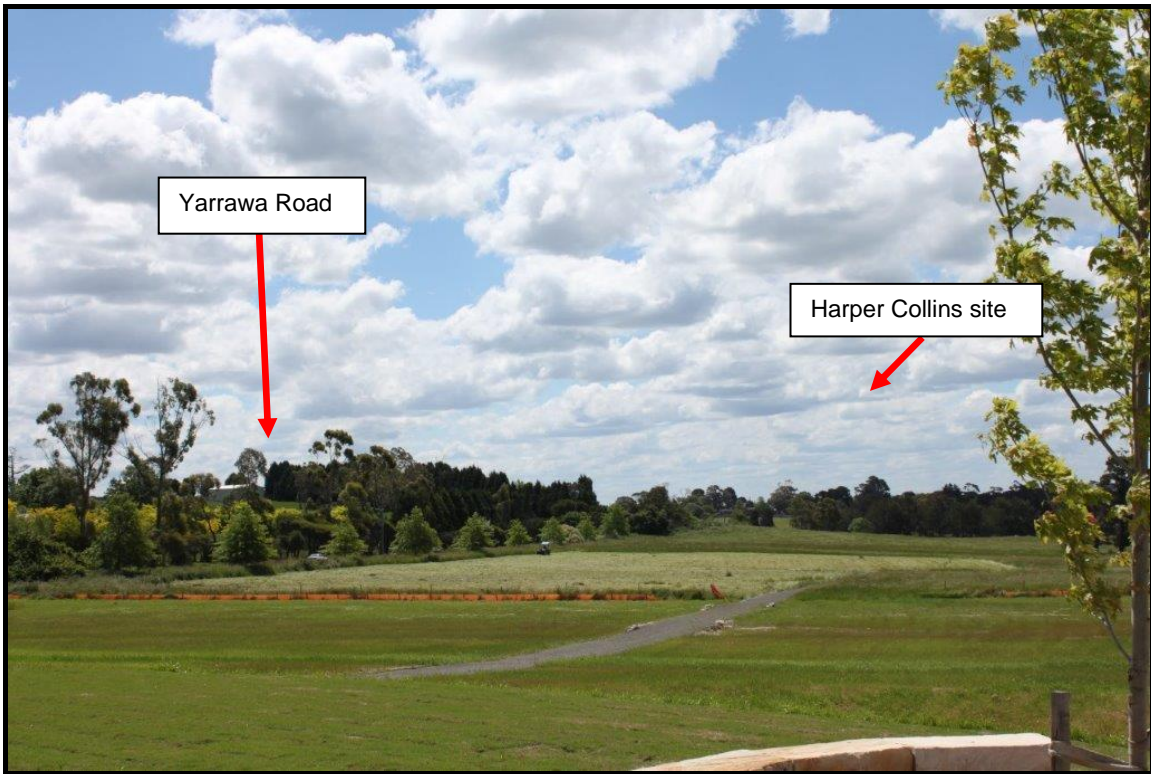


Figure 3: The site looking west towards Yarrowa Road and Harper Collins site

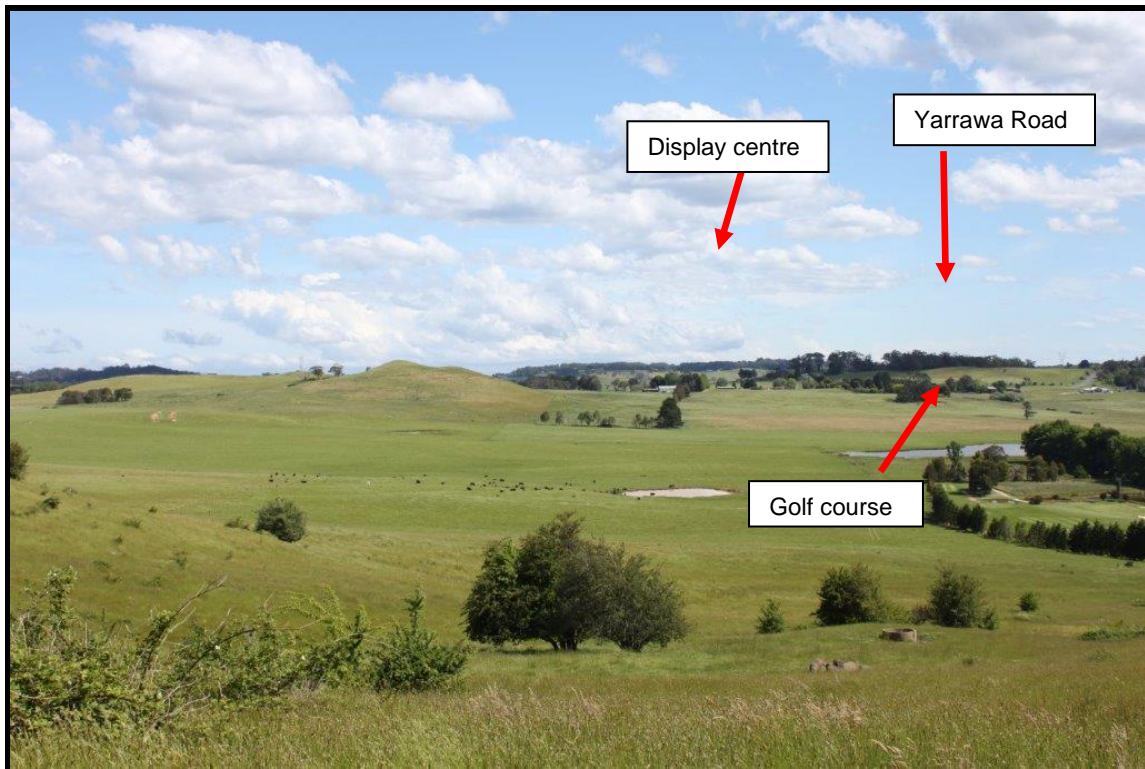


Figure 4: The site looking south towards the display centre from Hill Road area



Figure 5: The site looking southwest towards the golf course



Figure 6: The site looking southeast from Lovelle Street area



Figure 7: The steep portion of the site in the NE portion adjoining the reservoirs

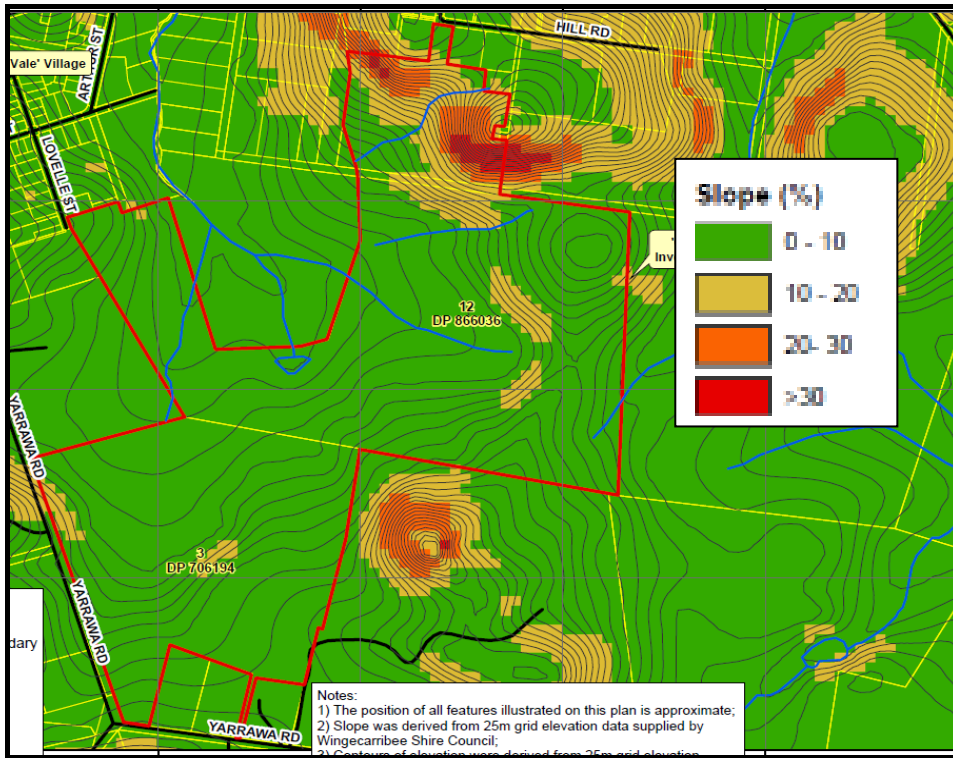


Figure 8: Site Topography and Slope (Source: Preliminary Contamination Report (Figure 3))

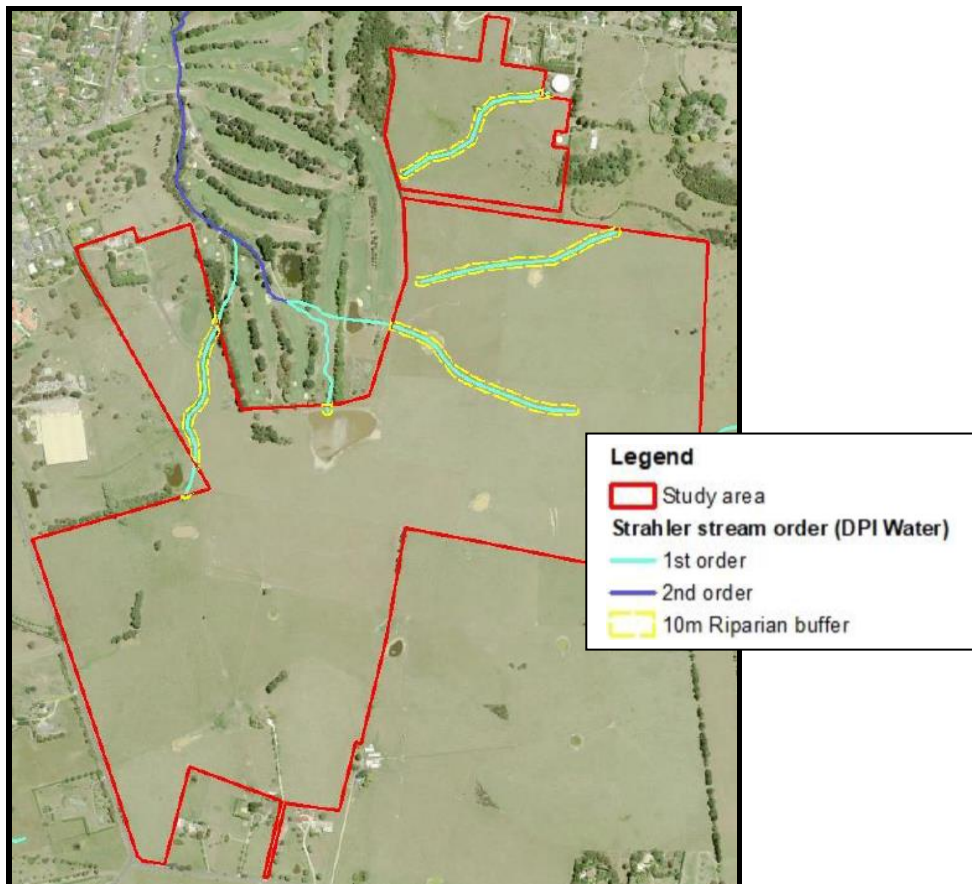


Figure 9: Watercourses on the site (Source: Flora and Fauna Assessment, Eco planning, October 2018)

3.3 The Locality

The site adjoins numerous land uses comprising the following:

- North – Moss Vale Golf Club directly adjoins to the north, comprising an area of 124 hectares on land zoned RE2 Private Recreation.
- North East – Hill Rd and residential parts of Moss Vale to the north with lot sizes varying between 700m² and 12 hectares on land within the R2, R5 and RU2 zones.
- East and southeast – Large rural and rural residential lots with lot sizes ranging between 1.5 hectares to 50 hectares on RU2 land with dwellings and farm buildings.
- South – Smaller lots of 2 hectares containing dwellings at 121, 131 and 153 Yarrawa Road on RU2 land, with larger lots to the south of Yarrawa Road also on RU2 land.
- South West – Farmland within the E3 zone on the opposite side of Yarrawa Road, largely containing 40 hectare lots with dwellings and farm buildings.
- West – A light industrial development (Harper Collins Publishers) within the E3 zone.
- Northwest - Residential land containing dwelling houses on lots of 700 square metres to 2000 square metres including the Harrison Hostel and single dwellings along Lovelle Street and Daylesford Drive.

4. THE PROPOSAL

The proposal is for a concept plan and the first stage of the proposed subdivision comprising:

- (a) Concept plan for subdivision of the entire site over nine (9) stages for **(Figure 10)**:
- Subdivision of land into 1,200 lots (max) in Stages 1, 2, 3a, 3b, 4, 5, 6a, 6b and 7;
 - Provision of public reserve lots comprising:
 - Parkleigh view park
 - East Park
 - Village kickabout
 - The Common
 - Windbreak Park
 - Whites Creek
 - Coomungie Park
 - Yarrawa Road Buffer planting
 - Drainage infrastructure and riparian corridor restoration within the Whites Creek Riparian Corridor
 - Provision of an internal road network including internal intersections and connections to the local road network; and
 - Provision of detention/retention ponds and associated drainage infrastructure.
- (b) Stage 1 subdivision works comprising 177 lots consisting of **(Figures 11 -13)**:
- 173 residential lots within Stages 1A (80 lots), 1B (55 lots) and 1C (38 lots) comprising:
 - Two (2) public reserve lots consisting of proposed Lot 1181 (reserve adjoining Yarrawa Road) and proposed Lot 1182 (public open space – Whites Creek)
 - One (1) residue business lot (as one consolidated lot of 1,809m²)
 - One (1) residue lot (proposed Lot 1183)
 - Infrastructure lots
 - Construction of internal roads and intersections within Stage 1 and a roundabout at the intersection of Yarrawa Road and Spencer Street;
 - Riparian corridor restoration and drainage infrastructure within Whites Creek Riparian Corridor in proposed Lot 1182;

- 2 metre high (maximum) boundary keystone retaining wall adjoining Lot 1 DP 842623;
- Site clearing and bulk earthworks comprising cut and fill;
- Side and rear retaining walls (900mm and 1.2m high) for specific residential lots; and
- Public utility infrastructure comprising water and sewer works for Stage 1.

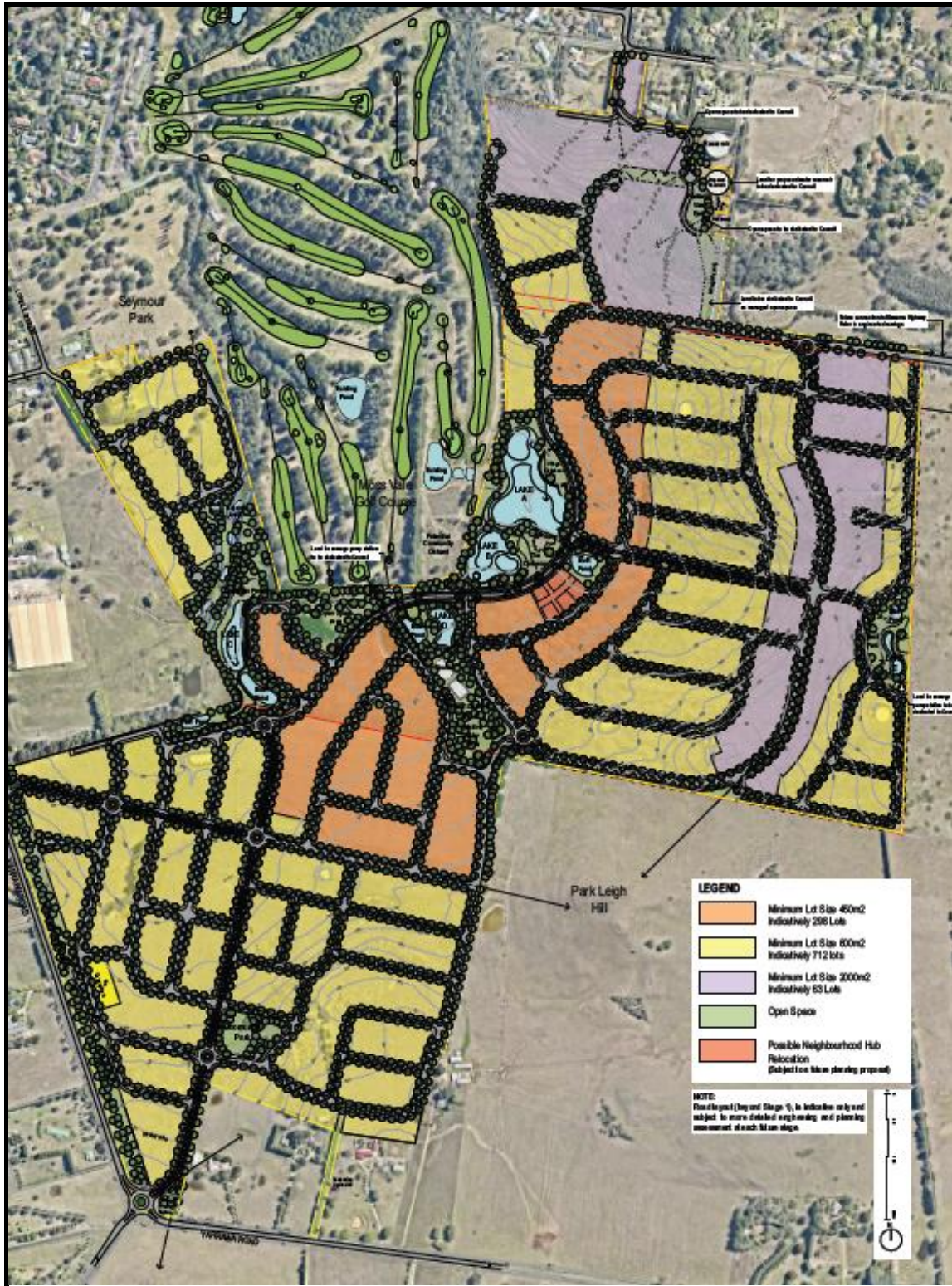


Figure 10: Concept Master Plan (Source: arterra 27 April 2022 Rev F)

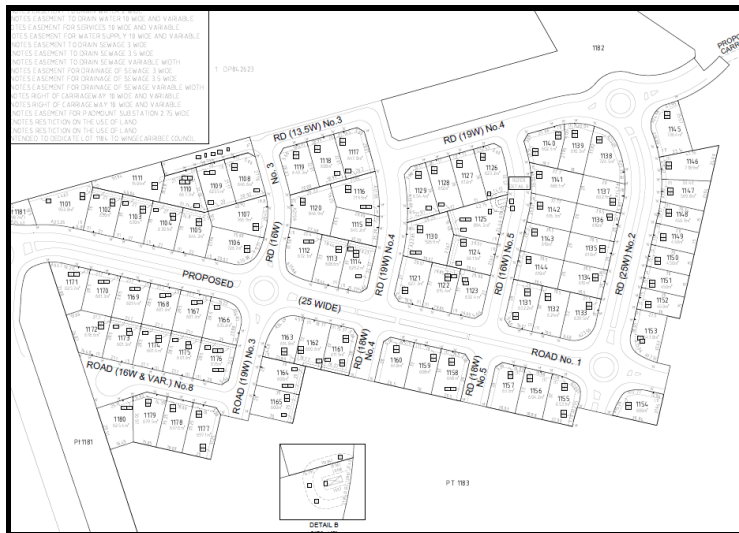


Figure 11: Proposed Stage 1A (Source: JMD, 27/4/2022)

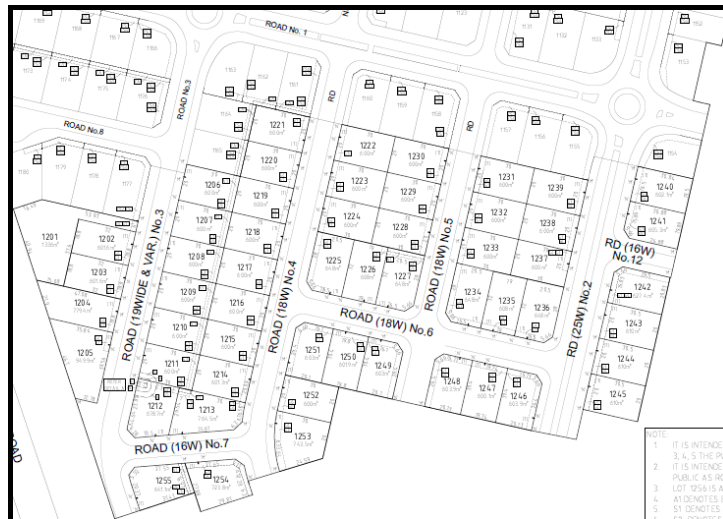


Figure 12: Proposed Stage 1B (Source: JMD, 27/4/2022)

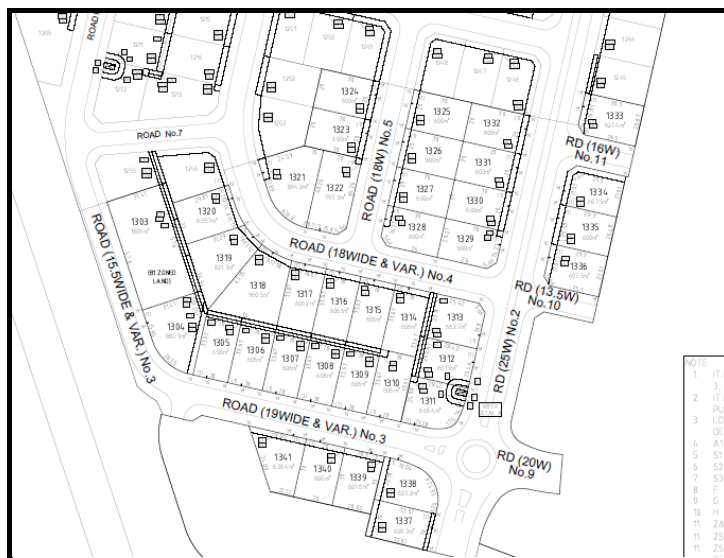


Figure 13: Proposed Stage 1A (Source: JMD, 27/4/2022)

5. CONSIDERATION OF THE WATER AND SEWER ISSUES

Public utility infrastructure that is essential for the proposed development must be available, or adequate arrangements have to have been made to make that infrastructure available when it is required, for consent to be granted to the proposal pursuant to Cause 7.10(2) of the WLEP 2010. The provision of adequate water and sewer services on the site constitutes essential public utility infrastructure.

It has become clear that such infrastructure is currently not available at the site and therefore to satisfy this precondition to the grant of consent, adequate arrangements need to have been made and demonstrated for water and sewer servicing of the land, which is discussed below.

Similarly, Clause 2.11 of the DCP requires a water and sewer servicing strategy for the development, which must include the ultimate development potential and be supported by water and sewerage modelling. This strategy must also consider existing capacity within the reticulation networks and treatment facilities and must be completed to the satisfaction of Council. The provision of water and sewer servicing to the site has been a major concern throughout the assessment of this proposal.

As a result, the Panel commissioned an independent engineering consultant to review all of the relevant documentation in relation to the provision of water and sewerage services for the proposed subdivision and to undertake a peer review of the document submitted by JMD development consultants on 18 August 2021 and the source documents it references.

Consequently, Decentralised Water Australia ('DWA') were commissioned to undertake this review and provided a report, *Water and Sewer Expert Advice for Subdivision DA - Final Report* dated 28 April 2022 ('the DWA Report') outlining their advice and recommendations. The findings of the DWA Report are discussed below in the context of the water and sewer servicing strategy for the proposal and to assist the Panel in considering whether adequate arrangements have been made for essential public utility infrastructure and whether consent can be granted.

