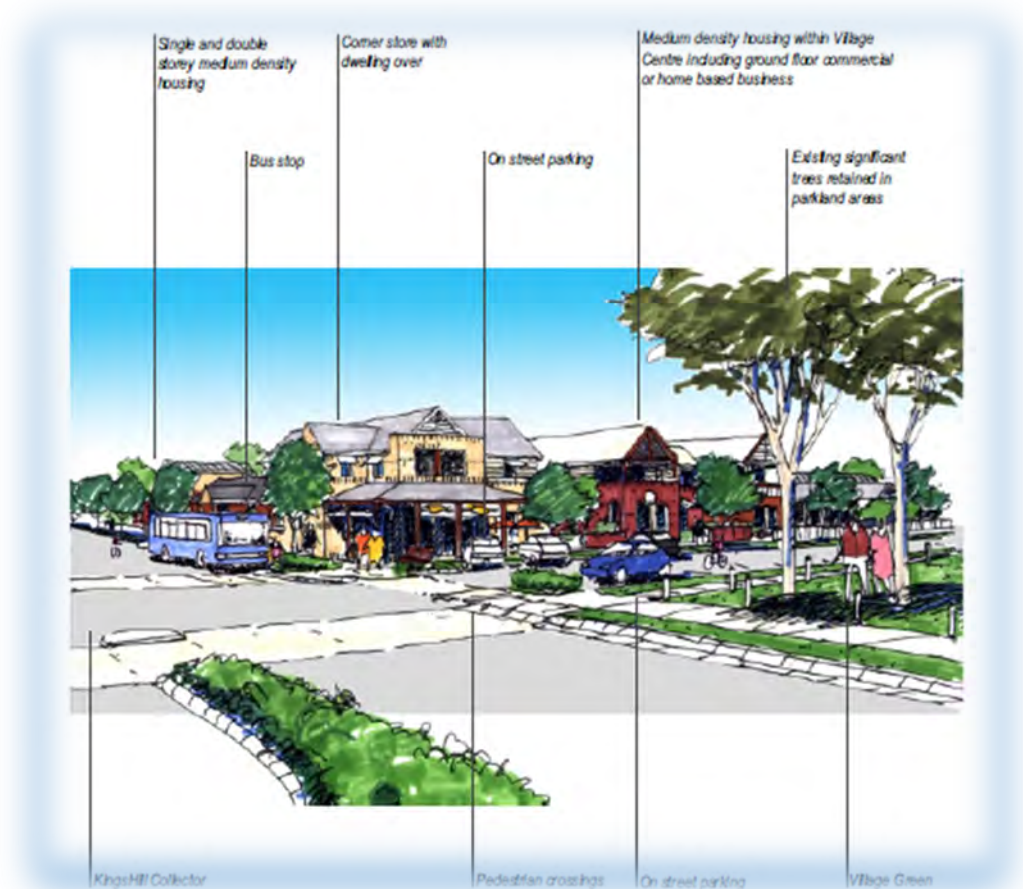


Project-specific SEARs request for KHD in the Kings Hill Urban Release Area



Prepared for: Kings Hill Development No 1 Pty Ltd
Kings Hill Development No 2 Pty Ltd
Submitted to Department of Planning, Housing and Infrastructure
August 2025

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Executive summary

This Scoping Report has been prepared by Kings Hill Developments (KHD) to support the request for Secretary’s Environmental Assessment Requirements (SEARs) for a concept development application under the State Significant Development (SSD) provisions of the *Environmental Planning and Assessment Act 1979*. The proposal relates to the balance of the Kings Hill Urban Release Area (URA), located within the Port Stephens local government area, and seeks to establish a master plan framework to guide the future staged delivery of residential development, affordable housing, supporting infrastructure, and environmental conservation outcomes across the site.

The purpose of this report is to provide the Department of Planning, Housing and Infrastructure (DPHI), Port Stephens Council, and other government agencies with a clear and comprehensive description of the concept proposal. It also outlines the statutory and strategic context for the proposal, identifies the key issues requiring assessment, and documents the consultation undertaken to date. The report responds to a request for additional information issued by the Department in July 2025 and has been updated accordingly to clarify the scope and intent of the concept development application as distinct from broader planning work relating to the URA.

The concept proposal seeks to establish development parameters and staging principles for the delivery of residential neighbourhoods within the eastern portion of the Kings Hill URA, including a mix of market and affordable housing, supporting open space and community facilities, and a significant conservation area. The proposal excludes land subject to existing development applications within Precincts 6 and 7, and does not include non-residential land uses previously contemplated in earlier draft reports. These exclusions are reflected throughout the revised report to ensure clarity and alignment with the State-led SSD process.

This Scoping Report is structured to assist the Department in preparing tailored SEARs for the proposal. Following this Executive Summary, Section 1 provides an overview of the proposal and its objectives, including the role of the SSD concept application in the staged delivery of the Kings Hill URA. Section 2 outlines the site location, ownership, and physical context, while Section 3 identifies the applicable planning framework and statutory considerations under the *Environmental Planning and Assessment Act 1979*, *Housing SEPP 2021*, and other relevant instruments.

Section 4 describes the concept proposal in detail, including the proposed land uses, indicative layout, staging, and supporting infrastructure. Section 5 addresses consultation undertaken to date with Council, agencies and the community, including both strategic and site-specific engagement activities. Section 6 provides a preliminary assessment of environmental and technical issues, including biodiversity, heritage, traffic, urban design, water management, and infrastructure delivery. Section 7 concludes the report and includes a proposed set of draft SEARs to assist the Department in finalising the requirements for the forthcoming Environmental Impact Statement (EIS).

In summary, this report provides a comprehensive and updated framework to support the progression of the concept proposal under the SSD pathway. It is submitted in accordance with the Department’s *SSD Guidelines: Preparing a Scoping Report* and is intended to facilitate coordinated assessment of future urban development and conservation outcomes within the Kings Hill URA.

Statement of purpose

The Lower Hunter region is facing a multifaceted social and economic crisis that urgently calls for investment in new housing and community infrastructure. Alongside the well-documented shortage of affordable housing—which has led to rising rental pressures and financial stress—there is a significant lack of accessible medical facilities. This combination not only impacts residents’ physical health but also deepens socio-economic inequality.

In addition, the area struggles with:

- **Employment and Economic Insecurity:** Limited job opportunities and low wages contribute to persistent financial instability.
- **Educational and Skills Gaps:** Inadequate access to quality education and vocational training restricts long-term economic growth.
- **Mental Health and Social Isolation:** Economic pressures and service shortages have increased rates of mental health issues and feelings of isolation.
- **Transport and Infrastructure Limitations:** Poor public transport and aging infrastructure make it difficult for residents to access essential services like healthcare, education, and employment.
- **Environmental and Indigenous Challenges:** A lack of careful planning, and promotion of new housing and infrastructure projects designed to promote environmental sustainability and honour Indigenous cultural values is impacting the area negatively. Such development can improve access to services and economic opportunities for all, ensuring that community growth supports both environmental stewardship and social equity.

Together, these challenges create a cycle of disadvantage that can only be broken by targeted, robust investment and efficient government systems that are transparent and effective to assist the delivery of projects focused at desirable community outcomes. New housing and upgraded community infrastructure would not only provide safe, affordable living conditions but also serve as a foundation for improved access to healthcare, education, and job opportunities—helping to reduce the strain on emergency services and ultimately enhance overall community well-being.

In 2010, following years of investigation, scientific research, public consultation, and review, that commenced in the 1990s, the New South Wales Government rezoned land at Kings Hill—located north of Raymond Terrace within the Port Stephens Local Government Area (LGA). This previously rural land was designated to support a mix of general residential, mixed-use, and local centre zones, with an anticipated yield of over 3,500 residential dwellings over a twenty-five-year period. The instrument amendment was the formal action of a detailed strategic process to implement the Lower Hunter Regional Strategy 2007, which recognized Kings Hill as 1 or 4 priority urban release areas to provide housing within 15- 30 minutes of the largest employment growth areas of the Lower Hunter.

This report has been prepared to support a request for Secretary’s Environmental Assessment Requirements (SEARs) under Part 4, Division 4.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The request relates to a proposed Concept Development Application for part of the Kings Hill Urban Release Area (KHURA) in Port Stephens Local Government Area.

The proponent, Kings Hill Development (KHD), owns the majority of land within KHURA and seeks to progress the delivery of housing, infrastructure, and ecological outcomes in alignment with the Hunter

Regional Plan 2041. The KHD landholdings form the subject of this SSD application, with the exception of Lots 6 and 7, which are being progressed under separate local development applications submitted to Port Stephens Council.

This SEARs request therefore relates only to the portion of the KHD site proposed for State Significant Development. It seeks to establish a coordinated, transparent and strategically aligned planning pathway for those areas of land that depend on major infrastructure coordination and broader State-led governance. Since the 2010 rezoning, the project has undergone a near 15-year process of complex assessments that have encountered challenges in achieving a required transparent balanced environmental development assessment in accordance with the objectives of the EPA Act 1979.

The primary objective of this report is to establish a transparent and robust assessment process that will underpin the sustainable development of the land. This approach is intended to ensure that the substantial public and private investments—amounting to years of less than optimal process and several tens of million dollars—are effectively directed toward delivering sustainable planning outcomes for the Lower Hunter community. Moreover, the report aims to reconcile two critical imperatives: addressing the urgent need for affordable housing in a community facing significant social challenges due to housing shortages and implementing sound ecological protection measures to halt and reverse the decline of the local koala population. In addition, the project seeks to restore and enhance local Aboriginal community connections, ensure permanent access to valued land attributes, and establish a conservation area of significant regional and state benefit.

Scientific investigations have provided clear evidence that a privately funded program with public sector agency guidance and delivery of long anticipated state infrastructure can assist to restore and enhance the currently degraded landscape and with specific methodology can reconnect two previously isolated koala communities, thereby improving genetic diversity and ecological resilience. Despite these promising findings, public sector assessment processes have not consistently achieved the statutory objectives for delivering both new housing and ecological outcomes as envisioned by the relevant frameworks and the project proponents.

This report is a result of identifying and experiencing certain systemic issues within the current assessment and planning processes below the state processes typically required for large complex projects. There have been instances where scientific data may not have been fully interpreted, and where external pressures have appeared to influence the assessment process—such as a lack of understanding about the level of engineering design required in a concept application, suggestions that the applicant was implementing financial shortcuts strategy to move around new off sets policy when the application was made under former legislative requirements, and more recently the majority of the exclusion of the Kings Hill Urban Release Precinct from the draft local housing strategy, despite its recognised priority in established and successive state and regional plans. Such issues have complicated transparent and robust assessment processes and contributed to outcomes that do not fully meet community and environmental expectations that desperately require projects of this type to be efficiently delivered aligned to the higher order strategic planning framework.

Notably, when these concerns were raised with senior officials, commendably those officials undertook review to address inconsistencies between local, regional, and state policy requirements. More recently, in 2024, in response to a significant housing crisis, the Port Stephens Council requested that the Minister for Planning adjust policies to enable a state-significant assessment process for projects promoting new affordable housing. Traditionally, such assessments were limited to projects in proximity to major rail transport—a criterion not met within this LGA. This policy shift now permits the

project presented in this scoping report to pursue an SSD assessment pathway, reflecting the importance of the affordable and market housing outcomes that the private sector aims to deliver. The history and complexity to date show that regardless of this policy shift it is without question that only an SSD process conducted by experienced experts is the optimal way for this project to be considered for future delivery.

By presenting this comprehensive, evidence-based framework, that benefits from years of study and committed evidence based research the report seeks to address longstanding procedural challenges and to establish a balanced, transparent, and scientifically rigorous foundation of assessment. This foundation is intended to guide decision-makers in issuing an equitable SSD declaration and in formulating project-specific assessment criteria that support both ecological conservation and the development of much-needed housing and community infrastructure.

1 Introduction

This scoping report has been prepared by Pacific Planning Pty Ltd on behalf of Kingshill Development No 1 Pty Ltd and Kingshill Development No 2 Pty Ltd to request the Secretary’s Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) to accompany a State Significant Development Application (SSD). The SSD will apply to the majority of the Kings Hill Development (KHD) landholdings, excluding two precincts - 6 and 7—which are currently the subject of local development applications lodged with Port Stephens Council (council).

This hybrid planning approach allows for early delivery of housing within areas that are already advancing under local assessment, while ensuring strategic coordination and infrastructure alignment for the remainder of the site. The scoping report has been prepared in accordance with the State Significant Development Guidelines – Preparing A Scoping Report (October 2022).

The report follows the format laid out in the Guidelines:

- Introduction
- Strategic context
- Project
- Statutory context
- Engagement
- Proposed assessment of impacts
- References
- Appendices

Kings Hill Development (KHD), as legally described in section 1.1, is the proponent for this request and owns the majority of land within the Kings Hill Urban Release Area (KHURA). This SEARs request relates only to those KHD landholdings proposed for assessment as SSD. The western-most precincts—identified as Precincts 6 and 7—are subject to separate local development applications lodged with council and are excluded from this SSD request.

This hybrid structure has been deliberately adopted to enable the early delivery of precincts already well progressed through council processes, while providing a coordinated SSD pathway for the balance of the site that depends on strategic infrastructure and whole-of-government oversight. As outlined

throughout this report, this approach ensures alignment with regional and state planning objectives while preserving the valuable contributions of council. It enables efficient land release, robust environmental assessment, and governance that reflects both the scale of the opportunity and the expectations of the community.

The proposed structure offers the most orderly, integrated and transparent planning pathway for the timely delivery of housing, infrastructure and conservation outcomes across the KHURA—balancing local responsiveness with state-level coordination to support long-term community benefit.

1.1 Proponent details

The proponent landowner of this application is:

- Kingshill Development No 1 Pty Ltd ACN 158 129 652 of Suite 605, 321 Pitt Street, Sydney NSW 2000 and,
- Kingshill Development No 2 Pty Ltd ACN 158 127 041 of Suite 605, 321 Pitt Street, Sydney NSW 2000.

These entities are collectively named in this report as Kings Hill Development (KHD).

1.2 Project summary

The Kings Hill urban release area (KHURA) is situated adjacent to the Pacific Highway approximately 25 kms north of Newcastle CBD and 8 kms north of Raymond Terrace, in Port Stephens local government area. The KHURA comprises a total land area of over 800 hectares and is held by seven individual landowners. The KHURA is listed in the Hunter Regional Plan 2041 as a priority one project and is expected to yield approximately 3,500 new dwellings for around 10,000 residents.

The project site comprises 3221 Pacific Highway and 35 Six Mile Road, Kings Hill, formally described as Lot 41 DP 1037411 and Lot 4821 DP 852073.

As illustrated in Figure 11, the westernmost precincts of the Kings Hill site—identified as precinct 6 and 7—are currently being progressed under local development applications submitted to Port Stephens Council. These areas are spatially discrete and not reliant on the delivery of major state infrastructure such as the proposed Pacific Highway interchange. They have benefited from a progressing local assessment process and can be serviced independently.

This scoping report proposes that these precincts be excluded from the SSD declaration area. This approach ensures that council assessment resources already committed to the local DA process are not duplicated, and that early housing delivery outcomes can be achieved in a manner that complements the broader strategic objectives of the State.

Council has indicated it supports the SSD process for the site as a means of coordinating regional infrastructure and advancing its Local Housing Strategy objectives for Kings Hill.

The KHD-owned land comprises 517.13 hectares (and 64%) of the KHURA. The land has been logged, quarried and grazed and it is in poor condition. Parts of it are heavily weed infested. There are areas of the land that have significant ecological and Aboriginal importance. This includes an existing partially

isolated koala population of approximately 9-10 individuals (at time of audit¹) and other important Aboriginal cultural elements.



Figure 1 Location of the KHURA within a regional context

1.2.1 The development subject of this scoping request

The development proposed by this SEARs request is a concept application for a masterplan to support future works stages of development for residential development in the different forms identified in the definition of ‘residential development’ listed in clause 15B of the HSEPP, and more particularly a mix of dwelling houses, dual occupancies, multi dwelling housing, residential flat buildings and shop top housing as permitted by Port Stephens Local Environment Plan 2013 (PSLEP) and the State Environmental Planning Policy (Housing) 2021. (HSEPP)

The presently anticipated yield of the master plan is at least 2,500 new dwellings of which a minimum of 10% will be affordable dwellings.

The yield for which development consent will be sought will be informed by the EIS and master plan prepared in accordance with SEARS issued by the Planning Secretary.

The application will seek consent for a concept development supported by the master plan will be delivered through an appropriate staging plan that allows for the efficient and timely delivery of the planned housing, drawing upon the concept plan provisions of the EP&A Act subject to the guidance provided by the SEARs.

¹ Port Stephens LGA Koala genetic sampling report – Owad Environment Dec 2019.

It is impossible to determine the precise cost and investment value of the development until it is designed with reference to the SEARs, but applying an estimated average construction cost of a dwelling in the Lower Hunter Region based on the presently available information the estimated development cost of the development will exceed a billion dollars, with the infill affordable housing comprising around \$900 million, which is far in excess of the threshold identified in clause 26A of Schedule 1 to the State Environmental Planning Policy (Planning Systems) 2021 (PSEPP) for housing to which Chapter 2, Part 2, Division 1 of the HSEPP applies, such that it is declared to be State significant development (SSD).

As advised in the previous section, the concept application the subject of this report relates only to a portion of the KHD landholdings. Specifically, Precincts 6 and 7, owned by KHD and located in the western extent of the KHURA, are excluded from this request.

1.2.2 Description of the proposed SSD concept application

The application seeks consent for a concept proposal that establishes a master plan for the subject land, primarily to facilitate the future staged delivery of residential development under Division 1 of the Housing SEPP 2021. The concept application also identifies and allocates land for supporting land uses that are necessary and directly related to the efficient and orderly delivery of residential development of this scale. These include civil infrastructure such as roads, drainage and water services, as well as public open space, ecological conservation areas, and utility-related infrastructure. These elements are integral to achieving a coordinated approach to subdivision and housing delivery across the site.

Consistent with the statutory framework for infill affordable housing under the Housing SEPP, this concept application does not seek consent for uses such as schools, seniors housing, medical or health facilities, or tourism-related development, as these are not considered sufficiently related development under the SSD pathway for residential purposes. Any such land uses are identified on the master plan for long-term strategic coordination purposes only and do not form part of the development for which consent is sought.

The application seeks to define the key land use structure, built form parameters, and sequencing framework through a concept SSD approval that will guide subsequent detailed SSD and subdivision applications. The concept proposal will include:

- definition of residential and non-residential precincts, including areas for community use, open space, conservation, and infrastructure.
- identification of indicative dwelling yields, building typologies, and built form development envelopes.
- allocation of affordable housing across nominated precincts consistent with State policy and housing targets.
- a staging and sequencing strategy for the SSD-nominated land, noting that precincts already under local development assessment (Lots 6 and 7) are excluded from this application.
- a proposed subdivision layout including road hierarchy, town centre locations, and public domain structure.

- identification of long-term land allocations for a school, health precinct, community facilities, and environmental conservation (noting these are not part of the SSD consent sought); and
- conceptual parameters to inform the preparation and assessment of future SSD and subdivision applications over the site.

This concept application forms the foundation for the detailed planning, infrastructure coordination, and housing delivery required to realise the site's development potential in a strategic and staged manner.(the proposal).

(For clarity, this SSD concept application does not apply to Precincts 6 and 7, which are subject to separate local development applications and are excluded from the SSD request. References to “the site” or “the proposal” throughout this report should be understood to relate only to the SSD-nominated land unless stated otherwise).

Use of the concept development application statutory provisions will allow establishment of the strategic planning and infrastructure framework required to support the orderly and coordinated delivery of the Kings Hill Urban Release Area.

While not included for approval in this proposal for infill affordable housing, the concept application will also show:

- Proposed subdivision layout, town centre locations, road hierarchy, and public domain structure.
- Allocation of land for various non-residential purposes including a school, health precinct, community facilities, and environmental conservation.

1.2.3 Overall development objectives elements



Figure 2 KHD's land

The KHD land as shown in Figure 2 in the KHURA is a significant new urban release area aimed at delivering the following below listed elements in future staged development applications as a result of the concept masterplan:

1.2.4 Market and affordable housing and community development

The delivery of approximately 2,500 new dwellings in the form of dwelling houses, multi-unit dwellings, residential flat buildings and shop top housing. These dwellings will be provided at a range of affordability levels and diversity of typology, with many in a sale and rental configuration provided in seven residential precincts. It is proposed that a minimum of 10% or greater of the housing stock will be allocated as affordable housing as per clause 13 of the HSEPP. As the project advances toward assessment consideration will be applied to what other mechanisms can assist to enhance delivery of additional affordable and social housing outcomes on the land.

The development of these residential precincts are to be carefully master planned with new open space, recreation areas, local road networks and related servicing infrastructure, new community facilities, new local town centres to support day to day community services and local shopping facilities.

1.2.5 Supporting community facilities

While not part of this application, the affordable housing will be supported by new town centres and community facilities. These are outlined in this section.

1.2.5.1 New school site

A new public school to service the emerging community collocated with proposed open space with capacity for multiple uses sporting fields. The education precinct will also benefit from consideration and planning and childcare uses.

1.2.5.2 Medical uses

Health and medical precinct contained in one of the new local centres. Inclusive of medical uses will be ancillary health related retail floorspace and other uses to meet the day to day needs of the community including a particular focus on providing a facility that can support bulk bill medical services. Of specific social value is the opportunity to address the issue of a lack of bulk billing services in the lower Hunter. Evidence informs this lack of bulk billing services is having a negative social impact in the community.

1.2.5.3 Seniors housing

A proposed seniors housing and residential aged care facility. Preliminary modelling suggests a 500-dwelling scheme (approximately) with the option of a related residential aged care facility of 100 beds with ancillary infrastructure to the support a scheme. Such a scheme would be considered in a future works application.

1.2.5.4 Cultural recreation and tourist facilities

An in perpetuity Aboriginal cultural heritage Koala education and conservation centre and related precinct in conjunction with the Worimi Local Aboriginal Land Council. Key highlights include: Indigenous curated walking trails, ancillary education connected to the Aboriginal values of the land in

conjunction with traditional knowledge holders methodologies aimed at the ecological restoration and enhancement of the currently separated koala communities.

District recreation facilities inclusive of: conservation area tracks and trails, equestrian trails, wetland boardwalks. An active uses mountain bike centre ,trailhead facilities and trails. A skate Park with connected cycleways and pedestrian networks.

1.2.6 Required and supporting infrastructure

Major enabling infrastructure will be required to progress the infill affordable housing. rigorous consideration has been given to the civil infrastructure required to ensure the housing is facilitated. Only approval is being sought for the master plan for infill affordable housing in this SEARs request, but the land will be allocated for the required and supporting infrastructure outlined in this section. Civil infrastructure

Pacific Highway interchange and stormwater channel – required under the PSLEP and supported by a state VPA. These significant items of critical infrastructure are proposed to be progressed either by SSI or a Part 5 agency led processes. As will be detailed further in part in this report and in significant detail in the EIS, these works also are a significant overall component of the wider ecological benefits of the project and the linking of historically separated koala communities that will assist to deliver an increase in local kola population genetic health and population growth.

Civil infrastructure includes a 3.5 km long east-west collector road and prospective bus route linking the residential precincts, school site, and new town centre. A 2.5 km long north-south collector road linking between the proposed new town centre and Six Mile Road.

1.2.6.1 Water storage, water treatment facilities and sewage systems

Significant civil infrastructure systems to support the urban release area including water reservoirs designed to provide water security to existing Raymond Terrace water supply.