The information that has been provided in this application in relation to water and sewer servicing has at times been conflicting and often difficult to reconcile, however, information provided to the Independent Engineering Consultant in the last two months has significantly improved the understanding of the water and sewer servicing strategy for the proposal.

5.1 Sewer Servicing and Reticulation Infrastructure

The provision of sewer services to the proposal has been considered in a number of reports and strategies prepared on behalf of the applicant for both the concept plan and the first stage of the development (Stage 1). The relevant reports include:

- *Aoyuan Moss Vale Subdivision Sewer Servicing Strategy* prepared by Urban Water Solutions dated 8 November 2019 ('the UWS November 2019 report');
- *Land Capability Assessment for Recycled Water Application Chelsea Gardens Estate, Moss Vale*, prepared by Strategic Environmental and Engineering Consulting ref:20000305-LC-03 dated 6 November 2020 ('the SEEC Report').
- *Addendum to DA – Revised Wastewater Strategy* prepared by Premise dated 16 November 2020 ('Premise 2020 Report');
- *Staging Plan for the provision of External Water, Sewerage and Local Road Infrastructure* dated 18 August 2021 ('the JMD Report'); and
- *Water and Sewer Infrastructure Staging Plan* prepared by Premise dated 11 May 2022 ('the Water & Sewer Strategy 2022').

The Council is the local water utility for the area and advised the applicant (after the lodgement of the application) that the Moss Vale Sewage Treatment Plant ('MVSTP') did not currently have any capacity to service the first stage of the proposal or any part of the concept plan. The Council has also advised that an upgrade to the MVSTP, which will provide capacity to service the development, is programmed to be delivered in the 2024/25 financial year with the detailed design of this upgrade works currently underway and scheduled for completion in 2022.

The proposal would be connected to the MVSTP once the upgrade works were completed. Accordingly, an alternative wastewater strategy for the first stage of the development is required while the MVSTP is upgraded.

The proposed internal servicing for the proposal relies on the construction and commissioning of a new sewer pump station at the low point of the site adjoining the southern boundary of the golf course (the north-west site boundary), known as Sewer Pump Station 1 ('SPS1'). A second pump station (Sewer Pump Station 2 ('SPS2')) will also be required on the eastern side of the development as many of the lots within proposed Stage 5 will be unable to drain

by gravity to SPS1 due to the site topography. It has been assumed that the lots in Stage 6b (to the north of the Whites Creek riparian park) will drain by gravity into the new reticulation infrastructure in future stages, rather than drain south and connect into the main pump station.

The concept plan has been revised to show proposed lots which will contain SPS1 and SPS2 and is therefore satisfactory in this regard (including for Stage 1 since SPS1 will be constructed in the first stage of the proposal). The proposed sewer servicing strategy is outlined below for stage 1 and future stages under the concept plan.

Stage 1

The stage 1 strategy was initially outlined in the UWS November 2019 report and involved the provision of SPS1 and a rising main to connect with existing sewer infrastructure in Lovelle Street, which would then convey wastewater to the MVSTP (**Figure 14**). This Strategy, however, relied on connecting to the MVSTP, which does not have any current capacity to accept wastewater from the site. While this portion of the strategy is now superseded, the general principle behind the system is the same in relation to the proposed reticulation infrastructure within the site.

Accordingly, a revised interim wastewater strategy which proposed the installation of an Aerated Wastewater Management Systems ('AWTS's) on each lot to treat wastewater on-site for future dwellings in Stage 1 was outlined in the Premise 2020 Report. The treated wastewater from the AWTS units would discharge into a proposed reticulated sewage system throughout stage 1, draining to proposed SPS1, which would then direct it via a 125mm PE rising main to holding tanks at the interim plant and then to an irrigation field located in Stage 5 of the concept plan. Beyond each lot, the responsibility for the operation and maintenance of the wastewater management system would remain with the applicant via an appointed and suitably qualified/experienced wastewater management system contractor. This system is outlined in the SEEC Report as Option 2.

On 10 November 2020, a development application (DA 21/0772) was lodged for the construction and operation of an Interim Wastewater Treatment System ('IWTS') to service Stage 1 of the proposal. DA 21/0772 was approved on 24 February 2021 for a packaged wastewater treatment system, designed by Aerofloat Wastewater treatment Specialists ('Aerofloat') and comprised Option 1 in the SEEC Report. This proposed scheme was different to the Premises 2020 report, although there are numerous common elements.

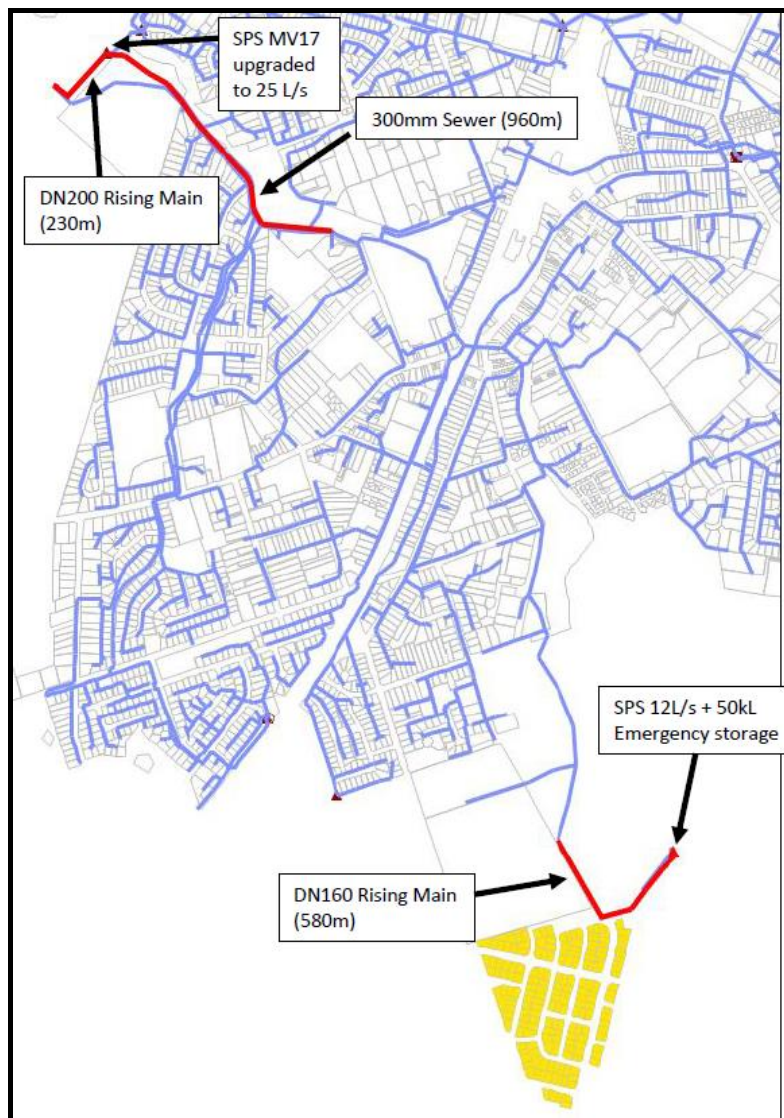


Figure 14: Initial Proposed Stage 1 Sewer Strategy (Source: UWS November 2019 Report (Figure 2-2))

This system involves construction of sewerage reticulation pipes throughout stage 1 which would convey the wastewater to the packaged plant within proposed Stage 5 of the site, via SPS1 and a rising main through proposed Stage 5. This rising main will be installed, where possible, on the future alignment and level of the ultimate Stage 5 rising main servicing SPS2, located on the eastern boundary of the site, and will be retained in place after decommissioning of the IWTS.

The approved interim plant would comprise a number of components including anoxic reactor tanks, activated sludge reactor tanks, sequence batch reactor tanks, a chlorine contact tank, an equipment shed and wet weather storage tanks. The treated wastewater from the IWTS would then be irrigated over the proposed stage 5 area within an irrigation area comprising

96,800m².

There are a number of concerns with this approval including:

- The approved plans are incorrect as revised plans were provided to reduce potential impacts on the Aboriginal cultural heritage on the site (noted as the PAD areas on the site plan);
- The requirement for a licence under the *Water Industry Competition Act 2006* ('WICA') has been included as a 'prior to Occupation Certificate condition', however, this is contrary to the WICA which requires a licence prior to construction;
- There are concerns that a new wastewater provider has been engaged by the applicant (no longer Aerofloat, but True Water Australia) which may result in changes to the treatment plant and irrigation requirements.

Accordingly, the following changes to the approved conditions are required:

- Amendment to the approved plans to reflect the revised JMD plans which divert the proposed rising main to the centre portion of stage 5 away from the Aboriginal Cultural heritage areas and to an area adjoining the access track;
- Requirement that the WICA licences are obtained prior to the issue of the Subdivision Works Certificate (instead of prior to the Occupation Certificate);
- A new condition which requires that the operation of the Interim Wastewater System must be undertaken in accordance with the WICA licenses and Section 68 approvals;

The applicant has now provided clarification that while a different operator has been appointed (True Water Australia), the interim plant will still comprise the packaged treatment system designed by Aerofloat. Relevant conditions have been recommended to be imposed as outlined in **Attachment A**, including a condition to ensure these changes are undertaken by the applicant pursuant to Section 4.17(1)(b) of the EP&A Act. Further concerns raised in the DWA Report regarding the IWTS are considered below.

Concept Plan

The UWS November 2019 remains the basis for the proposed sewer servicing for the concept plan, although the Water & Sewer Strategy 2022 has refined some of the timing of the provision of infrastructure, linking it to the number of lots (instead of stages) and upsizes one

of the proposed gravity mains. DWA supports this approach given the uncertainty associated with capacity availability at MVSTP, as tying either party to current staging and/or specific dates carries significant risk and limits adaptability.

The Water & Sewer Strategy 2022 outlines the following to be constructed by the applicant prior to the issuance of the Subdivision Certificate which creates the 1st residential Lot (i.e., stage 1):

- (a) Construction of sewer pump station SPS1 with emergency storage of 248KL (8 hours Average Dry Weather Flow) with flow rate of 12L/s.
- (b) Construction of 580m of a rising main (DN160 HDPE) connecting with the existing 150mm gravity main in Lovelle Street.
- (c) Construction of 960m of a 450mm gravity main connecting MH GH01102 to SPS MV17.
- (d) Upgrading of SPS MV17 pump capacity to 25L/S.
- (e) Upgrading of 230m of rising main from SPS MV17 to DN200 HDPE.

The final designs are to be determined by, and in consultation with, the Council.

The Water & Sewer Strategy 2022 indicates that no further external sewer works are required until the proposed number of lots exceeds 772 Lots, as the only upgrade works required in the intervening time up to 772 lots are minor increases in wet weather storage at SPS1. This additional wet weather storage is provided by the proposed emergency storage of 248KL to be constructed prior to the Subdivision Certificate which creates the first residential lot. The infrastructure to be constructed by the applicant prior to the Subdivision Certificate which creates the 772nd residential includes (**Figure 15**):

- (a) Increase flow rate capacity at SPS1 to 35L/s.
- (b) Construction of an additional 2,430m of 450mm gravity main.
- (c) Increase flow rate capacity of SPS MV17 to 45L/s.

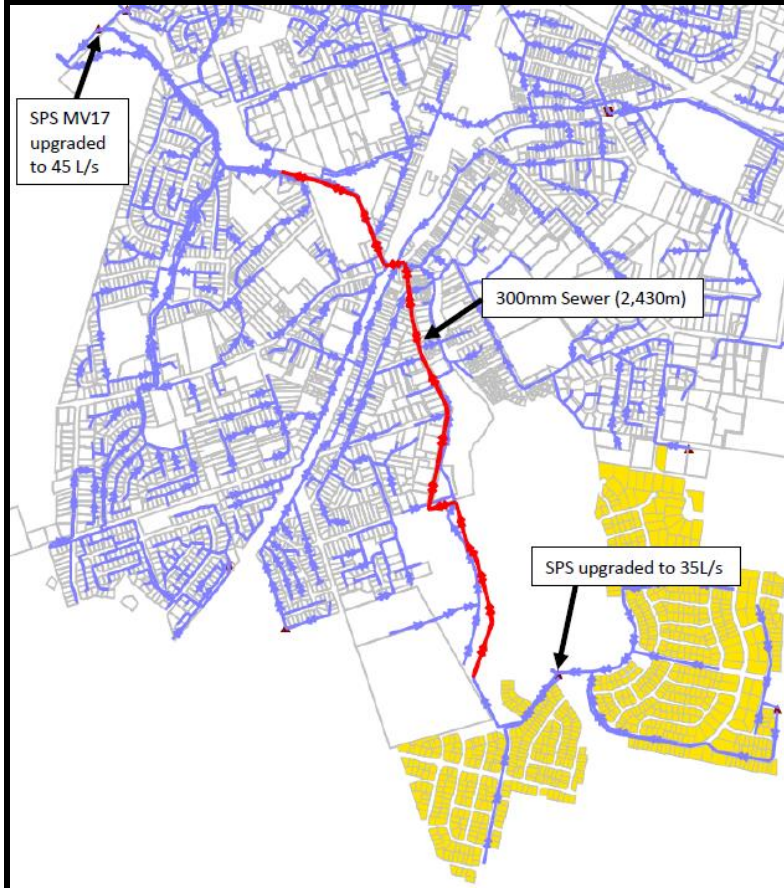


Figure 15: Proposed sewer servicing strategy for the concept plan (Source: UWS November 2019 Report)

The DWA Report – Stage 1 & Concept Sewer Strategy

Stage 1

The DWA Report considered the proposed Stage 1 sewerage reticulation strategy and supported the provision of the full 248kl of emergency storage to be constructed prior to issuance of the first Subdivision Certificate as recommended by Council. The new 960m gravity main connecting MH GH01102 to SPS MV17 being upsized to DN450 (instead of the DN300 recommended by the UWS November 2019 Report) was also supported and it was noted that this may relate to ensuring the 1,200 concept lots can be adequately serviced. All other proposed works are consistent with the UWS November 2019 Report modelling.

However, the DWA report outlined several concerns with the proposed stage 1 sewer servicing (approved on DA 21/0772), concluding that the degree of uncertainty around wastewater servicing of Stage 1 is significant and warrants further consideration.

The concerns with the IWTS included:

- WICA uncertainty - There is some uncertainty around the feasibility and likelihood of approval (licence) under the WICA, with the wastewater service for Stage 1 being critically dependent on a WICA licence being issued and the requirements of WICA being met. DWA do not believe adequate information has been submitted to provide confidence that the proposed IWTS is consistent with WICA.

Comment: DWA consider that the WICA licensing regime and application process is the appropriate mechanism for addressing these issues. The recommended conditions ensuring the IWTS cannot proceed without a WICA licence being in place (as recommended by DWA) have been included in the recommended conditions (**Attachment A**) including the required changes to the consent for the IWTS (DA 21/0772) which addresses these concerns.

Furthermore, the IWTS has been approved by Council and concurrence has been issued by Water NSW pursuant to Section 8.9 of the Biodiversity & Conservation SEPP in which the assessment of whether the development would have a neutral or beneficial effect on water quality was undertaken.

- WICA Requirements in conditions - Council's draft conditions did not require the applicant to obtain a WICA licence prior to the commencement of construction of infrastructure or any conditions requiring commencement of commercial operation of a WICA licenced entity prior to issue of a Subdivision Certificate. Similarly, Condition 31 of DA 21/0772 does not require provision of evidence of WICA licences being in place until an Occupation Certificate for the IWTS is sought, which is inconsistent with the WICA licencing process.

Comment: Relevant conditions are now recommended to be imposed as outlined in the recommended conditions in **Attachment A**.

- Wastewater provider - *True Water Australia* is now the proposed provider for the IWTS, however, the consent was prepared on the basis of a system by Aerofloat and the proposed use of their proprietary packaged treatment plant. There has been no engineering or technical detail on True Water Australia's interim plant and therefore no

evaluation of the proposed wastewater treatment process prior to consent has been undertaken.

Comment: The applicant has now provided clarification that while a different operator has been appointed (True Water Australia), the interim plant will still comprise the packaged treatment system designed by Aerofloat.

- Easements on Private land - The proposed IWTS relies on most sewerage reticulation infrastructure being located on private land and subject to easements, which is not recommended practice unless unavoidable. Reference to acceptance by Council of this arrangement does not provide the Panel with adequate assurances given Council are not the approval authority for WICA licences.

Comment: The provision of sewer services within easements located on private land is contrary to Council's adopted policies for servicing, which generally requires sewer infrastructure to be located on public land, however, Council has agreed with this method. This aspect of the proposal will be further considered at the Section 68 and WICA stages of the relevant licences and approvals regime for the site.

- Incorrect Irrigation Guidelines - The SEEC Report has used NSW guidelines (DLG, 1998) and an Australian Standard (AS1547:2012) that apply to individual on-site systems that are predominantly domestic in nature, which is inconsistent with the design approach and recycled water irrigation philosophy required for a small community scale recycled water scheme as proposed in this case.

The primary issue relates to the recycled water irrigation approach, with the SEEC Report adopting an effluent land application strategy that involves applying effluent beyond plant water requirements which is not recognised as beneficial reuse under the NSW EPA Effluent Reuse Guidelines. This approach will result in reasonable proportions of the treated effluent draining through the soil profile during cooler months. Adoption of a beneficial reuse irrigation strategy consistent with these guidelines typically requires significantly greater land and wet weather storage requirements.

Comment: The proposed irrigation area and approach is considered further below.

Recycled Water Irrigation

The IWTS proposes to treat the wastewater at the interim plant and dispose of the treated effluent over an irrigation area. The SEEC Report details the requirements to meet human health and environmental protection standards for this recycled water irrigation approach, comprising the *Land Capability Assessment* ('the LCA'). This approach consists of three (3) main components, comprising the irrigation area, effluent quality and wet weather storage, which all need to be considered within the overall system. While this approach has development consent for the land use activity from the Council, it has not applied for, or received, a licence from IPART for the construction or operation of this interim plant.

Concerns have been raised by the Panel in relation to the potential environmental impacts arising from the irrigation area. This issue has been considered in the DWA Report, which is discussed further below. It is noted that the Council has assessed and approved the interim plant including the irrigation area (on DA 21/0772) and obtained the concurrence from Water NSW. The temporary nature of the plant and the required future connection to the MVSTP have also been considered in the assessment of the interim arrangements for stage 1 and the recommended conditions of consent in **Attachment A**.

These recommended conditions include requiring the WICA licences/approvals to be obtained prior to the issue of a Subdivision Works Certificate, and the potential contamination arising from the irrigation area having to be investigated in future stages. The requirement to limit the interim plant to service Stage 1 only, resulting in fewer lots requiring servicing than the original planned capacity of the system (173 lots in stage 1 instead of 385 lots proposed in the original SEEC Report), has also been recommended.

DWA Report

The DWA Report raised significant concerns with the LCA (SEEC Report) (Section 3.1.2 of their report), including:

- *Incorrect guidelines* - The LCA references the incorrect guidelines, referring to guidelines and standard that apply to individual on-site systems that are predominantly domestic in nature (not proposed), instead of the NSW Department of Environment and Conservation's *Effluent Reuse by Irrigation Guidelines* (2004) for small community

scale recycled water schemes.

- *Overall irrigation strategy* - The LCA utilises Design Loading Rates (DLRs) that result in the application of water above plant water requirements for extended periods, typically referred to as land application, which is not usually accepted at the scale of this discharge. Irrigation is normally required to limit application to closely match plant water requirements and minimise deep drainage of recycled water (beneficial reuse under the NSW EPA Effluent Reuse Guidelines). DWA consider that the proposed scheme will result in reasonable proportions of the treated effluent draining through the soil profile during cooler months. DWA states that adoption of a beneficial reuse irrigation strategy, consistent with the appropriate guidelines, typically requires significantly greater land and wet weather storage requirements.
- *Design flows and capacity* – the LCA adopts a design basis that is inconsistent with the sewerage servicing strategies (namely use of 180 L/EP/day versus 230 L/EP/day) which results in design flows that are ~22% lower.
- *Site hydrology, hydrogeology and drainage* – The LCA outcomes for site hydrology and groundwater do not align with the previously completed *Capability Assessment by Harvest Scientific Services* (2006) which identified high groundwater value and the presence of both intermittent and perennial seeps. When combined with the high irrigation rates (and high risk of increase deep drainage), there is potential for the proposal to increase the frequency size and duration of these seeps, potentially creating a pollutant export risk.
- *Water balance modelling and wet weather controls* - The monthly water balance approach used in the LCA is designed for domestic and small commercial on-site wastewater management system design. It includes a number of assumptions and limitations that are inconsistent with DEC (2004) or WICA requirements for sewage management.
- *Wet weather storage sizing* – The beneficial reuse approach (normally required for a WICA licenced recycled water system) requires significantly larger storage volume to prevent uncontrolled overflow during wet periods whilst limiting irrigation to plant water requirements.

DWA concluded that while there are various concerns with the proposed irrigation approach, there may be opportunities for an innovative or interim approach to be proposed, however, this would require a more rigorous design and impact assessment process to justify. DWA considered that such an impact assessment and consideration of the various components of the irrigation system, would be undertaken as part of the WICA licence application and was the most appropriate mechanism for further consideration of the interim plant and irrigation approach.

Importantly, DWA were of the opinion that the most expedient way forward would be to include conditions of development consent that require the applicant to:

- Obtain all necessary WICA licences prior to issuance of the Stage 1 Subdivision Works Certificate. This is consistent with standard practice for conventional water, stormwater and sewerage infrastructure (e.g. requiring Section 68 approval of sewerage works) and would ensure this rigorous design and impact assessment process was undertaken prior to the issue of the Subdivision Works Certificate.
- Provide evidence of approval by the relevant Minister to commence commercial operation of the IWTS under WICA prior to issuance of the Subdivision Certificate for the 1st lot. This is considered appropriate in order to ensure the IWTS meets regulatory requirements and is constructed and commissioned in accordance with WICA licences.

Further information from the Applicant

Following the Panel's briefing with the applicant and independent consultants on 28 April 2022 and having reviewed the DWA Report, the Panel requested the applicant address the concerns in Section 3.1.2 of the DWA Report. Subsequently, the applicant provided further material from SEEC reiterating their position that the proposed irrigation approach was satisfactory. The applicant also provided a legal opinion which stated it was unnecessary and unreasonable to impose the condition requiring the WICA licence prior to subdivision works certificate (discussed further below).

DWA has reviewed this additional material from SEEC and concluded that the appropriate pathway to address the risks and uncertainty identified in Section 3.1.2 of the DWA Report relating to the LCA and proposed effluent irrigation strategy is via a Network Operator Licence

under the WICA.

DWA stated:

“The WICA assessment process includes a ‘Sustainability Assessment’ that considers the environmental and human health risks associated with a proposed effluent management strategy. This assessment includes referral of the LCA and design documentation to the EPA and NSW Health for concurrence.”

In relation to the Panel’s concerns with the potential environmental impacts arising from the irrigation area, DWA consider there to be ‘*more risk associated with conducting a separate, parallel assessment process as part of the subdivision DA given the iterative, ‘chicken and egg’ nature of irrigation system design*’. DWA considered that since the process can typically involve trade-offs between the size of the irrigation area, volume of wet weather storage and effluent quality, that there are a number of combinations that could be pursued and therefore a thorough consideration of all the options is better undertaken as part of the WICA licence process.

DWA did conduct some preliminary water balance modelling that would suggest the proposal as documented in the SEEC LCA does carry some risk and has been designed using guidelines not typically applied to a scheme of this scale under WICA. However, DWA cannot at this time say with confidence that management of effluent generated by Stage 1 cannot be managed on the site. DWA consider that it may be possible that the applicant will be able to negotiate a compromised irrigation strategy on the basis that it is an interim system, and/or conduct more detailed investigations and design to justify suitability of an alternative approach. Accordingly, DWA concluded that the WICA process be utilised to further refine the design of the proposed irrigation approach and recommended conditions relating to the WICA licences being required to ensure this further assessment is undertaken prior to the subdivision progressing.

Legal Opinion – Conditions

The applicant also provided a legal opinion which concluded that the proposed imposition of a condition to require the WICA licence prior to the issuance of the Stage 1 Subdivision Works Certificate was not necessary or reasonable because:

- Such a restriction prevents any subdivision works whether they relate to the sewer component or not.
- Whilst there is a valid need to ensure future lots are not registered, and thus no homes can be constructed and occupied without a sewer connection, this can be ensured by a restriction on the grant of a subdivision certificate and occupation certificates until the WICA licence is issued.
- The sewerage treatment plant has already been approved. The WICA licence application process is focussed more on the capability of the proposed licence holder rather than constructability and design.
- It has not been required on other projects.

DWA consider the recommended conditions of development consent to require the WICA licences and approvals prior to issue of Subdivision Works and Subdivision Certificate to be the most appropriate mechanism for managing the risks/uncertainties identified in Section 3.1.2 of the DWA Report. DWA do not consider the additional material from SECC justifies removing the recommended conditions. This remains commensurate with requirements for other subdivision infrastructure such as roads, water and stormwater. The Interim treatment plant and irrigation system can reasonably be considered critical components for the provision of an essential service for the development.

DWA concluded that an exception should not be made to allow commencement of subdivision construction prior to completion of a mandatory approval process for water and sewer infrastructure. As an example, DWA noted that the owner of a single dwelling cannot obtain their Construction Certificate until they have an approval under Section 68 of *Local Government Act 1993* to construct an on-site wastewater management (septic) system. On this basis, DWA consider it reasonable to expect the same for the interim system.

The imposition of the WICA conditions is considered reasonable in this instance as it ensures that the further assessment of the interim plant and irrigation area is undertaken prior to the subdivision progressing on the site. This is of particular importance given the concerns raised by DWA in relation to the irrigation area. Without the WICA approvals, the proposed subdivision cannot be serviced and therefore this is a critical issue which requires resolution as soon as possible following determination of the subdivision application.

Concept Plan

In relation to sewer servicing for the proposed concept plan, DWA provided the following conclusions:

- The hydraulic model calculations, which are based on Council's design standards, were considered to be generally consistent with Council's engineering design.
- A suitable future pathway is available for connection to the MVSTP for the lots from stages 2 – 5. To clarify the arrangements, DWA suggested that:
 - The Draft Agreement letter be re-titled and re-emphasised to a 'Water and Sewer Infrastructure Staging Plan' or similar for inclusion in any consent in conjunction with the UWS Servicing Strategy; and
 - The UWS November 2019 Report confirm or amend that the staging plans/strategy/modelling has been based on 1,200 proposed lots.

Comment: The Water and Sewer Strategy 2022 has been provided, however, the UWS modelling was not updated for the proposed maximum 1,200 residential lots for the site. Accordingly, a condition has been recommended in **Attachment A** to restrict the lots to a maximum of 1073 residential lots as outlined in the sewer modelling by UWS.

- Supports the use of conditions of consent rather than a separate agreement to implement the servicing strategies

Comment: Relevant conditions have been recommended in the revised draft conditions in **Attachment A**

- DWA recommended the following conditions:
 - The requirement to obtain all necessary WICA licences prior to issuance of the Stage 1 Subdivision Works Certificate (commensurate with standard practice for conventional water, stormwater and sewerage infrastructure that require *Local Government Act 1993* Section 68 approval of sewerage works).
 - The applicant to demonstrate that appropriate approvals to commence

commercial operation of the IWTS under WICA have been obtained, prior to issuance of the Subdivision Certificate for the 1st lot.

- Connection to the Council network is required within a fixed timeframe once MVSTP capacity is made available (regardless of development stage).
- Future development applications for other stages in the concept plan be required to connect to the Council network (and MVSTP) and capacity at MVSTP to be confirmed prior to issue of any development consent for a detailed Development Application for Stage 2 onwards consistent with Council's preference and Water NSW concurrence conditions.
- Suitable conditions required to ensure the establishment and operation of the IWTS and subsequent transition to the WSC network takes place appropriately.

Comment: These conditions are supported and have been included in the revised draft conditions in **Attachment A**.

The provision of sewer servicing to the site is considered to be satisfactory subject to the recommended conditions in **Attachment A**.

5.2 Water Supply and Reticulation Infrastructure

The provision of a water supply to the proposal has been considered in a number of reports and strategies prepared on behalf of the applicant for both the concept plan (the whole of the site) and the first stage of the development (stage 1). The relevant reports include:

- *Aoyuan Moss Vale Subdivision Stage 1 Water Servicing Strategy* prepared by Urban Water Solutions dated 25 May 2020 ('the UWS May 2020 report');
- *Aoyuan Moss Vale Subdivision Full Development Water Servicing Strategy* prepared by Urban Water Solutions dated 11 August 2020 ('the UWS August 2020 Report');
- *Staging Plan for the provision of External Water, Sewerage and Local Road Infrastructure* dated 18 August 2021 ('the JMD Report');
- *Moss Vale Short Term Water Supply Planning Report*, prepared by Ian Burrows dated December 2021 ('the Burrows Report'); and
- *Water and Sewer Infrastructure Staging Plan* prepared by Premise dated 11 May 2022 ('the Water & Sewer Strategy 2022').

The analysis of the Wingecarribee Water Supply model identified that the existing network in the vicinity of the development does not have the capacity to service the full development yield without the installation of network infrastructure, while Stage 1 could be serviced with existing water supply.

The Council has developed a Long-term capital and operating strategy for increasing water supply to the Moss Vale area, with medium to long term actions having been put in place by Council. One of these required upgrades includes a 450mm trunk main duplication from the Bowral system to the Hill Road Low Level Reservoir (the Bowral to Moss Vale water main duplication – ‘B2MV duplication’). The B2MV duplication is currently in the detailed design phase, which should be completed by the end of this year, and is scheduled to commence construction in the 2022/23 financial year with construction likely over 2 to 3 years.

Developers, however, are looking to progress development within the Moss Vale area and accordingly, the Council commissioned the Burrows Report in late 2021, arising from the expected timing of this proposal and to provide a review of the short-term options for improving the Moss Vale water supply prior to implementation of the medium-term capital works strategy (i.e., the B2MV duplication).

The Burrows Report has considered the proposal in terms of its ability to be adequately serviced with a water supply (among other proposed developments) and developed five (5) modelled options tested for average day demand (‘ADD’) and maximum day demand (‘MDD’) conditions. The model options provided a range of capital works that could be delivered within a relatively short time frame and were broadly aligned with the medium to long term strategy, including:

- Option 01: Do Nothing
- Option 02: New inlet control valve for Oxley Drive zone plus non-return valve (‘NRV’) to northern supply
- Option 03: New inlet control valve for Oxley Drive zone plus NRV to northern supply plus Stage 01 of Bowral to Moss Vale Trunk Main Duplication–
- Option 04: New inlet control valve for Oxley Drive zone plus NRV to northern supply plus rezone Blakes Hill onto Bundanoon WTP (the short term strategy of this option enables Hill Road to fill under ADD conditions at 2026 and 2031 and level in Hill Road Reservoir can be maintained under MDD for 2026 but not for 2031. Storage

performance in 2031 unlikely to be acceptable). Timing was noted as less than 6 months.

- Option 05: New inlet control valve for Oxley Drive zone plus Bowral to Moss Vale temporary transfer pumping station

The Burrows Report identified the following demand and development trigger levels for the proposal:

- For Chelsea Gardens development to proceed, the recommended Option 04 should be in place, which will be suitable for up to approximately 480 lots at the site. It is noted that the Water and Sewer Strategy 2022 outlines that the short term strategy works (i.e., Option 04) must be completed prior to connection of stage 2 of the proposal;
- For development levels beyond 480 lots (from Stage 3 onwards) at the site, either the B2MV duplication Stage 01 or Stage 02 or alternatively (subject to further investigation), the Bowral to Moss Vale booster pumping station must be implemented.
- For development levels beyond 960 lots at Chelsea Gardens, the full B2MV duplication must be completed.

The Burrows Report also concluded that an additional water reservoir storage was required by Stage 2B of this proposal and that the preferred site for this additional storage in the Moss Vale area is adjacent to existing Hill Road reservoir within the subject site. The revised concept plan includes an infrastructure lot for the proposed additional reservoir and is therefore consistent with this short term strategy.

The Council has advised that Option 04 from the Burrows Report is included in Council's capital works program for 2022/23 which includes works for the construction of new valves to supply more water to Moss Vale, plus modification of treatment plant controls to operate based on Hill Road (Moss Vale) reservoir instead of Bowral. The Council stated that the timing of these works is dependent on the completion of design and construction activities which will commence in July 2022, with Council aiming for completion as soon as possible within the 2022/23 financial year.

The progress of these short term strategy works are largely a Council-led process and the applicant is only responsible for the connection to the existing reservoir for stage 1 (and construction of the associated reticulation within the site) and the construction of, and the provision of land for, the additional reservoir by Stage 2B (the 382nd lot). These recommendations of the Burrows Report are included in the Water and Sewer Strategy 2022

provided by the applicant and agreed to by Council. A summary of the provision of the water supply servicing infrastructure for stage 1 and the concept plan is outlined below.

Stage 1

The UWS May 2020 report outlined the water servicing strategy for Stage 1 of the proposal, with the current Council network capable of supplying proposed Stage 1 without augmentation. Stage 1 is proposed to be supplied from the Hill Rd Low Level Reservoir, with a DN300/DN450 transfer main being required to transfer flow from the reservoir to the Stage 1 area (**Figure 16**). The UWS May 2020 report also noted that although the land within proposed Stage 1 is located within the Blakes Hill Reservoir zone, there is insufficient storage available at that Reservoir to service any additional demand from the proposal (and therefore the proposal is not proposed to be serviced from Blake's Hill).

The JMD Report confirmed that the transfer water main required to be constructed within the site to connect the Stage 1 reticulation to the reservoir will be designed and installed by the developer at no cost to Council and will be protected by a suitable easement created in favour of Council, with the main being transferred to Council upon the completion of Stage 1.

It also confirmed that no other water reticulation works, external to the development site, are required to be constructed. The JMD Report, however, did not provide any indication of whether Council had accepted this and whether it was consistent with Council's future capital works in relation to the local water supply upgrades, however, stated that further work would be required to the water supply network to service the proposal beyond 900 lots. The Water and Sewer Strategy 2022 has filled these gaps and Council agrees with the strategy and confirmed that consent conditions is the most appropriate pathway to implement the strategy.

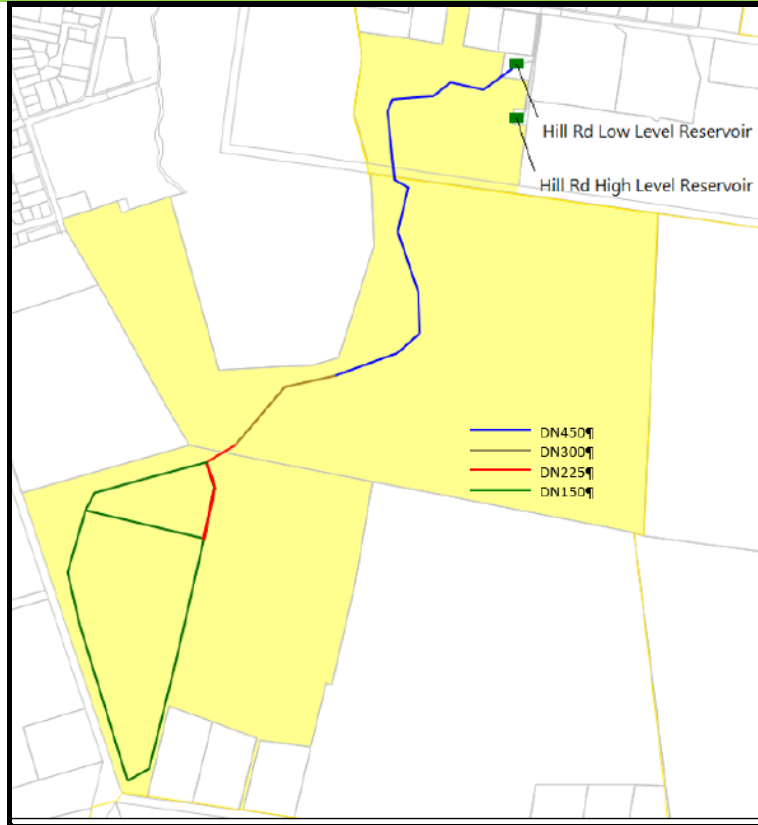


Figure 16: Proposed Stage 1 water servicing (Source: UWS, May 2020 - Figure 4-1)

Concept Plan

The UWS August 2020 Report provides a water servicing strategy for the proposed concept plan of 1,200 lots, which is to supply the majority of the development (1,185 lots) from the Hill Rd Low Level Reservoir via a new outlet main (**Figure 17**) following the upgrade work as discussed above and in the Burrows Report. The remaining 15 lots in Stage 3b in the northern part of the development will connect to the DN100 AC main along Hill Rd in the Hill Rd High Level Zone to utilise the available storage capacity and the higher supply grade in the Hill Rd High Level Zone (**Figure 18**). This will remove the need for pumping within the site.

The Water and Sewer Strategy 2022 provided by the applicant outlines the triggers for the upgrades to the water supply, which culminates in the need for the B2MV duplication to be commissioned and the provision of the additional reservoir at the site.

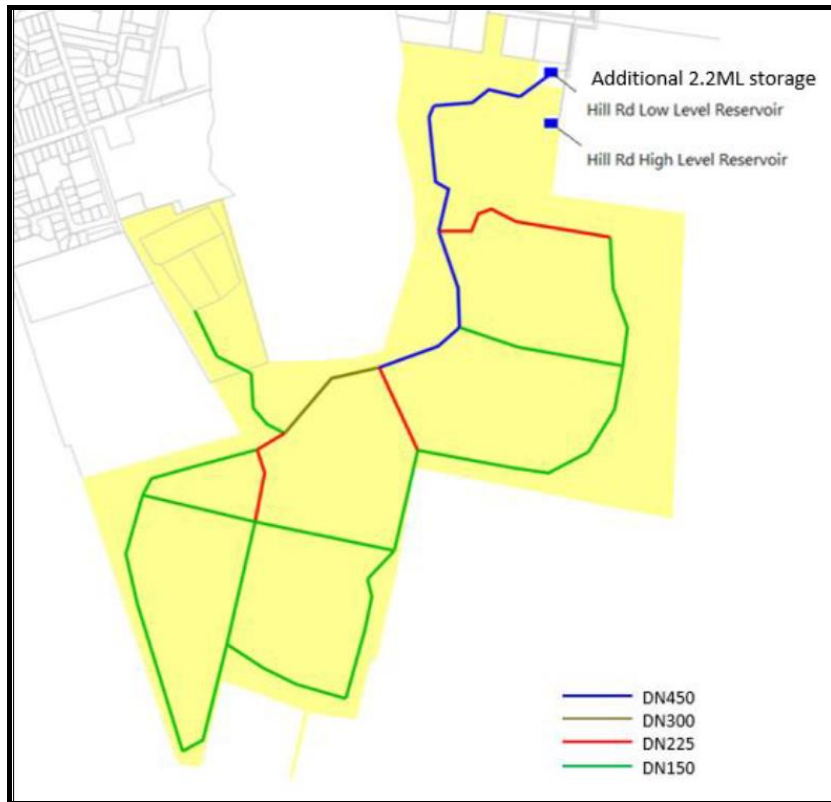


Figure 17: Proposed Water Supply for the Concept Plan (Source: UWS, August 2020, Figure 4-1)



Figure 18: Lots to be connected to Hill Rd High Level Zone (Source: UWS, August 2020, Figure 4-1)

DWA Report – Stage 1 & Concept Water Strategy

The DWA Report reviewed this water supply strategy and made the following conclusions in relation to the concept plan, which are considered below:

- The hydraulic parameters, pipe sizing and pressure at a small number of test locations indicated that the proposed demands and impacts on the network were within expected outcomes

Comment: Noted, no further action

- The Water and Sewer Strategy 2022 is generally aligned with the infrastructure upgrades and timing documented in the Burrows Report

Comment: Noted, no further action

- Whilst the 2020 UWS modelling did not consider the short-term water supply strategies required to enable development prior to completion of the B2MV main duplication, Council has advised that modelling undertaken to inform the Burrows report has addressed this gap.

Comment: Noted, no further action

- The Water and Sewer Strategy 2022 is adequate to enable approval of a concept development and would be subject to standard conditions requiring detailed design and revised network modelling prior to issuance of a Subdivision Works Certificate for future stages.

Comment: Relevant conditions have been included in the revised draft conditions in **Attachment A.**

- Water and sewer infrastructure can be dealt with via conditions of consent (subject to the agreement being rephrased into a water and sewer servicing plan) now that verification of the required infrastructure has been provided from Council.

Comment: The Water and Sewer Strategy 2022 is satisfactory, with the recommended conditions have been included in the revised draft conditions in **Attachment A**.

- Several specific matters require clarification or modification including:
 - the Draft Agreement letter be re-titled and re-emphasised to a 'Water and Sewer Infrastructure Staging Plan' or similar and included as a stamped document under the consent along with the Stage 1 and Full Development UWS Servicing Strategies.
 - Amend the trigger for Item 4 in Appendix B of the Agreement to "Work is to be completed and commissioned prior to the issuance of the Subdivision Certificate which creates the 961st residential lot.
 - Seek confirmation from Council that the developer is not required to design or construct any works associated with the Short-term Option 04 water supply augmentation strategy discussed by WSC as required to service up to 480 residential lots.

Comment: The Water and Sewer Strategy 2022 is satisfactory and has updated item 4 in Appendix B as requested.

- Several matters need to be addressed as part of LGA Section 68 approval process (for Stage 1) including:
 - The final connection point to the network immediately adjacent to the Hill Road Low Level Reservoir must be determined and the modelling revised as part of the detailed design and Section 68 process for Stage 1; and
 - The detailed design and modelling for the development supply mains (to be performed during Section 68 process) needs to consider the potential for water quality impacts due to residence time in the DN450 main due to lower demands from early development. Additionally, consideration must be given to gradual upsizing if deemed necessary by the modelling outcomes.

Comment: Relevant conditions have been included in the revised draft conditions in **Attachment A**.

The conditions recommended in the DWA Report are included in **Attachment A** as well as other conditions required to ensure the provision of adequate water supply infrastructure is

provided on the site. It is considered that an adequate water supply can be supplied to the site as outlined above.

Summary of Water and Sewer

Following an independent engineering review of the proposed water and sewer servicing arrangements by DWA for the site and Council's agreement to such arrangements, it is considered that the proposal satisfies Clause 7.10(2) of the WLEP 2010 as adequate arrangements have been made for public utility infrastructure to be available for the proposal. It is also considered that the proposal is consistent with Clause 2.11 of the DCP for the provision of water and sewer services to the site. This satisfaction is subject to the recommended revised conditions in **Attachment A**.

6. STATUTORY ASSESSMENT

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act'). These matters as are of relevance to the development application include:

- (a) *the provisions of—*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
that apply to the land to which the development application relates,
- (b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) *the suitability of the site for the development,*
- (d) *any submissions made in accordance with this Act or the regulations,*
- (e) *the public interest.*

These matters are considered below:

6.1 Provisions of environmental planning instruments, proposed instruments, development control plans, and any planning agreements (Section 4.15(1)(a))

(a) Environmental planning instruments, proposed instruments and development control plans

The environmental planning instruments, proposed instruments and development control plans pursuant to Section 4.15(1)(a)(i), (ii) and (iii) of the EP&A Act relevant to this application include the following:

- *State Environmental Planning Policy (Planning Systems) 2021 – Chapter 2: State and Regional Development;*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 8: Sydney Drinking Water Catchment;*
- *State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 4: Remediation of Land*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021 – Chapter 2: Infrastructure;*
- *Wingecarribee Local Environmental Plan 2010 ('WLEP 2010');*
- *Draft amendments to State Environmental Planning Policy (Infrastructure) 2007, SEPP (Environment) and Remediation of Land SEPP*
- *Moss Vale Town Plan DCP - Section 21 Chelsea Gardens Coomungie Precinct ('the DCP')*

The relevant controls of these planning instruments and policies are considered in a compliance table in **Attachment A**.

Integrated Development

The development application is Integrated Development pursuant to Section 4.46 of the EP&A Act pursuant to:

- Section 100B of the *Rural Fires Act 1997* (Bushfire Safety Authority) and
- Section 91(2) *Water Management Act 2000* (Controlled activity approval).

General terms of approval ('GTAs') have been provided from these agencies and are included in the revised recommended draft conditions in **Attachment A**. The development application is not integrated development under the *National Parks and Wildlife Act 1974* as an Aboriginal Heritage Impact Permit ('AHIP') pursuant to Section 90 is not required as there are no works proposed in Stage 1 which would impact on any Aboriginal object, Aboriginal place, land, activity or person (contrary to the DA form). An AHIP will be required for future stages under the concept plan and relevant conditions have been updated in the revised recommended draft conditions.

Concurrence

Concurrence under Section 4.13(1) of the EP&A Act is required pursuant to Section 8.9 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*. The concurrence of Water NSW has been obtained and the recommended revised draft conditions incorporate the concurrence conditions of Water NSW (s4.13(8)(a) of the EP&A Act). The recommended conditions are consistent with the Water NSW conditions (s4.13(9) of the EP&A Act).

Preconditions to the Grant of Consent

The key preconditions of the planning controls and other key requirements include the following, which have been satisfied:

- Section 8.9 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Chapter 8: Sydney Drinking Water Catchment) which states that a consent authority must not grant consent to the carrying out of development under Part 4 of the Act on land in the Sydney drinking water catchment except with the concurrence of the Regulatory Authority. This concurrence has been granted by Water NSW and relevant conditions have been included in the recommended conditions to be imposed in the revised draft conditions.
- Section 4.6 of *State Environmental Planning Policy (Resilience and Hazards) 2021* (Chapter 4: Remediation of Land) which requires the consent authority to consider whether the land is contaminated, and if contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the proposal, and if the land requires remediation to be made suitable for the proposal to

be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. This issue has been adequately addressed and discussed further in the key issues. Relevant conditions have been recommended to be imposed in the revised draft conditions.

- Section 2.48 of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Chapter 2: Infrastructure) requires the consent authority, prior to determining a development application for development involving or requiring the placement of power lines underground, give written notice to the electricity supply authority for the area in which the development is to be carried out.

The Council state that the applicant has undertaken this consultation with Endeavour Energy ('EE') including connection service application for the SPS and Interim sewage plant, certified plans for the electricity Supply for the site and Substation No 54998 (display centre and up to 550 lots). A Letter of intent Electricity Supply for the site has also been submitted to EE on 21 February 2022. The Council states that the Infrastructure report indicates that the first feeder work bolsters the local network such that there will be sufficient supply for the first 550 Lots at the site, after which the second feeder work will be required to provide for the remainder of the Development. Relevant conditions are recommended in **Attachment A**.