1.2.6.2 Establishment of an in perpetuity conservation area.

The progression and finalisation of a Biodiversity Conservation and Management Plan (BCAMP) detailing management of the land required to preserve the conservation principles for both ecological and Aboriginal areas of significance.

1.3 Background

In 2010, the New South Wales Government rezoned land at Kings Hill, located north of Raymond Terrace within the Port Stephens Local Government Area (LGA). Previously part rural zoned land and owned by Boral Resources for quarrying and buffer purposes, this rezoned land would support a mix of general residential, mixed use and local centre land use zones and is expected to yield more than 3,500 residential dwellings over a twenty-five-year period.

The nature of the Lower Hunter region is changing. The region is growing rapidly with internal migrants attracted to the region's affordability in comparison to the Sydney market as well as its existing and foreseeable employment opportunities with both the state and Commonwealth governments having allocated significant investment to the region. To keep pace with growth there is an urgent need to deliver new housing. The region's supply does not keep pace with demand, and similar to the issue experienced across Australia, the result is steep housing price increases due to a misalignment of demand and supply. The NSW Premier advises that the increase in housing unaffordability is causing

significant social impacts and discord in the community, and it is the purpose of his government to ensure that the systems of government and the agencies that are responsible are focused on being resolute in their actions to resolve the crisis². The development of KHURA is critical to avoiding this current serious social issue. The KHURA plans to provide a mix of dwelling types in a mix of household compositions and a significant supply of affordable housing.

According to the *Port Stephens Council Demographic and Housing Overview* by Remplan (2019), the KHURA represents:

- 27% of the forecast supply of land in the PSC LGA and could satisfy up to 40% of the demand for the LGA and 96% of local housing supply for Raymond Terrace. Without KHURA, the Raymond Terrace forecast supply would be 148 dwellings by 2036, satisfying less than 10% of the required dwelling demand from population growth.

In October 2019, KHD executed a planning agreement with the NSW government (agencies - TfNSW and Planning) which provides a mechanism for the funding and delivery of enabling infrastructure. Recognising the importance of the KHURA to the supply of housing needed to meet the demand generated by employment growth (esp. the Williamstown RAAF base, education, medical and energy sectors), the Department of Premier and Cabinet (now Premier's Department) coordinated the VPA outcome, which links to funding under the Restart NSW Housing Acceleration Fund (HAF). So far, the NSW budget has spent \$6 m of HAF fund money toward the design and approval of that infrastructure by TfNSW.

In December 2022, the NSW minister endorsed the Hunter Region Plan 2041, where Kings Hill is recognised for its capacity to supply land for housing within 16 minutes of RAAF base at Williamstown. A primary objective of the plan is, *inter alia*, to locate housing within 30 minutes of Williamstown RAAF base. The objective of the HRP 2041 is in recognition that in the last few years alone, the Federal government has announced significant investment in the defence base, including most recently a missile manufacturing facility set to generate significant levels of new employment. In addition, the defence base leases part of the facility to Newcastle airport, which is currently being transformed to an international airport.

The land involves former rural zoned land generally disturbed by a history of logging, quarrying, weed and pest invasion associated with uncontrolled grazing activities. There are inherent biodiversity values in certain areas of the site which are primarily zoned for conservation purposes. The overarching objective of the proposal is therefore to restore and deliver long term sustainable conservation outcomes in appropriate areas of the site, while also providing for high quality, serviced residential land in both market and rental offerings with convenient access to essential services and facilities, and employment growth centres in the Port Stephens and the Lower Hunter.

Unlike many areas of the Lower Hunter the land is not impacted from mine subsidence – noting the closest mine subsidence area is at Ashtonfield / Gillieston Heights as shown in Figure 3. The red circle shows the land and the yellow mapping the closest impact.

² <https://www.chrisminns.au/>



Figure 3 Mine subsidence not impacted

The area is supported by a Koala Plan of Management with Port Stephens Council (council) which is relevant to the consideration of the Biodiversity Conservation (Koala) SEPP. The project amongst other ecologically sustainable objectives seeks build on the existing 5 year program of engagement and partnership with local Indigenous groups being represented by the Worimi Local Aboriginal Land Council and local ecological groups to promote the growth of koala populations on the land supported by significant regeneration program and major infrastructure upgrades (see Figure 5) that include linking of traditional joined koala communities that were separated by the original construction of the Pacific Highway. Figure 4 shows a synopsis of an option for the proposed re-vegetation within existing forested areas for koala benefits.

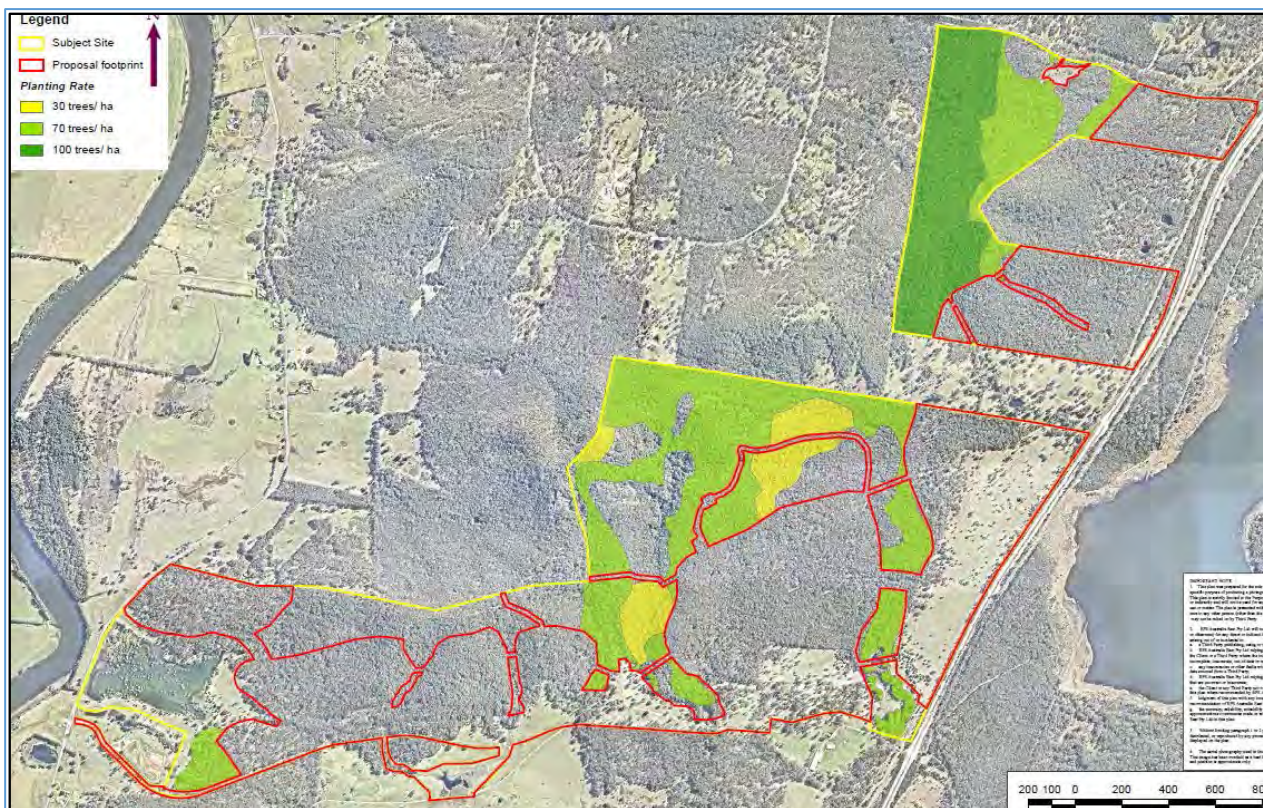


Figure 4 Regeneration program highlights map.

Source: RPS Species Impact Statement

The project, being to provide a concept approval to provide the planning foundation to realise the development of land within the KHURA in conjunction with high standard of ecological embellishment of degraded land has been anticipated in the NSW statutory planning framework for decades and has progressed through extensive land use analysis that culminated in the zoning that applies to the land.

Since March 2024, Pacific Planning in conjunction with the established project team has advanced engagement with the department seeking to establish an orderly framework of delivery of the KHD land aligned to the statutory framework and specifically the Hunter Regional Plan 2041, the provisions of the EPIs that apply to the land and the state planning agreement that promotes the orderly delivery of required infrastructure.

Before granting development consent to any development application for subdivision of the rezoned land, the consent authority requires satisfactory arrangements be made under the Port Stephens Local Environmental Plan 2013³ (PSLEP) including suitable vehicular access from the KHURA to the Pacific Highway. As such, access and egress to the new residential subdivision development is proposed from the Pacific Highway via the proposed interchange.

The first sections of lots and dwellings on the land, does not rely on the delivery of the state infrastructure and are not prevented by the PSLEP clause related to road access.

On 21 November 2024, the secretary replied on the Minister's behalf to KHD's letter to Minister Scully of 9 July. Most significantly, the secretary noted *"the planning agreements that are currently in place with developers in the Kings Hill urban growth area, including Kings Hill Development, will support works to be undertaken by Transport for NSW relating to a road interchange and water diversion channel. The NSW Government has provided funding to Transport for NSW to undertake transport modelling to determine the planned road network response to housing growth in the area. This work is expected to be completed next year and will help to inform infrastructure upgrade options and a staging strategy for future investment."*

This communication provided a stable platform of information that the state was progressing the actions allocated in the HRP2041 that are linked to the priority progression of KHURA.

As indicated in the secretary's response, the development of the KHURA will also require a solution to fulfil Hunter Water's requirement of preventing stormwater from KHURA entering Grahamstown Dam in any rainfall event up to the 0.2% Annual Exceedance Probability (AEP). Grahamstown Dam, located approximately 150 metres east of Kings Hill URA, is the Hunter's largest drinking water supply dam.

The development of these two major infrastructure items that the secretary advises will be state agency led, gives rise to the consideration of any ecological impact and appropriate mitigation measures and works. Ecological investigations with concluding scientific analysis inform that the interchange will, due to increased traffic, exacerbate the existing issue of associated mortality of koalas if unaddressed. The impact area of the stormwater drainage channel includes a current pinch point for koalas along the western edge of the Grahamstown Dam. Its removal may result in an impassable barrier to movement being created. It is important that this is considered in a landscape and population context beyond the animals directly within the study area or impact area and the adjacent land in the KHURA subject to this report.

³ PSLEP clause 6.6

The Grahamstown West koala population is important in and of itself, but also as a conduit for movement from significant koala source populations ('hubs') which occur to the east (Anna Bay) and west (Kings Hill). The infrastructure proposal should safeguard the continued health of Port Stephens koala populations by ensuring that these populations do not become further fragmented, subjecting them to the possibility of local extinction, genetic isolation and creating problems for the recolonization of areas that may be impacted by fire or other stochastic events. If appropriate mitigation measures are taken, the impacts of the current proposal will not substantially interfere with the recovery of the koala and other native fauna.

Noting the long history and strategic planning platform to support the delivery of the KHURA, the development is designed and planned to support and deliver the significantly important objectives of the Koala SEPP and additional ecological benefits. The actions and works related to the regional specific SEPP objectives requires a deliberate methodology. This methodology is targeted to address the devastating impact caused by the separation of previously linked koala communities as a result of the dam and highway construction.

The construction of these significant infrastructure items occurred without sufficient consideration of the ecological impacts, particularly the habitat loss and genetic degradation caused by the separation of the koala population. This project presents an opportunity to address and correct that ecological imbalance and its ongoing effects.

To enable the full development and use of the KHD land, the delivery of supporting infrastructure will be required. This includes the early preparation and delivery of proposed ecological enhancements and the establishment of habitat corridors integrated with these works and across the KHD land.

These vital elements of ecologically focused civil design will enhance and support the local environment well before the ultimate reconnection of the currently divided eastern and western koala populations—a key and necessary feature of the planned infrastructure delivery.

1.4 Related development

This section describes the related development that is subject to a separate state led delivery that will be required to be operational to enable the entire extent of the KHURA. These items described under headings 1.6.1 and 1.6.2 are elements that are subject to the planning agreement between the landowner proponent and the NSW State government. These works do not form part of this application.

1.4.1 The stormwater channel

Grahamstown Dam, located approximately 150 metres east of Kings Hill URA, is the Hunter's largest drinking water supply dam.

The objectives of the stormwater aspects of the future state delivered proposal are:

- Provide a new stormwater channel able to prevent stormwater entering the Grahamstown Dam for any rainfall event up to the 0.2% Annual Exceedance Probability (AEP).
- Assist in maintaining access to the Grahamstown Dam in all storm events up to the 0.2% AEP rainfall event.
- Minimise impacts to the environment during construction.

These aspects of the proposal are located between the Pacific Highway and the western foreshore of Grahamstown Dam, mostly on land owned by Hunter Water known as:

- Lot 1 DP245115
- Lot 1 DP41745
- Lot 2 DP1106088
- Lot 31 and Lot 32 DP1185385
- Lot 113 DP733181.

During construction, land to the west of the Pacific Highway would also be impacted, including:

- Lot 41 DP1037411
- Lot 481 DP804971
- Lot 4821 and 4822 DP852073.

The location of the lots is shown in Figure 2.

1.4.2 The Pacific Highway interchange

The objectives of this aspect of the future state delivered proposal are to:

- Provide suitable vehicular access from the Kings Hill URA to the Pacific Highway, for future traffic associated with the Kings Hill URA, without impeding the safe and efficient operation of the Pacific Highway as part of the national highway network
- Deliver a proposal that is sympathetic with the surrounding landscape and future surrounding land uses, minimises impacts on the natural and built environment and is compatible with the Pacific Highway urban design principles and objectives
- Provide Kings Hill URA with flood-immune access to the Pacific Highway for a 1 in 100 year event.

The part of the proposal is located at Kings Hill within the Port Stephens LGA, approximately four kilometres north of Raymond Terrace, 25 kilometres north of Newcastle and 135 kilometres north of Sydney and is located on land owned by RMS, Hunter Water, council, Gwynvill and KHD known as:

- The Pacific Highway road reserve
- Lot 41 DP 1037411
- Lot 31 and 32 DP 1185385.

During construction, additional land would also be impacted, including:

- Lot 113 DP 733181
- Lot 4821 and 4822 DP 852073
- Lot 481 DP 804971
- Lot 5 DP 234521.

The location of the lots is shown in Figure 5.

1.4.3 Ecological mitigation work measures

The objective of the ecological mitigation works aspect of the state infrastructure proposal are to ensure that there are no significant environmental impacts or ongoing impacts during the lifecycle of the entire proposal. The measures will collectively enhance connectivity for koalas both locally and more broadly within the Port Stephens area. Recommendations pertaining to the envisioned Vegetation Management and Fauna Management Plans which will be necessitated by the proposed works and associated development of the KHURA that are proposed to be advanced prior to the completion of the state infrastructure are included in various relevant mitigation measures, guided by the Koala SEPP and the Port Stephens koala strategy.

1.4.4 Overview of the state infrastructure

Transport for NSW (TfNSW) proposes to construct a new grade separated interchange over the Pacific Highway at Kings Hill (four kilometres north of Raymond Terrace) and construct a stormwater channel that would be located parallel to the Pacific Highway at Kings Hill (four kilometres north of Raymond Terrace) (the proposal). The proposal is required to enable safe and efficient access and egress from the proposed Kings Hill Urban Release Area (URA) and would capture stormwater run-off from Kings Hill URA. The combined infrastructure will support a multifaceted urban development that adjoins the Pacific Highway. That urban development includes a significant supply of diverse residential development, significant areas of recreation and tourism, social infrastructure in the form of schools, medical uses and a detailed ecological strategy.

The main features of the state infrastructure items are:

- A new overpass across the Pacific Highway (about one kilometre north of Irrawang Spillway)
- A new road (the East-West Link road) that would connect the Kings Hill Urban Release Area (Kings Hill URA) to the proposed interchange. It would run in an east-west direction from the future Kings Hill town centre intersection (which falls outside the scope of this proposal)
- Two northbound (entry and exit) and two southbound (entry and exit) ramps that would connect the East-West Link road and the Pacific Highway and enable all northbound and southbound movements
- A roundabout that would connect the East-West Link road to the interchange
- Relocation of the existing Hunter Water maintenance track access point
- Relocation of existing utilities
- Drainage infrastructure (e.g. swales or pipes) that would convey surface flows from the interchange into detention basins, which would discharge into existing culverts located beneath the Pacific Highway.
- An open-cut, vegetated stormwater channel that would extend 3,485 metres from a point 80 metres south of the Pacific Highway and Six Mile Road intersection, to the proposed discharge point at the disused Irrawang Spillway
- Extension of existing culverts that run underneath the Pacific Highway conveying stormwater from the western side to the eastern side

- Modification and retro fitting of the existing Irrawang Spillway to accommodate wildlife connectivity creating a fauna underpass suitable for koalas and other fauna.
- A koala land bridge about 300 metres long, constructed where the Grahamstown Dam is closest to the highway.
- Relocation of the Hunter Water Corporation (Hunter Water) maintenance access track, a one-lane road that provides access from the Pacific Highway to the western shore of Grahamstown Dam.

Construction delivery is supported by a state planning agreement between the Minister for Planning and Public Spaces, the Roads and Maritime Services and the land-owning entities, Kingshill Development No 1 Pty Ltd and Kingshill Development No 2 Pty Ltd. The construction once commenced is advised will take approximately 14 months to complete.



Figure 5 Location of the study site with intersecting lot plans.

(source – Biolink 2020)

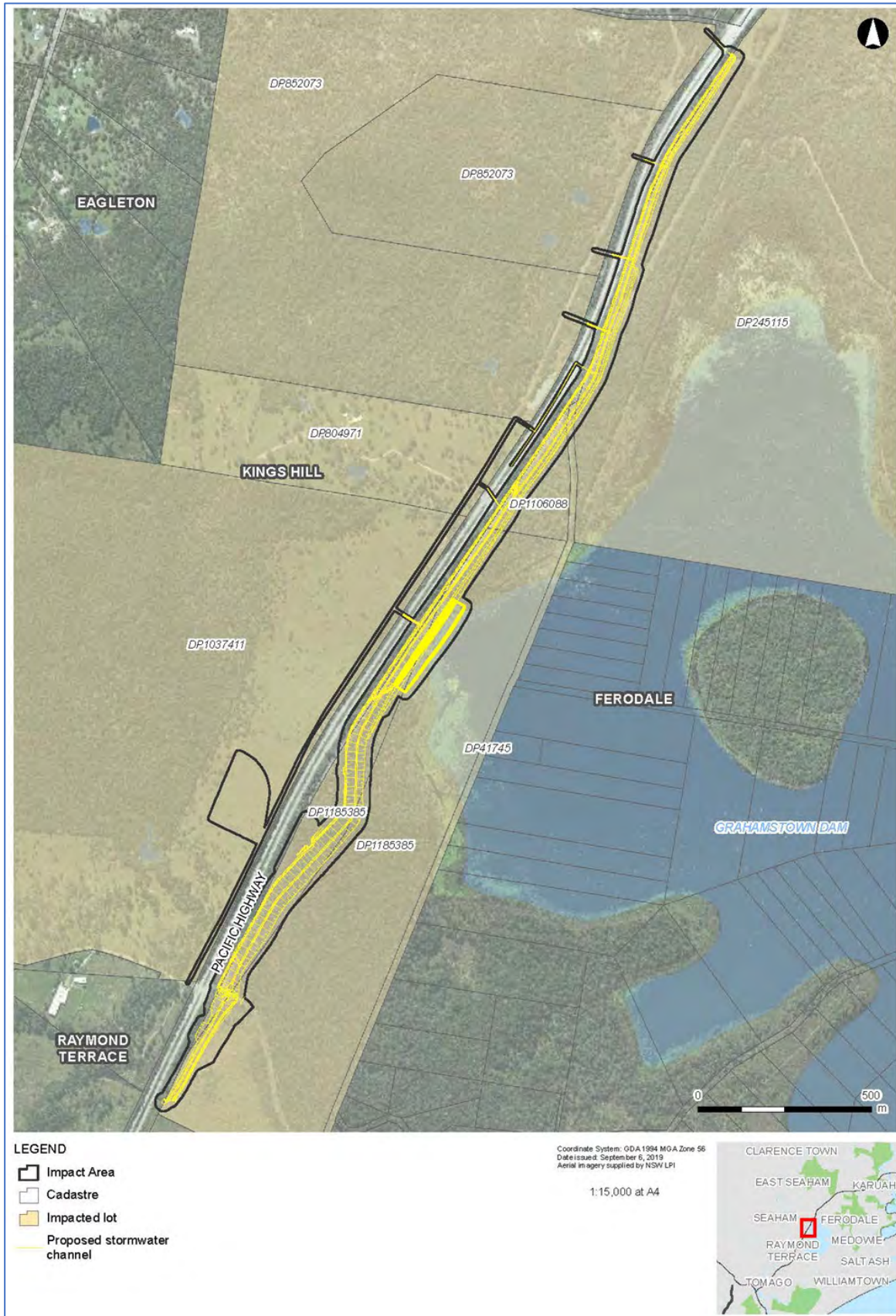


Figure 6 Location of stormwater and impacted lots.