- Section 2.121 of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Chapter 2: Infrastructure) requires the consent authority, prior to determining a development application for development involving traffic generating development, to give written notice to TfNSW and consider any submission as well as any accessibility, traffic safety and servicing issues. This has been addressed by the application.
- The *Wingecarribee Local Environmental Plan 2010* ('WLEP 2010') is the principal planning instrument applying to the site. The following clauses of the WLEP 2010 are relevant to the proposal:
 - Clause 1.2 – contains the aims of the plan, with the proposal considered to be consistent with these aims in that it seeks residential development in an area which is zoned for residential development. The proposal encourages the efficient use and development of urban land, being a logical extension of the existing township of Moss Vale, and having been identified for residential

development.

- Clause 2.2 – this clause contains the zoning of the site, with the site comprising land in numerous zonings (**Figure 19**). A consideration of the proposal in relation to the zoning is outlined in the key issues section of this report.
- Clause 4.1 – contains the minimum subdivision lot size development standard, which has been achieved for all of the residential lots, however, has not been achieved for one of the proposed public reserves in Stage 1 (proposed Lot 1181). A Clause 4.6 request has been provided and is considered to adequately demonstrate that compliance with the development standard is unreasonable and unnecessary in the circumstances of the case, that there are sufficient environmental planning grounds to justify contravening this development standard and that the proposal is in the public interest. While the concurrence of the Planning Secretary is not required as the proposal is for regionally significant development (and does not involve a lot size exceedance in a rural zone), the matters for consideration in this regard have also been satisfied. This consideration of the Clause 4.6 request is at **Attachment C**.

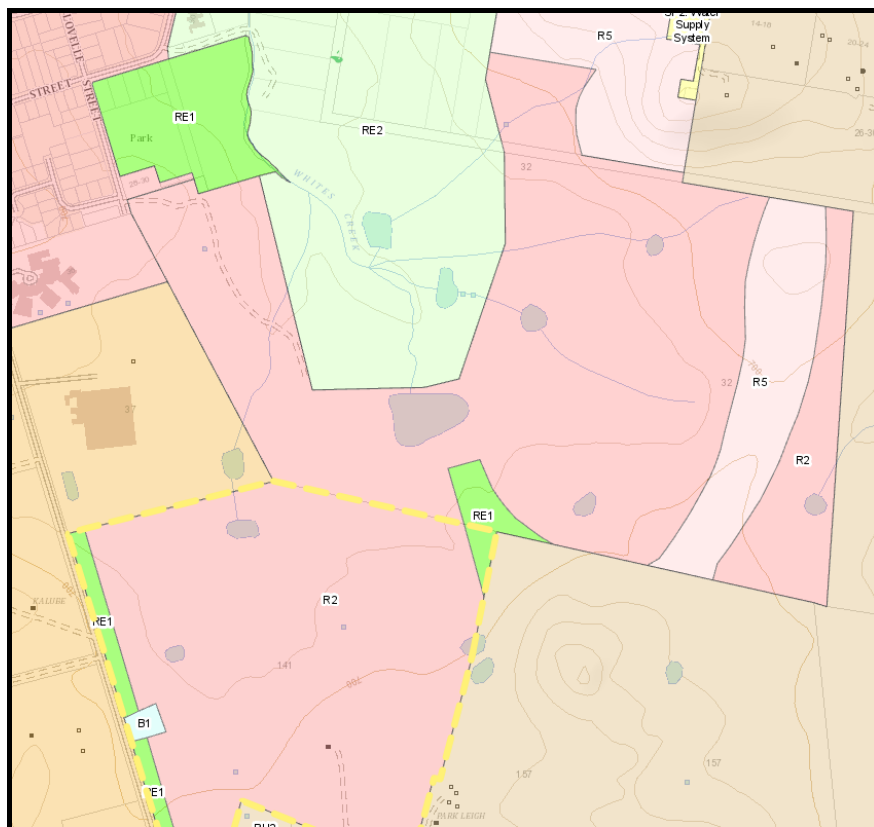


Figure 19: Zoning of the Site (Source: NSW Planning Portal)

- Clause 5.16 – contains controls for the subdivision of land in the R5 zone, which has been satisfied.
- Clause 5.21 – contains controls for flood planning, which has been satisfied subject to additional and revised recommended conditions as provided in this report.
- Clause 6.1 – contains for arrangements for designated state public infrastructure. This has been satisfied following the provision of certification from the Department that satisfactory arrangements have been made in relation to this clause dated 3 August 2021 (through the State VPA for road works).
- Clause 6.2 – contains a requirement for a Development Control Plan to be prepared for the site. Section 21 of the DCP satisfies this clause (considered in **Attachment B**).
- Clause 7.3 – contains controls for earthworks which has been satisfied, subject to relevant conditions which have been updated in the revised recommended draft conditions.
- Clause 7.5 – contains controls for natural resources sensitivity (water) which states before granting consent for development on land to which this clause applies, the consent authority must consider any potential adverse impact of the proposed development on the natural flow regime, the water quality of receiving waters, the waterway’s natural flow paths, the stability of the waterway’s bed, shore and banks, and the flow, capacity and quality of groundwater systems. The Integrated Water Cycle Management Report has considered these issues, which is further discussed in the Key issues section. This matter has been satisfied subject to relevant conditions which have been updated in the revised recommended draft conditions.
- Clause 7.10 – contains a precondition to the grant of consent for the provision of public utility infrastructure. Consent must not be granted for development on land to which this clause applies unless the Council is satisfied that any public

utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required. The Council accepts the proposed arrangements for sewer and water, which is further discussed in Section 5 of this report. This matter has been satisfied subject to relevant conditions which have been updated in the revised recommended draft conditions (**Attachment A**).

Moss Vale Township Development Control Plan - Section 22: Chelsea Gardens Coomungie Precinct

On 30 October 2019, the *Moss Vale Township Development Control Plan* was amended with the introduction of *Section 22: Chelsea Gardens Coomungie Precinct*, a Site Specific DCP applying to the site ('the DCP'). This DCP was effective approximately two months following lodgement of this DA. A detailed consideration of the proposal in the context of the provisions of the DCP is provided in **Attachment B**.

(b) Planning agreements (Section 4.15(1)(a)(iia))

A state voluntary planning agreement ('SVPA') has been executed and the proposal is generally consistent with this Planning Agreement as discussed in Section 7 of this report, with the future road in the north-east section of the site illustrated on the concept plan.

(c) Provisions of Regulations (Section 4.15(1)(a)(iv))

Clause 92(1) of the Regulation contains matters that must be taken into consideration by a consent authority in determining a development application. The application does not involve any of these matters.

6.2 Likely impacts of that development (Section 4.15(1)(b))

The likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality have been considered in response to SEPPs, LEP and DCP controls outlined above and in the key issues section. The proposal is considered satisfactory subject to the recommended revised draft conditions outlined in **Attachment A**.

6.3 Suitability of the site for the development (Section 4.15(1)(c))

The site has been zoned for residential development and has been the subject of numerous studies and consultant reports over the past 10 years. There are a number of site constraints, discussed further in Section 7 of this report, however, it is considered that subject to the recommended revised draft conditions outlined in this report, the site is suitable for the proposed development.

6.4 Submissions (Section 4.15(1)(d))

The submissions from the community lodged during the notification period have been considered by Council in their assessment report. Relevant revised conditions have been recommended to be imposed to address these issues where relevant.

6.5 Public interest (Section 4.15(1)(e))

The proposal is generally consistent with the planning controls, the site is suitably zoned for the proposal and the constraints of the site have largely been addressed. The proposal would assist in providing additional housing opportunities in a location which has the benefit of services provided within the Moss Vale town centre and is located to allow for future pedestrian connections to the town centre.

The proposal represents a logical extension of the urban area of Moss Vale and the physical aspects of the proposal are satisfactory having regard to internal road network and connections to the local road system, the location and amount of public open space and the provision of infrastructure. The proposal is considered to be in the public interest.

7. CONSIDERATION OF THE KEY ISSUES

The following key issues are relevant to the assessment of this application having considered the relevant planning controls and the proposal in detail:

- Traffic Generation, Road layout and Connections to Local Road Network
- Integrated Water Cycle Management
- Boundary interfaces and Visual Impacts
- Subdivision Design and Permissibility
- Ecological and Biodiversity Issues
- Public open space and streetscapes
- Site constraints
- Heritage
- Contributions

The water and sewer servicing of the site is considered in detail in Section 5 of this Report. These key issues are considered further below.

7.1 Traffic Generation, Road layout and Connections to Local Road Network

In relation to road and traffic issues and potential impacts on the local road network, the following reports were provided with the application:

- *Moss Vale Traffic Study Report* prepared by Cardno, July 2019 ('2019 Traffic Study');
- *Traffic Impact Assessment* prepared by Cardno, 27 April 2021 ('TIA');
- *Moss Vale Traffic Model Audit Report* prepared by Transport Modellers Alliance dated 4 May 2021 ('the TMA Audit').

Traffic Generation and the Surrounding Road Network

The 2019 Traffic Study undertook a traffic and transport analysis to assess the impacts of the proposal on the surrounding road network. The outputs of the model were then used to assess

the impacts of the development and inform recommendations for mitigating its effect on the traffic network.

This Study stated that the traffic surveys indicated that the major current deficiencies experienced by the road network are within the CBD area and future modelling results suggested that these deficiencies will be exacerbated by the proposed development and other future growth. This Study summarises the findings of all previous modelling which has been undertaken by the applicant since 2016.

The key findings of this study included:

- *With the North East Road, the impact of Chelsea Gardens on the traffic network is predominantly concentrated at the following intersections:*
 - *Argyle Street / Arthur Street*
 - *Argyle Street / White Street*
 - *Argyle Street / Illawarra Highway / Suttor Road*
 - *Illawarra Highway / Fitzroy Road.*
- *Minor intersection upgrades (right turn bans) at Argyle Street / Arthur Street on the Arthur Street and western Argyle Street approaches are recommended to improve network level of service and mitigate the impact of additional traffic from Chelsea Gardens*
- *The Argyle Street / Illawarra Highway roundabout performs near or at capacity with the full development*
- *Roundabout metering (not modelled) could be employed to improve the performance of this roundabout*
- *The staged development means that impacts to the roundabout will be progressive not immediate*
- *It is not necessary to remove any parking in the CBD for the suggested infrastructure upgrades based on the impact of Chelsea Gardens only*
- *The Stage 1 Moss Vale Bypass is not directly triggered by the proposal as the impact of the development in isolation can be mitigated by infrastructure upgrades*
- *Previous modelling indicated that without infrastructure upgrades or Chelsea Gardens but including other development and background growth, the Moss Vale CBD experiences significant traffic congestion and delays by 2036*
- *If the Stage 1 Moss Vale Bypass is implemented in the future, this would improve traffic conditions, amenity and intersection performance on Argyle Street while retaining*

existing car parking provisions.

The Council engaged Transport Modellers Alliance ('TMA') in February 2021 to undertake an independent audit of the *Moss Vale Model* prepared by Cardno, the TMA Audit. This independent audit concluded that there were a range of significant concerns with the modelling and that the findings of the assessments undertaken cannot be reliably used in the assessment of traffic impacts.

The Council has provided further correspondence from Cardno dated 11 June 2021, which considered the TMA Audit, stating that *they are not expected to fundamentally change the outcome of the investigations completed to date or the findings in relation to transport infrastructure requirements from the overall development.* Cardno provided recommendations on how to address each audit finding and that traffic model updates could subsequently be undertaken, however, should not preclude approval of DA 20/0227 for the Concept Masterplan and detailed Stage 1 subdivision.

The Council and the applicant have been considering the traffic modelling at various meetings, with the applicant stating that the Council had agreed to consider the modelling further after stage 1. This is contrary to Council's supplementary report to the Panel in October 2021 in which Council's traffic engineer considered that a no risk conclusion regarding the timing and level of impact on each of the local road network intersections over time would require an updated model, stating:

From a no risk perspective the finalisation of the Traffic Model and Traffic Impact Assessment Report prior to the determination of the DA for the Masterplan and Stage 1 is important as potential development impacts on the local road networks (where there could be potential community concerns) are identified and managed in a logical and transparent manner."

The Council has now advised (on 17 May 2022) that this risk mitigation could be achieved in several ways, including the proposed model review and adjustments at subsequent DA stages. Given Council's expertise in traffic management and their history and on-going dialogue with the applicant and its consultants, it is recommended that the modelling is reviewed and adjusted where required prior to the submission of the development application for the next stage (provided in the revised draft conditions in **Attachment A**).

This condition is more specific than Council’s proposed draft condition as it requires that the modelling is undertaken *prior to the submission of a development application for the next stage of the subdivision*, whereas Council’s proposed condition stated, ‘*at the appropriate stage as identified in the Traffic Impact Assessment Report for the whole of the development precinct*’. The revised proposed condition requires the updated modelling is undertaken before any further stages are considered, ensuring that no further subdivision can occur without a revised model being considered by Council.

Proposed North East Road

A new road is proposed, known as the North East Road, as required by the State VPA (discussed further in Section 7.10 of this Report), which represents a north-eastern connection between the site and Fitzroy Road / Illawarra Highway (**Figure 20**). The connection was considered in the modelling process in the TIA to provide additional connectivity to the development and minimise traffic from the proposal using the Moss Vale CBD.

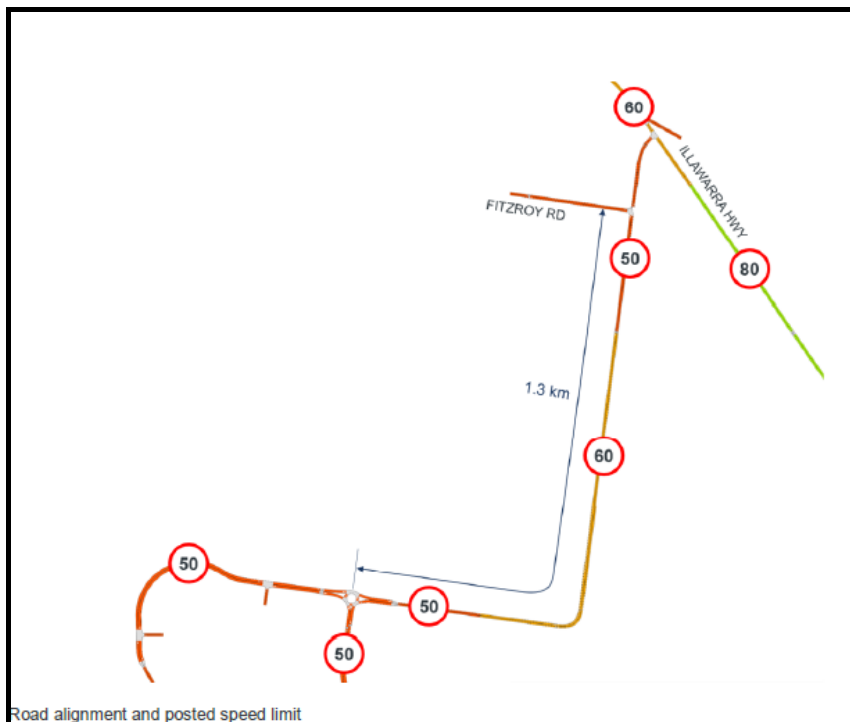


Figure 20: Proposed North East Road (Source: TIA, Cardno, 21 April 2021)

There is also an unmade road reserve, known as Shelley Road (although not formed or signposted), which traverses the site from the eastern boundary of the golf course to the eastern boundary of the subject site, with this unmade road aligning with the proposed west to east road in Stage 5. This unmade road reserve is outside of the site boundaries (shown

on DP 866036 as the break in the two portions of Lot 12), which will connect with the proposed north-east road outlined in the State VPA. The Council has recommended a condition to be imposed which requires the closure of this public road (Shelley Road) in future stages, which has also now been included in the revised draft conditions in **Attachment A**.

The link is approximately 1.3 kilometres long and is proposed to have a sign posted speed limit of 60 kilometres per hour for its length except within 250 metres at either end where it reduces to 50 kilometres per hour to remain consistent with the surrounding local roads.

The concept plan has been revised to refer to this proposed future new road, which allows connection of the site to this future intersection as required by Transport for NSW. The requirements for the construction of this road is covered in the State VPA and the Council has recently advised that the proposed road is within a current unformed road reservations of Shelley Road and Fitzroy Road and therefore this land is already reserved for this purpose (and is not private property). The Council has also recently advised that Crown Lands have confirmed that this road is a Council Public Road.

There are no implications of this proposed new road for the construction of Stage 1. A condition has been recommended to be imposed in the concept plan to ensure this road is constructed prior to the issue of a Subdivision Certificate for the 500th residential Lot.

Stage 1 Traffic Impacts

The TIA was carried out to determine the potential traffic generation of the proposal and to assess the impacts of Stage 1 on the Yarrawa Road / Spencer Street / Darran Road intersection. The TIA also reviewed the proposed internal road layout and the existing public transport services and provisions for walking and cycling in the vicinity of the site (considered below).

The TIA made the following conclusions in relation to proposed Stage 1:

- The surrounding traffic network has sufficient capacity to cater for the increase in traffic volumes associated with Stage 1
- There is limited sight distance at the Yarrawa Road / Spencer Street / Darran Road intersection (currently priority controlled). A traffic signal warrant assessment was undertaken with the results indicating that the criteria to upgrade this intersection to

traffic signals is not met

- *Section 94 Developer Contributions Plan for Roads and Traffic Facilities 2012 to 2031 (Wingecarribee Shire Council, 2012)* lists rehabilitation of Yarrawa Road / Spencer Street as part of Table 10 – Works Schedule for Local and District Roads and Traffic Facilities for the Wingecarribee Shire 2006 to 2031. The nominated rehabilitation is installation of a roundabout
- The upgrade shown in Council's contributions plan is deemed adequate to address existing safety deficiencies at this intersection (which precede Chelsea Gardens Stage 1) and convert it to a configuration suitable to accommodate the relatively small increase in traffic volumes generated by Chelsea Gardens Stage 1
- Given how the traffic signal warrant criteria not being met, a meeting with Council and TfNSW is proposed to discuss the options available to improve safety at this intersection, namely the proposed upgrade to a roundabout configuration and respective delivery mechanism and timing.

Yarrawa Road / Spencer Street / Darran Road intersection

This intersection requires an upgrade from the current signal controlled intersection to a roundabout as a result of the lack of adequate sight distance at this intersection and the likely increase in traffic movements through this intersection from the proposed stage 1 development. The Staging Plan for the *Provision of External Water, Sewerage and Local Road Infrastructure* prepared by JMD Development Consultants dated 18 August 2021 ('the JMD Report') considered this intersection further, which noted that Council have identified the intersection as a priority upgrade in the Contributions Plan with the existing signage to be replaced with a roundabout. Given the delay on the planned implementation of the works as identified in the Plan, Council requested that the applicant undertake interim intersection improvement works until the final works are completed (**Figures 21 and 22**).

The JMD Report confirms that the applicant will construct a small mountable roundabout and associated signage and line marking (refer Figure 3-3) at no cost to Council prior to the issue of Subdivision Certificate of the Stage 1 development. These works will be contained within the existing road reserve and remain as Council assets upon completion of the works.

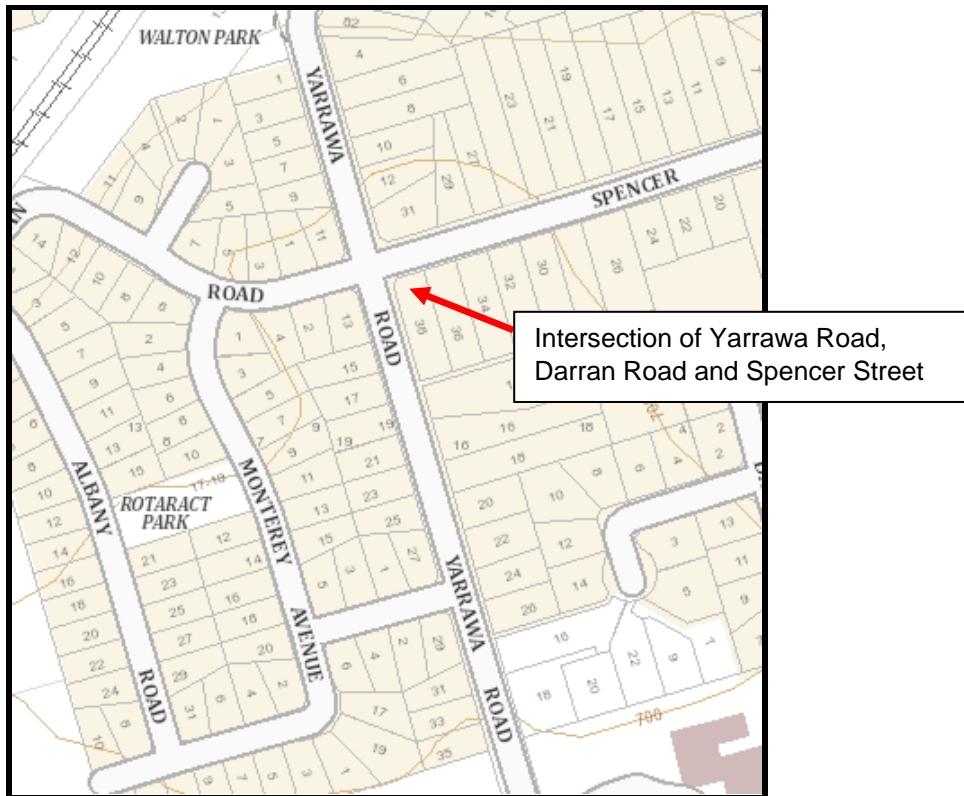


Figure 21: Yarrawa Road / Spencer Street / Darran Road intersection (Source: SIX Maps)

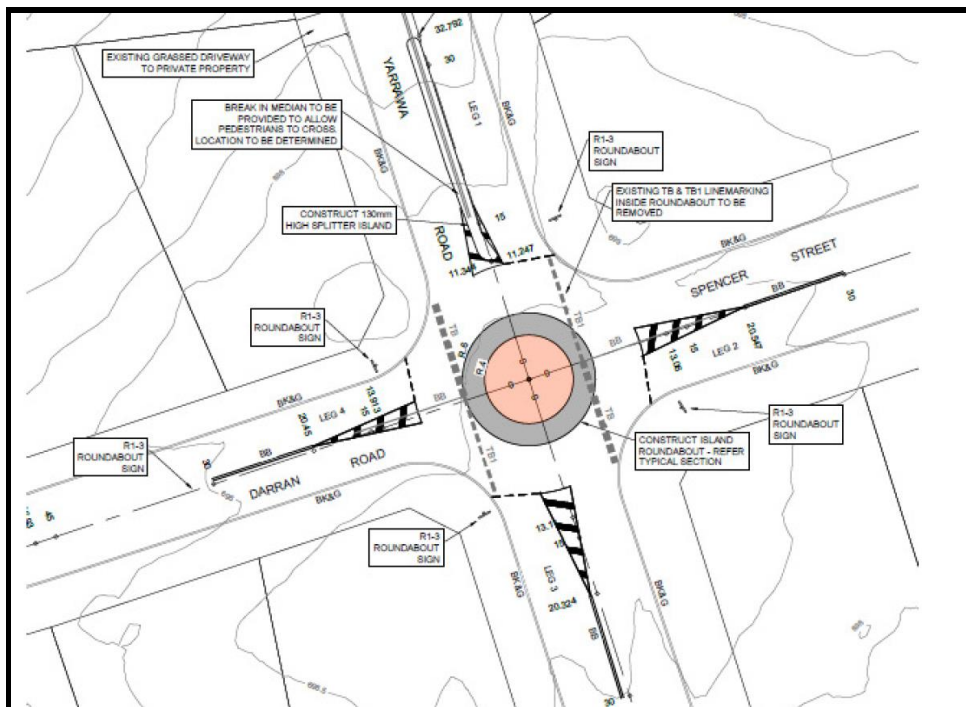


Figure 22: Proposed Interim roundabout at intersection (Source: JMD Report, August 2021)

Relevant conditions have been imposed in **Attachment A**, with additional conditions recommended to ensure detailed designs are provided at the Subdivision Certificate stage for Stage 1 and relevant certification is provided prior to the issue of the Stage 1 Subdivision Certificate.