(Source - Arcadis 2019)

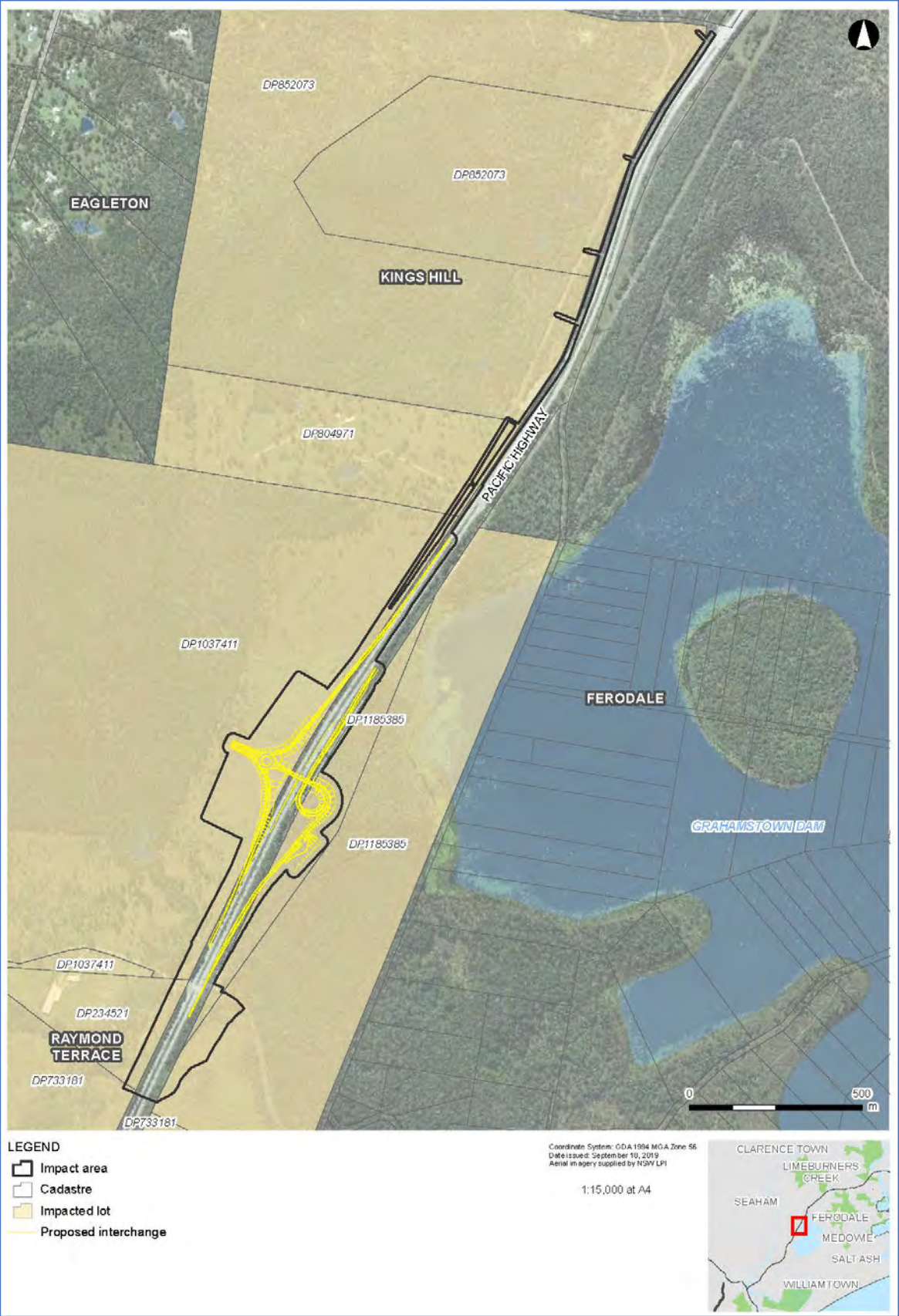


Figure 7 Interchange impacted lots

(Source – Arcadis 2019)

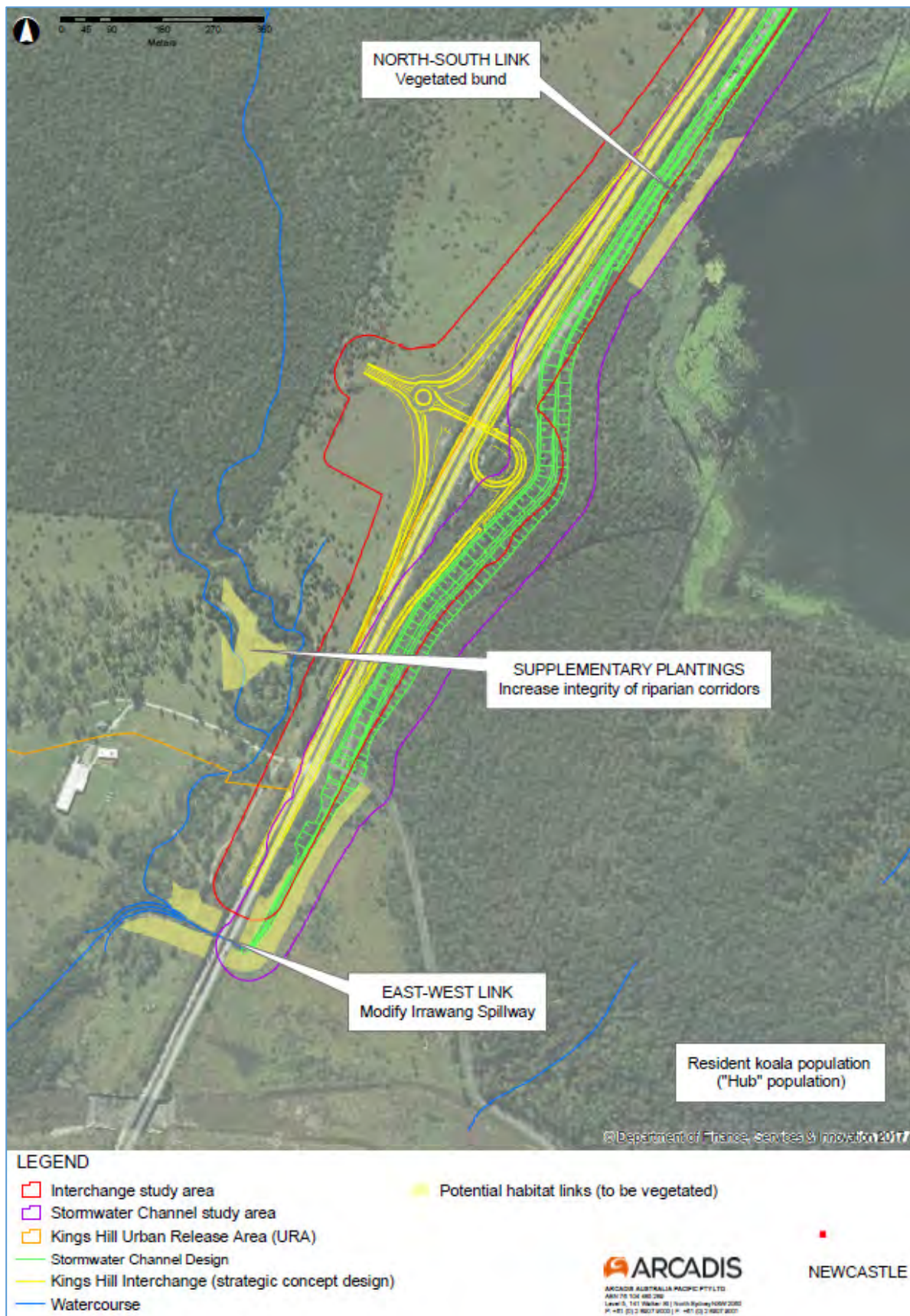


Figure 8 Ecological mitigation works measures



Figure 9 Yellow crosshatch shows extent of recommended revegetation

(source Biolink 2020)



Figure 10 The former Irrawang Spillway

(Source Biolink 2017)

1.4.5 Existing infrastructure

Existing infrastructure includes:

- Ausgrid 11kV overhead power line that is currently located within KHD-owned land on the western side of the Pacific Highway
- Telstra underground Optic Fibre and Copper communication lines, located within KHD-owned and Gwynvill Trading Pty Ltd (Gwynvill) owned land on the western side of the Pacific Highway
- Hunter Water 33kV overhead power line, located within KHD-owned land on the western side of the Pacific Highway, crosses to the eastern side of the Pacific Highway (in the middle of the proposal footprint), where it continues north on the eastern side of the Pacific Highway.
- The Pacific Highway at Kings Hill is a dual carriageway with a plain concrete pavement. The northbound and southbound carriageways each have two lanes with a speed limit of 110 kilometres per hour. A revegetated median approximately seven metres wide separates the carriageways. A guardrail is provided alongside the northbound and southbound carriageways where Irrawang Spillway is located beneath the highway, south of the proposal.
- Six Mile Road, located two kilometres north of Kings Hill which forms the western boundary of the KHURA, is a sealed rural road with a speed limit of 80 kilometres per hour, which connects the Pacific Highway to Newline Road on the west. There are no other public roads in proximity to the proposal.
- A chain-link, floppy-top fauna fence is located on the eastern side of the Pacific Highway, that extends from an existing Hunter Water maintenance track access point into the Grahamstown Dam, located 350 metres north of Irrawang Spillway, to beyond the northern extent of the study area.

1.5 Current approvals and applications

The following applications, approvals and agreements are summarised below

- Lead-in Water & Sewer Mains (to boundary) – Part 4 (EIS), Approved by JRPP Sep 2020.
- Concept DA – Part 4 (with a related SIS), Regionally Significant Development Application, JRPP Refusal, Class 1 Appeal, 56A Appeal (lodged Nov 2018), and subsequent appeal to the Court of Appeal.
- Local Subdivision DAs – lodged with PS Council (approx. 170 lots), under local assessment (see Figure 11).
- KHD and Worimi Local Aboriginal Land Council Vision Statement (13 July 2021) - to formally align on cultural and environmental objectives with the intention of preserving, promoting and enhancing the natural, historical and culturally significant attributes of Kings Hill.

- State planning agreement - October 2019 between KHD, the NSW Department of Planning and Environment, and the (then) RMS (now TfNSW), to fund and deliver an interchange in time to enable access and egress via the Pacific Highway.
- Local planning agreement to fund and deliver biodiversity outcomes on the site to ultimately facilitate dedication to Council for culturally sensitive public uses– adopted by Council in 2020 pending execution once stable development process delivered.

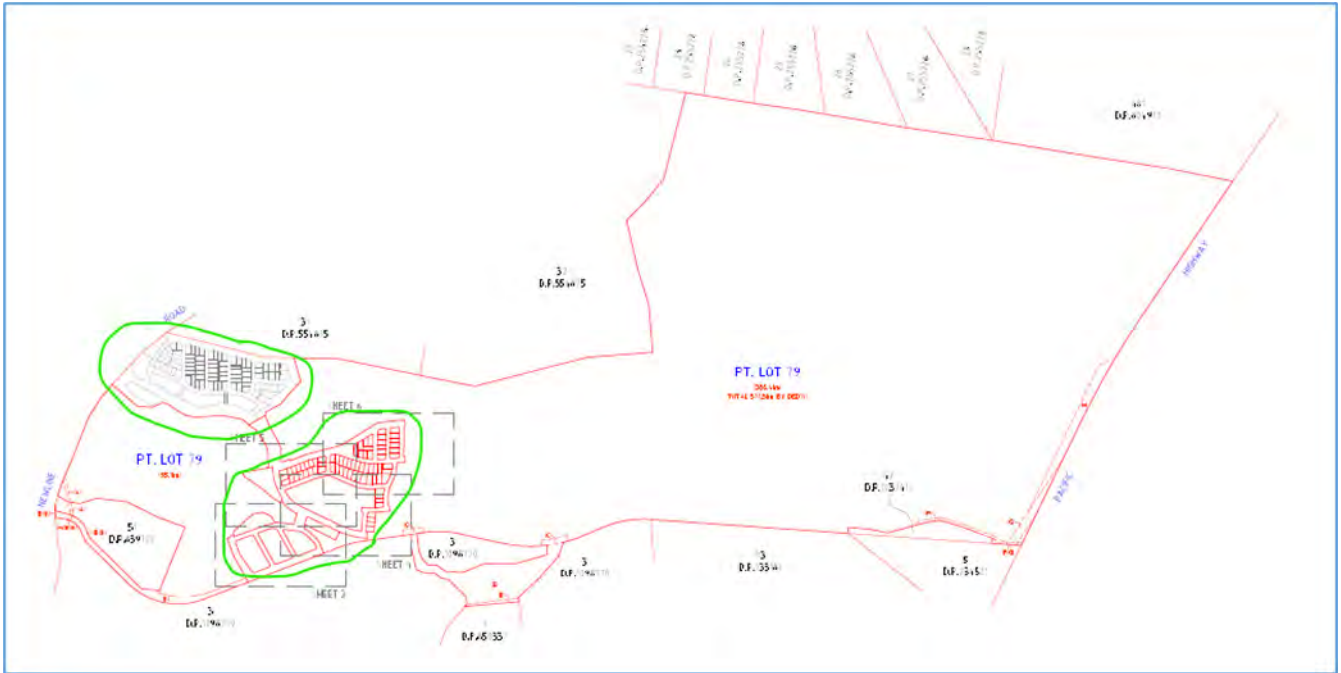


Figure 11 Existing local DAs under assessment.

1.5.1 History of previous applications

- Figure 11 identifies precincts 6 and 7 currently progressing under local development assessment. These areas are excluded from the SSD and are addressed in Section 3.5.3 as part of the hybrid staging and delivery model.
- KHD lodged a concept development application on 23 November 2018, DA 16-2018-772-1 (concept DA), which (at the time of lodgement) had a capital investment value of \$133,264,874.
- The seven precincts proposed by the concept DA are capable, after (future) residential subdivision, of providing (indicatively) 1900 residential lots within the KHD owned land.
- Before lodging the concept DA, in 2015 KHD lodged a small 144 lot development application and 3 lot superlots development application, based on catchment areas. However, assessment was stalled by council pending the DCP for the KHURA, contributions plan, and the State VPA (see below).
- In 2018, council and then Office of Environment and Heritage indicated during consultation that a holistic approach to development of KHD's site was preferred by progression of a concept DA.

- To facilitate a holistic approach to the KHD site, a concept DA detailing the environmental management framework for the life of the project (as Stage 1) was then prepared and lodged, later in 2018. The concept DA sought to contemporise the environmental assessment based on 15 years of ecological assessment (conservation zoned land as well as avoided areas of residential zoned land) and associated management measures under Stage 1, while leaving the development areas for approval under subsequent DAs for subdivision.
- KHD is the only developer in the KHURA that has proposed a concept development application (responsive to the desires of government).
- The development application for sewer and water lead-in infrastructure has already been approved by the panel but is at risk of lapsing if it is not commenced prior to September 2025.

2 The project

2.1 Overview

The application seeks concept approval for a master plan to support the staged delivery of approximately 2,500 dwellings, including a minimum of 10% in-fill affordable housing to be managed by a registered community housing provider.

The masterplan proposal will allocate land for a diversity of built form typologies consistent with Clause 15B of the Housing SEPP, including:

- Low-density detached housing on Torrens or strata lots.
- Medium-density terraces and townhouses.
- Manor houses and dual occupancies.
- Residential flat buildings and shop-top housing clustered near centres.

This mix is permitted by PSLEP and HSEPP. The yield for which development consent will be sought will be informed by the EIS as a consequence of the SEARS issued by the secretary.

The project site comprises 3221 Pacific Highway and 35 Six Mile Road, Kings Hill, formally described as Lot 41 DP 1037411 and Lot 4821 DP 852073. The Port Stephens LEP 2013 land zone map extract is provided at Figure 1 of this letter. The site spans approximately 517.13 hectares and forms part of the Kings Hill Urban Release Area (KHURA), as identified in the Port Stephens Local Environmental Plan 2013, the Hunter Regional Plan 2041 and the Port Stephens Council Local Housing Strategy that targets the delivery of 3,500 dwellings at KHURA.

The application will also seek consent for ancillary civil infrastructure and the uses necessary for a residential development of this scale as described in this section, and subdivision.

It is anticipated that the development will be delivered through an appropriate staging plan that allows for the efficient and timely delivery of the planned housing, drawing upon the concept plan provisions of the EP&A Act subject to the guidance provided by the SEARs.

Precincts 6 and 7 are excluded from this SSD application and are being progressed separately through local development applications. References to “the KHD land” or “the site” in this section relate only to the area nominated for SSD proposal.

2.1.1 The site and locality

The Kings Hill URA is located approximately 4 km north of the regional centre of Raymond Terrace.



Figure 12 KHURA site and context

The KHD land (Figure 18) is north of the Hunter Water Corporation Grahamstown Dam spillway with the Pacific Highway forming the eastern boundary, and Newline Road forming the western boundary. Six Mile Road forms a northern boundary to KHDs land.

The combined area of the site is 517.13ha and permits a range of uses with all land areas permitting various forms of residential development. Approximately 205.8ha of the site is zoned C2 Environmental Conservation and 311.4ha of the site is zoned R1 and MU1 for more intensive urban uses. The site provides capacity for housing in proximity to Raymond Terrace, the administrative and commercial centre of Port Stephens LGA.

2.2 Site analysis

An extensive analysis of the site constraints and opportunities has been carried out over the land since 2003. This has culminated in the guiding constraints plan (Figure 24).

The analysis considers the opportunities and constraints of:

- Topography and Slope Analysis;
- Visual Context;
- Geotechnical environment;
- Drainage catchments and watercourses;
- Flooding and Coastal Wetlands;
- Biodiversity;
- Bushfire prone lands;
- Aboriginal Archaeology
- Potential Contamination
- Buffers to adjoining land uses;
- Vehicle Access and Egress;
- Potential acoustic impact of Pacific Highway and Aircraft; and
- Existing and potential capacity of Utilities Infrastructure

[Appendix A](#) provides a summary of the site conditions listed and how they have assisted to support the development methodology and assessment of issues.



Figure 13 Subject Land - Lot 41 DP 1037411 & Lot 4821 DP 852073.

2.3 The concept plan proposal

The Kings Hill Development (KHD) proposal seeks consent for a concept State Significant Development (SSD) application that defines a master planning and land allocation framework to guide the future

staged delivery of residential development under Division 1 of the Housing SEPP 2021. The concept proposal aims to establish the structure for a coordinated and orderly delivery of residential and supporting development outcomes across the site, consistent with the Hunter Regional Plan 2041 and informed by a site-specific constraints and opportunities analysis.

The overarching vision for Kings Hill is to create a connected, inclusive and sustainable community—integrating housing, local centres, community infrastructure, open space, Aboriginal cultural values, and ecological protection—within a cohesive and logical urban structure. The concept master plan provides the framework for future development, aligning urban land uses with terrain and environmental features, and ensuring compatibility with site conservation objectives and development constraints. The internal road network, block structure, subdivision layout, and neighbourhood sequencing respond directly to topography and environmental values, establishing a pattern of urban precincts with character, accessibility, and a sense of place.

As part of this process, recommendations from the preliminary Site Investigation Studies (SIS), including ecological and Aboriginal cultural heritage assessments, have informed the proposal to ensure conservation outcomes are integrated from the outset and are not compromised by future development.

The concept SSD application includes the following components:

- definition of residential, open space, community, conservation and infrastructure precincts;
- identification of indicative dwelling yields, building typologies, and built form controls;
- allocation of affordable housing across appropriate residential precincts;
- a staging and sequencing strategy to guide the coordinated rollout of subdivision and development across SSD-nominated land.

To support strategic coordination and facilitate efficient future approvals, the concept proposal will also illustrate—but not seek consent for—the following elements:

- proposed subdivision layout, including the road hierarchy, public domain structure, and indicative town centre locations;
- long-term allocation of land for future school, health, and community infrastructure precincts, and expanded environmental conservation areas (outside the scope of this SSD application);
- urban design and planning parameters to inform future detailed SSD and subdivision applications.

This approach ensures the concept SSD application remains within the scope of Division 1 of the Housing SEPP, while providing a strategic land use framework that integrates urban development and conservation, supports affordable housing delivery, and aligns with long-term regional planning objectives.

The application seeks to define the key master planning and land allocation framework through a concept SSD application that will seek approval to guide the future staged development of the site to support the orderly and coordinated delivery of the Kings Hill Urban Release Area. (Figure 19).

For clarity, the concept plan forming part of this SSD excludes land within precincts 6 and 7, which are already under separate development applications progressing through local assessment.

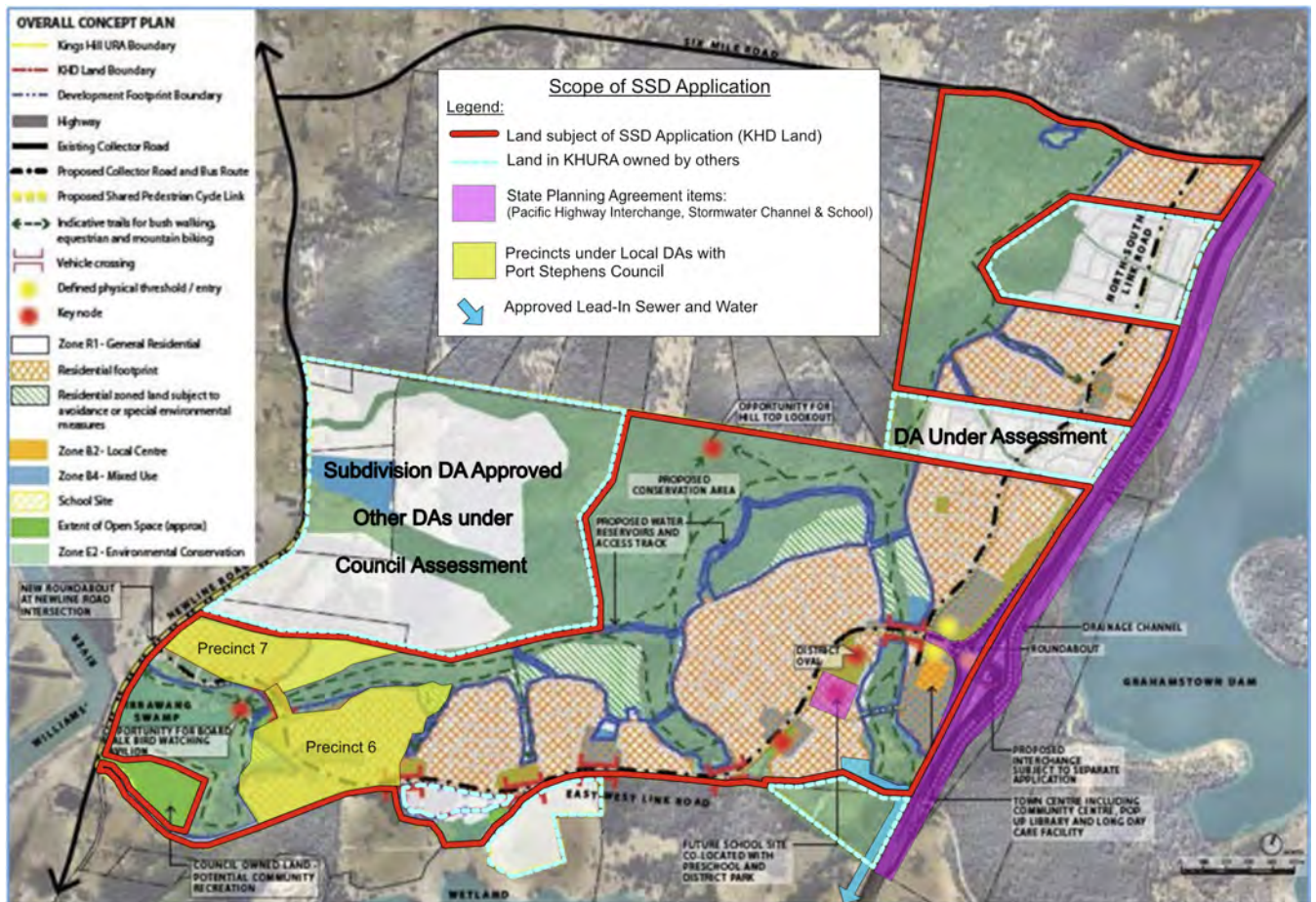


Figure 14 The concept masterplan

2.4 Simple description of proposed development

The KHD-owned land comprises 517.13 hectares (and 64%) of the KHURA. The subject land has been logged, quarried and grazed and it is in poor condition. Parts of it are heavily weed infested. There are areas of the land that have significant ecological and Aboriginal importance. The KHD land in the KHURA is a significant new urban release area aimed at delivering:

2.4.1 Housing and community development

The delivery of approximately 2,500 new dwellings in the form of dwelling houses, multiunit dwellings, residential flat buildings. These dwellings will be provided at a range of affordability levels and affordable housing categorisation (as per the HSEPP). The concept will seek to facilitate a diversity of typology of dwellings, in a sale and rental configurations provided in seven residential precincts. The seven residential precincts described include areas progressing under both SSD and local development applications. Precincts 6 and 7 are proposed to deliver housing consistent with the broader master planning principles.

2.4.2 Supporting community facilities

Subject to future applications, the proposal for the site includes a wide array of community facilities to support the housing. The masterplan will allocate the sites, but approvals will be sought in future applications.

2.4.2.1 New school site

The masterplan will allocate an area for a new school to service the emerging community collocated with proposed open space with capacity for multiple uses sporting fields. The concept application does not seek approval for a school use. A separate major projects application will progress for the development of the school as per the terms of the state VPA.

2.4.2.2 Medical uses

The masterplan will provide allocation of land for a future health and medical precinct contained in one of the new local centres. A separate development application process will occur in a future stage that is specific to the medical uses including ancillary health related retail floorspace and other uses to meet the day to day needs of the community.