The JMD Report also considered a range of other potential road works which may be required for the proposed concept plan and the stage 1 proposal including the following:

- (a) Intersection of proposed new road, Villiers Road and Hill Road
- (b) Intersection of proposed new road, Lovelle Street and Daylesford Drive
- (c) Intersection of Lovelle Street and Spencer Street
- (d) Intersection of Arthur Street and Mack Street
- (e) Intersection of Mack Street and Kirkham Street
- (f) Intersection of Yarrawa Road and Mt Broughton road
- (g) Fitzroy Road from Illawarra Highway to Stage 5 of Development
- (h) Widening of Yarrawa Road from No 35 Yarrawa Road to the intersection of Mt Broughton Road

Intersections (a), (b) and (f) comprise intersections where the proposed access roads into the site from the existing road network would need to be provided and which should be covered by standard conditions of consent for road works. A condition on the concept plan has been recommended to ensure that any works required to the existing roads is to be undertaken by the applicant at no cost to Council.

The road work referred to in (g) relates to the future North East Road, with relevant conditions recommended to be imposed on the concept plan for this new road outlined in **Attachment A**. Other conditions for (g) are contained in the SVPA.

A further condition has been recommended to be imposed on the concept plan which requires the traffic impact model to be updated and reviewed prior to the submission of the development application for the next stage to ensure potential future impacts on the operation of all of the intersections can be assessed and appropriate conditions of consent for any necessary improvements to the intersections are imposed on any future consents (refer to **Attachment A**). This issue is considered further above.

Following consideration of the TIA, it is evident that the proposed stage 1 works can be readily absorbed into the local road network subject to relevant conditions of consent, including the provision of the roundabout at the intersection of Yarrawa Road/Darran Road and Spencer Street (outlined in **Attachment A**).

Internal Road layout, Pedestrian & Cyclist facilities and Public Transport and linkage

The proposed subdivision provides a connected and legible street network which will allow for vehicles, pedestrian and cyclists to move throughout the site and is generally consistent with Sections 1.5 (Indicative master plan), 2.5 (Street Network and Hierarchy (DCP Figure 7)) and 2.6 (Main Entry points) of the DCP. The proposed road hierarchy is illustrated in **Figure 23**, which involves some small variations to the DCP layout, however, such changes are largely confined to the perimeter roads along the eastern boundary and other minor changes. The concept plan also outlines the verge and median planting, which is consistent with the DCP.



Figure 23: Proposed Road Hierarchy Plan (Source: arterra, Rev E MP-14, 30/08/2021)

There are only 4 cul-de-sacs proposed on the site, largely in areas of significant site constraints including sloping land, near public open spaces and drainage areas. Perimeter roads are now proposed along the majority of the site boundaries, particularly along the eastern boundary adjoining the rural parts of the area. Only lots adjoining the Harper Collins site do not have a perimeter road which is considered satisfactory.

The proposed lots in stage 1 are provided with public road access, with proposed Lot 1111 provided with a right of way ('ROW') while proposed Lot 1201 is provided as a battle axe lot with an access handle. Relevant conditions have been recommended to be imposed to ensure these ROWs and access handles are consistent with Council's controls, (**Attachment A**). The concept plan component of the proposal provides a legible and connected road network with access to all of the proposed lots achievable from public roads.

The internal road network has been designed to accommodate a future bus route via the collector road system and link to the proposed access points as outlined in the DCP (purple line in Figure 23). The TIA acknowledges that public transport servicing in the vicinity of the site is currently limited to bus route 816, which provides a service to the Moss Vale town centre and has limited frequency. The closest bus stop to the site is located approximately 500 metres to the north of the proposed site access along Yarrowa Road. The proposed Stage 1 and future stages of the proposal will present opportunities to extend these current bus routes or implement new services in the future as the population expands on the site.

The proposal provides a legible and connected system of pedestrian linkages which will assist with active transport throughout the site, however, connecting existing walking and cycling facilities around the site are limited and the overall network is not conducive to active transport trips. It is expected that Stage 1 will be predominantly reliant on vehicle access, however, as future stages of the proposal proceed, improved walking and cycling conditions will be delivered in the vicinity of the site as well as local connections to the north of the site, via the existing street network and the new north east road.

Council's draft conditions included a condition for the concept plan component to require a *Walking and Cycling Strategy Plan* for the whole of the precinct for connection to Moss Vale Town Centre and a *Bus Route Strategy Plan* to be provided which outlines the connection of the bus route within the site to the existing routes in the area. It is considered that requiring these plans at the next stage of the subdivision is satisfactory given that such connections are

likely to occur along Lovelle Street, Yarrowa Road and Hill Road. Appropriate conditions have been included in the revised draft conditions at **Attachment A**.

7.2 Integrated Water Cycle Management

A *Water Cycle Management Study* prepared by Cardno dated 31 January 2019 ('Water Cycle Report') establishes a water cycle management strategy for the site to detail flooding and stormwater management as well as the proposed riparian management strategy for Whites Creek. One of the aims of this strategy is to make all stormwater management assets integrated with the public open space so as to perform dual functions of recreation and water management. The Water Cycle Report supported the preparation of the DCP for the site.

A further report, the *Integrated Water Cycle Management Report* prepared by Orion Consulting dated 5 March 2020 (Revision 02) ('IWCM Report') has been prepared to provide updates and design input into the current underlying integrated water cycle management strategy, coordinating with the landscaping, open space and urban design strategy, earthworks and civil design strategy for the proposal.

Drainage characteristics of the site

The majority of the site falls within the Whites Creek catchment with a small portion of the site falling within the Kelly's Creek catchment. Several intermittent first order streams cross the site, the main one being Whites Creek, which enters the site from the adjoining western site (Harper Collins) and flows downstream onto the Moss Vale Golf Club. The remaining drainage lines do not exhibit a defined channel or stream function and are not considered to be waterfront land as defined by the *Water Management Act 2000* ('WMA').

The remaining streams, notated as Category 3 streams under the WLEP 2010 (**Figure 24**), are contained within the Whites Creek riparian area, as proposed public open space which forms part of the stormwater strategy (proposed Lot 1182 in Stage 1) discussed further below. There are several existing farm dams onsite, with the largest immediately adjacent to the Golf Course.

Water from the site entering Whites Creek contributes to downstream flooding in Moss Vale, which is known to be subjected to flooding in relatively frequent storm events (e.g., 5 year ARI) and as such downstream flooding is a consideration for development on this site. The site also

falls with Sydney's drinking water catchment and therefore is subject to WaterNSW requirements.



Figure 24: Category 1 riparian land (Source: Flora and Fauna Report and WLEP 2010)

Reshaping and Revegetation Works in Whites Creek

The existing Whites Creek watercourse is proposed to be reshaped and revegetated as part of the proposed development in order to improve flooding behaviour both within the subject site and downstream of the site within the Moss Vale Township and enhance the ecological appeal of the area. The proposed riparian corridor works within Whites Creek include the adoption of a pool and riffle system, designed to provide passive floodplain storage and contain floodwaters within the site, making use of the defined watercourse (**Figure 25**).

The design of this system will allow for a range of ecological niches to develop due to the variety of hydrological conditions. Works within the Whites Creek watercourse are considerate of the existing inlet and outlet points and associated impacts on neighbouring properties. The riparian corridor will be revegetated to 10 metres from the top of bank as per the *Guidelines*

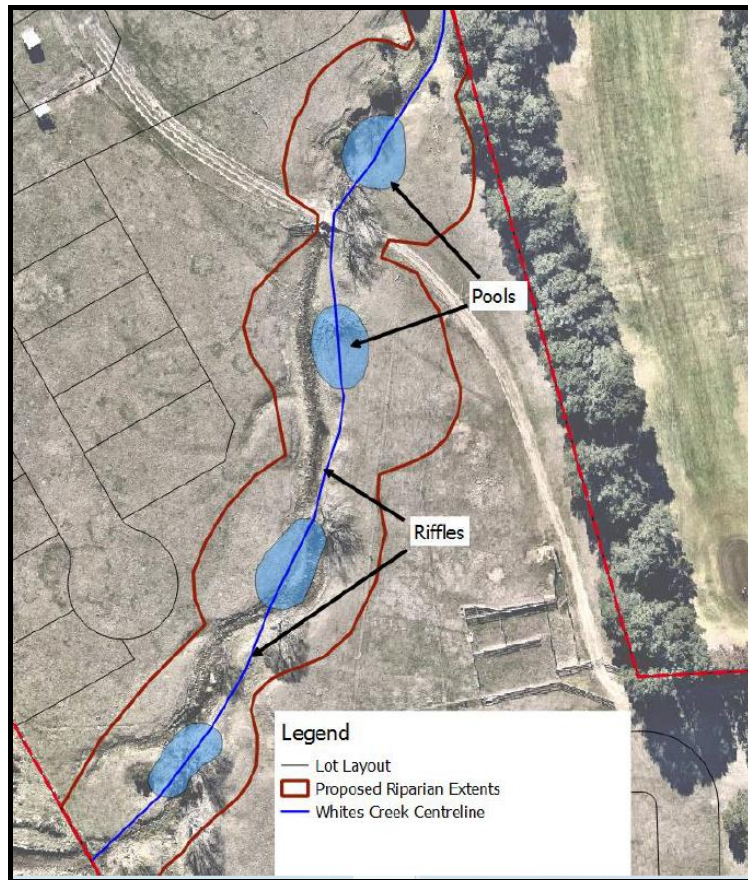


Figure 25: Proposed Riparian Corridor Works within Whites Creek (Source: Water Cycle Management Study, Cardno, January 2019)

The Whites Creek Riparian Area (proposed Lot 1182) preserves this riparian area within a public open space area restoring the natural drainage features to this portion of the site (contained in Stage 1 works). These restored riparian corridors and dams will be enhanced via a Vegetation Management Plan ('VMP'), discussed in the ecological issue below, which would enhance biodiversity value. NRAR have granted GTAs for the stage 1 works, with relevant conditions included in the revised draft conditions.

Stormwater

Stormwater generated within the proposed development site and collected upstream will be managed through drainage infrastructure, adequately sized to capture and convey both the minor and major storm events. On-site detention ('OSD') and Water Sensitive Urban Design ('WSUD') assets are included as part of the stormwater management system to ensure flows

from the site are restricted to pre-development rates and improve the water quality leaving the site, compared to the pre-development site.

The stormwater quality strategy for the proposed development includes WSUD assets which have been adequately sized to meet the Neutral or Beneficial Effect '(NorBE)' improvement targets which include 10% improvement to TSS, TP and TN loads when compared with pre-existing levels. The proposed stormwater quality strategy relies on a treatment train for each of the four discharge points that is a combination of a primary treatment (GPT, swale, inlet zone) and downstream water quality pond, wetland and/or bioretention.

The main stormwater discharge points have been considered for the proposal:

- Outlet 01 - Whites Creek Park ; outlet into the top of Whites Creek
- Outlet 02 - Northern Catchment; outlet into the Golf Club adjacent to Seymour Park
- Outlet 03 - Windbreak Park; outlet into the top (Southernmost) boundary of the Golf Club
- Outlet 04 - Central Lakes; primary outlet along the Eastern common boundary with the Golf Club
- Outlet 05 - Eastern View Park; outlet to existing farmland at the top of the Kelly's Creek catchment

Three (3) OSD basins are proposed for the development to prevent increases in peak flow rates as a result of the increased impervious area coverage. These OSD basins will be located on top of the proposed WSUD assets to improve the efficiency of the overall stormwater management system. The stormwater discharge points and the OSD basins locations are illustrated in **Figure 26**.

The proposed management of the water cycle on the site is considered to be satisfactory subject to relevant conditions (**Attachment A**).

Flooding

Flooding is considered in Section 5.9 of this report (site constraints). The stormwater management measures provided as part of the proposed development were found to improve flooding within the Moss Vale Township, downstream of the subject site when compared to the existing scenario for both the 10 year ARI and 100 year ARI events.

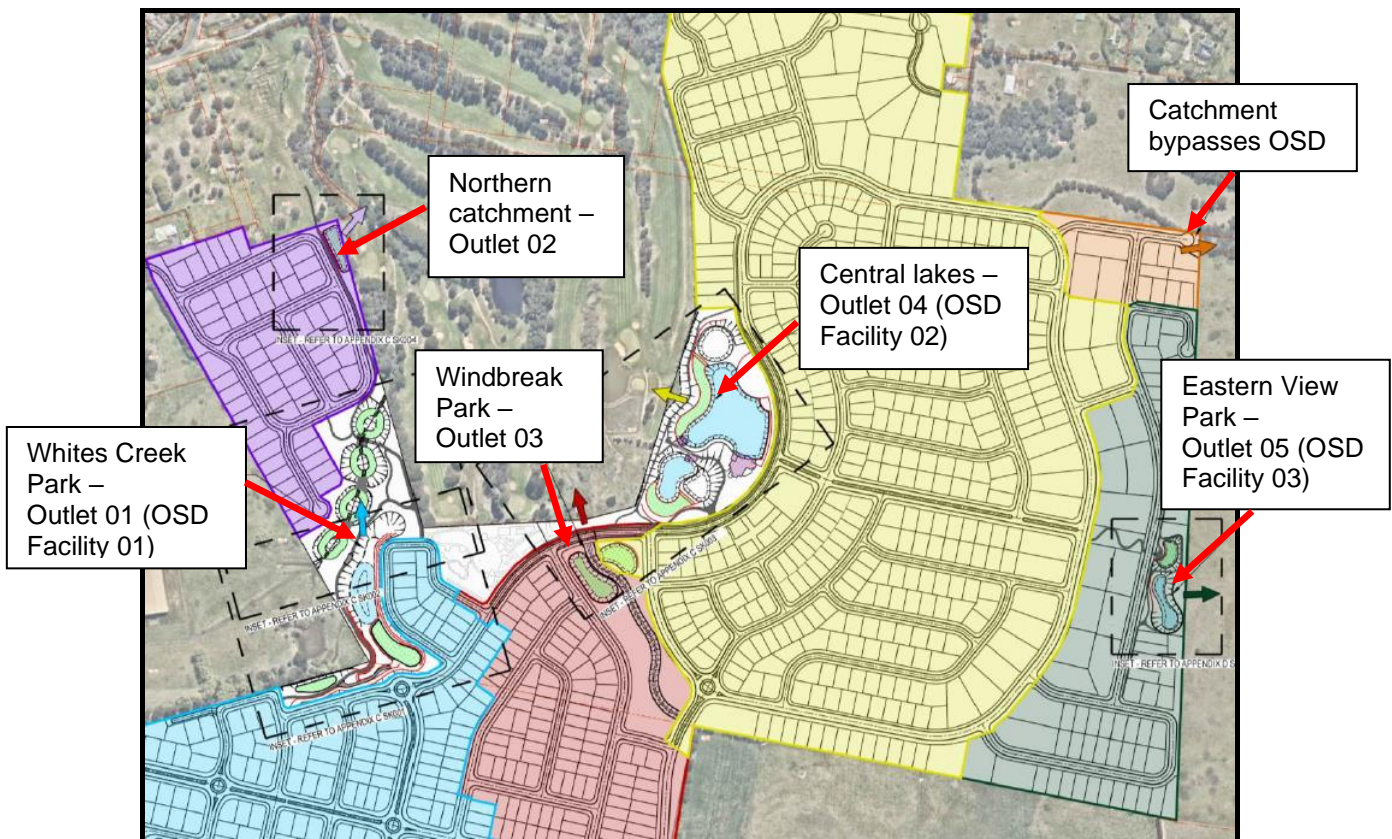


Figure 26: Proposed OSD and outlet locations (Source: IWCM Report, Orion, March 2020)

7.3 Boundary interfaces and Visual Impacts

The site comprises a large landholding with numerous boundaries to adjoining sites within a semi-rural setting. Section 2.4 of the DCP provides controls for subdivision land use interfaces, which apply to the rural edge interface (along the eastern boundary), the golf course boundary and the northern boundary near Hill Road (Figure 27). There are other boundaries which require consideration, which are outlined below for the site.

The relevant boundaries include:

- Boundary to Lot 1 DP 842623 – This portion of the site forms the north-western boundary adjoining the Harper Colins site with a 2-metre-high keystone retaining wall proposed along this boundary for a length of approximately 250 metres. Council’s draft conditions include a requirement for suitable landscape treatment to soften the appearance of this boundary retaining wall to the Harper Collins site, which is considered relevant and should be retained.

- Boundary to Seymour Park – This portion of the site consists of a perimeter road, ensuring there is an acceptable relationship with the adjoining public open space area. There are no conditions required for this boundary.

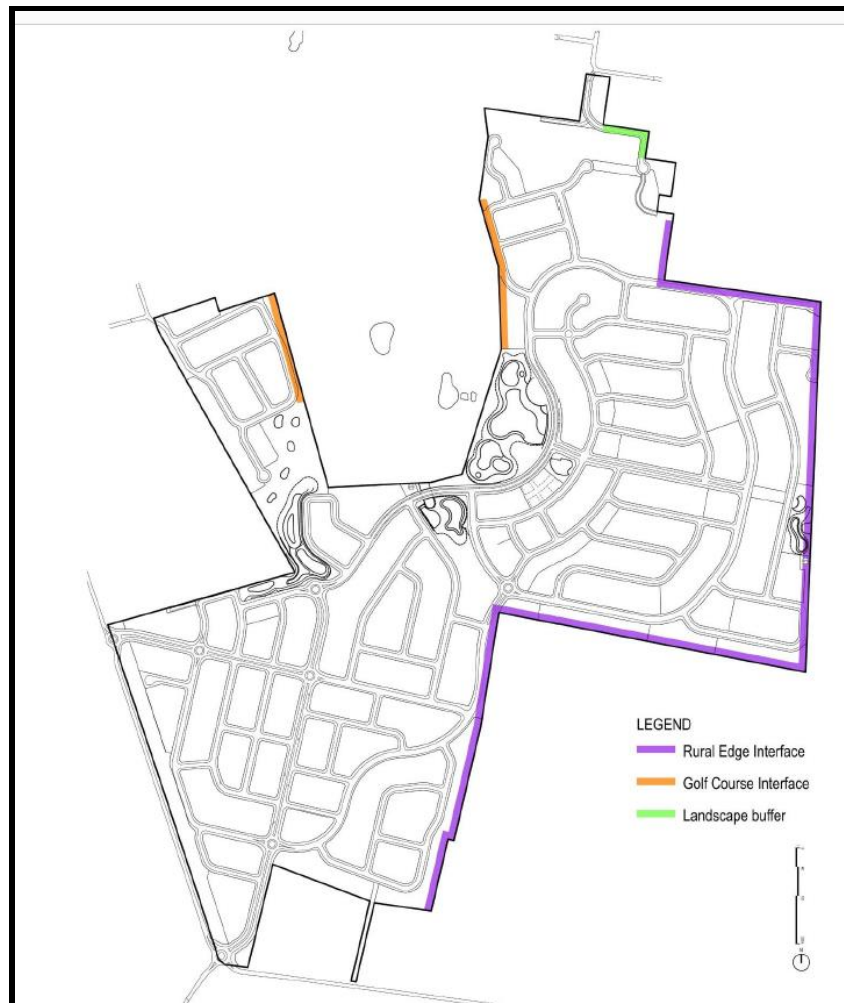


Figure 27: Rural Edge Interfaces (Source: Figure 5 of the DCP)

- Boundary to the golf course – The boundary to the golf course is shown in orange in Figure 27 and is outlined in Section 2.4.2 of the DCP. The DCP requires that development adjoining the golf course edge interface should be designed to minimise impacts on the operation of the adjoining golf course, be sensitively designed to minimise the visual impacts of the development when viewed from the golf course and designed to enhance passive surveillance with views over the golf course.

The DCP states that either perimeter roads are to be provided along the golf course edge interface with appropriate landscape buffer or fencing or an appropriate landscape buffer or fencing at the boundary interfacing with the golf course is required to maintain golf hazards to a manageable risk. The DCP also indicates that Council would need to be satisfied that appropriate arrangements are made at the subdivision stage to address this requirement, such as a restriction on the title of residential lots in relation to landscaping/fencing.

The proposed concept plan provides a perimeter road in the north-eastern section of the site adjoining the golf course and in the north-eastern section of the site near Seymour Park, adjoining the golf course. There is a small section within the proposed Stage 4 area which comprises residential allotments directly adjoining the golf course (within the orange line area). Relevant conditions have been recommended in the revised draft conditions to require a landscaped buffer and fencing in this area as Council's current draft conditions do not provide such conditions.

- Yarra Road boundary – This boundary comprises land within the RE1 zone and is proposed to consist of a linear buffer park to screen the proposal from Yarra Road and provide a windbreak to the future residential development. This area is contained within the Stage 1 area with the proposed subdivision plan reflecting this future use as a reserve. No further conditions are required.
- Northern boundary – This boundary adjoins land within the R5 residential land and includes some of the land denoted as landscape buffer in Figure 5 of the DCP (Figure 27). The concept plan proposes a perimeter road in this location with verge planting, which is considered to satisfactorily addresses the requirements of the DCP. This area is also within the special character area which has greater visual amenity and landscaping controls as outlined in the draft conditions and Section 7.4 of this report. This boundary is considered satisfactory.
- Rural edge interface along the eastern boundary in the high portion of the site – This rural edge interface is represented by the purple line in Figure 27 (Figure 5 of the DCP) extending for approximately 2.5km and is required to be addressed in Clause 2.4.1 of the DCP. The concept plan proposes a perimeter road and two (2) public open space areas along this interface, with only a small area towards the Yarra Road boundary comprising residential allotments. This boundary treatment minimises impacts on

adjoining rural lands by providing roads and verge planting instead of rear fences and building forms to the rural landscape beyond the site and provides a greater setback between the future proposed residential development and rural land uses.

The retention of rural style fencing along this boundary will further assist in maintaining the visual amenity of the area for the surrounding rural landscape and will provide for passive surveillance with views over the rural landscapes being achieved (**Figure 28**). This fencing style is also recommended in the draft conditions.

The planting of at least one (1) tree on each of the proposed lots within the special character area will further ensure there are minimal visual impacts arising from the proposal for adjoining properties. This planting of trees is also recommended in the draft conditions.

The revisions made to the concept plan throughout the assessment of this proposal have substantially increased the proposed perimeter road and roadside plantings at this rural /urban interface in the eastern portion of the site, a significant improvement to the original structure plan outlined in the DCP. It is considered that the proposed concept plan minimises the visual impact of the subdivision when viewed from public roads and adjoining rural landscapes outside of the site and in this way is consistent with Cause 2.4.1 of the DCP.

To ensure the proposed landscaping in close proximity to the site boundaries is established as soon as possible, the applicant agreed that the proposed landscaping would be installed as part of the civil construction works and maintained for Council's standard 12 month maintenance period from the date of practical completion for each stage of the subdivision. This timing would ensure the establishment of landscaping on the site is carried out at the earliest point in time to accompany construction works on the site. This landscaping commencement is also recommended in the draft conditions.

As outlined above, it is considered that the boundary treatments of the site are satisfactory as they generally comprise perimeter roads and planting which will ensure there are minimal visual impacts arising from the proposal on the surrounding rural and semi-rural areas, subject to the recommended draft conditions.