2.4.2.3 Seniors housing and a residential aged care facility

The masterplan will allocate land for a seniors housing. The future seniors dwelling scheme with a related residential aged care facility will be subject to a separate development application process.

2.4.2.4 Cultural recreation and tourist facilities

An in perpetuity Aboriginal cultural heritage Koala education and conservation centre and related precinct in conjunction with the Worimi Local Aboriginal Land Council is a central theme and focus for the masterplan process established in the required environmental and social considerations of the scheme. Key highlights include: Indigenous curated walking trails and ancillary education connected to the Aboriginal values of the land. The masterplan will detail these elements as they relate to the overall development of the KHD land.

The masterplan will also detail the important district recreation facilities inclusive of: conservation area tracks and trails, equestrian trails, wetland boardwalks. An active uses mountain bike centre ,trailhead facilities and trails. A skate Park with connected cycleways and pedestrian networks. A separate detailed development application process will facilitate the works delivery of these significant elements.

The Worimi Local Aboriginal Land Council and KHD, have a formal agreement ([Appendix G](#)). That agreement and the draft planning agreement with council seeks to establish an in-perpetuity presence on the land for the local Aboriginal community. Part of this program includes a nature-based tourism experience which includes the opportunity for specifically designed new centre with a cafe and education gallery run by the Worimi Local Aboriginal Land Council. Design options include an educational amphitheatre for cultural awareness training. Design for Indigenous cultural burn practices, and the use of local forest resources to create an innovative approach to eco-tourism and cultural education in the region.



Figure 15 Cultural and recreational facilities

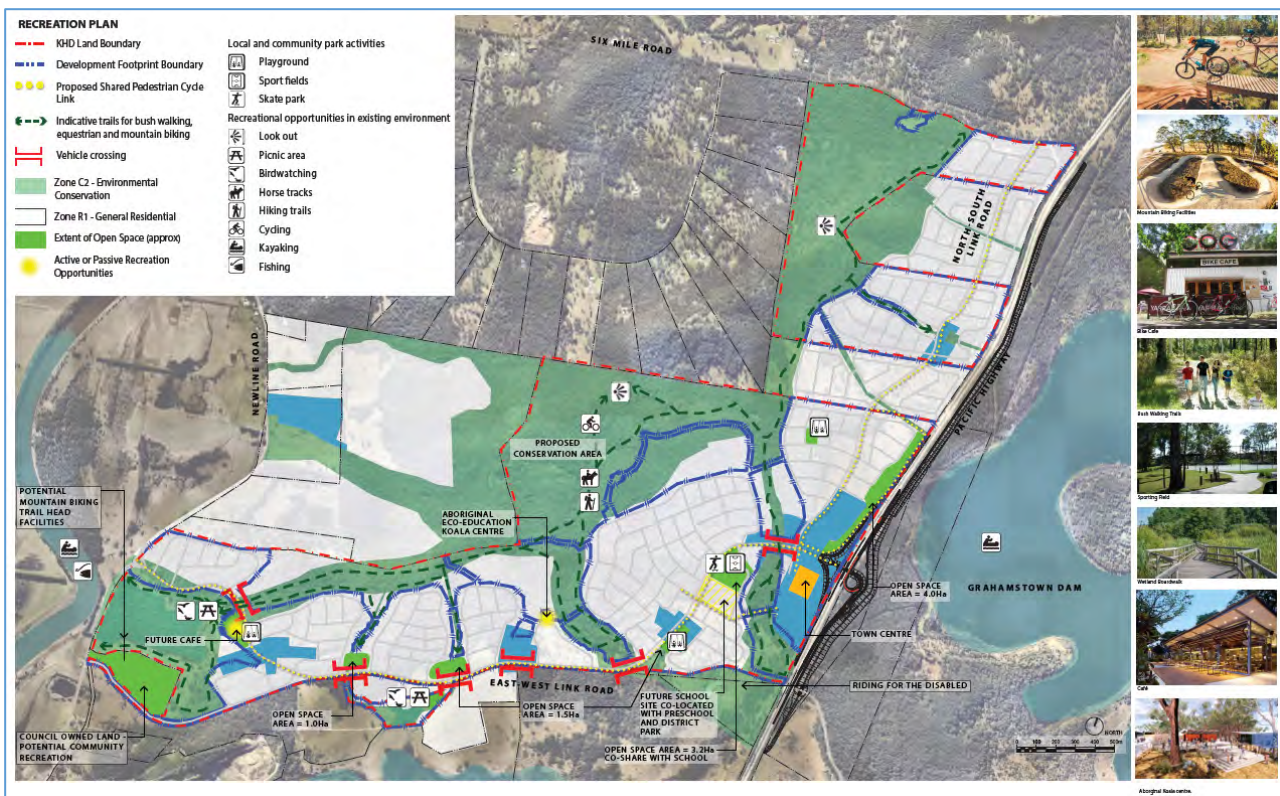


Figure 16 Proposed cultural, recreation and tourist facilities C2 land

The centre, guided by opportunities identified by the Worimi, will seek to operate taking leads of other example projects that combine traditional Aboriginal knowledge holders' skills in ecological sustainable practices linked to the wider program of koala management. The centre will be the base for

a program of elaborate walking and cycle trails to areas of cultural significance and provide positive employment opportunities to local Aboriginal community and an active education experienced opportunity for the wider community based on the history of the Aboriginal community connection to the land. It is noted this type of program is supported by the objectives of the BC Act Investment strategy and Koala strategy as key desirable outcomes in BC offsets merit analysis.

2.4.3 Supporting infrastructure

Subject to future applications, the proposal for the site includes a wide array of community facilities to support the housing. The masterplan will allocate the sites, but approvals will be sought in future applications.

2.4.3.1 Civil infrastructure

A related Pacific Highway Interchange & Stormwater Channel – required under the PSLEP and supported by a state VPA.

A 3.5km long east-west collector road and prospective bus route linking the residential precincts, school site, and new town centre. A 2.5km long north-south collector road linking between the proposed new town centre and Six Mile Road.

2.4.3.2 Water storage, water treatment facilities and sewage systems

A servicing strategy has been approved by Hunter Water and the lead-in water and wastewater mains have been approved by the Regional Planning Panel under DA 16-2020-81-1 (PPSHCC-34). The servicing strategy allows for the entire URA (4000ET) supporting the development of residential dwellings, as well as a town centre (including a school, commercial and mixed-use development) within KHURA with a staged approach to delivery of infrastructure.

Stage 1 approved comprises of:

- Pipes and pumping station(s) to convey wastewater from KHURA to the existing gravity network at Rees James Road, near Panorama Close in Raymond Terrace.
- Pipes to convey drinking water from the existing Raymond Terrace Water Pump Station located near the intersection of Irrawang Street and Glenelg Street to Kings Hill URA.

Stage 1 works will be commenced prior to the DA lapsing in Sep 2025. A pre-construction works commencement meeting has been held with Port Stephens Council. The focus of the meeting was to start works in the far south-eastern corner of the URA. In the interim and as these stage 1 works are established, an alternative water and wastewater servicing solution is available to KHD through Solo (WICA). This solution consists of a decentralised wastewater servicing with bulk water supply from Hunter Water. This process of services will be in place to service development along the western front of the development. The EIS will detail the delivery process of the water and waste water delivery and staging program.

2.4.3.3 Electricity services

Ausgrid estimate the load requirement is approximately 8MVA for the entire development. The proposed initial stages of the development are to be supplied from Raymond Terrace zone substation 11000 volt feeders 81244T. The feeder is adjacent to the Pacific Highway on the eastern side of the development land and feeder 81240 adjacent to the western boundary of the development. There are sufficient capacities on these feeders in the short term. Additional upgrades works will be required for

the ultimate development, including new 11000 volt feeders from surrounding zone substations. The EIS will provide an analysis and staging program linked to development staging to support required electrical infrastructure.

2.5 Masterplan framework for development and conservation

The land was rezoned in 2010 to a mix of urban and conservation zones based on some 8 years of site and environmental assessments of the kind outlined in the Site Analysis under [Appendix A](#). But while the gazetted land-use zones provide an indication of areas capable of development and suitable for conservation, it is ultimately the statutory, strategic and environmental considerations during the development application preparations that shape the use of the land. While the proposal is for infill affordable housing, it seeks to embed conservation outcomes into a refined masterplan to guide the KHD development.

2.5.1 Conservation areas allocation

In terms of the conservation zones, a review of the proposed zoning in 2009 by EcoBiological (2009) identified four key environmental outcomes that future development applications ought to achieve within the KHURA:

- Establish corridor zones of 100-150 m width (proposed corridor widths meet and exceed this specification). At least three corridors are proposed as recommended and are to be enhanced (enriched) with Koala-friendly vegetation.
- Retain additional preferred Koala habitat along the western ridge.
- Avoid as far as possible areas of high-value Brush-tailed Phascogale habitat and known Grey-crowned Babbler breeding areas; and
- Avoid the removal of Freshwater Wetland habitat within three key wetland locations.

Ecobiological also identified areas within the KHURA where land uses within an urban zone could potentially result in a significant impact on the certain threatened species or their habitat.

To inform and respond to Ecobiological's recommendations, and to inform the development application process as to whether a significant impact is likely, the Chief Executive Requirements (CERs) for the preparation of a Species Impact Statement (SIS) were obtained from the NSW Office of Environment and Heritage in 2017 and updated in 2018.

Preparation of an SIS by RPS Group during 2018 and 2020 has provided an improved and contemporary understanding of biodiversity values and potential impacts arising from the gazetted land use zones. In particular, the CERs required that the SIS adopt the biodiversity principle of '*avoid, minimise and mitigate*'.

This is a principle that did not formally exist in 2010 when the land was rezoned, and adopting this principle in the SIS provided a means to re-evaluate the site and refine the approach to development and conservation with a view to not causing a significant impact, and to ensure conservation outcomes that align with those recommended by Ecobiological.

A key objective of the SIS was therefore to determine how the proposal can deliver the zone based land use expectations of the KHURA without having a significant impact on threatened species and ecological communities on the site. In turn, extensive site investigations were carried out in accordance

with the CERs to determine how the principle of avoid, minimise and mitigate ought to be adopted by the Proposal to achieve that objective.

The recommendations of the SIS are that to avoid a significant impact on threatened species and ecological communities on the site, the Proposal ought to adopt the following principles, notwithstanding the existing land use zones gazetted in 2010:

- Define an area suitable for the long term sustainable conservation of local biodiversity values (a conservation area) and apply the necessary establishment works required to retain these values over the long term;
- Define an appropriate management regime that minimises the impact of the proposal where the clearing of vegetation and habitat is involved; and
- Provide security for the long term protection of local biodiversity values through the use of an appropriate conservation mechanism that provides in-perpetuity conservation inclusive of ongoing funded management regimes (i.e. VPA).

In seeking to define an area suitable for the conservation of local biodiversity values (SIS Principle No.1), the SIS considered key principles relevant to defining an appropriate long term sustainable Conservation Area. They are:

- Patch size and integrity: Larger patches with proportionally reduced edge length enhances the prospect of improved biodiversity outcomes by catering for species with larger home ranges, minimising risk of impact from external threatening processes and reduced influence from edge effects.
- Habitat condition and value: Preferential incorporation of areas with higher biodiversity value (e.g. areas of relatively high hollow-bearing tree and fallen log density and Preferred Koala Feed Trees (PKFTs)) to minimise impacts at the landscape scale, thereby allowing for ongoing local persistence of threatened species.
- Movement pathways: Local and regional movement pathways or corridors have been considered together with zone boundaries and the Proposal, suitable for activities such as revegetation works (e.g. plantings around wetland 803) for the purposes of improving the functioning of retained habitat.

In applying these principles, the SIS confirmed the observations of Ecobiological (2009) that much of the existing E2 zoned land comprised areas of high value habitat conducive to, or in need of, improvements to ensure a long term, resilient, and long term sustainable habitat. In addition, however, the SIS identifies that some 38.5ha (about 12.9%) of the urban zoned land within the subject site exhibits values that are worthy of inclusion and management in a conservation area.

Adopting this impact avoidance measure reduces the developable area of the site from 311.4ha to 272.88ha (refer to areas of urban zoned land to be managed in a proposed Conservation Area in Figure 22, with the rationale for each numbered area, increasing the proportion of the site to be managed for Conservation purposes from 39.8% to 47.2%.

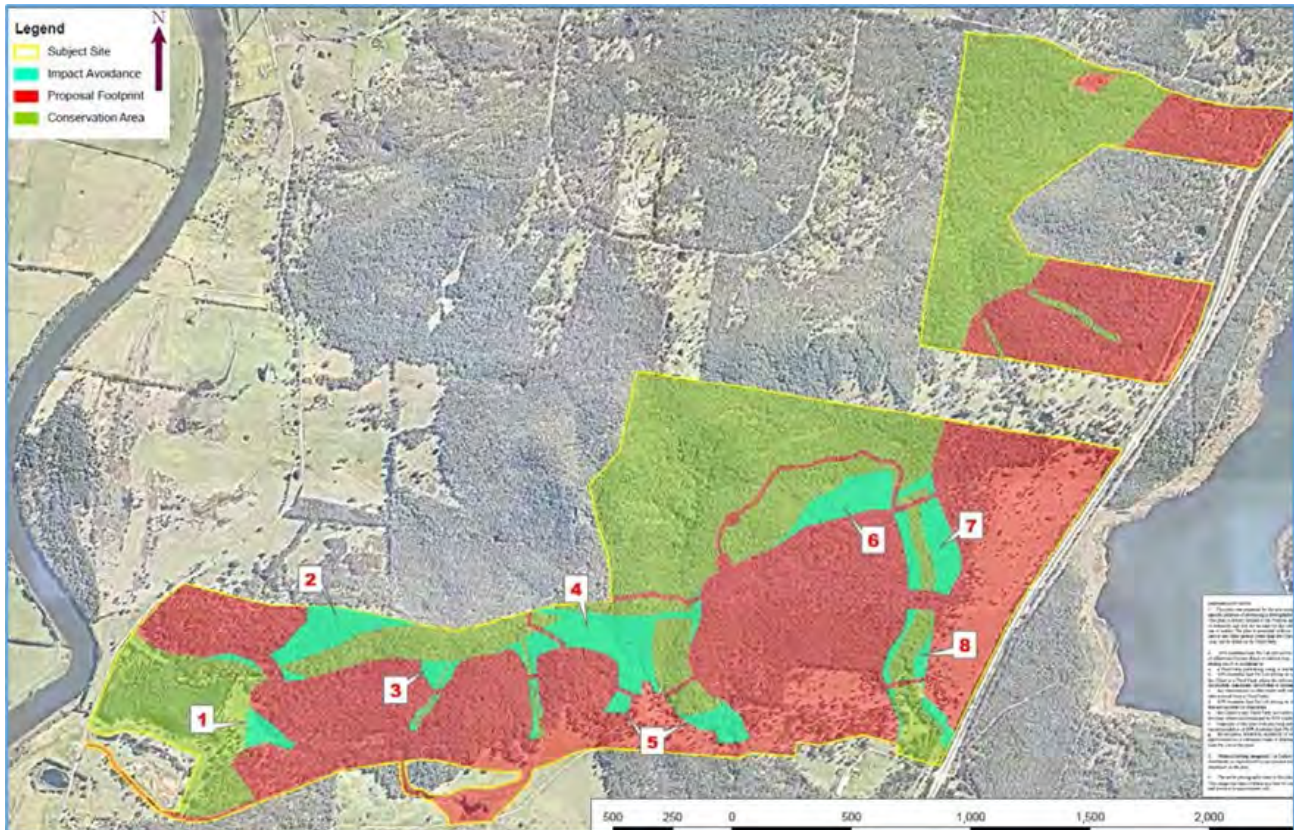


Figure 17 Developable areas excluded to minimise impacts

The impact avoidance measure increases the area of land to be retained within a conservation area to 244.5 ha, and importantly, enables compliance with the Ecobiological (2009) recommendation to increase corridor widths Figure 23.

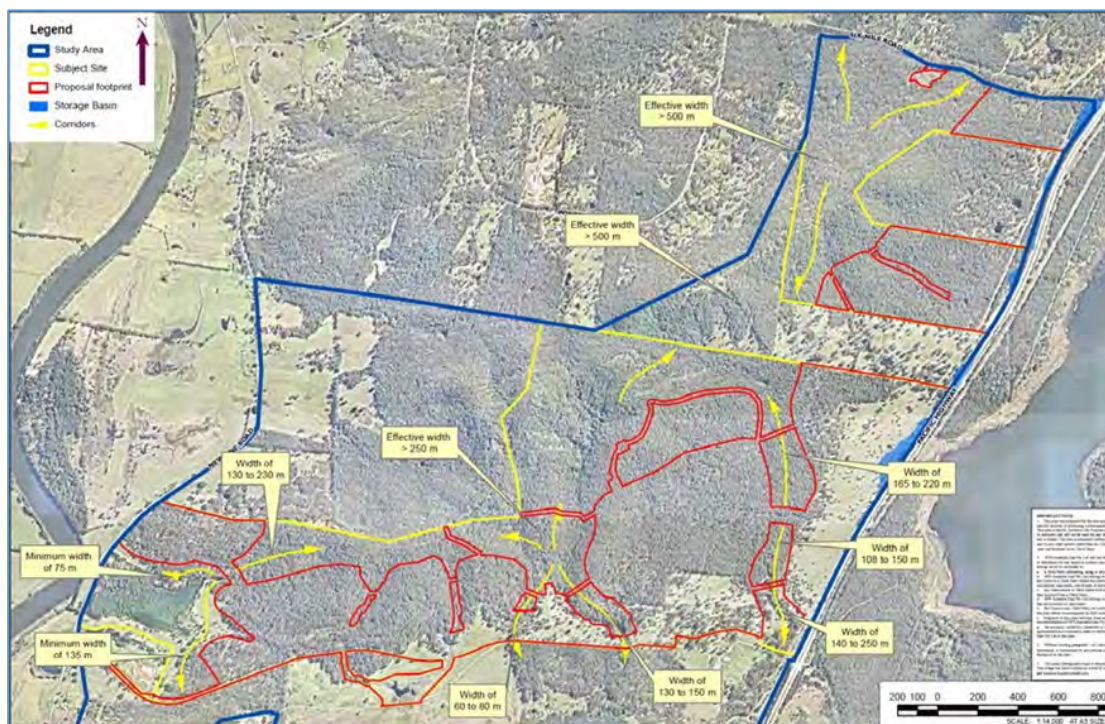


Figure 18 Improved corridor widths

The areas of impact avoidance with the rationale for avoidance are provided in Table 4.

Table 1 Impact and avoidance rational

Impact Avoidance	Rationale	Area Avoided (ha)
1	Substantially increase patch integrity by limiting edge to area ratio (i.e. reduce edge effects)	2.23
2	Avoid area with high foliage nutrient value for the Koala Avoid area with high hollow-bearing tree density Increase vegetated corridor width to wetland area	6.18
3	Avoid area with high foliage nutrient value for the Koala and area actively used by the Koala	1.31
4	Avoid area with high foliage nutrient value for the Koala and area actively used by the Koala including breeding female activity Substantially increase patch integrity by limiting edge to area ratio (i.e. reduce edge effects) Increase vegetated corridor width to vegetation situated south of the study area	11.40
5	Avoid area with high foliage nutrient value for the Koala and area actively used by the Koala	3.16
6	Avoid area with high foliage nutrient value for the Koala and area actively used by the Koala including breeding female activity Substantially increase patch integrity by limiting edge to area ratio (i.e. reduce edge effects) Avoid area with high hollow-bearing tree density Avoid the majority of habitat occupied by <i>Corybas × dowlingii</i>	5.36
7	Avoid area with high foliage nutrient value for the Koala and area actively used by the Koala including breeding female activity Substantially increase patch integrity by limiting edge to area ratio (i.e. reduce edge effects). Avoid area with high hollow-bearing tree density	6.11
8	Increase vegetated corridor width to vegetation situated south of the study area	2.72
Total		38.47

Adopting the impact avoidance measure redefines the boundaries between the urban and conservation areas of the site, which can broadly be described as:

The Conservation Area delineates an area for the managed conservation and protection of affected biodiversity values. It comprises 244.25 ha of land, including 38.5ha of urban zoned land which contain high biodiversity values; and

The Impact Area delineates areas where impact avoidance is not necessary to avoid a significant impact. It comprise 272.88 ha in area comprising 212.14 ha of native vegetation and 60.74 ha of cleared lands. A constraints plan derived from the site analysis and incorporating the impact avoidance areas and improved corridor widths recommended by the SIS is depicted in **Figure 24**.

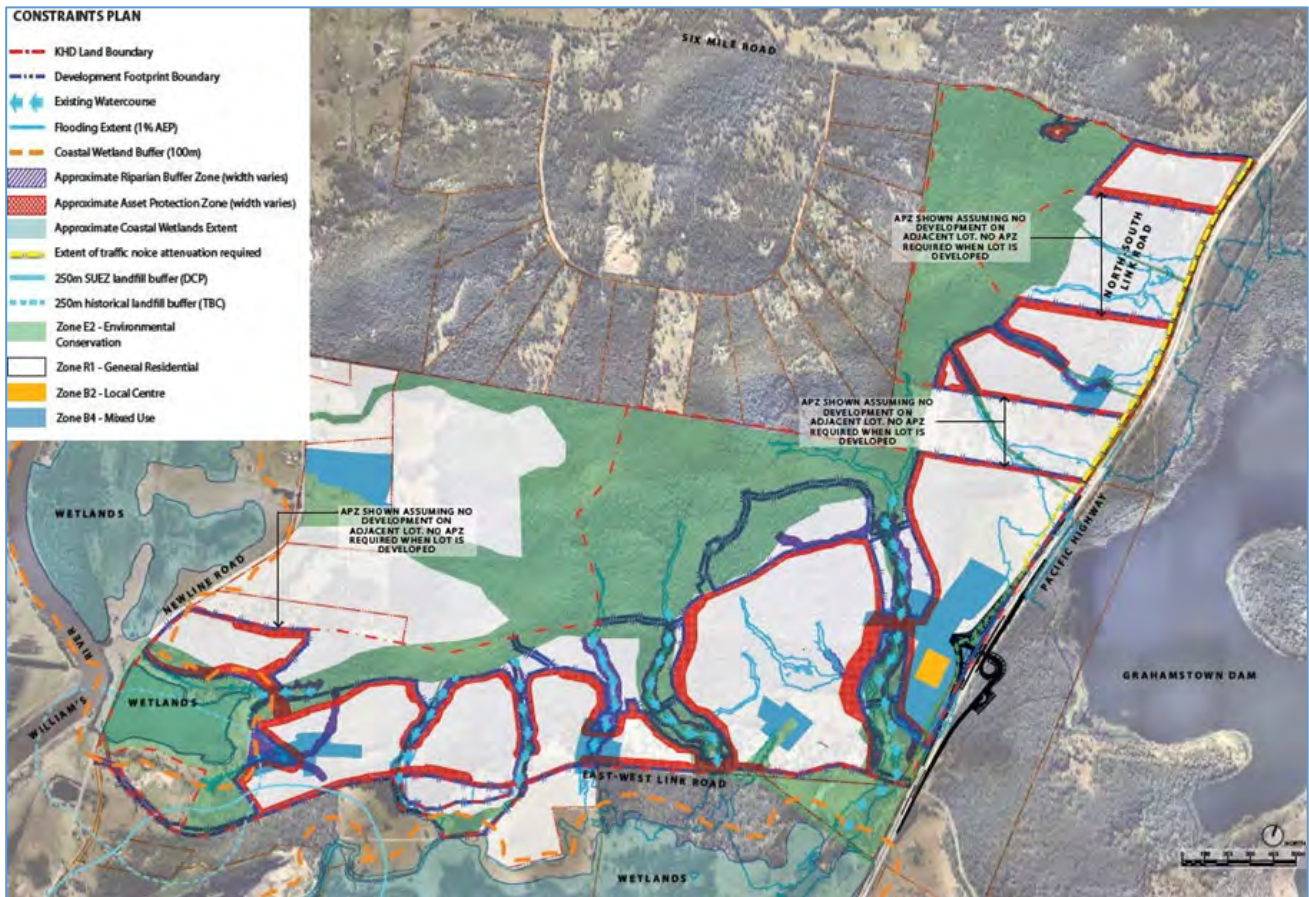


Figure 19 Development constraints plan

Provided the constraints plan remains the basis of the concept proposal, development carried out in accordance with the concept proposal will be in a position to positively respond to a wide range of statutory, strategic, and environmental planning considerations.