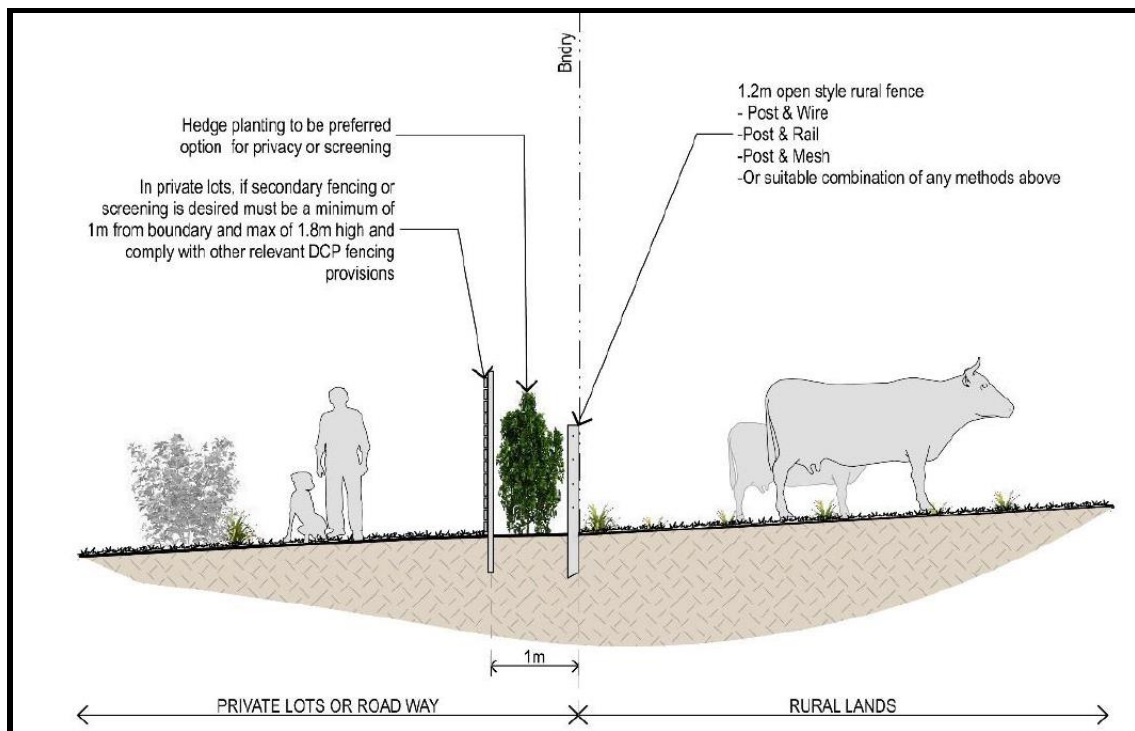


Figure 28: Residential - rural edge interface (Source: Figure 4 of the DCP)

7.4 Subdivision Design and Permissibility

(a) Subdivision Design

The proposed subdivision is located approximately 2km to the south-east of Moss Vale Town Centre & Railway Station and is considered to be a logical extension of the existing Moss Vale township. The site is appropriately zoned for residential development and has a site-specific DCP in place to guide its future development.

Section 1 of the DCP sets out planning controls and guidelines that are to be used in the design and assessment of all development at Chelsea Gardens/Coomungie Lands including residential development, public domain and village centre. The proposed subdivision (concept and stage 1) is generally consistent with Section 1 of the DCP and the indicative master plan illustrated in **Figure 29**.

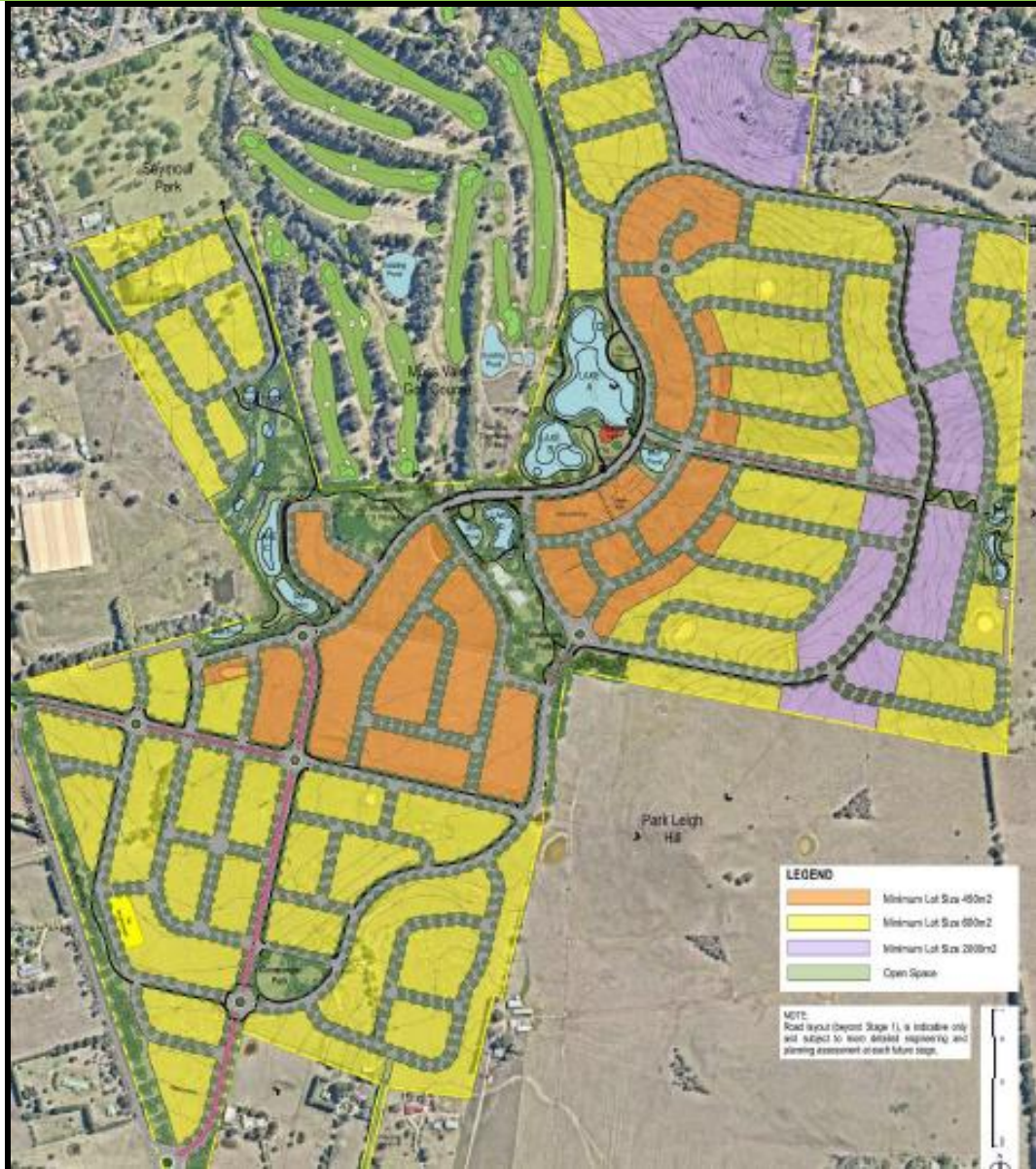


Figure 29: Indicative Master Plan - Section 21 of the DCP (Source: Figure 2 of DCP)

There have been some changes/clarifications to the proposed subdivision throughout the assessment of the proposal which differ from the indicative master plan which require further consideration, outlined below.

(i) Lot yield

The indicative lot yield plan for the total subdivision inclusive of Stage 1 illustrates an indicative lot yield of 1,073 residential and commercial lots, which includes:

- 1,066 residential lots including 63 proposed lots within the special character areas

(discussed further below); and

- 7 commercial lots (within the proposed relocated village hub outside the currently zoned B1 land)

This does not include any of the proposed public open space, drainage or infrastructure lots. The existing B1 zone comprises 1 residue commercial lot and therefore does not contribute to the overall number of residential lots.

The concept plan application, however, is seeking approval for a maximum of 1,200 residential lots, which is effectively 134 residential lots more than is shown on the indicative lot yield plan (**Figure 30**) when considering the 7 proposed commercial lots (1,200 – 1,066).

The concern is the concept plan and the indicative lot yield plan have not adequately demonstrated where these additional 134 residential lots would be located on the site given the minimum lot size controls of the LEP and restrictions arising from the topography of the site in the north-eastern portion. The lot yield for stage 1, for example, is consistent with this indicative lot yield plan, with the majority of those proposed stage 1 lots being generally close to the minimum lot size of 600m². If the remainder of the site had a similar yield in terms of being at or close to the minimum lot size, then there would be limited capacity on the site to provide the 134 additional residential lots.

While the proposal is for a concept plan only and the infrastructure servicing has reportedly been predicated on 1,200 lots, this has not been confirmed, given the Sewer Servicing Strategy prepared by Urban Water Solutions dated 8 November 2019 appears to have been prepared on the basis of 1,073 residential lots (page 9 and 16).

Some of the areas proposed as public open space and drainage reserves are zoned R2 as only the buffer area along Yarrowa Road and a small portion of the site where “Windbreak Park” are proposed within an RE1 zone. There may be an intention to use these areas of the site for additional residential lots. There is also the possibility that some of the additional residential lots proposed may comprise medium density lots or dual occupancy developments in the future, however, Clause 4.2E of the WLEP 2010 provides a minimum lot size for development for the purposes of a dual occupancy in the R2 zone of 1,000 square metres, limiting this potential.

Accordingly, it is considered that the lot yield for the concept plan should be limited to 1,073

residential lots. This would allow additional lots to be created for commercial development, infrastructure and public open space as required, however, would limit the number of future residential lots to the lot yield plan.

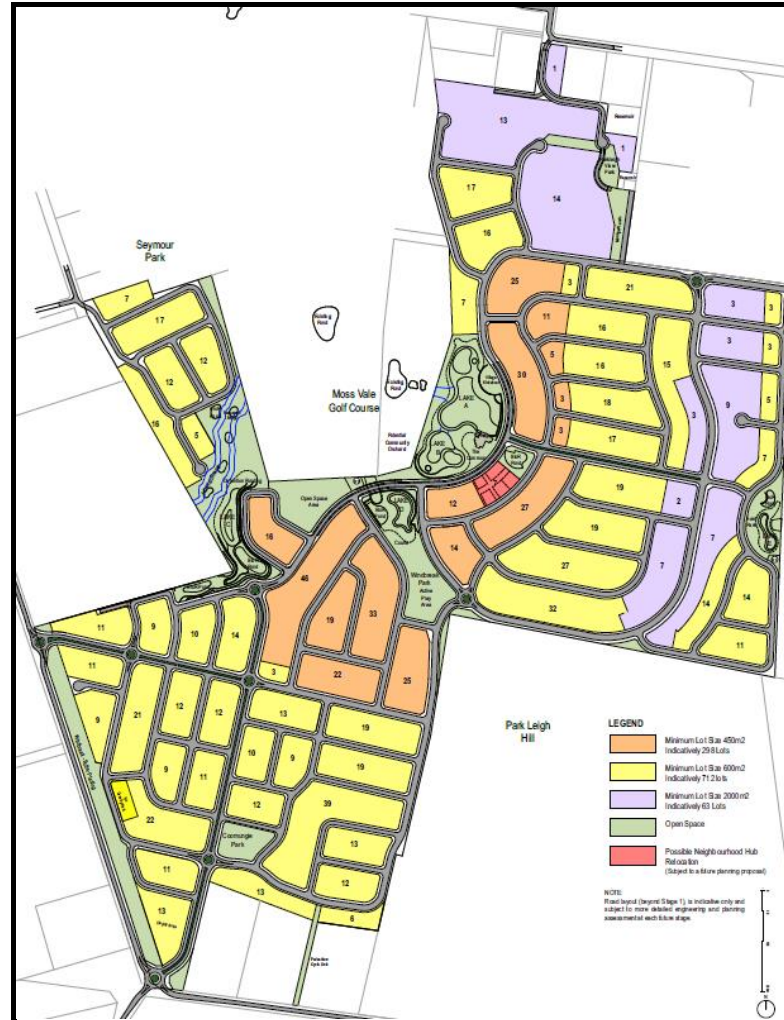


Figure 30: Proposed Lot Yield (Source: arterra, Revision A, 30/08/2021)

(ii) Relocation of the neighbourhood hub

The current concept plan (Revision F) contemplates the relocation of the neighbourhood hub from the south-western boundary along Yarrawa Road within the current B1 zoning to a location opposite the large public open space/drainage reserve along the boundary adjoining the eastern side of the golf course. This new location is within the R2 Low Density Residential zone in which the proposed neighbourhood hub uses are not permissible.

The R2 zone is a restrictive zone in that item 4 (prohibited uses) includes any other development not listed in items 2 or 3. Centre-based child care facilities and community

facilities are the only non-residential uses permissible in this zone and accordingly, for the proposed neighbourhood hub to be permissible, a planning proposal to rezone the land would be required.

While Council has included a reference to this permissibility issue in draft Condition 12, a revised draft condition is recommended which ensures that any concept approval granted does not include the neighbourhood hub in the initial condition relating to the development description. The revised recommended draft conditions have been updated to reflect this requirement.

(iii) Adventure playground

The proposed Adventure Play Area / Active Play Area has been relocated from its original position adjoining Moss Vale Golf Course within the Whites Creek Riparian area and the heritage conservation area to the central / eastern public reserve, Windbreak Park. This relocation was requested by Heritage NSW to ensure conservation of the Aboriginal cultural heritage on the site. While the concept plan the subject of this report has removed this adventure playground from the conservation area, a further condition is recommended to be imposed on the concept plan to ensure no other active recreation or other structures are proposed in this conservation area in future development applications on the site.

(iv) Special character area

This area is shown in purple on the revised concept plan (Revision F) corresponding with Figure 11 – Special Character Areas of the DCP. The controls for this area have been designed to mitigate potential visual impacts and geotechnical constraints arising from the topographical constraints of this portion of the site. The Special Character Area indicative plans (SK 33, SK34 & SK35 Rev D) illustrates building envelopes for 63 indicative lots ranging in size between 2,000 square metres and 5,366 square metres in area, with the majority of lots being between 2,000 – 2,200 square metres in area.

The indicative building envelopes shown upon each proposed lot within the Special Character Area have side boundary setbacks of 4 metres or greater, exceeding the minimum 2.5 metre side setback requirement within Section 4.4 Special Character Area Controls. Therefore, a minimum 8 metre separation distance between the sides of dwellings will be achieved in the Special Character Area. This will assist in reducing the visual impact of future dwellings in the

higher portions of the site, particularly so that future dwellings do not create a visual wall of buildings, but are able to sit within a landscaped setting.

The proposed indicative building envelopes within the Special Character Area comply with the numerical standards within Section 4.4 of the DCP indicating future residential development of these lots can achieve compliance with DCP requirements.

The draft conditions have been revised to ensure the controls of Section 4.4 of the DCP as well as the requirements for the geotechnical and visual impacts to be considered at the detailed design stage for this area in future development applications are adequately outlined. Further conditions have been recommended to ensure that trees are planted and minimum side setbacks are provided to ensure the visual amenity of the surrounding area is maintained arising from this elevated portion of the site.

(v) Future Built Form

The development application does not include any built form on the site. The DCP includes detailed controls in relation to housing in Section 4 of Chapter 21 which are sufficient to ensure future building form is compatible with the area. Council's assessment report concluded that the proposed Stage 1 subdivision layout is likely to achieve compliance with the relevant provisions of the Part 4 Residential Controls for future development on the proposed allotments. Relevant conditions have also been recommended to be imposed in the revised draft conditions which ensures future development is capable of being consistent with Section 4 of the DCP.

(b) Permissibility and Consistency with the LEP

The proposal must consider the various zonings across the site and the minimum lot sizes arising from the varying zonings across the site as outlined below.

(i) Minimum lot size

The site comprises a number of different zonings and minimum lot size requirements. The proposed residential lots in Stage 1 comply with the minimum lot sizes and lot widths, however, the proposed buffer reserve along Yarrowa Road, proposed Lot 1181, does not achieve the minimum lot size of 40 hectares as the proposed size is 21.303m².

A Clause 4.6 request accompanied the application, which adequately demonstrates that compliance with the minimum lot size development standard is unreasonable and unnecessary in the circumstances of this case, and that there are sufficient environmental planning grounds to justify contravening the development standard. Consideration of the Clause 4.6 request is outlined in **Attachment C**.

(ii) *Permissible uses*

The site comprising a number of different zonings, which impacts on the permissibility of the various uses proposed within the site. These zones and uses are considered below:

R2: Low Density Residential Zone

The predominant zoning across the site, the objectives state:

- *To provide for the housing needs of the community within a low-density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposal will allow for future housing to be provided on the site in a low-density setting likely to comprise a mix of dwelling houses and dual occupancies, while other non-residential uses permissible in the zone may also be provided in the future including child care centres depending on future owners and requirements of the area.

The uses proposed in this zone include subdivision (permitted by CI 2.6), future dwelling houses (permissible) and recreation areas (permissible) for the Whites Creek park (proposed Lot 1182). The proposal complies with the objectives and permissible uses in the R2 zone.

R5: Large Lot Residential

This zone is located in the northeast corner (steep land) and along sloping portion in eastern section of the site, the objectives state:

- *To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.*
- *To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.*
- *To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To provide a restricted range of opportunities for employment development and community facilities and services that do not unreasonably or significantly detract from—*
 - (a) the primary residential function, character and amenity of the neighbourhood, and*
 - (b) the quality of the natural and built environments.*

Residential lots are proposed in the R5 zone in the concept plan which are larger lots greater than 2000m² in area to allow for the construction of future housing on the steeper land on the site. This land use is permissible (Cl 2.6 - subdivision) and future dwelling houses (permissible), and there are no other land uses are proposed in this zone. The proposal complies with the objectives and permissible uses in the R5 zone.

RE1: Public Recreation

There are two (2) small portions of RE1 land, one in the centre of the site and the other along south-west boundary (Yarrawa Rd), the objectives state:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To enable ancillary development that will encourage the enjoyment of land zoned for open space.*

The concept plan and stage 1 application provide for a public reserve within the RE1 zoned land along the south-western boundary of the site adjoining Yarrawa Road. The concept plan allows for a public open space area in the south-eastern portion of the site (outside the stage 1 area) within the RE1 zoned portion of land, consistent with the zone objectives. Roads and

recreation areas are both proposed in these areas which are both permissible uses in the RE1 zone. The proposal complies with the objectives and permissible uses in the RE1 zone.

B1: Neighbourhood Centre

This zone comprises a small area adjoining the south-west boundary to Yarrowa Road. The development proposed in this area of the site in the concept and stage 1 application is a *recreation area* (the buffer planting reserve to Yarrowa Road) which is permissible under item 3 of the B1 zone as *any other development not specified in item 2 or 4*. The remainder of this area will form a residual lot to be developed in the future (potentially following the rezoning of the land to residential and relocation of the B1 land to a central location on the site). The proposal complies with the objectives and permissible uses in the B1 zone, subject to the recommended revised draft condition in relation to permissibility of the village hub as outlined in this report.

The proposed subdivision design and permissibility is considered satisfactory subject to the recommended revised draft conditions in **Attachment A** and the Panel's support of the Clause 4.6 request (**Attachment C**).

7.5 Ecological and Biodiversity Issues

The application is accompanied by the *Flora and Fauna Assessment* prepared by Ecoplanning dated 8 October 2018 ('Flora and Fauna Report') which considers the ecological values of the site and assesses the potential impact of the proposal on these values. Council engaged an Ecological consultant to review this aspect of the application.

The report outlined that the site generally comprises mostly cleared land with small, scattered patches of other vegetation comprising the following (**Figure 31**):

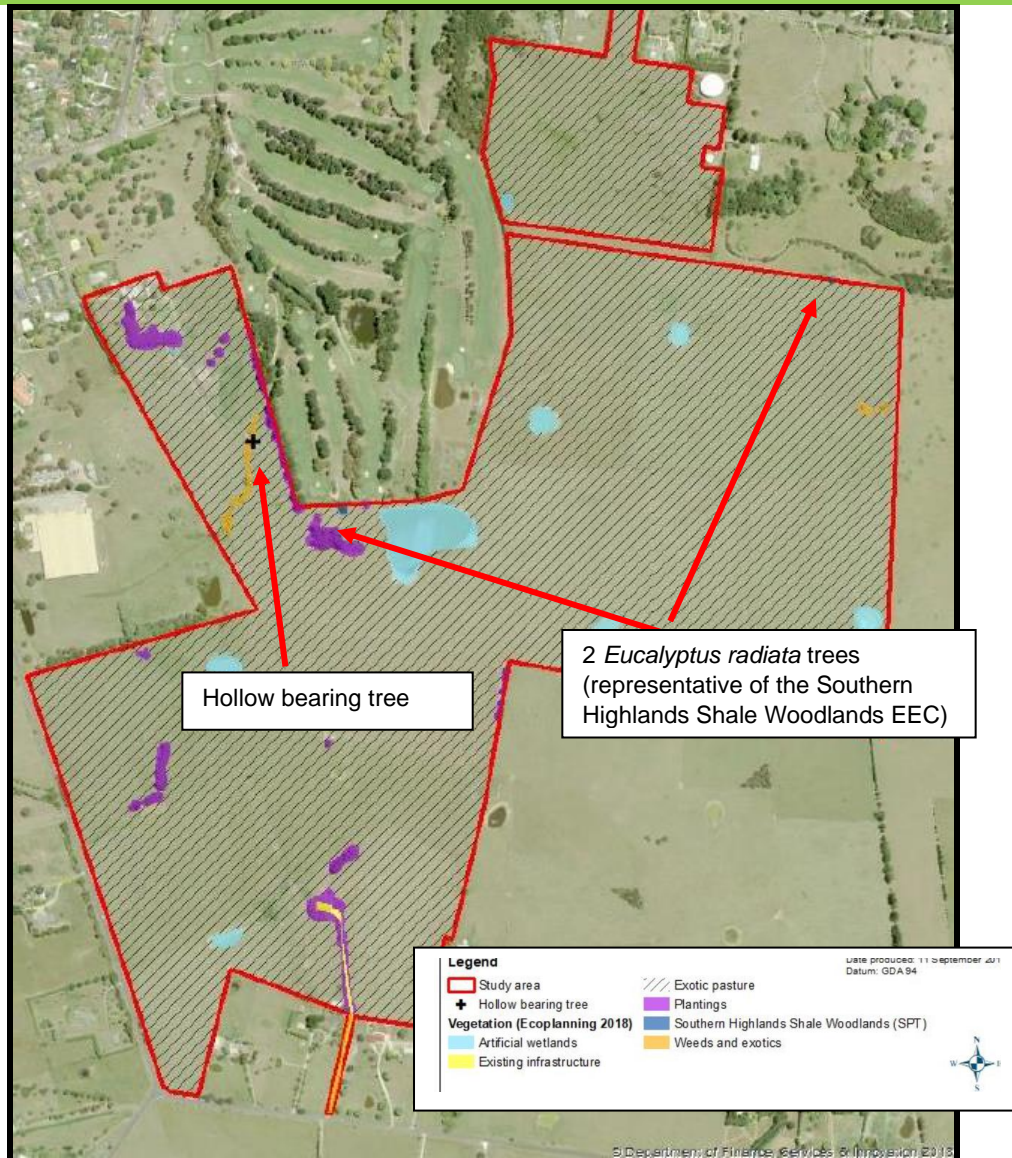


Figure 31: Vegetation Communities on the site (Source: Flora & Fauna Report)

- Two (2) *Eucalyptus radiata* trees, representative of the *Southern Highlands Shale Woodland Endangered Ecological Community* ('the EEC') listed under the *Biodiversity Conservation Act 2016* ('BC Act') located along the northern side boundary adjoining the golf course and the north-eastern section of the site within Stage 5;
- One (1) hollow bearing tree (*Salix* sp.), located on the north-western boundary adjoining the golf course;
- Weeds and exotic pasture (majority of the site);
- Exotic plantings dominated by Radiata Pines and Cluster Pines;
- Numerous dams mapped as artificial wetlands.