Once approved, the concept proposal will provide confidence and certainty in the assessment of subsequent staged development applications to carry out subdivision of the land.

2.5.2 Development areas master planning and staging

The master planning process will allocate the urban areas of development and refine how those areas will be planned to support the delivery of the proposed 2,500 dwellings.

2.5.2.1 Place making study

Placemaking is the strategic process of designing and delivering built environments that foster a strong sense of place through the integration of physical, cultural, and social dimensions. In a greenfield context, placemaking involves shaping new communities around vibrant public spaces, walkable urban form, distinctive local identity, and inclusive design principles that promote social connection, community pride, and long-term sustainability.

More than the delivery of infrastructure, effective placemaking ensures that streets, centres, parks, and the broader public domain contribute to a legible, connected, and character-rich urban fabric that supports community wellbeing, economic activity, and environmental responsiveness.

To support the plan making process in 2010 a master plan was prepared to inform the final plan making outcome for the KHURA. That master plan is located at [Appendix H](#).

A draft placemaking scoping report is included at [Appendix J](#). Prepared by Deicke Richards in July 2020, with input from project specialists and key stakeholders, the report provides a preliminary framework for guiding the evolution of the Kings Hill master plan. It outlines how a refined concept layout will respond to the unique landscape and amenity of the site, while embedding key placemaking principles into the structure and sequencing of the development.

The report draws on an analysis of surrounding townships—including Raymond Terrace, Morpeth, and Maitland—to understand the existing settlement patterns, built form character, and activity nodes that inform a contextual response for Kings Hill. It takes a landscape-led, character-based approach that draws inspiration from regional identity to shape a locally grounded vision for future development.

Central to the study is a Connecting with Country approach, developed in close coordination with the Worimi people as Traditional Custodians. This has informed the conceptual framework and site response from the outset. Further, recommendations from **Len Roberts**, arising from the Archaeological Survey by Myall Coast Archaeology, have been incorporated in consultation with the Local Aboriginal Land Council and in accordance with the National Parks and Wildlife Act 1974.

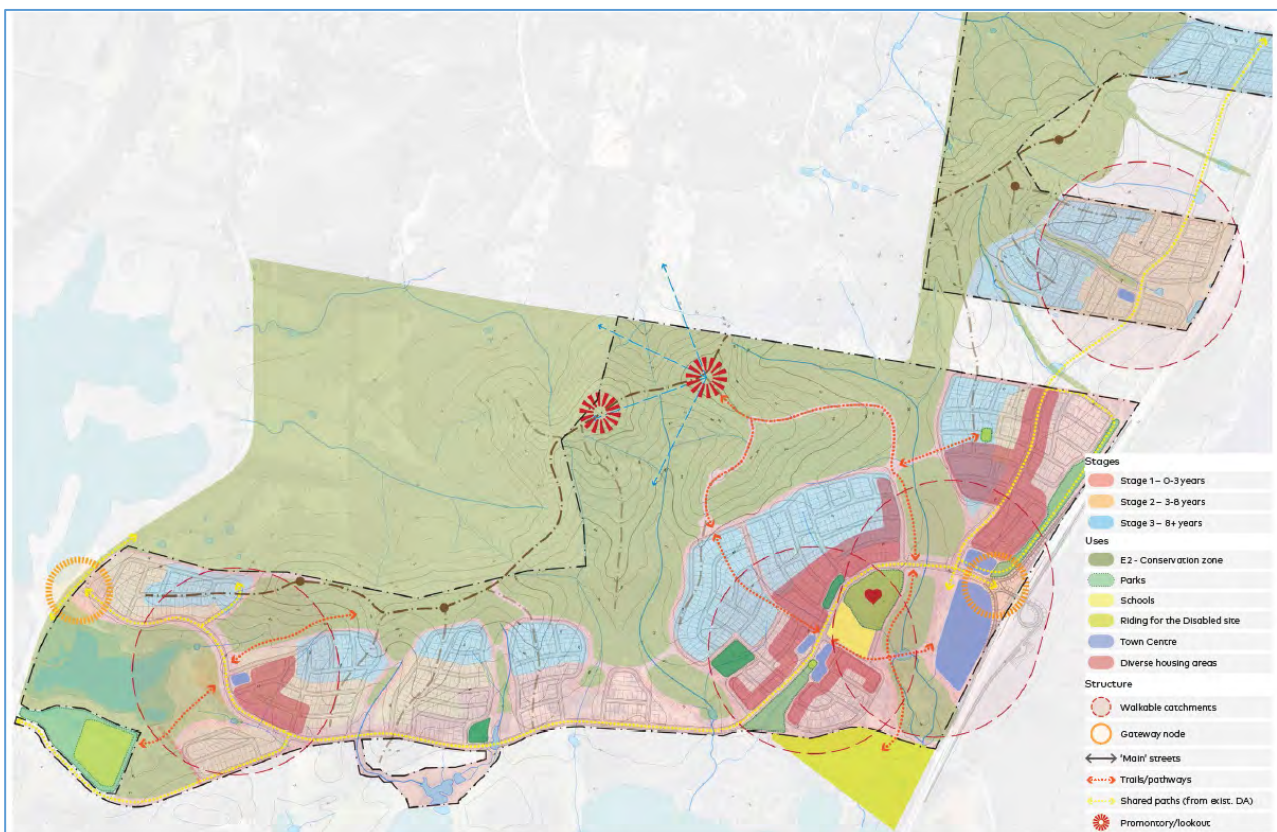


Figure 20 Preliminary structure plan

2.5.2.2 A preliminary structure plan

A draft structure plan is included in the July 2020 report and progresses the foundation of a place making process to support a more detailed masterplan process for the concept proposal. The structure plan has considered the refinement of how future centres can be planned and designed linked to key

access points to creates nodes of community uses and activity with complementary land uses projected.

2.5.2.3 Neighbourhood-based placemaking

As part of the preliminary placemaking framework for Kings Hill, early design concepts have considered the formation of distinct, character-rich neighbourhoods that respond to landscape features, recreation opportunities, and community infrastructure.

For example, West Hill Village is shaped around active recreation and environmental interface. Its proximity to wetlands and the mountain biking Pump Track informs a village character grounded in outdoor activity, nature connection, and sustainability. A small centre aligned with the riparian corridor integrates support services such as bike repair and sales. An environment centre and café overlook the wetland edge, with boardwalks and bird hides enhancing public interaction with the natural setting. A cycleway reinforces connectivity between the Pump Track and surrounding trails.



Figure 21 Placemaking to inform centres design

Kings Hill Centre comprises two key precincts: The First Village and The Town Centre. The First Village integrates educational and civic functions within a linear parkland setting, with direct connections to surrounding hilltops and wetlands via walkways and cycle paths. Key features include a school hall at the heart of the community, civic green spaces, and higher density housing within walking distance of the centre. The Town Centre presents a more urban response, anchored by a main street, library, and

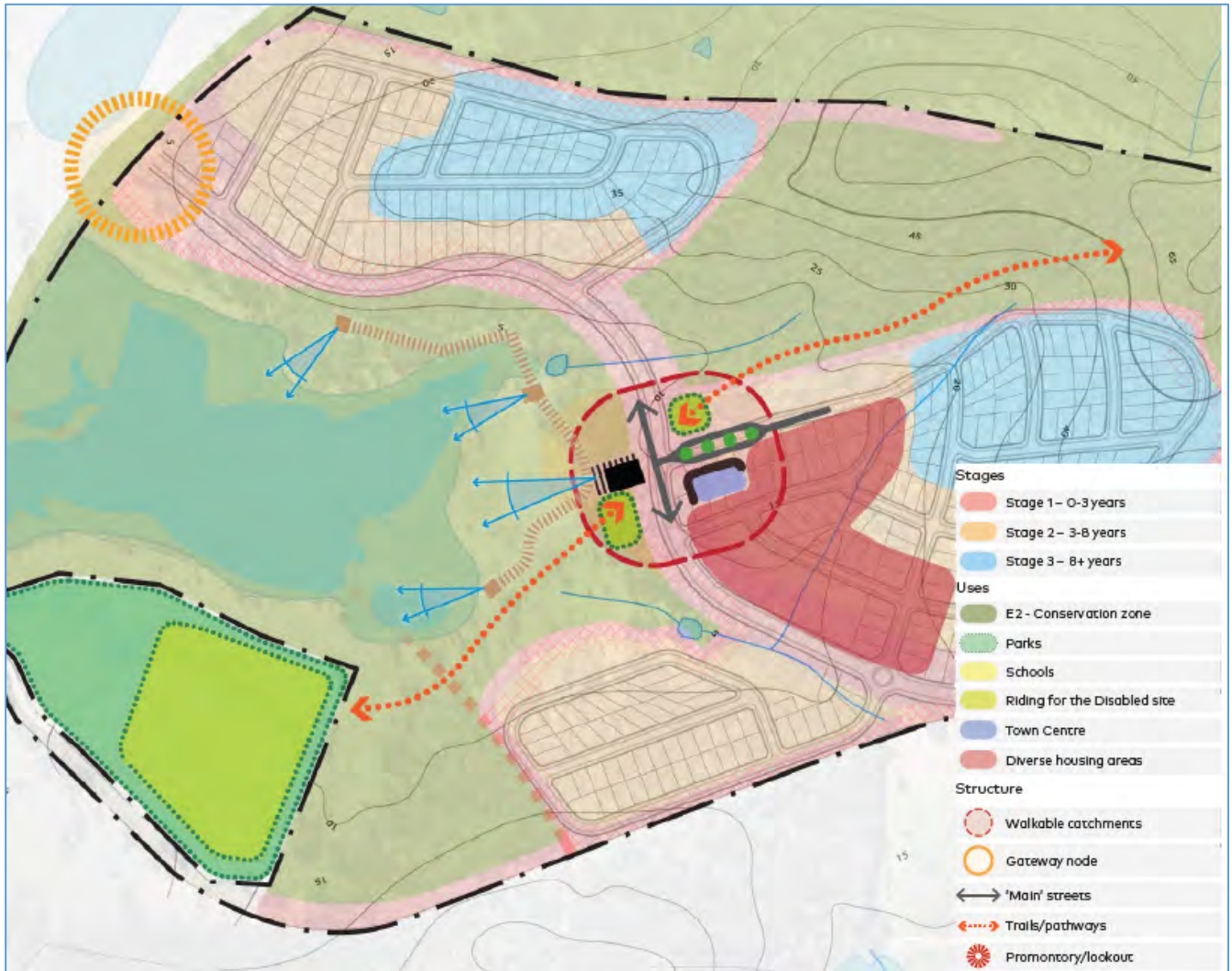


Figure 22 Draft centres study options

The place making process undertook a consideration of the future built form at Kings Hill. The study considered options to draw upon the architectural and cultural heritage of the region, referencing the historic character of nearby centres such as King Street, Raymond Terrace and Morpeth. Design guidelines in the masterplan may be appropriate to encourage a distinctive yet contextually sensitive architectural language that reflects the vernacular of these settlements. Positive attributes for consideration includes features such as steeply pitched roofs, verandas with timber posts, vertical window proportions, and expressed chimneys. These elements not only honour the area's historical identity but also respond to local climate and social needs—providing shaded, human-scaled frontages that support walkability, social interaction, and visual coherence across neighbourhood centres.

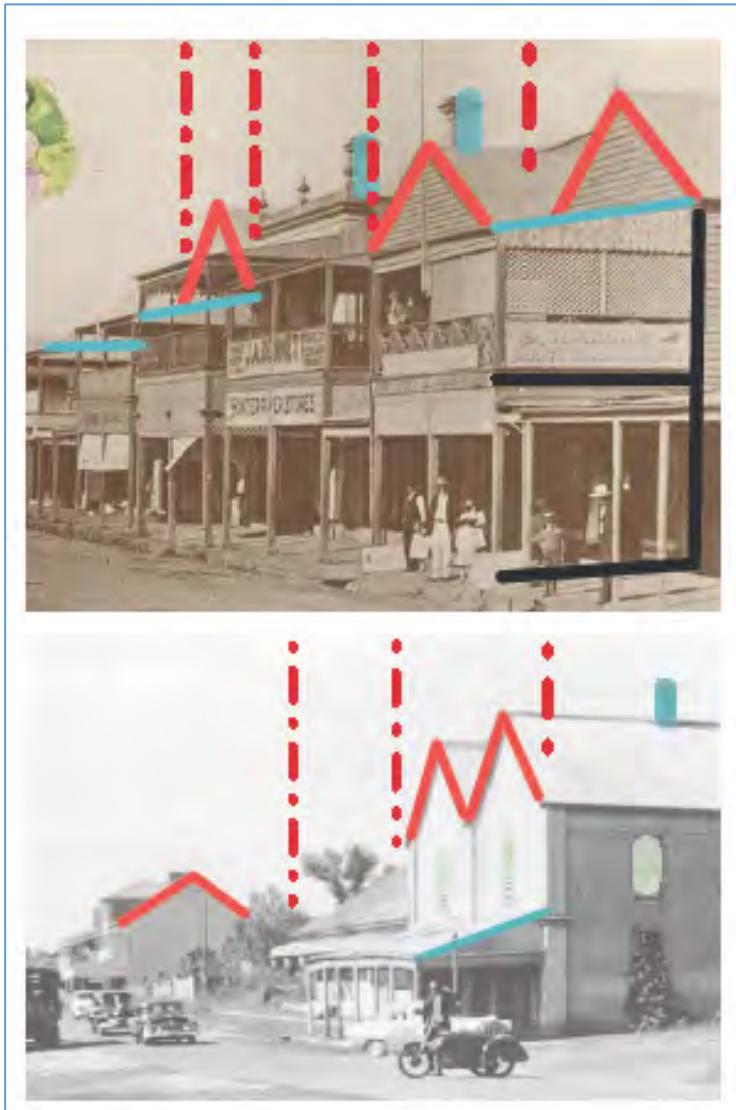


Figure 23 Built form considerations connected to the regional historical context

2.5.2.5 Integration of placemaking into the draft master plan

The draft Kings Hill URA Master Plan ([Appendix D](#)) which is supported by the draft precincts master plan ([Appendix E](#)) and the draft landscape and open space concept ([Appendix F](#)) represents a direct evolution of the earlier placemaking framework. It translates high-level place-based strategies into a spatial structure that balances dwelling typology, site-responsive urban form, community infrastructure, and staged delivery.

Developed as a logical extension of the July 2020 placemaking scoping report, the October 2020 draft master plan provides a vital base for the refinement and settlement of an SSD concept master plan by:

- Structuring the urban form around diverse neighbourhood centres informed by terrain, landscape features, and placemaking intent.
- Testing a wide range of dwelling typologies (apartments, row houses, small lots, general lots, and larger lots) across different slope conditions and proximity to centres, providing early yield estimates and density variations.

- Embedding open space, civic centres, mixed-use nodes and schools into the plan from the outset to create identifiable, walkable neighbourhoods with local character.
- Using slope-responsive layout and road grids that support accessibility while maintaining landform integrity.



Figure 24 Example entrance precinct with uses consideration

The draft master plan establishes three key development areas: First Neighbourhood, Main Centre, and Second Neighbourhood, each with a tailored mix of housing and community assets responding to topographic, social, and market conditions. This staged and contextually responsive framework directly supports the transition to a concept SSD by ensuring the land use structure is strategically justified and economically viable. This process targeted at enabling the most appropriate areas to be identified and allocated for infill affordable housing in the suitable built forms.

2.5.2.6 Staging and logical infrastructure delivery

The draft master plan includes a staged development framework that supports an orderly rollout of urban development comprising in-fill affordable housing in alignment with infrastructure provision, servicing capacity, and community need.

Draft staging has been considered and structured to:

- **Prioritise development in flatter, accessible areas** in proximity to future neighbourhood centres, allowing early activation and the cost-effective delivery of trunk infrastructure, road connections, and essential services.
- **Align residential growth with civic and community infrastructure**, including schools, parks, and centres, ensuring that each stage delivers complete and functional neighbourhood components capable of supporting early residents.
- **Sequence the extension of roads and services progressively outward** from the initial stages, minimising upfront capital outlay and enabling efficient staging of utilities and stormwater infrastructure in coordination with natural drainage patterns and slope conditions.
- **Incorporate topographical response** into the sequencing of development, with later stages addressing more challenging terrain or ridgeline lots that may require greater engineering solutions and market readiness.

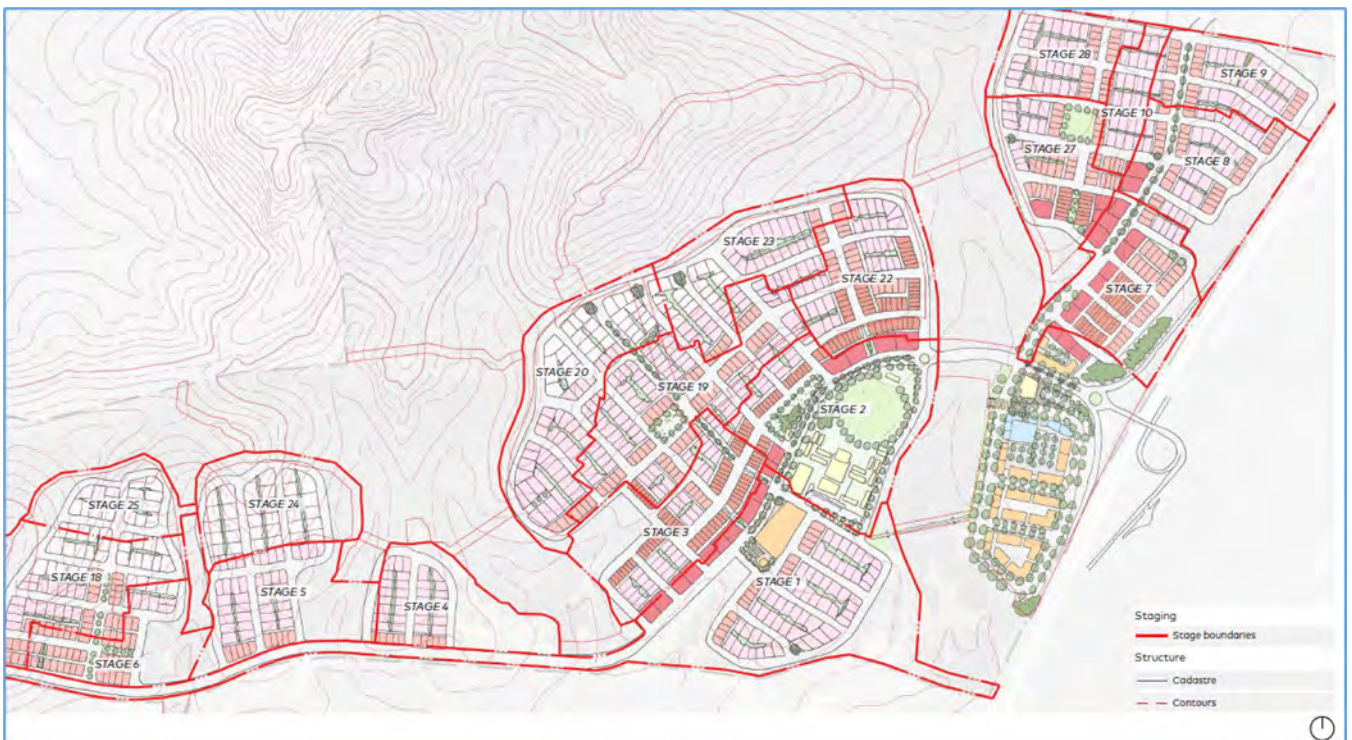


Figure 25 Draft staging plan example

The draft master plan identifies approximately 28 staging sub-areas, with early stages concentrated around the First Neighbourhood and Main Centre — areas with strong place-making potential, access to flatter land, and capacity for early infrastructure rollout. This provides a logical development spine from which further neighbourhoods can incrementally evolve as market and infrastructure readiness align.

The master planning refinement during the EIS will need to be in consideration of how the various staging will align with infrastructure delivery to support the development.

The draft staging plan from Northrop engineers found at [Appendix I](#) supports a scalable approach to urban release, capable of responding to infrastructure funding programs, servicing agency

coordination, and housing market demand, while embedding community infrastructure at each phase to avoid fragmented or under-serviced growth. The Northrop plan has considered a provision of 1900 lots in the 7 precincts related to roads and servicing delivery.

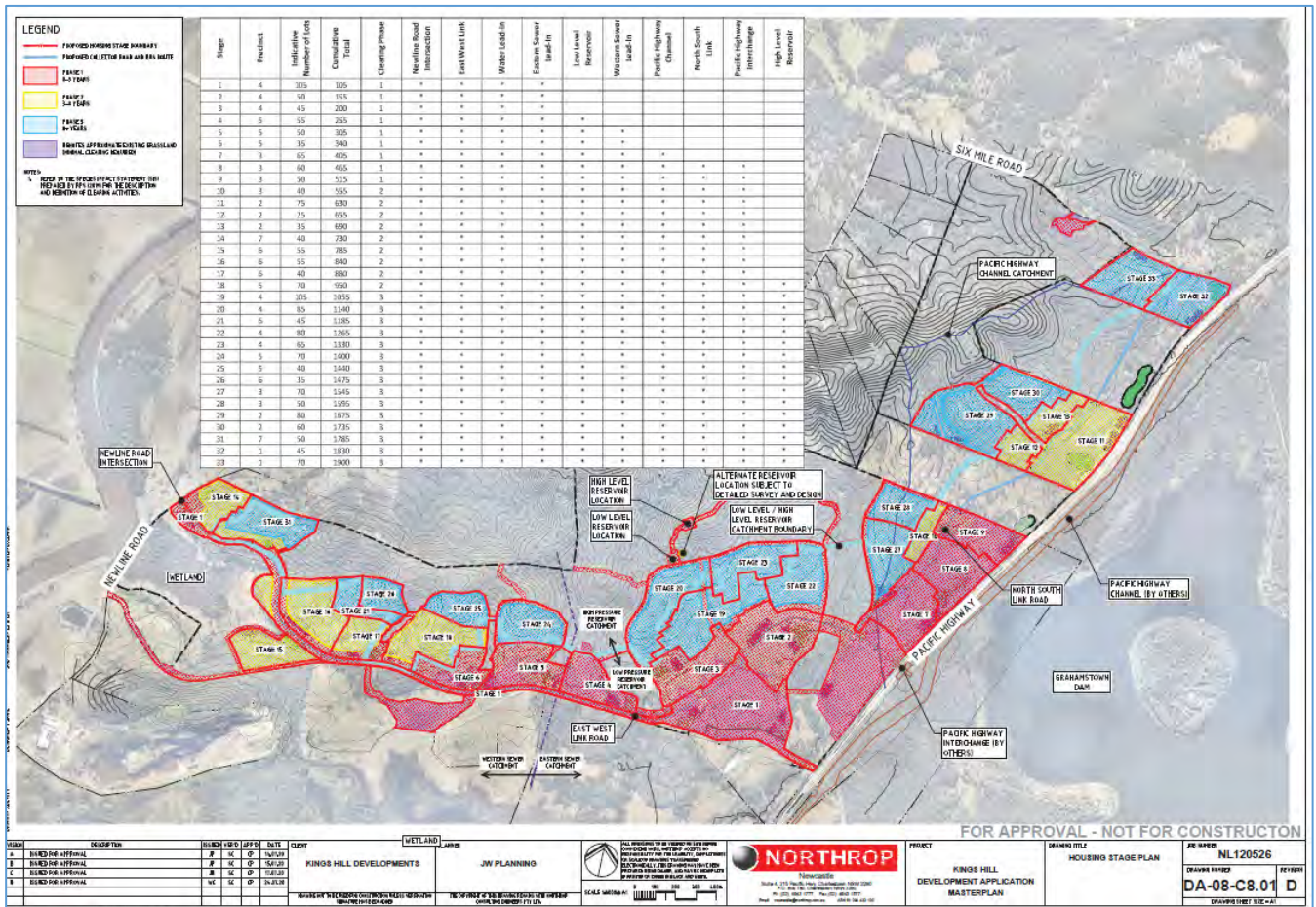


Figure 26 Staging draft relevant to infrastructure

The EIS process supported by place making, servicing considerations and engagement will assist to review and refine a final staging plan in connection with a detailed master plan for endorsement to support staged delivery.

2.5.2.7 Residential typologies, built form and affordable housing strategy

The Kings Hill concept SSD will be underpinned by a staged, place-based master planning approach that integrates diverse residential typologies, walkable neighbourhoods, and a proactive affordable housing strategy. The proposed master plan is anticipated to deliver a minimum of 2,500 dwellings, with the approved **staging** plan outlining the sequential rollout of approximately 1,900 lots across a series of neighbourhoods, structured to support logical infrastructure delivery and early centre activation.

The forthcoming EIS will demonstrate how this staged development is structured to accommodate a range of residential forms as defined under Clause 15B of Division 1 of the State Environmental Planning Policy (Housing) 2021, such as:

- Attached dwellings
- Dual occupancies
- Dwelling houses

- Manor houses
- Multi dwelling housing
- Multi dwelling housing (terraces)
- Residential flat buildings
- Semi-detached dwellings
- Shop top housing

These typologies will be distributed across the master plan in response to landform, urban structure, and social infrastructure provision, ensuring that each stage contributes meaningfully to housing diversity and market choice.

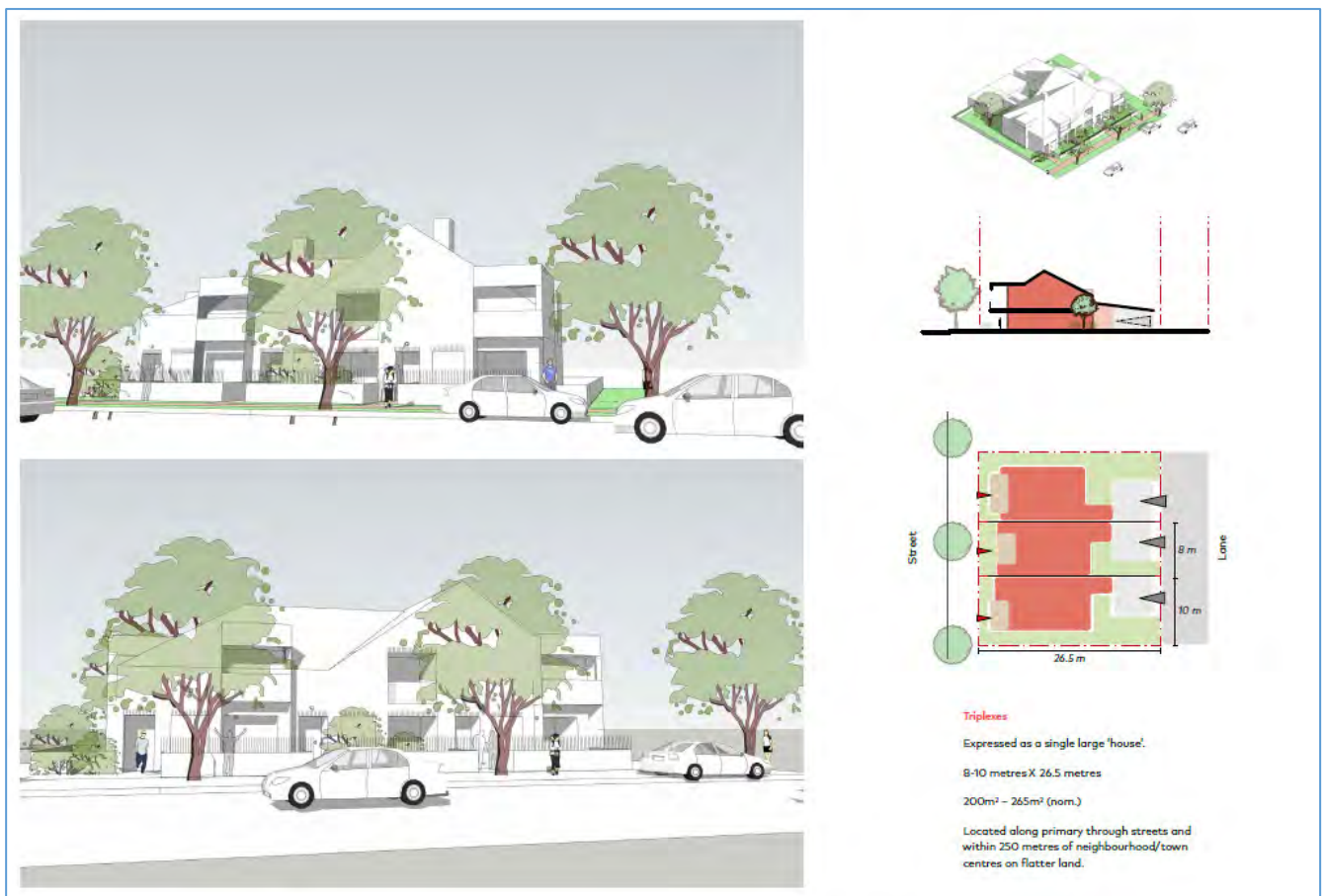


Figure 27 Sample of dwelling typology considerations

Informed by engagement, social and economic analysis, affordable housing will be embedded across all typology types, including lower-density options such as manor houses and terraces, as well as higher-density formats like residential flat buildings and shop top housing, particularly within the two planned town centres, where increased height and floor space capacity can accommodate greater yield and public benefit outcomes. An example of dwellings testing that will be inserted into the concept master plan and EIS.



Figure 28 Dwelling testing example

Affordable housing delivery is not being treated as a residual or separate product, but as a core theme of the master plan and a central component of the EIS. The strategy will:

- Commit to delivering a minimum of 10% of dwellings as affordable housing, in line with Housing SEPP incentives and expectations.
- Seek to exceed this minimum, subject to the outcomes of further detailed economic and social analysis, which will explore delivery models, funding mechanisms, and tenure mix to ensure a sustainable and equitable housing outcome.
- Ensure affordable dwellings are tenure-integrated, dispersed, and located in areas with access to public transport, local services, open space, education, and employment opportunities.
- Support a resilient community structure by aligning affordable housing with neighbourhood staging, ensuring delivery from the earliest phases, not deferred to later stages.

The EIS will also include:

- Yield forecasts, dwelling mix breakdowns, and built form testing (including typologies such as triplexes and small lots)
- Mapping of where each typology is proposed within the staging plan
- An assessment of how each stage aligns with infrastructure and community facility delivery

Through this integrated strategy, Kings Hill will deliver a complete, inclusive and adaptable residential community that meets local housing need, planning policy objectives, and the economic and social imperatives of the Hunter Region.

2.5.3 Staging and assessment pathway

The Kings Hill development proposes a hybrid assessment framework that strategically combines two statutory planning processes to deliver housing efficiently and in alignment with infrastructure readiness.

- Lots 6 and 7: These western precincts are the subject of current local development applications lodged with Port Stephens Council. They are spatially discrete, not dependent on the major State infrastructure (such as the future Pacific Highway interchange), and capable of being serviced and delivered independently. These precincts have undergone considerable planning and technical assessment in collaboration with Council staff, who have engaged constructively with the project team and expressed operational support for their continued progression under local pathways.
- SSD Area: The balance of the KHD landholdings, comprising the majority of the Kings Hill site, is nominated for declaration as State Significant Development. This reflects the larger scale of the proposal, the complexity of coordinating regional infrastructure, ecological management, and strategic housing delivery, and the need for a whole-of-government assessment framework.

This approach achieves several key planning outcomes:

- Supports early delivery of housing in areas already progressed under local assessment;
- Preserves and leverages existing Council resources and positive collaboration;
- Ensures state-led coordination for infrastructure-dependent precincts;
- Reinforces alignment with both the Hunter Regional Plan 2041 and Port Stephens Council's Local Housing Strategy.

For clarity, the SSD concept application does not encompass Lots 6 and 7, which are subject to separate local development applications that propose actual works. The two processes are spatially and procedurally discrete, and no overlap in statutory assessment is anticipated. Any shared infrastructure coordination will be addressed through detailed staging and servicing strategies prepared in consultation with Port Stephens Council and relevant agencies.

The proposed structure allows the Secretary to clearly scope the SSD requirements for the nominated land while respecting the integrity and progress of existing local processes. It is intended to support the orderly, integrated and timely release of land in a way that balances strategic oversight with local responsiveness.

2.6 Feasible alternatives

This section considers the feasible alternatives available to achieve the intended planning, environmental and housing outcomes of the Kings Hill Urban Release Area (KHURA) as guided by the Hunter Regional Plan 2041.

The alternatives evaluated reflect the strategic importance of KHURA in delivering housing, biodiversity conservation, cultural access, and infrastructure outcomes in the Hunter Region. Four key options are identified and discussed below, each representing a distinct approach to balancing the ecological, social, and economic objectives embedded in the planning framework.

2.6.1 Option considerations

2.6.1.1 Option 1 – Balanced on-site ecological management and urban development

This option, referred to as the "local outcome", represents the preferred localised approach to land use and ecological management. It seeks to establish a conservation-led development model, delivering a **net ecological gain** while enabling urban development within a defined footprint.

Under this model, the development footprint is adjusted to avoid areas of high ecological and cultural sensitivity. A conservation management program is proposed to protect core koala habitat, ensure Aboriginal access to significant sites, and manage fire, pests, and weeds in perpetuity. This approach avoids the need for off-site offsets and promotes site-based stewardship.

Key benefits of this option include:

Ecological:

- Avoidance of significant residual impacts and protection of local koala populations.
- Retention and enhancement of habitat connectivity.
- Reduced risk of stochastic environmental events.

Community:

- Formal access to high-value conservation areas for recreation (walking, mountain biking, horse riding).
- Public ownership and management of conserved land by council, ensuring long-term access and oversight.
- Recognition of Aboriginal cultural values through land access and cultural tourism opportunities.

Social and Economic:

- Significant delivery of new market and affordable housing consistent with the Hunter Regional Plan 2041.
- Private sector investment in ecological enhancement and land stewardship.
- Activation of local economic activity through tourism, employment, and infrastructure provision.
- While this pathway remains appropriate for certain parts of the KHURA—specifically Precincts 6 and 7, which are currently subject to local development applications—it is not suitable for the broader KHD site, which requires integrated coordination of infrastructure, environmental management, and delivery staging.

2.6.1.2 Option 2 – Off-site offset model and expanded urban footprint

This option involves expanding the urban development footprint to align with the broader 2010 zoning boundary, including parts of the C2 environmental zone. Ecological impacts under this scenario would be addressed through monetary contributions to state-managed biodiversity offset programs, in accordance with the Biodiversity Conservation Act 2016.

This approach enables a greater yield of greenfield housing, including affordable housing opportunities under the Housing SEPP. It relies on external offset arrangements to address biodiversity impacts rather than site-specific ecological management.

Key considerations for this option:

- May allow for greater housing supply and diversity of housing options.
- Reduced conservation land retained on-site.
- Offset contributions would be directed to broader state programs but provide lower level or no direct local ecological benefit.

- Potentially reduced recreation and cultural access outcomes compared to Option 1.

This option will be tested in the EIS process through comparative modelling, in consultation with government agencies and community stakeholders.

2.6.1.3 Option 3 – Do nothing

Under the "do nothing" scenario, no urban development or conservation outcomes would be delivered. The land would remain in its current state, unmanaged and degraded. This option responds to a view held by some stakeholders that no further development should proceed in the KHURA.

However, the site is currently affected by widespread invasive weed infestation (e.g., 70% lantana coverage), limited fire and pest management, and degraded ecological values. Without intervention, the decline of habitat quality and genetic health of local koala populations is expected to continue.

Key limitations of this option:

- Fails to deliver the housing and infrastructure targets set out in the Hunter Regional Plan 2041.
- Does not address current land degradation or public access needs.
- Provides no satisfactory solution to ensure the implementation of the koala management plan objectives and outcomes.
- Misses the opportunity to establish Aboriginal cultural access, education facilities, health services, recreation, employment and tourism infrastructure.
- Provides no funding mechanism for long-term land management.

2.6.1.4 Option 4 – Continuation of local development applications

This option reflects the current planning pathway being pursued for Precincts 6 and 7, where development applications are assessed under the local framework in coordination with council.

These applications are based on a precinct-wide ecological strategy and the structure plan aligned to the original zoning intent. Significant effort has been made to engage with council staff and stakeholders, and to integrate technical and environmental inputs into the design process.

However, several challenges remain:

- The complexity and regional scale of KHURA may exceed the resourcing and procedural scope of local assessment and places considerable pressure on the elected council in determination governance processes.
- Fragmented precinct-by-precinct approvals may lead to inconsistencies in conservation and infrastructure delivery.
- Delays in assessment timelines can impact certainty for landowners, infrastructure planning, and housing delivery.

While this option reflects genuine progress to date and ongoing cooperation with council, it may not provide the whole-of-precinct assessment framework needed to secure the long-term outcomes envisaged in regional strategies.

Importantly, this option is not discarded in full; rather, elements of it are retained as part of the proposed hybrid approach, with precincts 6 and 7 continuing to progress under local development assessment while the remainder of the KHD land is transitioned to SSD.

2.6.1.5 Preferred Pathway: Hybrid Delivery Model with Ministerial Oversight

Each of the options above presents different strengths and trade-offs. Option 1 offers strong local outcomes but may require integration into a broader strategic framework. Option 2 prioritises yield but reduces local ecological outcomes. Option 3 fails to address current challenges or deliver the objectives of state planning policy. Option 4 represents progress under the existing system but has limitations in coordinating a project of this scale.

In light of these considerations, it is respectfully recommended that the Kings Hill Development (KHD) landholdings proceed under a hybrid delivery model, whereby the majority of the site is progressed as State Significant Development under the consent of the Minister for Planning, while the western precincts—Precincts 6 and 7—continue under local development assessment with council.

This structure enables early housing delivery on land already advanced significantly through council processes, while supporting broader coordination of infrastructure, environmental management, and strategic outcomes through the SSD pathway. It reflects a pragmatic and integrated governance model that builds on existing work while aligning with the scale and complexity of the wider precinct.

The SSD pathway:

- Ensures a robust and transparent planning process, consistent with the EP&A Act.
- Provides the governance necessary to coordinate State and local infrastructure, biodiversity, housing, and cultural access at the precinct scale.
- Aligns delivery with State and regional planning objectives, including the Hunter Regional Plan 2041.
- Enables collaborative engagement with the community, council, State agencies, and Aboriginal stakeholders.
- Focuses decision-making at the level the community recognises as responsible for delivering major housing outcomes—the State.

This recommendation does not diminish the role or value of council, whose contributions remain critical to the delivery of precincts 6 and 7. Rather, it recognises the benefits of shared responsibility—combining council’s operational engagement with State-led strategic coordination—to deliver orderly, integrated and community-aligned outcomes across the broader Kings Hill Urban Release Area linked to the objectives of the Hunter Regional Plan 2041 and the council’s local housing strategy.

The hybrid model offers the clearest and most effective path to unlocking the social, environmental and economic value of the precinct, while providing confidence and transparency for government, community, and the investment sector.

3 Statutory context

This chapter provides the statutory and planning framework for the proposal and considers the provisions of the Environmental Planning and Assessment Act 1979 and supporting statutory provisions.

3.1 Summary of permissibility

3.1.1 HSEPP – Division 1, Clause 15C

The proposal meets the criteria under Clause 15C of the HSEPP. Specifically, the proposal is structured to provide a form a development that is defined by clause 15C, contains a minimum of 10% of affordable housing and all or part of the development is within 800 metres walking distance of land in a relevant zone.

3.1.2 Planning Systems SEPP – Clause 26A declares SSD

Clause 26A of schedule 1 to the PSSEPP declares as SSD:

“Development to which State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, Division 1 applies... if the residential component has an estimated cost of more than \$30 million, and the development is not prohibited under an applicable environmental planning instrument.”

The proposal:

- Exceeds the \$30 million threshold.
- Is permissible under the Port Stephens LEP (zoned R1, MU1 and C2) and clause 15C of the HSEPP.

Accordingly, the proposal is declared SSD by operation of Clause 2.6(1) and Clause 26A of Schedule 1 to the Planning Systems SEPP.

3.1.3 EP&A Act – Ministerial consent authority and SSD provisions

Under Section 4.5 of the EP&A Act, the Minister for Planning is the consent authority for the proposal.

3.1.4 Height bonus clarification

Additional building height bonuses may be sought under clause 16 of the Housing SEPP. . The EIS will confirm whether clause 16 and/or clause 17 of the Housing SEPP are proposed to be applied in relevant parts of the site. These considerations will be subject to further urban design testing, economic and social justification in the accompanying EIS.

3.2 Acts and regulations

- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2021
- Environmental Protection & Biodiversity Conservation Act 1999
- Biodiversity Conservation Act 2016
- Fisheries Management Act 1994
- Local Land Services Act 2013
- National Parks and Wildlife Act 1974
- Contaminated Land Management Act 1997

- Water Management Act 2000
- Rural Fires Act 1997
- Hunter Water Act 1991
- Hunter Water Regulation 2024
- Roads Act 1993
- Protection of the Environment Operations Act 1997
- Biosecurity Act 2015
- National Parks and Wildlife Act 1974

3.3 Environmental planning instruments

- Port Stephens Local Environmental Plan 2013 (pub. 23-12-2013).
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Allowable Clearing Area (pub. 21-10-2022).
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021).
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Greenfield Housing Code Area (pub. 6-5-2018).
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021).
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021).
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Subject Land (pub. 23-9-2022) .
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29-8-2022)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)

3.4 Statutory requirements

[Note: The SSD declaration sought applies only to the land not currently under local development assessment. Lots 6 and 7 are excluded from the SSD application and will continue to progress under the local DA pathway.]

Table 2 Statutory requirements

Category	Action Required
Power to grant approval	<u>Environmental Planning & Assessment Act 1979 (EP&A Act)</u> The EP&A Act governs planning in NSW. The main provisions for development assessment and approval are contained in Part 4 (Development Assessment) and Part 5 (Environmental Impact Assessment). Section 1.3 of the Act outlines its objectives, including: (a) Promoting the social and economic welfare of the community and a better environment through proper management, development, and conservation of the State's resources; (b) Facilitating ecologically sustainable development by integrating economic, environmental, and social considerations; (c) Promoting the orderly and economic use and development of land; (e) Protecting the environment, including the conservation of threatened species and ecological communities; (f) Promoting the sustainable management of built and cultural heritage (including Aboriginal cultural heritage); (g) Promoting good design and amenity of the built environment; (i) Promoting the sharing of responsibility for environmental planning and assessment among government levels; and (j) Increasing community participation in environmental planning and assessment. Section 1.7 confirms that the EP&A Act operates subject to additional requirements under Part 7 of the NSW Biodiversity Conservation Act 2016 and Part 7A of the Fisheries Management Act 1994. Section 3.13 of the EP&A Act states that an environmental planning instrument may be made for the purposes of achieving any of the objects of this Act. The primary EPIs that guide the power the grant approval of the proposal are the PSLEP, the HSEPP and the State Environmental Planning Policy (Planning Systems) 2021 (PSSEPP). The PSLEP zoning of the land enables residential development, the HSEPP at Division 1 informs that residential development is development to which that division applies and the PSEPP categorises development as SSD. Section 4.5 of the EP&A Act informs that the Minister is the consent authority for SSD development. The development is SSD under PSEPP (cl 2.6(1) and Schedule 1 Clause 26A. (Table 5 provides an analysis of other future project stage elements that are categorised as state significant).

	The proposal is for a concept approval for residential subdivision and subdivision works inclusive of environmental protection works and the establishment of an in perpetuity conservation area. The proposal does not include buildings and residential development but facilitates the progression of applications for residential development under stages that will follow.
Permissibility	The site is zoned R1, MU1 and C2 land. All zones permit residential development as defined by clause 15B of the HSEPP. All or part of the development including that subject to affordable housing component are within the 800 metres of the relevant MU1 zone. The overall project is permitted with consent. Clause 22 of the HSEPP informs that development to which Division 1 applies maybe subdivided with consent. The works component being for subdivision works and environmental protection works are permitted uses.
Other approvals	<u>Environmental Protection & Biodiversity Conservation Act 1999</u> Under the EPBC Act, any action that is—or is likely to be—significantly impactful on Matters of National Environmental Significance (MNES) must be assessed before it proceeds. Such actions, deemed controlled actions, require prior approval from the Commonwealth Minister for the Environment and Energy. Relevant MNES categories for this application include wetlands of international importance (Ramsar wetlands), threatened species and ecological communities (Sections 18 and 18A), migratory species, and Commonwealth marine areas. The assessment process begins with a self-assessment under the Significant Impact Guidelines 1.1 (DoE 2013) to determine the likelihood of a significant impact on MNES. If the assessment indicates that the controlled action may have a significant impact, regulatory approval must be sought before any works commence on site, with due regard given to the directions specified under Section 68 of the EPBC Act. Importantly, under the bilateral provisions of the EPBC Act, certain controlled actions may be referred to and assessed by the NSW Minister if the project falls within the parameters of the bilateral agreement between the Commonwealth and NSW. This system grants the NSW Minister the authority to oversee the assessment process in place of the Commonwealth Minister. Consequently, the formal referral and assessment requirements—such as those outlined in Section 68—are not applicable for actions transferred under the bilateral arrangement. In this way, the assessment process can be administered locally, drawing on state expertise and ensuring that environmental considerations are evaluated in a manner that is both consistent with national objectives and responsive to local conditions. <u>Biodiversity Conservation Act 2016</u> The BC Act and supporting regulations establish a modern and integrated legislative framework for land management and conservation in NSW. The purpose of the BC Act, with reference to the assessment of development (Part 4 of the EP&A Act) or activities (Part 5 of the EP&A Act), is: (k) to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity

(l) to establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values

(m) to establish market-based conservation mechanisms through which the biodiversity impacts of development and land use change can be offset at landscape and site scales.

Part 7 of the Biodiversity Conservation Act 2016 requires that an application for development that is “likely to significantly affect threatened species” must be accompanied by a biodiversity development assessment report (BDAR), except as provided by the Regulations.