Overall, the site is considered to have low biodiversity value, with no threatened flora or fauna

species recorded or likely to occur. The Flora and Fauna Report assumed that all native vegetation would be cleared which includes the following:

- Approximately 0.03 ha of Southern Highlands Shale Woodland
- Approximately 120 ha of Exotic Pasture
- Approximately 2.4 ha of Artificial Wetlands
- Approximately 2 ha of Plantings,
- Approximately 0.3 ha of Weeds and Exotics and
- Approximately 0.2 ha of Existing Infrastructure.

The Flora and Fauna Report stated that 99.98% of all direct impacts within the study area would be incurred to degraded and predominantly exotic vegetation, which has minimal ecological value and provides marginal foraging habitat for native fauna. An impact assessment in accordance with Section 7.3 of the BC Act (i.e., Test of Significance) and associated guidelines (OEH 2018) was undertaken and which has been accepted by Council's Consultant.

The Panel also raised concerns with the existing vegetation within the unmade road reserve of Shelly Road (located between the two parts of Lot 12) which comprises a patch of regenerating woodland vegetation of approximately 0.4 hectares in area, (**Figure 32**) and conforms to the Southern Highlands Shale Forest and Woodland ('SHSFW') critically EEC under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. This vegetation will need to be removed for future road construction.

The applicant's ecologist advises that an assessment against the significant impact guidelines has been undertaken which concluded that removal of this portion of the SHSFW would not constitute a significant impact. Council's consultant ecologist concurs with this conclusion.

Council recommended that any native vegetation that needs to be cleared for the new road is replaced by planting in a suitable location, such as within a riparian corridor to be rehabilitated within the site. This has been included as a recommended condition in the revised conditions for the concept plan.

The Flora and Fauna Report concluded that subject to the avoidance and mitigation measures, there will be no significant impacts to the EEC, nor will there be any requirement

for biodiversity offsets in accordance with the *Biodiversity Conservation Regulation 2017*. These recommended measures included:

- Requirement for a Vegetation Management Plan ('VMP') for the restoration of the riparian areas (Whites Creek);
- A comprehensive construction management plan; and
- Retention of the two (2) *Eucalyptus radiata* trees.

The hollow bearing tree (*Salix* sp.) has been incorporated into proposed Lot 1182 comprising the Whites Creek Riparian area within Stage 1 and the two (2) *Eucalyptus radiata* trees are also retained in a public reserve and a road reserve. Council's ecological consultant supports the recommendations and considers that the preparation and implementation of a VMP will satisfy Clause 7.5 of the WLEP. These measures have been included in the recommended revised draft conditions for the concept and Stage 1 approval.

Following consideration of the Flora and Fauna Report, an inspection of the site and the opinion of Council's Consultant, it is considered that the proposal will not adversely impact on any ecological values of the site subject to the recommended revised draft conditions.

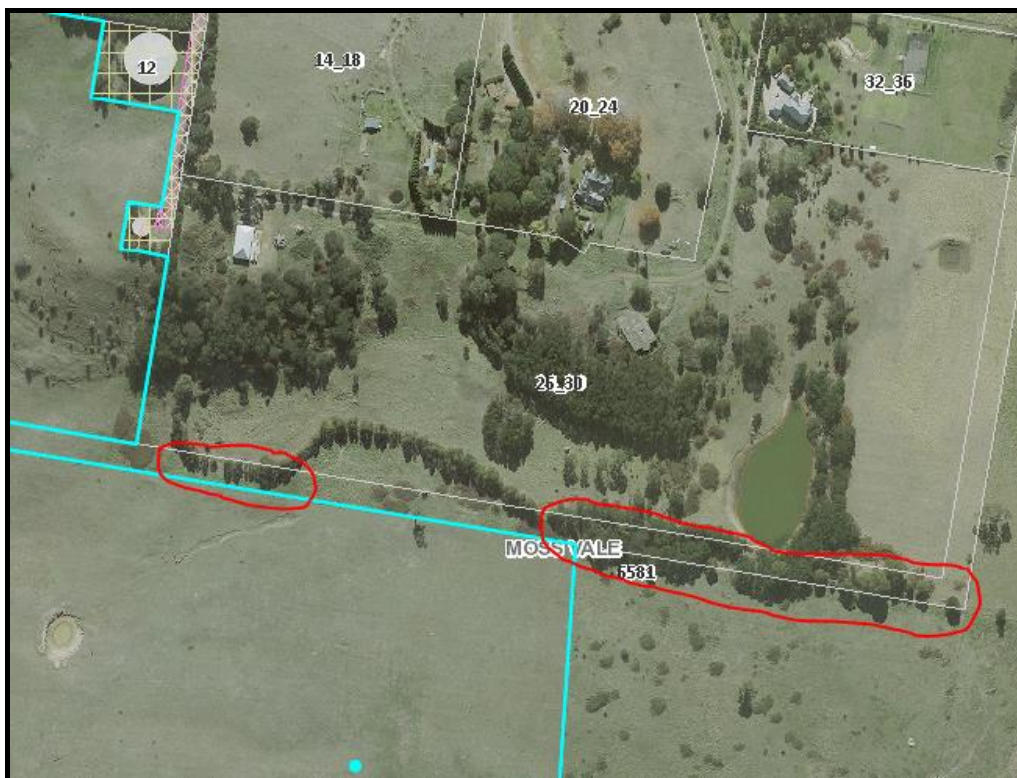


Figure 32: Vegetation within the unmade road reserve of Shelly Road (marked in red) (Source: Council's Supplementary Report, 13 October 2021)

7.6 Public Open Space and Streetscapes

The DCP requires that local parks are generally located as indicated in the indicative master plan. The proposed concept plan outlines the following parks (from north to south):

- Parkleigh view park (in the vicinity of the existing and proposed water reservoir)
- East Park (adjoining the eastern boundary)
- Village kickabout (adjoining the main detention basin area)
- The Common (adjoining the main detention basin area and opposite future neighbourhood hub)
- Windbreak Park (in the central portion of the site)
- Whites Creek (referred to as the District Adventure Plan and picnic Area)
- Coomungie Park (within stage 2)
- Windbreak – Buffer planting (adjoining Yarrowa Road)

The Panel asked Council to confirm whether it agreed that ownership and on-going maintenance of reserves across the concept plan area, including the proposed drainage reserves will be the responsibility of Council, after these reserves have been created and placed in Council ownership.

The Council confirmed that ownership and on-going maintenance of the local parks and drainage reserves will be the responsibility of Council after these reserves have been created and placed in Council ownership. This includes recent advice from Council (May 2022) that they accept that the “managed lands” in the north-east section of the site, in the vicinity of the Parkleigh view park and the existing and proposed water reservoirs, will be owned and managed by Council.

Following revision to the recommended draft conditions, it is considered that this issue has been adequately addressed.

7.7 Site Constraints

There are numerous site constraints which affect the site that must be considered, including:

- Bushfire

- Contamination
- Flooding
- Geotechnical

These matters are considered further below.

Bushfire

The site is mapped as Vegetation Category 1 and buffer on the Bushfire Prone Land map (**Figure 33**), albeit a minimum area of the site. Accordingly, a Bushfire Safety Authority is required pursuant to Section 100B of the *Rural Fires Act 1997* as the proposal involves subdivision and assessment under Section 4.46 of the EP&A Act as integrated development. A *Bushfire Assessment Report* has been prepared by Australian Bushfire Solutions dated 12 July 2019.

The NSW RFS issued GTAs on 22 November 2019 and 1 July 2020 (no changes from original GTAs). One of the matters raised by the Panel in their deferral of the matter on 25 August 2021 was whether the requirement for the site to be managed as an Inner Protection Area ('IPA'), as required by the GTAs issued by the RFS, conflicted with the Landscape Concept Plan prepared by Arterra Design dated 6 October 2020. The Panel also requested that the bushfire consultant provide advice in relation to whether the perimeter roads were consistent with the GTAs issued by the RFS (Condition 4).

The applicant's Bushfire Consultant stated that the perimeter roads on the revised concept plan provided following the Panel's meeting of 13 August 2021 are capable of satisfying the requirements for perimeter roads under the GTAs. The bushfire consultant also confirmed that future landscaping as shown in Landscape Concept Plan is capable of satisfying the requirement as an Inner Protection Area. Council accepted these conclusions.

Following a thorough consideration of the bushfire hazard, various revised and additional conditions addressing the bushfire hazard on the site are recommended in the revised draft conditions provided at **Attachment A** of this report.

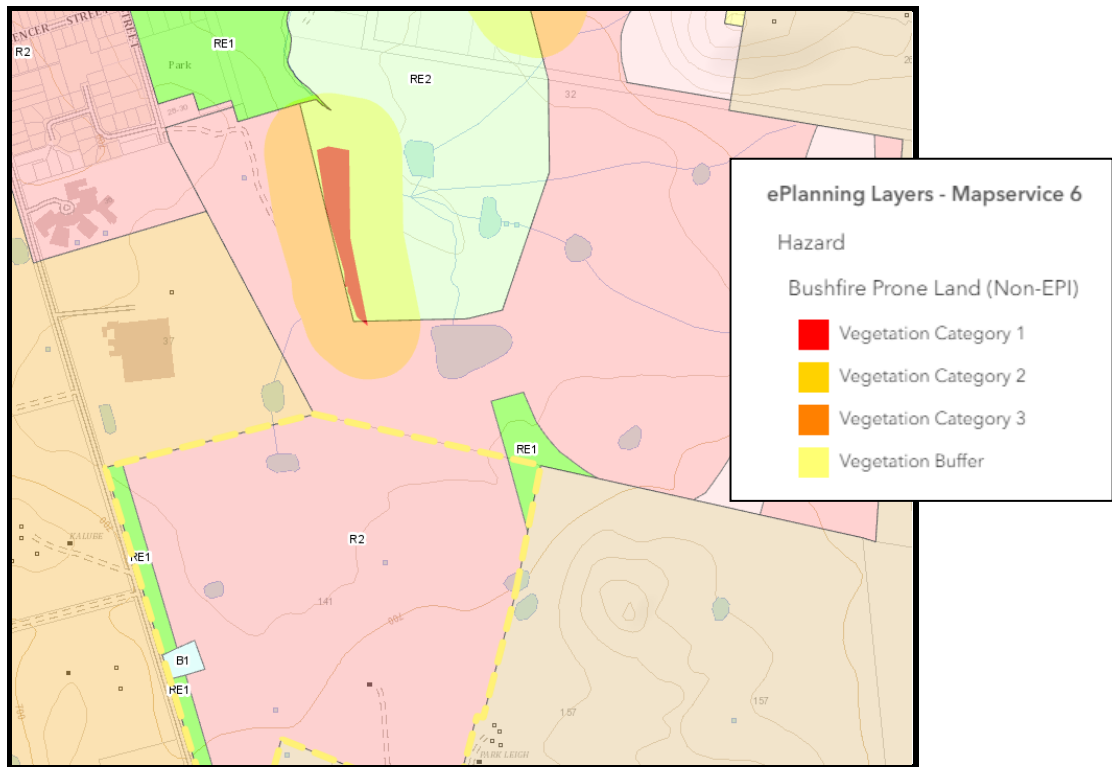


Figure 33: Bushfire Prone Land Map (Source: e-Planning Spatial Viewer)

Contamination

A preliminary site investigation, *Phase 1 Environmental Assessment* prepared by Harvest Scientific Services dated 22 February 2019 ('PSI') was undertaken for the whole site, which identified a number of areas of environmental concern. These areas on the site were largely associated with potentially contaminating activities arising from the previous agricultural use of the site and where filling was undertaken (**Figure 34**).

A detailed site investigation, *Detailed Environmental Site Assessment: Chelsea Gardens, Moss Vale* prepared by Harvest Scientific Services dated 13 October 2020 ('DSI') has also been undertaken for the proposed first stage of the development, which reviewed the findings of the PSI. The DSI comprised a visual assessment, the excavation of a number of test pits and collection of representative soil samples from the areas of concern identified in the PSI.

The results of the DSI included that contaminant concentration levels for metals, BTEX and TPH OC/OPs were all below the adopted Human - Based Investigation Levels (HBIL) criteria and no asbestos containing material was identified. Based on this evidence, the DSI considered that from a contamination perspective, the site of proposed Stage 1 is suitable for

the proposed residential subdivision, and recommended an *Unexpected Findings Protocol* to be imposed. Appropriate revised draft conditions have been imposed in **Attachment A** to ensure land contamination is addressed in the first and future stages of the project.

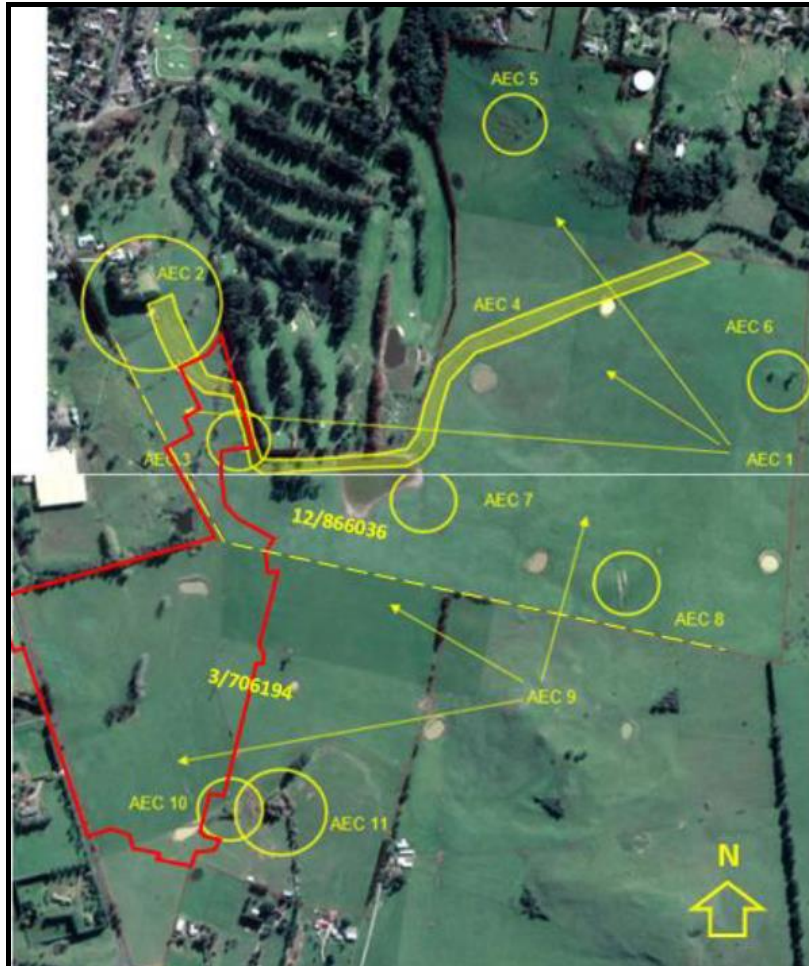


Figure 34: Areas of concern within Stage 1 (red line) and the whole site (Source: Harvest, 2020)

Flooding

The Water Cycle Report considered the flooding hazard on the site and identified that a portion of the site is affected by the 1% AEP flood level arising from Whites Creek (**Figure 35**). This flood affected portion of the site is confined to proposed Lot 1182 comprising the Whites Creek area, which is proposed as an open space area with paths and water treatment facilities, OSD storage and bioretention ponds as part of the water sensitive urban design for the site.

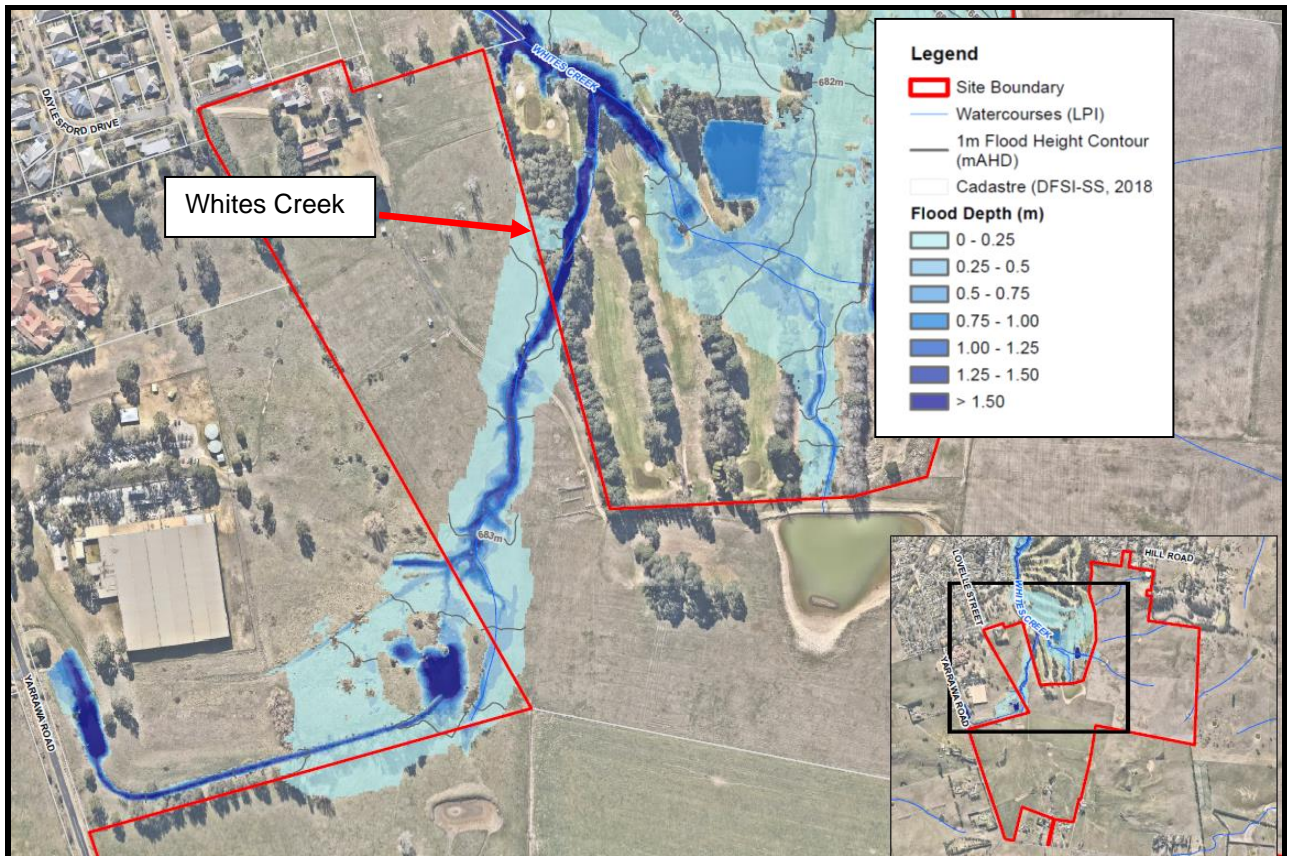


Figure 35: Flood Extent 100 Year ARI - Pre Development (Source: Water Cycle Management Study prepared by Cardno (January 2019))

The Water Cycle Report concluded the following in relation to flooding (Figures 36 & 37):

- Only a small portion of the subject site is inundated with floodwaters in both the existing and proposed scenarios in events up to and including the 100 year ARI event. The majority of floodwaters are contained within the Whites Creek floodplain.
- Existing buildings within Moss Vale, downstream of the subject site were found to fall within both the 10 year ARI and 100 year ARI flood extents for the existing scenario.
- The proposed pool and riffle system within Whites Creek is capable of containing all floodwaters within the subject site in storm events up to and including the 100 year ARI event.
- The extent of sheet flows over the golf course site downstream of the proposed development has been reduced in the 100 year ARI event when compared to the existing scenario.
- The stormwater management measures for the proposed development were found to improve flooding within the Moss Vale Township, downstream of the subject site when

compared to the existing scenario for both the 10 year ARI and 100 year ARI events.

These improvements include:

- Mack Street now considered flood free in the 10 year ARI event.
- Mack Street 100 year ARI trafficability now downgraded from Category H4 (unsafe for all people and vehicles) to Category H2 (unsafe for small vehicles).
- Reduction in flood level and hazard extents along Argyle Street.
- There is no net increase in flood hazard extent as a result of the proposed development on the subject site.
- Downstream there will be a reduction in the high hazard extents within the Moss Vale Township, particularly along Lackey Road and at the intersection of Argyle Street and Railway Street when compared to the existing scenario.
- The proposed development will not increase risk to life and property have any adverse impacts on adjoining properties.
- All proposed lots and roads are either within the Low flood risk precinct or outside of the floodplain entirely (DCP (2017) controls therefore do not apply).
- It is recommended that a stay in place strategy is adopted for this development during flood events due to the majority of the site being outside of the floodplain and the relatively short time to peak of the catchment for critical storm events.

Following a thorough consideration of the flooding information for the site, various revised and additional conditions addressing the flooding constraints on the site are recommended in the revised draft conditions provided with this report.