A BDAR is required as part of the development application for the Proposal as impacts on biodiversity values exceed at least one significance threshold (i.e., area cleared), mandatorily requiring entry into the Biodiversity Offsets Scheme (BOS).

The BDAR is to be compliant with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the NSW Biodiversity Assessment Method (BAM).

In difference to the offsetting specifications for Part 4 local developments, as described in s7.13 of the Biodiversity Conservation Act 2016 (BC Act), SSD projects have a wider scope for determining how a projects residual impacts are reconciled without compromising the ‘no net loss’ standard specified under the NSW Biodiversity Assessment Method (BAM). In considering s7.14(2) of the BC Act and in exercising s7.14(3), the Minister for Planning may form the view that a Projects residual impacts could be settled in several ways without relying solely on the number and class of biodiversity credits specified in the biodiversity assessment report that accompanies the SSD application. s7.14(5) of the BC Act supports this framework as it states that the Minister for Planning is not limited by the matters specified in s7.14 when considering the:

- impact of the proposed development on biodiversity values;
- the measures that the Minister may require to avoid or minimise those impacts; or
- the power of the Minister to refuse consent or approve because of those impacts.

In considering s7.14 of the BC Act and the biodiversity conservation mechanisms available, the Minister for Planning may consider an offset strategy for SSD projects as comprising one or more of the following when satisfying the ‘non net loss’ standard:

- Retirement of biodiversity credits through the NSW Biodiversity Offset Scheme (BOS). This would involve the acquisition of offsets from lands with an approved Biodiversity Stewardship Agreement (BSA) under Part 5 Division 2 of the BC Act; and/or
- The funding of a biodiversity conservation action that would benefit the relevant threatened species or ecological community and that is equivalent to the cost of acquiring the required like-for-like biodiversity credits as determined by the offsets payment calculator referred to in section 6.32 of the Act; and/or

- Payment into the Biodiversity Conservation Fund in lieu of biodiversity credits (s6.30 of the BC Act).

Further the Minister for Planning, as the consent authority, may also decide to reduce or increase the number of biodiversity credits required, as inferred by s7.14(3) of the BC Act and may stage the delivery of offsets (s7.14(4) of the BC Act). The Minister for Planning as the consent authority is not required to consult with the Environment Agency Head in these circumstances (s7.11(1)(a) of the BC Act).

Unless specified by conditions of consent, the Minister for Planning may use a planning agreement under s7.18 of the BC Act to make offset provisions for an impact on biodiversity values of proposed development. The merits of this approach hinge on the extent of avoid/minimise/mitigate measures (s7.14) and how any related commitments can act to improve biodiversity values relative to the residual impacts. It is conceivable that such an agreement may utilise other biodiversity conservation mechanisms/actions such as:

- A Conservation Agreement under Part 5 Division 3 of the BC Act; and/or
- A Wildlife refuge agreement under Part 5 Division 4 of the BC Act; and/or
- The adoption of development controls (or State infrastructure contributions) under the Environmental Planning and Assessment Act 1979 that conserve or enhance the natural environment; and/or
- Any other measure determined by the Minister.

The latter two mechanisms/actions are consistent with the framework for a strategic application for biodiversity certification (s8.3 of the BC Act), thus establishing alignment with any offsetting requirements generated by a Controlled Action declaration under the Environment Protection and Biodiversity Conservation Act 1999.

Water Management Act 2000

Under Section 91(2) of the Water Management Act 2000, a controlled activity approval is required for works on waterfront land. Because the Proposal involves works within 40 m of an ephemeral creek, it is classified as integrated development and must be referred to the NSW Natural Resources Access Regulator (NRAR) for their General Terms of Approval.

Rural Fires Act 1997

Section 100B of the Rural Fires Act 1997 permits the issuance of a Bushfire Safety Authority (BSA) for subdivisions on bushfire-prone land. Since the site is identified as bushfire-prone, the Proposal will be referred to the NSW Rural Fire Service, supported by a bushfire assessment, to ensure compliance with bushfire planning controls.

Fisheries Management Act 1994 (Part 7A)

Part 7A of the Fisheries Management Act 1994 applies where the development may affect Commonwealth marine matters, ensuring that impacts on fish habitat, fish communities, and threatened aquatic species are properly assessed and managed.

Roads Act 1993

Under Section 138(1) of the Roads Act 1993, works on, over, or under public roads require prior consent from the relevant road authority. The proposal includes at future stages constructing an intersection with Newline Road and upgrading that public

	road for flood immunity. The local council, as the road authority, will require a condition of consent for these works, it will be sensible in the concept to consult with the road authority. <u>National Parks and Wildlife Act 1974 (NPW Act)</u> The NPW Act provides for the conservation and management of nature and objects, places and features of cultural value. It is the primary legislation for the protection of Aboriginal cultural heritage in NSW. Part 6 of the NPW Act provides protection for all Aboriginal objects and Aboriginal places in NSW. Under Section 90 of the Act, an Aboriginal Heritage Impact Permit (AHIP) is required before the disturbance of Aboriginal objects or places. It is considered no AHIP is required for the proposal. THE EIS will detail the reasons for this current position of advice. <u>Contaminated Land Management Act 1997</u> It is considered that no actions under the Contaminated Land Management Act 1997 are required for the site. Site contamination has been assessed and is deemed remediable to urban development standards. The EIS will seek to detail this aspect to ensure no action is required.
Pre-Condition to exercising the power to grant approval	<u>Chapter 4 Koala habitat protection 2021</u> The Koala SEPP 2021 aims to ensure that koala habitat is properly considered during the development assessment process, and to provide a process for councils to strategically manage koala habitat through koala plans of management. Section 4.8(2) states that where an approved Koala Plan of Management that applies to the land, the determination of a development application must be consistent with that plan. The proposal must therefore be consistent with the Port Stephens Comprehensive Koala Plan of Management (CKPoM) 2002 which provides performance criteria for development applications. <u>The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BCSEPP)</u> The BCSEPP sets out key environmental thresholds that must be met before development consent is granted for an SSD project. • <u>Allowable Clearing Area (pub. 21-10-2022):</u> This provision defines the maximum area of native vegetation that may be cleared without triggering additional compensation or mitigation requirements. For the SSD project, the proponent must demonstrate that any clearing remains within these allowable limits—or, if exceeded, that adequate biodiversity offsets or restoration measures are provided. • <u>Land Application (pub. 2-12-2021):</u> This instrument establishes the criteria for any proposed change in land use that might impact biodiversity. It requires that all land applications be assessed against biodiversity conservation objectives, ensuring that development activities are designed to minimize adverse impacts on native flora and fauna. For the SSD project, compliance with these criteria is a precondition to obtaining development consent. <u>Chapter 4 Koala habitat protection 2021</u>

	The Koala SEPP 2021 aims to ensure that koala habitat is properly considered during the development assessment process, and to provide a process for councils to strategically manage koala habitat through koala plans of management. Section 4.8(2) states that where an approved Koala Plan of Management that applies to the land, the determination of a development application must be consistent with that plan. The proposal must therefore be consistent with the Port Stephens Comprehensive Koala Plan of Management (CKPoM) 2002 which provides performance criteria for development applications.
Mandatory matters for consideration	Clause 4.15 of the EP&A Act provides a list of matters that are to be considered and assessed to the extent relevant to the development the subject of the development application. 4.15 Evaluation <i>(1) Matters for consideration—general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—</i> <i>(a) the provisions of—</i> <i>(i) any environmental planning instrument, and</i> <i>(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</i> <i>(iii) any development control plan, and</i> <i>(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</i> <i>(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),</i> <i>(v) (Repealed)</i> <i>that apply to the land to which the development application relates,</i> <i>(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,</i> <i>(c) the suitability of the site for the development,</i> <i>(d) any submissions made in accordance with this Act or the regulations,</i> <i>(e) the public interest.</i> Relevant Environmental Planning Instruments Environmental planning instruments include State Environmental Planning Policies (SEPPs) as are applicable to the Port Stephens Local Government Area, the Proposal, and the Port Stephens Local Environmental Plan 2013. <u>SEPP (Biodiversity and Conservation) 2021</u> Chapter 2 Vegetation in non-rural areas

Chapter 2 (Vegetation in Non-Rural Areas) sets the rules for the clearing of vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application.

An authority is not required where Development Consent has been granted for the clearing of native vegetation.

The BDAR accompanying this application quantifies all of R1 Residential and C2 Conservation zoned land required to be cleared to enable the Proposal. On grant of a Development Consent, a Permit will not be required to clear the vegetation identified.

Chapter 4 Koala habitat protection 2021

The Koala SEPP 2021 aims to ensure that koala habitat is properly considered during the development assessment process, and to provide a process for councils to strategically manage koala habitat through koala plans of management.

Section 4.8(2) states that where an approved Koala Plan of Management that applies to the land, Council's determination of a development application must be consistent with that plan.

The Proposal in this Development Application must therefore be consistent with the *Port Stephens Comprehensive Koala Plan of Management (CKPoM) 2002* which provides performance criteria for development applications under Section 5.3.

State Environmental Planning Policy (Housing) 2021

The Housing SEPP includes the planning provisions for:

- boarding houses
- build-to-rent housing
- seniors housing
- caravan parks and manufactured home estates
- group homes
- retention of existing affordable rental housing
- secondary dwellings (granny flats)
- social and affordable housing
- short-term rental accommodation
- design quality of residential apartment development.

These forms of development listed are applicable to this application.

Division 1 - Clause 15A advises that the objective of this division is to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households. The division provides incentivised land use controls and provisions pertaining to development to which the division applies including identify development standards for particular matters relating to residential development under the division that, if complied with, prevent the consent authority from requiring more onerous standards for the matters.

Schedule 9 Design principles for residential apartment development – this section of the policy aims to deliver better living environments for residents choosing this form of housing, and to enhance our streetscapes and our neighbourhoods across the state it provides the basis for the application of the Apartment design guide which is applicable to certain forms of future development.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

Part 3C Greenfield Housing Code – The Greenfield Housing Code applies to greenfield areas across NSW identified on the ‘Greenfield Housing Code Area Map’, and applies to the land (see below map) The Greenfield Housing Code contains simplified and tailored development standards to allow one and two-storey homes, home renovations, and associated development (such as garages and swimming pools) in greenfield areas to be carried out under the fast-tracked complying development approval pathway. The DPHI informs that the Greenfield Housing Code was developed in close consultation with council and industry stakeholders to ensure amenity, privacy and design considerations are incorporated into the development standards, and good design outcomes can be achieved for new dwellings in greenfield areas. The project having objectives of seeking to deliver a diversity of land uses to meet the social need may see need to consider how the Code as applies to the land could be refined to provide better planning outcomes.



Source Planning portal NSW

SEPP (Resilience and Hazards) 2021

Chapter 2 Coastal Management

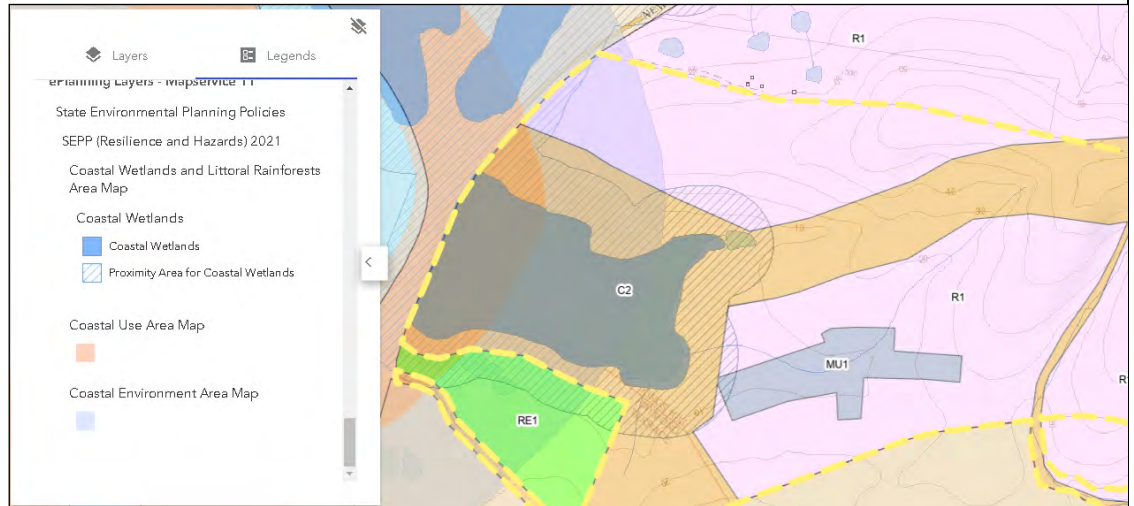
The aim of this Chapter is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area.

The Proposal involves land (Lot 41 DP 1037411) that is partly mapped within the following overlapping Coastal Management Areas of the SEPP:

- Coastal Environment Area
- Coastal Use Area
- Coastal Wetland Area (Wetland 803)

Wetland 803 is mapped inside a *proximity area* for coastal wetlands, which forms a 100m buffer around wetland. Part of the land immediately adjacent Newline Road is also within the proximity area for Coastal Wetland 802, which is located west of Newline Road.

Site Relative to Coastal Management and Proximity Areas



Source: NSW Planning Portal Spatial Viewer

Section 2.15 indicates the hierarchy of development controls applicable to land identified within more than one coastal management area. To the extent that the controls area inconsistent, the highest to lowest prevail to the extent of the inconsistency-

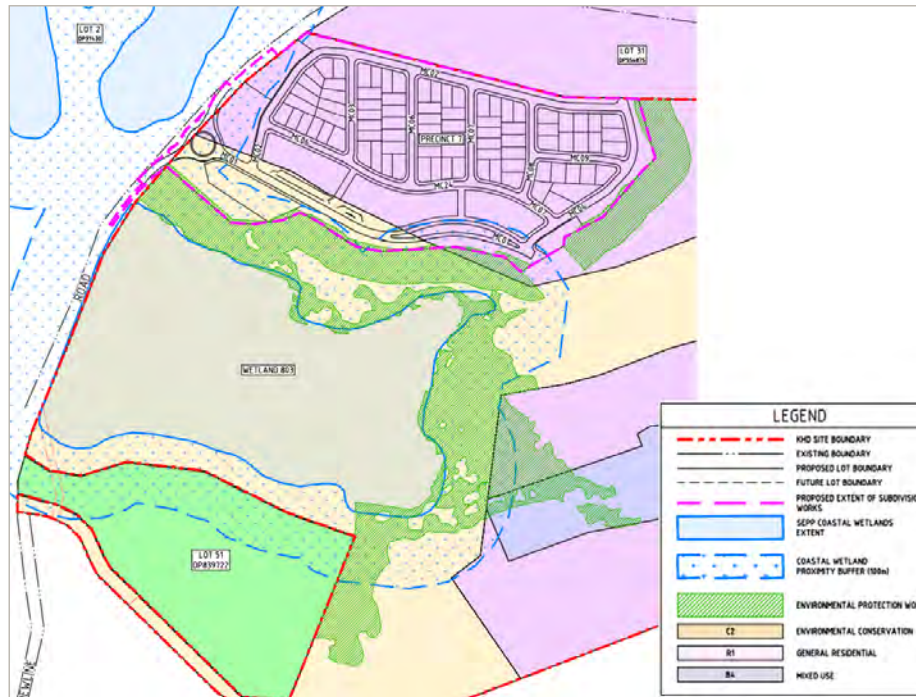
- (a) the coastal wetlands and littoral rainforests area,
- (b) the coastal vulnerability area,
- (c) the coastal environment area,
- (d) the coastal use area.

The proposed subdivision does not involve subdivision works within the mapped extent of the Coastal Wetland, with the nearest subdivision works determined to be 44.69m from the mapped wetland boundary.

The proposal proposes *environmental protection works* under a draft VMP to restore cleared land within Wetland 803 and its associated proximity area by the revegetation of those lands consistent with the CKPoM 2002.

Subdivision works are also proposed within the periphery of the proximity area to both Wetland 803 and Wetland 802. The proposed future subdivision works proposed to occur in this area include earthworks (battering and retaining) associated with the east-west Collector road, the intersection with Newline Road and associated road upgrade works, and the south-western biofiltration basin.

Works within Wetland Proximity Areas



Source: Northrop Engineers April 2024

Development within Coastal Wetlands and Proximity Areas are subject to the provisions of Section 2.7 and Section 2.8 of the SEPP (underlined for emphasis).

2.7 Development on certain land within coastal wetlands and littoral rainforests area

(1) The following may be carried out on land identified as “coastal wetlands” or “littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map only with development consent—

(a) the clearing of native vegetation within the meaning of Part 5A of the Local Land Services Act 2013,

(b) the harm of marine vegetation within the meaning of Division 4 of Part 7 of the Fisheries Management Act 1994,

(c) the carrying out of any of the following—

(i) earthworks (including the depositing of material on land),

(ii) constructing a levee,

(iii) draining the land,

(iv) environmental protection works,

(d) any other development.

2) Development for which consent is required by subsection (1), other than development for the purpose of environmental protection works, is declared to be designated development for the purposes of the Act.

(3) ...

(4) A consent authority must not grant consent for development referred to in subsection (1) unless the consent authority is satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland or littoral rainforest.

(5) *Nothing in this section requires consent for the damage or removal of a priority weed within the meaning of clause 32 of Schedule 7 to the Biosecurity Act 2015.*

(6) ...

2.8 Development on land in proximity to coastal wetlands or littoral rainforest

(1) *Development consent must not be granted to development on land identified as “proximity area for coastal wetlands” ... unless the consent authority is satisfied that the proposed development will not significantly impact on—*

(a) *the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or*

(b) *the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.*

In addition, and in accordance with the section 2.15, development controls for land within the Coastal environment area apply to the Proposal:

2.10 Development on land within the coastal environment area

(1) *Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following—*

(a) *the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,*

(b) *coastal environmental values and natural coastal processes,*

(c) *the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,*

(d) *marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,*

(e) *existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,*

(f) *Aboriginal cultural heritage, practices and places,*

(g) *the use of the surf zone.*

(2) *Development consent must not be granted to development on land to which this section applies unless the consent authority is satisfied that—*

(a) *the development is designed, sited and will be managed to avoid an adverse impact referred to in subsection (1), or*

(b) *if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or*

(c) *if that impact cannot be minimised—the development will be managed to mitigate that impact.*

(3) *This section does not apply to land within the Foreshores and Waterways Area within the meaning of State Environmental Planning Policy (Biodiversity and Conservation) 2021, Chapter 6.*

A hydrological assessment of wetland impacts by Salients and Northrop Engineers has been prepared to determine whether development inside the proximity area will impact on the Coastal Wetland hydraulic function.

ERM subsequently assessed the potential for direct and indirect impacts to wetland integrity (**Attachment N** having considered the assessments by Northrop and Salient, and earlier Wetland 803 assessments by Martens (2023) and Alluvium (2019).

The results that will be further interrogated in the EIS indicate that the Minister can be satisfied that the proposed subdivision works and the environmental protection works proposed on land within the proximity area will not significantly impact on the biophysical, hydrological or ecological integrity of the adjacent coastal wetland, or the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland.

Chapter 4 Remediation of Land

The SEPP provides state-wide planning controls for the remediation of contaminated land, and in particular, aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment by specifying:

- (a) when consent is required, and when it is not required, for a remediation work, and
- (b) certain considerations that are relevant in rezoning land and in determining development applications

Section 4.6 of the SEPP provides assessment criteria which are self-explanatory (**bold** for emphasis):

(1) A consent authority must not consent to the carrying out of any development on land unless—

- (a) it has considered whether the land is contaminated, and*
- (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

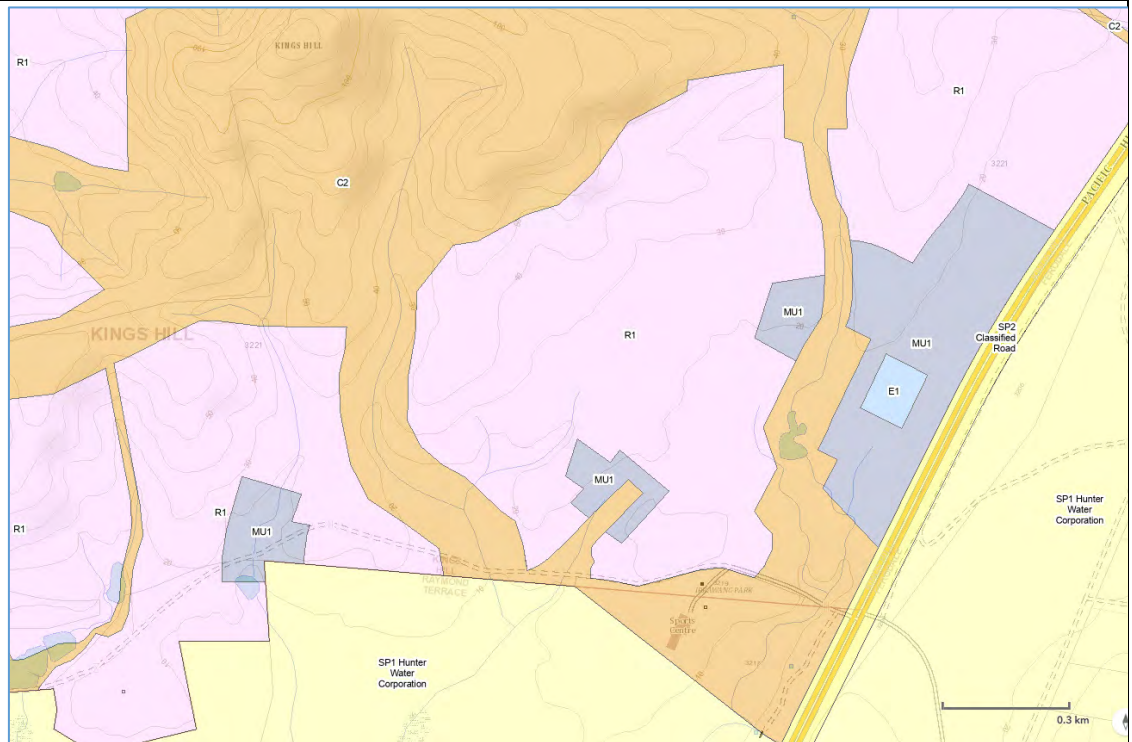
A site specific Preliminary Site Investigation for Contamination results indicate that the potential for gross contamination at the Site arising from onsite sources is mainly associated with potentially contaminated imported fill within the former quarry in the western portion of the Site. Based on the results of the PSI, it is considered that the Site is, or can be made, suitable for the proposed residential development.

SEPP (Transport and Infrastructure) 2021

Chapter 2 Infrastructure

The Infrastructure Chapter of the SEPP allows for infrastructure and services provided by or on behalf of a public authority such as electricity, water, sewer, public reserves, and roads. The Proposal does not affect the operation of the SEPP nor is it inconsistent with the provisions within it.