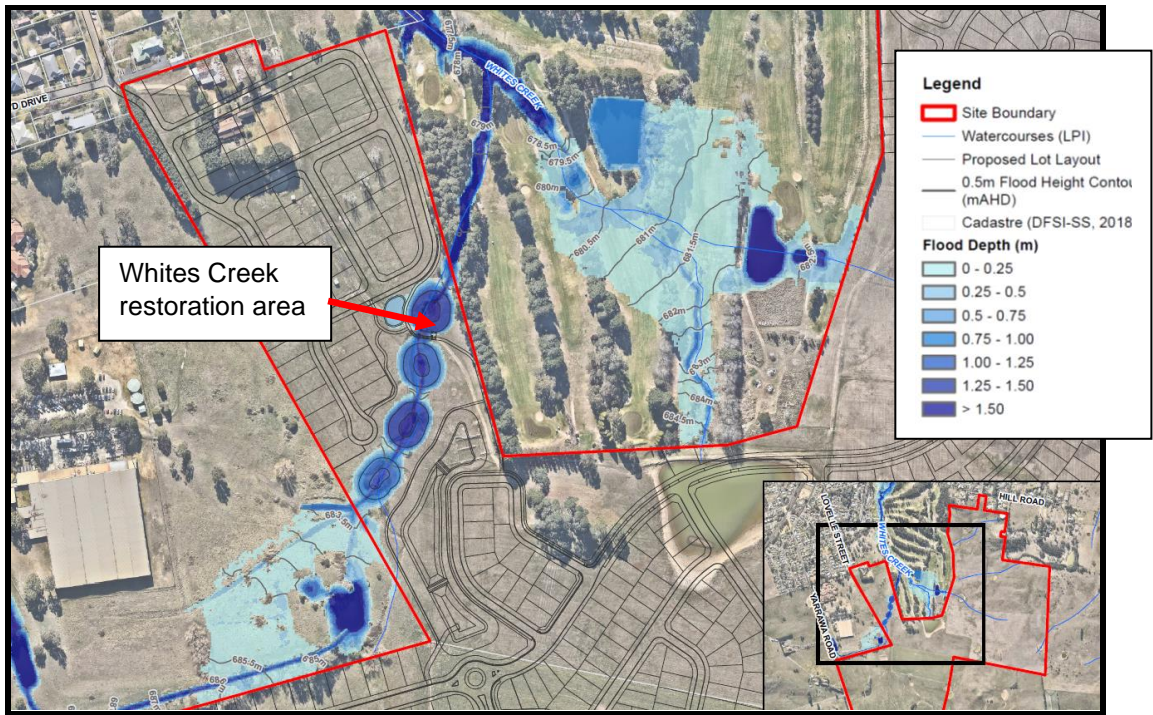


Figure 36: Flood Extent 100 Year ARI - Post Development (Source: Water Cycle Management Study prepared by Cardno (January 2019))

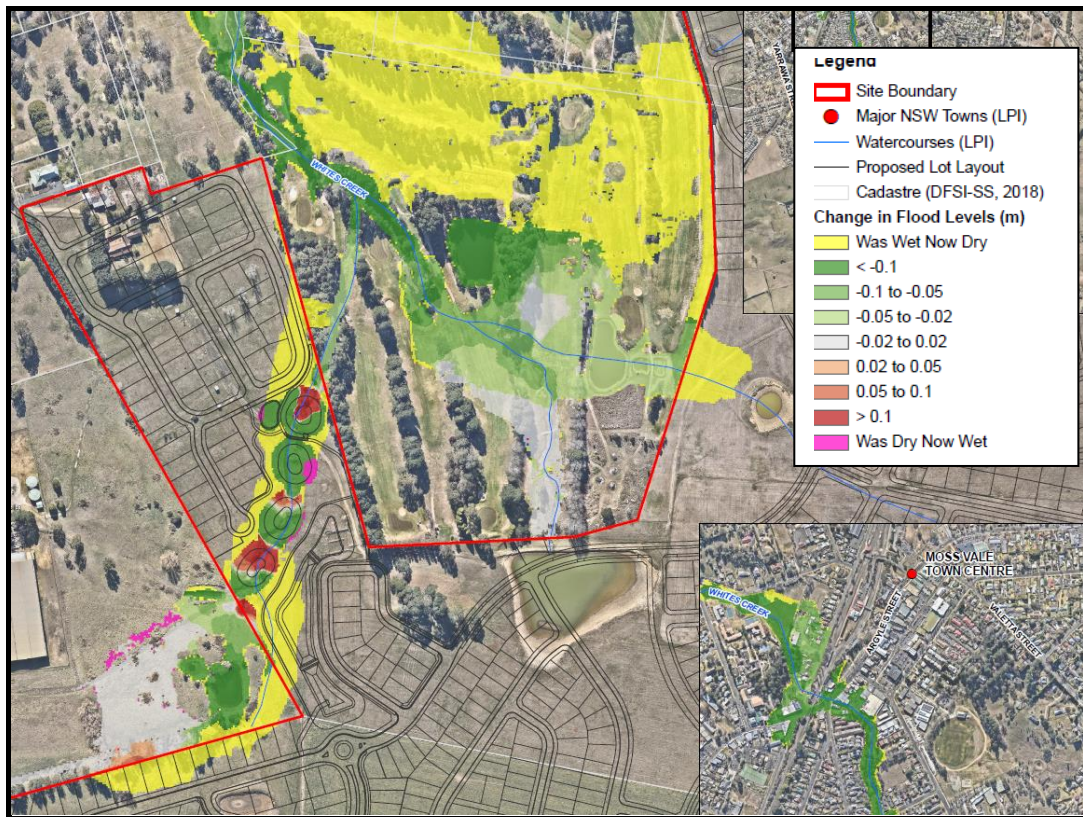


Figure 37: Flood Impact 100 Year ARI - Post Development (Source: Water Cycle Management Study prepared by Cardno (January 2019))

Geotechnical

The site contains areas of flat and steep land and contains some smaller watercourses and existing farm dams. The application is accompanied by two (2) geotechnical reports including:

- *Report on Preliminary Geotechnical Investigation* prepared by Douglas Partners dated February 2019 – largely prepared to determine the subsurface conditions underlying the site to provide information for concept planning and design purposes and to examine specifically risk of slope instability, soil erodibility, waterlogging potential and foundation conditions; and
- *Report on Geotechnical Investigation* prepared by Douglas Partners dated April 2020 - prepared to provide information on the soil, rock and groundwater profile in the northern hillside to facilitate stability modelling and to assess potential remedial works and to provide development guidelines for future development of the steep hillside area, which concluded that subject to remedial works, development could occur in this area.

The geotechnical constraints for the site arising from this report is illustrated in **Figure 38**. In summary, this geotechnical constraints map highlights the following:

- Zone 1 - The most constrained land, where active, inactive or potential slump-flow landslides have (or may) occurred, largely located in the northern section of the site in the steep hillsides near Hill Road (within special character area).
- Zone 2 - generally in the sloping, easterly section of the site, where soil creep on steeper slopes may occur and within the special character areas, where specific conditions are recommended in relation to the visual and geotechnical constraints.
- Zone 4 – within Stages 1 and 6a, where soil creep on steeper slopes leads to the instability classification as a low to moderate risk to property.
- Zone 5 – This zone represents the majority of the land within the site and is described as an area with no geotechnical constraints and can accommodate typical residential development.

- Zone 7 – This zone is described as an area of inactive or potential saturation slumping with a moderate risk to property.

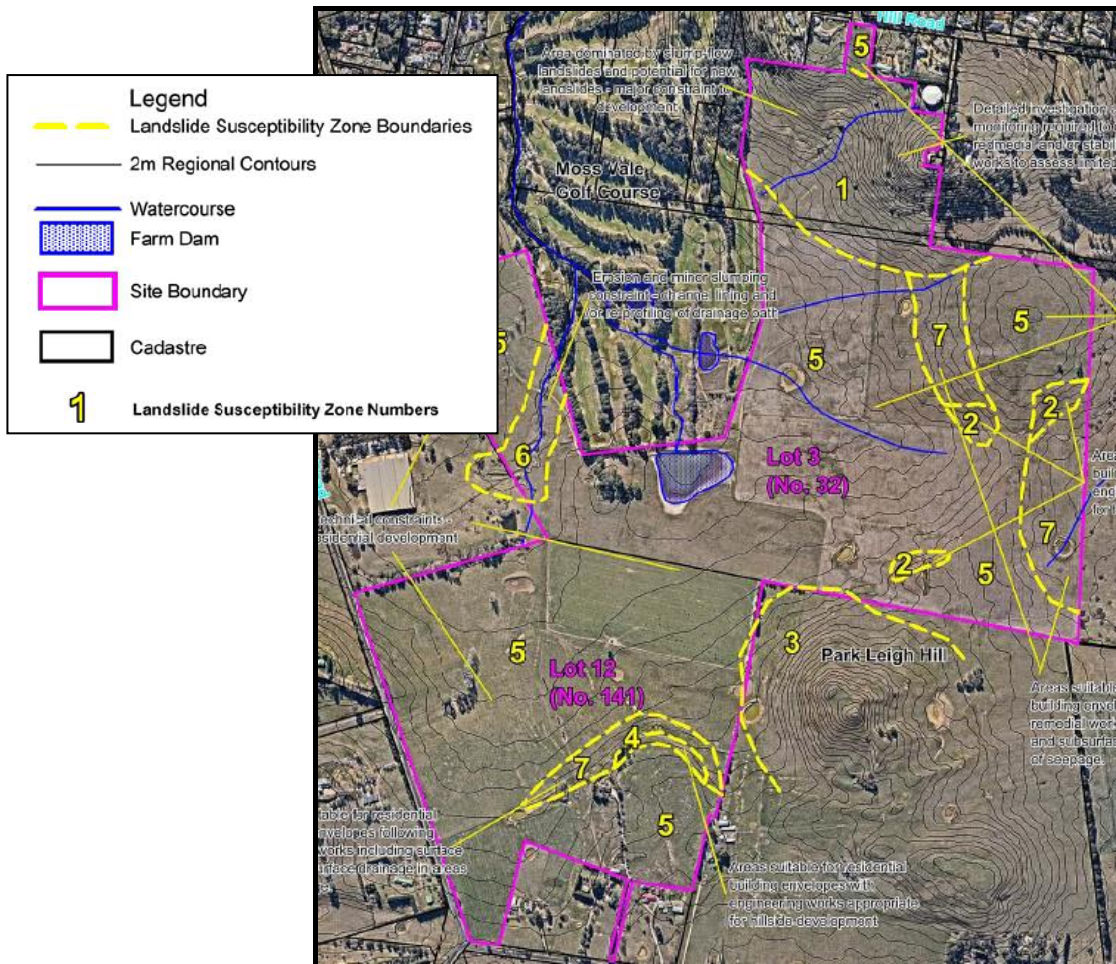


Figure 38: Geotechnical Constraints Map (Source: Douglas Partners, February 2019 - Dwg 3)

The report concluded that the site was suitable for residential development subject to further assessment and testing as planning and construction proceeded. Accordingly, further investigation will be required comprising detailed geotechnical investigation and assessment as the design of the development proceeds.

Following a thorough consideration of the geotechnical reports prepared for the proposal and a site inspection which revealed the steepness of the northern section of the site, various revised and additional conditions addressing the geotechnical constraints on the site are recommended in the revised draft conditions provided with this report.

7.8 Heritage

Heritage issues have been considered in the following reports:

- *Aboriginal Cultural Heritage Assessment Final Report* prepared by Biosis dated 11 December 2019 ('ACHAR') including the *Archaeological Report Final Report*; and
- *Historical assessment and Statement of Heritage Impact* prepared by Biosis dated 10 December 2019

European Heritage

There are no items listed under the WLEP 2010 located on the site or any items in the vicinity of the site. It is considered that there is unlikely to be any adverse impacts to built heritage arising from the proposal. No conditions of consent are required.

Aboriginal Cultural Heritage

The site contains items of Aboriginal cultural heritage with Heritage NSW ('HNSW') having been consulted throughout the assessment of this proposal by Council (the agency responsible for Aboriginal cultural heritage changed throughout this application, however, is referred to HNSW throughout this assessment). The potential archaeological deposits are represented by the red hatching in **Figure 39**.

The ACHAR made the following recommendations:

1. *Conservation of AHIMS 52-4-0194/Chelsea Gardens Locale 2* – this area to be conserved as a green space and no further ground disturbances occur, including landscaping.
2. *Application for an Aboriginal Heritage Impact Permit ('AHIP')* – allow partial impacts to AHIMS 52-4-0194/Chelsea Gardens Locale 2, avoiding the area of moderate density.
3. Establish care and control of Aboriginal objects - All artefacts identified during the test excavations should be reburied in an area adjacent to the study area which will not be impacted by future developments, or given to the Illawarra LALC for safe keeping.

4. If any suspected human remains are discovered during any activity, you must:
 - (a) Immediately cease all work at that location and not further move or disturb the remains.
 - (b) Notify the NSW Police and DPIE's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location.
 - (c) Not recommence work at that location unless authorised in writing by DPIE.

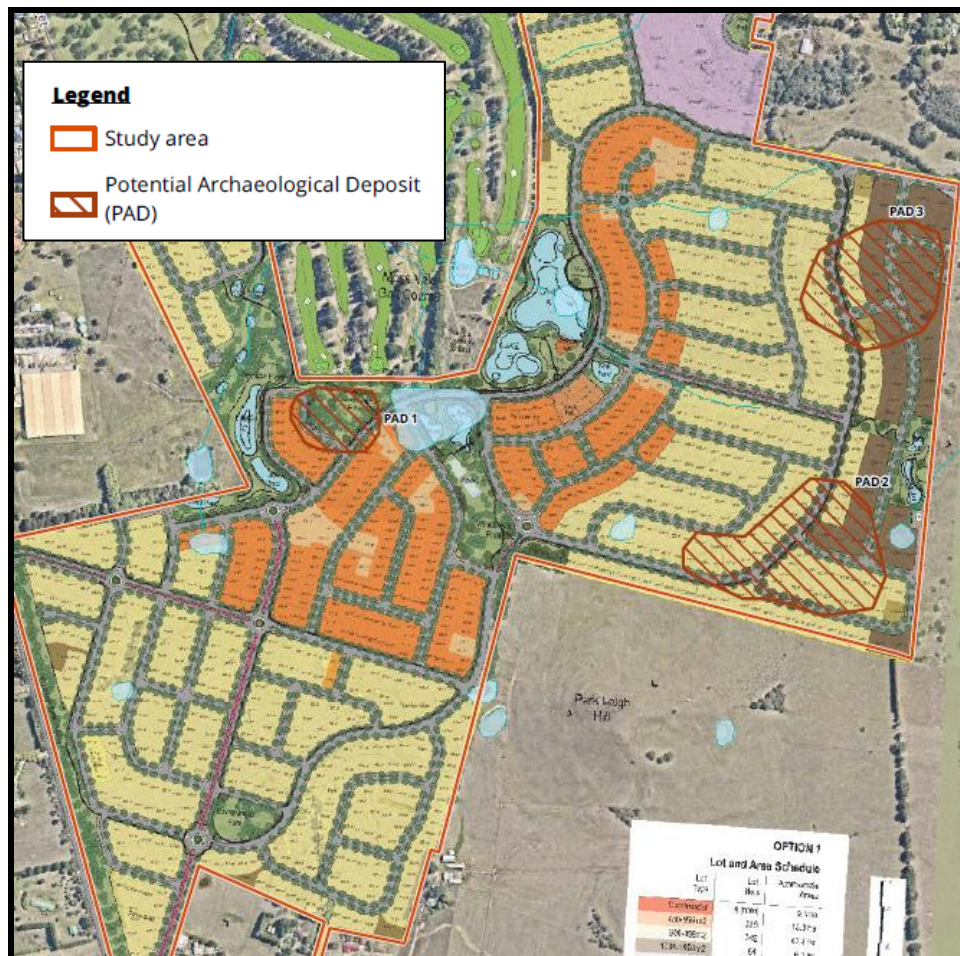


Figure 39: Aboriginal sites within the site (Source: Biosis, 2019)

Information provided to HNSW by the applicant indicated that harm to Aboriginal objects will likely occur through construction of Stages 2, 3a and 5. HNSW considered that the proposed works would destroy sites 52-4-0193 and 52-4-0689 and would partially harm site 52-4-0194.

The initially proposed adventure playground proposed within Locale 2 has been relocated to another area of proposed open space in the central portion of the site. The area containing Locale 2 will form a Conservation Area and is located to the south of the golf course within

proposed Stage 3a. Relevant conditions have been recommended for NSW's Recommendations 2, 3 and 4.

In relation to Stage 1, the proposal is considered to be satisfactory having regard to Aboriginal cultural heritage given there are no known items located in this area, consistent with advice from HNSW. Conditions are recommended to be imposed which encompass any unexpected finds during the construction process.

Following revision to the recommended draft conditions, it is considered that this issue has been adequately addressed.

7.9 Development Contributions

The site is the subject of an executed State Voluntary Planning Agreement ('SVPA') between the Minister for Planning and Public Spaces and Prime Moss Vale Pty Ltd ('the applicant') on 17 July 2021. This SVPA provides that the applicant will make a development contribution by providing a Monetary Contribution of \$3,466.67 per urban lot created for the purpose of contributing to the provision of designated State public infrastructure in relation to each lot.

The SVPA provides funds for the provision of new road infrastructure, including a new intersection, to the north-east of the site to allow a road connection between site and the Illawarra Highway which will reduce traffic passing through the Moss Vale town centre (**Figure 40**). Part of the Monetary Contribution payable may be offset by the completion of road work by the Developer (to the value of \$2,406,000) which will comprise the *Intersection Upgrade works*, which are defined in the SVPA as "*An intersection upgrade at Illawarra Highway/Fitzroy/Throsby Park Road, generally shown in Annexure A*".

If the Intersection Upgrade Works (illustrated in **Figure 41**) cannot reasonably be carried out, a proposed modified roundabout design/alternative treatment or arrangement to the satisfaction of Transport for New South Wales may be undertaken (*Proposed Modified Road Work*).

The application of sections 7.11 and 7.12 of the EP&A Act are not excluded in respect of this development while section 7.24 Special infrastructure contributions are excluded in respect of the development. No relevant capital works program by the Minister is associated with this agreement. The Developer must register the SVPA on the title of the land in accordance with

Section 7.6 of the EP&A Act. DPIE issued a Satisfactory Arrangements Certificate pursuant to Clause 6.1 of the WLEP 2010 dated 3 August 2021 on the basis of this executed SVPA.

Relevant conditions in relation to contributions are recommended to be imposed as outlined in Council's draft conditions and are contained in **Attachment A**.

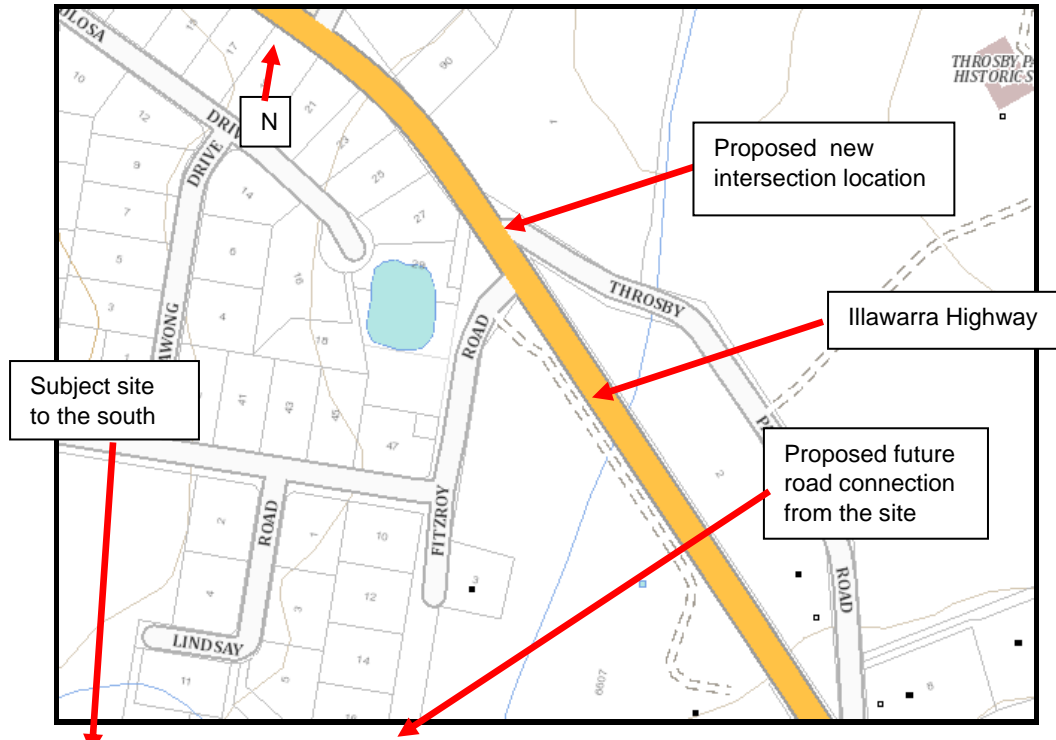


Figure 40: Location of the Proposed Future Road infrastructure (Source: SIX Maps)

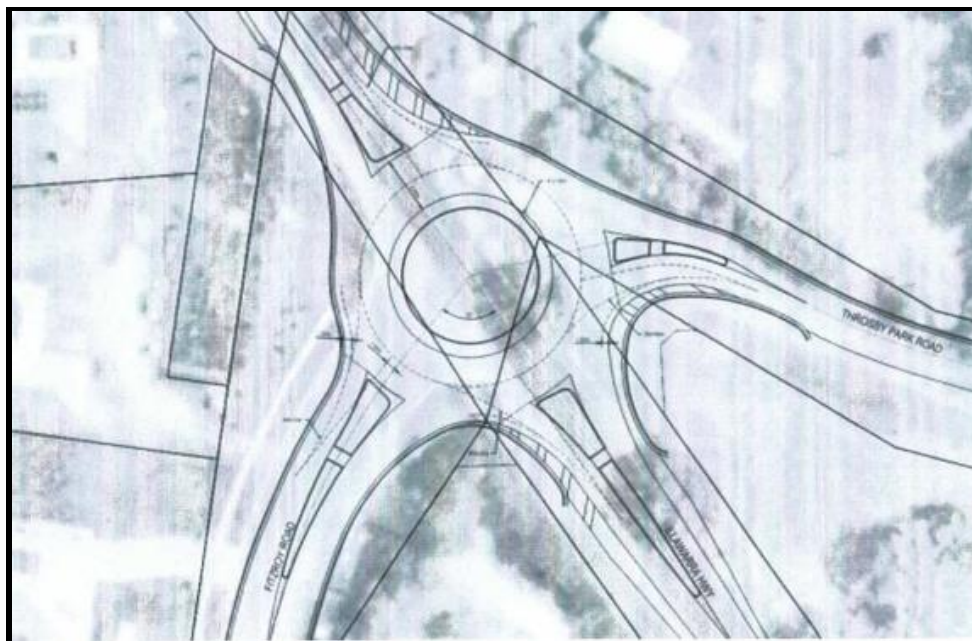


Figure 41: Intersection Upgrade Work (Source: Annexure A of SVPA executed on 17 July 2021)

8. CONCLUSION

This development application has been considered in accordance with the requirements of the EP&A Act and the Regulations as outlined in this report. Following a thorough assessment of the relevant planning controls, issues raised in submissions and the key issues identified in this report, it is considered that the application can be supported.

The key issues have been addressed and are satisfactory for the following reasons:

- Adequate arrangements have been made for the extension of water and sewer services to the site for the first and subsequent stages of the proposed development.
- The first stage of the development requires a new roundabout at a local intersection as well as the construction of access roads and roundabouts into the site, while revised modelling will be required prior to the next stage of the subdivision to ensure any improvements to the local road network are undertaken.
- The management of the water cycle on the site is satisfactory and the provision of water sensitive urban design measures on the site allows for the stormwater drainage to be managed, flooding to be reduced on the site and nearby sites and the stormwater infrastructure areas being used for public open space.
- The boundaries of the site and interfaces with adjoining properties is satisfactory while the visual impact of the proposal has been minimised through the use of boundary/screen planting and perimeter roads.
- The design of the subdivision is generally consistent with the DCP and is permissible on the site with consent.
- The proposal allows for the retention of significant trees on the site in public reserves and road verges and allows for some of the large dams to be retained and rehabilitated on the site. The area surrounding Whites Creek will also be rehabilitated and revegetated in accordance with a Vegetation Management Plan.

- Adequate provision has been made for public open space on the site and the streetscapes will be appropriately vegetated with adequate footpaths for connectivity throughout the site.
- Aboriginal cultural heritage will be protected on the site through the use of public reserves and a Conservation Management Plan. Future stages of the development will require further consultation with the Registered Aboriginal Parties and Heritage NSW.
- Appropriate development contributions have been levied pursuant to Section 7.11 of the EP&A Act as well as through the State VPA.

The site is considered to be suitable for the proposed development, notwithstanding the existing site constraints as a result of the technical studies undertaken and the conditions of consent recommended to be imposed on any consent granted for the proposal.

The proposal is compatible with surrounding development and is a logical extension to the urban area of Moss Vale. There are adequate services and facilities within Moss Vale to cater for the proposal and there will be connectivity into the town centre in future stages.

It is considered that the key issues as outlined in Sections 5 and 7 have been resolved satisfactorily through amendments to the proposal and/or in the recommended conditions of consent at **Attachment A**.

9. RECOMMENDATION

That Development Application DA No 20/0227 for a concept proposal for a subdivision of a maximum of 1,073 residential lots and Stage 1 subdivision works comprising 177 lots at Lot 3 DP 706194 (No 141 Yarrawa Road Moss Vale) ('Coomungie') and Lot 12 DP 866036 (No 32 Lovelle Street, Moss Vale) ('Chelsea Gardens') be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the recommended draft conditions of consent attached to this report at **Attachment A**.

Attachments:

- A: Revised draft conditions of consent**
- B: Compliance Tables**
- C: Clause 4.6 Consideration**

Attachment A: Revised Recommended Draft conditions

Attachment B: Compliance Tables

Attachment C: Consideration of Clause 4.6 Request