	Under <i>section 2.48</i> of the SEPP, the consent authority is required to refer development that is likely to affect an electricity transmission or distribution network. Council is consequently required to refer the Proposal to Ausgrid to confirm that consent may be granted. Under <i>section 2.121</i> and Schedule 3 of the SEPP, the development is traffic generating development if the application proposes more than 200 residential lots. Division 17 - Roads and Traffic Under <i>section 2.122(2)(a)</i>, <i>Schedule 3 Traffic generating development to be referred to TfNSW</i> a Proposal for subdivision of 200 or more lots with a new public road must be referred to TfNSW if the Site has access to <u>any road</u>. Division 20 – Stormwater management Section 2.136 defines stormwater management system as: <i>stormwater management system means—</i> <i>(a) works for the collection, detention, harvesting, distribution or discharge of stormwater (such as channels, aqueducts, pipes, drainage works, embankments, detention basins and pumping stations), and</i> <i>(b) stormwater quality control systems (such as waste entrapment facilities, artificial wetlands, sediment ponds and riparian management), and</i> <i>(c) stormwater reuse schemes.</i> Under <i>section 2.138</i>, <i>development for the purpose of a stormwater management system may be carried out by any person with consent on any land</i> <u>SEPP (Planning Systems) 2021</u> The purpose of the PSSEPP is to facilitate assessment of projects that are of State or regional significance. The project is defined under the Schedule as SSD. <u>Port Stephens Local Environmental Plan 2013 (As Amended)</u> Clause 2.1 Land Use Zones The land use zones applicable are illustrated below.
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Source: NSW Planning Portal PSC LEP 2013

The Proposal involves the following land use zones:

- C2 Environmental Conservation
- R1 General Residential
- MU1 Mixed Use
- E1 Local Centre

Clause 2.3 Zone Objectives and Land Use Table

The proposal involves concept for the subdivision of the land for residential purpose to meet the housing needs of the community, and biodiversity measures to protect, manage and restore areas of high ecological and aesthetic value (environmental protection works).

Clause 2.6 Subdivision – Consent Requirements

This clause provides that land to which the instrument applies may be subdivided only with development consent.

Clause 4.1 Minimum Subdivision Lot Size

The extent of land mapped with a 450sqm minimum lot size and the application of clause 4.1C which provides smaller lot sizes for certain types of development, it may be required to achieve various social and land use outcomes to reduce the minimum lot sizes within the extent of R1

C2 zoned land less than the minimum 40ha lot size.

Clause 5.10 Heritage Conservation

This clause provides that development consent is required for actions that will or are likely to affect items or places of heritage significance listed within Schedule 5 of the LEP. There are no items or places listed on the Site.

Clause 5.21

This clause provides that *consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development*

(a) is compatible with the flood function and behaviour on the land, and

(b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and

(c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and

(d) incorporates appropriate measures to manage risk to life in the event of a flood, and

(e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

The clause then provides that *in deciding whether to grant development consent on land to which this clause applies, the consent authority must consider the following matters—*

(a) the impact of the development on projected changes to flood behaviour as a result of climate change,

(b) the intended design and scale of buildings resulting from the development,

(c) whether the development incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood,

(d) the potential to modify, relocate or remove buildings resulting from development if the surrounding area is impacted by flooding or coastal erosion.

Clause 6.2 Public Utility Infrastructure

This clause provides that the Minister must be satisfied that provision is available for essential public utility infrastructure in an Urban Release Area, prior to development being carried out on the land. As described under heading 3.4.1.6,7 and 8. The EIS will detail the servicing required to meet the satisfaction of the Minister.

Clause 6.3 Development Control Plan

This clause requires a Development Control Plan to be in effect prior to granting consent to development of the land. Albeit that as SSD a DCP does not apply the Port Stephens Development Control Plan 2014 contains locality controls specific to Kings Hill URA.

Clause 6.5 Infrastructure – Pacific Highway Access

This clause seeks to ensure that access to the Pacific Highway is provided in a manner that does not impede the safe and efficient operation of the Pacific Highway as part of the national highway network.

The clause provides that consent must not be granted for subdivision unless arrangements have been made, to the satisfaction of Roads and Maritime Services and the consent authority, for the provision of vehicular access from the urban release area to the Pacific Highway, including the closure or modification of any existing vehicular access from any land adjoining the Pacific Highway, if necessary.

The State VPA executed between KHD and the NSW Government (October 2019) contains arrangements to allow access for up to 400 lots to the Pacific Highway via Newline and Six Mile Road. From the 401st lot access to the Pacific Highway will be provided by the proposed grade separated Pacific Highway Interchange.

Clause 6.6 Access from Precinct Areas to Pacific Highway, Kings Hill

This clause provides that consent must not be granted to development on land within the Kings Hill URA unless the consent authority is satisfied that arrangements have been made to ensure flood free vehicular access from the Kings Hill Precinct areas to the Pacific Highway.

Arrangements are contained within the State VPA executed between KHD and the NSW Government (October 2019).

Clause 7.1 Acid Sulfate Soils

This clause provides that development consent is required for certain works within certain land identified on the Acid Sulfate Soils (ASS) Map. The majority of the land is identified as Class 5 soil, while Wetland 803 is recognised as Class 2 soil.

For this area, works are defined as:

Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

Clause 7.2 Earthworks

This clause provides that development requiring earthworks must be assessed against the following criteria to ensure minimal environmental impacts will be produced during and as a result of development.

- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*
- (b) the effect of the development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
- (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

It is expected that works phases will trigger a need for excess material to be exported offsite and reused by nearby quarries as Virgin Excavated Natural Material and/or the local landfill operation, therefore not involving significant haulage distances. If other Precincts are approved for development before subdivision works commenced, excess material may instead be used (subject to testing) as fill in those Precincts.

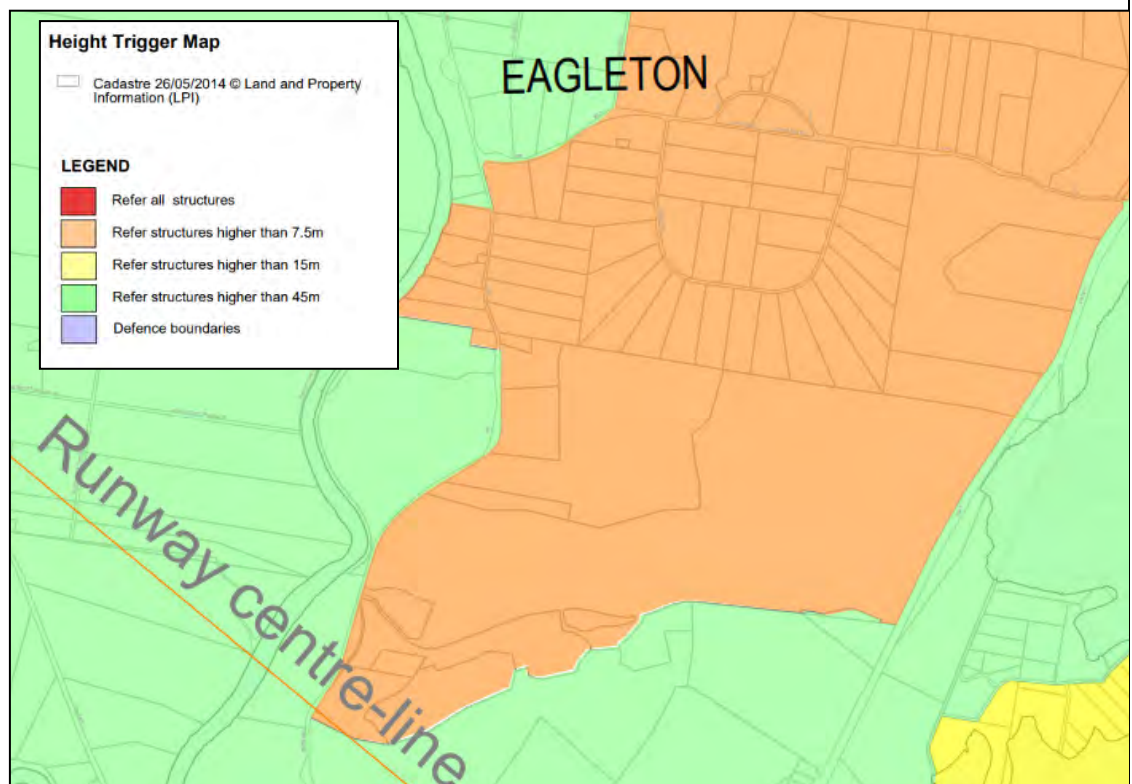
A site specific geotechnical assessment will provide details on the slope stability and suitability of the Site for the proposed earthworks, including site preparation and earthworks management

It is considered that a condition of consent of the concept application will require a Construction Environmental Management Plan (CEMP) for subsequent works applications. The CEMP will be implemented prior to works commencing and will deal with measures to mitigate potential impacts and minimise disturbance (dust suppression, vibration, noise, dilapidation assessments etc.) to the nearest residents.

Clause 7.4 Airspace Operations

This clause provides that development within the Airspace Operations Area of Williamstown Defence Base does not penetrate the Limitation or Operations Surface as identified in Council Mapping.

The Proposal does not involve structures that would trigger this provision and the application does not need to be referred.



Air Space Height Referral Map Source: Port Stephens DCP2014

Clause 7.5 Development in areas subject to aircraft noise

The land is not mapped as being within the Australian Noise Exposure Forecast 2025 (ANEF) associated with the Williamstown airbase, and is outside of ANEF 20.

Clause 7.6 Essential Services

This clause duplicates the requirements of **Clause 6.2**, other than in respect of ensuring satisfactory provision of stormwater drainage (see **Section 3.2.2.3**) and suitable vehicular access (see **Section 3.2.2.7**).

Clause 7.8 Drinking Water Catchments

This clause provides that development proposed within the Drinking Water Catchment of Grahamstown Dam.

Clause 7.9 Wetlands

In addition to the provisions of SEPP Coastal Wetlands, this clause requires that development on land mapped as Wetland by PSC LEP 2013 must consider the potential impacts of the development on the wetland habitat and water quality and assess the mitigation measures proposed to minimise these impacts. In particular:

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider—

(a) whether or not the development is likely to have any significant adverse impact on the following—

(i) the condition and significance of the existing native fauna and flora on the land,

(ii) the provision and quality of habitats on the land for indigenous and migratory species,

(iii) the surface and groundwater characteristics of the land, including water quality, natural water flows and salinity, and

(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The area of land subject to this clause is illustrated below

PSLEP 2013 Wetlands Map



Source: PSC LEP 2013

The LEP mapped wetland areas occur within the *proximity area* to Coastal Wetland 803. The proposed environmental protection works are planned to occur in the LEP mapped wetland boundary. However, whereas the works are contained within the mapped area, it is noted that scientific investigation, in the form of detailed floristic mapping⁴, shows an error in the extent of the EPI mapping that informs the works will be outside of the area if the EPI mapping is correctly represented to match the science outcome. The EIS will seek a change to this mapping error.

Clause 7.11 Public Infrastructure Buffer

This clause provides an avenue for the consent authority to assess the potential impacts of authorised public infrastructure land uses (Waste or Resource Management Facility) on the proposed development.

⁴ Review Kings Hill SEPP 14 wetland mapping assessment for East/west link road alignment design – BIOSM April 2016

Table 3 State Significant Categorisation of various concept elements.

SSD ITEM (Schedule 1)	Description	EDC
13 Cultural, recreation and tourist facilities	An Aboriginal cultural heritage Koala education and conservation centre and related precinct in conjunction with the Worimi Local Aboriginal Land Council, including: • Nature-based tourism experience includes the opportunity for specifically design new education and tourism centre with a cafe and gallery run by the Worimi Local Aboriginal Land Council focused on ecological Koala management and cultural heritage. Remediated and embellished ecological connection areas inclusive of Indigenous curated walking trails and ancillary education connected to the Aboriginal values of the land. District Recreation Facilities: • Conservation Area Tracks and Trails • Equestrian trails (including riding for the disabled program) • Wetland boardwalk • Mountain bike centre, trailhead facilities and trails • Skate Park • Cycleways and pedestrian networks.	<\$18m
14 Hospitals, medical centres and health research facilities	A new medical precinct within the proposed new town centre to cater for the medical needs of the community. The precinct will consist of a number of buildings and varying ranges of medical uses in the form of general practice, specialist care, day surgery, pathology and ancillary allied health services.	<\$40m
15 Educational establishments	A new school and collocated open space and sporting fields to support the education services. (2ha land area).	<\$30m
21 Water storage or water treatment facilities	Water storage and water treatment facility decentralised solution	<\$32m
22 Sewerage systems	Sewage system (in environmentally sensitive area)	<\$18m
26A In-fill affordable housing	Approximately 2,500 new dwellings in the form of dwelling homes, multiunit dwellings, residential flat buildings. These dwellings will be provided at a range of affordability levels and diversity of typology in a sale and rental configuration in seven	<\$900m

	residential precincts with a minimum of 10% allocated as affordable housing. .	
28 Seniors housing	Seniors housing 500 dwellings and a 100 room residential aged care facility.	<\$75m
*SSI Items (required to establish an orderly development of the URA)	Critical infrastructure flood free interchange and overpass Pacific Highway intersection upgrades and the Grahamstown Dam stormwater diversion channel (identified as enabling infrastructure for the URA) and an ecological connective underpass to support the koala strategy to form a connection between the previously separated koala communities as per arrangements in the State VPA.	>\$80m

4 Community engagement

This scoping report seeks to establish a clear and transparent assessment methodology that is focused on ensuring stakeholders from both the community, public and private sector are engaged and informed about the proposal and its wider linkage to the sustainable development of the KHURA.

The project proposal is benefited by an extensive proceeding program of engagement with various stakeholders from state government, council and professional experts.

4.1 Engagement carried out

4.1.1 Port Stephens Council

KHD has undertaken sustained and ongoing engagement with Port Stephens Council over the past 18 months in relation to Precincts 6 and 7, which are subject to separate local development applications and are excluded from this SSD application. These discussions have focused on precinct-specific planning and engineering matters, biodiversity and conservation coordination, and lead-in infrastructure delivery. While these precincts fall outside the scope of this concept SSD proposal, the engagement has informed broader infrastructure coordination and master planning inputs relevant to the SSD-nominated land.

This engagement demonstrates KHD's commitment to proactive consultation with council and reflects the project's transition from early pre-lodgement discussions to detailed engineering and planning resolution on specific precincts. The Table 7 below summarises the key meetings held with council between December 2023 and June 2025.

Table 4 Summary of engagement with Port Stephens Council – Precinct 6 and 7 (2023–2025)

Date	Engagement type	Focus / Summary
19 Dec 2023	Pre-DA meeting	Initial meeting with PSC regarding western DAs (Precinct 6 and 7)
5 Feb 2024	Pre-DA meeting	Biodiversity scope and assessment matters
20 Mar 2024	Pre-DA meeting	Project progress update – Precinct 6 and 7 DAs confirmed
10 Apr 2024	Pre-DA engineering consultation	Engineering issues related to Precinct 6 and 7
Late Apr 2024	Lodgement	DAs for Precinct 6 and 7 formally lodged
12 Jul 2024	Formal response	RFIs issued by PSC for Precinct 6 and 7
Jul 2024	Site meeting	Inspection and meeting with PSC officers to discuss DA RFIs
7 Mar 2025	RFI response meeting	Detailed discussion on RFI matters – PSC Management and Planning teams
28 Mar 2025	Site inspection	Council inspection of proposed amendments to Precinct 7
9 Apr 2025	DA commencement meeting	Meeting with PSC regarding lead-in sewer and water DA
28 May 2025	Engineering meeting	Technical engineering design review for Precinct 7 with PSC Engineers
2 Jun 2025	DA modification meeting	Meeting with PSC to discuss modification to lead-in sewer and water DA

Following the lodgement of the draft SEARs request on 6 May 2025, Kings Hill Developments (KHD) formally wrote to the General Manager of Port Stephens Council on 20 May 2025 to outline its parallel planning processes and ongoing commitment to coordinated urban development across the Kings Hill Urban Release Area. In the letter, KHD confirmed that:

- Precincts 6 and 7 would continue to progress through local development application processes under Council’s assessment, with an aim to obtain development concept approval for at least Precinct 7 by the end of 2025.

- the balance of KHD’s landholdings is being advanced under the State Significant Development (SSD) pathway, with SEARs sought for a concept master plan; and
- KHD values council’s support for the overall urban release area and looks forward to continuing a cooperative relationship throughout and beyond the assessment of the current precinct DAs.
- This correspondence reinforces KHD’s commitment to transparency and collaborative planning with council and reflects a dual-track planning approach designed to deliver early housing outcomes while establishing a long-term master planning framework for the remainder of the site.

4.1.2 Local stakeholders

There are four landowners directly affected by the proposal: KHD, Hunter Water, Gwynvill Trading Pty Ltd, McCloy, Solo (Suez) and Riding for the Disabled. As a part of development process, KHD and its representatives have consulted with affected landowners with regard to the concept design of the proposal. These stakeholders have provided general support for the development of the land. Consultation with the affected landowners is ongoing. The proposal has been developed to ensure that appropriate access to the affected landowners’ properties would be maintained at all times during and post-construction.

4.1.2.1 Riding for the disabled

Neighbouring the Kings Hill development are the well-known volunteer organisation Riding for the Disabled, who provide horse riding and other activities for people with disabilities.

The organisation will benefit from improved connectivity to equestrian trails that will enhance their offering.

Importantly, Kings Hill Developments will ensure that internal access to their land is provided prior to the new major interchange becoming operational.

4.1.2.2 Suez (now Viola)

Viola are landholders and managers of a waste management facility off Newline Road, neighbouring the Kings Hill site. Discussions are proposed to continue around compatible land uses within the buffer zones and mitigation measures required.

4.1.2.3 Worimi community

Kings Hill Developments are committed to working with the Worimi community and engaging them through the development, particularly the conservation area.

The urban release area has areas of Aboriginal significance on the ridgeline of the conservation area, including connections to significant assets like bora rings, caves and a wetland.

The area proposed to be residential development is not an area of significance for Aboriginal people.

Opportunities for the long-term inclusion of the Worimi community include education cultural awareness programs, land care and conservation, local tours, experience and tourism ventures.

KHD anticipates that the Worimi community would be involved in contributing to the Biodiversity Management Plan for the ongoing management of the conservation area.

KHD and Worimi Local Aboriginal Land Council (WLALC) have signed into a strategic alliance with the intention of preserving, promoting and enhancing the natural, historical and culturally significant attributes of Kings Hill.

As part of early engagement, council was advised of the proponent's intention to pursue a dual assessment framework—retaining the local pathway for Lots 6 and 7 while progressing a concept SSD DA for the remainder of the site. Council officers have expressed operational support for this approach and acknowledged that it complements the objectives of their Local Housing Strategy by enabling near-term housing delivery alongside coordinated State-led planning.

4.1.3 Preceding concept development consultation

A substantial body of consultation has preceded the current Concept Development Application, reflecting the long-term strategic planning and engagement processes underpinning the Kings Hill Urban Release Area (URA). These activities were led by both Port Stephens Council and the NSW Government, alongside voluntary engagement initiatives by Kings Hill Developments (KHD), and have informed both the planning controls and the environmental framework that shape the current proposal.

Initial consultation commenced in the 1980s, when Port Stephens Council publicly exhibited a series of settlement strategies aimed at guiding growth in the Raymond Terrace–Kings Hill area. These strategies were updated and re-exhibited by the Department of Planning (now the Department of Planning, Housing and Infrastructure) from 2007 onwards, providing an evolving strategic basis for the urban release.

Between 2007 and 2010, the URA was subject to formal rezoning processes, including the public exhibition of Council's Local Environmental Study (LES), draft planning controls, and supporting materials. Public Council meetings were held during this period to consider community feedback and to endorse the rezoning outcomes. This culminated in the adoption of new planning controls facilitating future urban development.

Further statutory consultation occurred in 2013 when Council publicly exhibited a site-specific Development Control Plan (DCP) chapter and a draft section 94 Contributions Plan. These were subsequently adopted following community feedback and formal Council consideration.

From 2018 onward, KHD initiated direct engagement with the Office of Environment and Heritage (OEH), now the Biodiversity Conservation Division (BCD), to inform the environmental assessment and biodiversity certification pathway for the broader precinct. Key meetings included:

- A multi-agency consultation on 17 April 2018, which addressed Director-General's Requirements, proposed the inclusion of Lot 4821, and examined offsetting approaches and koala impact management strategies;
- A pre-SIS consultation with OEH on 2 August 2018 to confirm the environmental assessment pathway;

- A comprehensive pre-lodgement meeting on 7 February 2019 involving OEH, Port Stephens Council, the Office of the Coordinator General (OWAD), and project consultants, focused on koala habitat planning and strategic alignment with Council's Koala Plan of Management.

The current development application (DA ref: 16-2018-772-1) was first lodged in November 2018. A revised version was submitted in May 2019 and publicly exhibited in June 2019. During this exhibition, KHD voluntarily conducted two community drop-in sessions, widely promoted and attended, with outcomes formally documented and submitted to council.

A second revised DA was lodged in March 2020, followed by a second public exhibition in April 2020. Additional supplementary material was submitted in August 2020 in response to feedback from the Hunter and Central Coast Regional Planning Panel.

In parallel with the concept planning process, the project team participated in the preparation and exhibition of a State Voluntary Planning Agreement (VPA). This was followed by the public exhibition and formal endorsement of a separate VPA between KHD and Port Stephens Council relating to the delivery and management of the conservation area.

This body of consultation has underpinned the formulation of the concept proposal and has played a critical role in shaping the environmental, infrastructure and community outcomes that now inform the SSD pathway.

4.1.4 Aboriginal heritage consultation – linked to state infrastructure

Aboriginal Heritage Due Diligence Assessment: Kings Hill interchange and drainage channel Raymond Terrace, NSW (Myall Coast Archaeological Services, 2015) was prepared to support the assessment of potential impacts of the proposal on Aboriginal heritage for the proposed State infrastructure items. This due diligence was informed by a previous Aboriginal Heritage assessment across the KHURA, which involved full consultation with the Aboriginal Community.

In 2019, an Aboriginal heritage assessment was carried out in accordance with Roads and Maritime's *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (PACHCI) (RTA, 2011a).

As part of the PACHCI Stage 2, Roads and Maritime's Aboriginal Cultural Heritage Officer (Southern Region) carried out a site inspection across the proposal footprint on 24 May 2019. The Aboriginal Cultural Heritage Officer was accompanied by a Roads and Maritime Environment Officer, representatives from KHD and representatives from the Worimi Local Aboriginal Land Council (WLALC). This facilitated on-site consultation regarding the interchange and channel proposals, construction methodologies and operational issues such as stormwater management.

4.1.5 The stormwater channel and the interchange engagement

Various government agencies and stakeholders have been consulted about the proposal, including:

- Hunter Water.
- Council.
- Roads and Maritime.
- Dams Safety Committee.

- Telstra.
- Landowners.

Issues that have been raised in consultation with these agencies and stakeholders are outlined [Appendix C1](#).

4.1.6 Community views

As has been outlined in the strategic section of this report, the community views are dominated by significant evidence of a desire to see the progression of new housing investment and connected infrastructure upgrades.

State and National polling of community views has for a significant period since 2022 shown that the issues of cost of living and housing supply are the two primary issues of concern for the community. The prevalence of these issues is relevant in the actions of elected members at state and Commonwealth levels focusing on the issue of housing affordability on a consistent and regular basis.

Typically, when consultation is progressed that is specific to a development application related to major housing delivery or related infrastructure specific views are encouraged in workshop style sessions. This style of format is very helpful in gaining issues of interest from these motivated groups or individuals and are found to be in the case of KHURA dominated by special interest groups of a particular nature focused on ecological issues. Further these groups typically have consistent and engaged community programs and actions of communication to raise awareness of their particular issue of importance.

The key issue of ecological concern relating the KHURA is heightened by the concerns of specific groups engaged in the community debate on the impact of the local koala population and the competing interests of land development and impacts on the local native fauna.

More recent consultation sessions have been held with the community with open invitation. The consultation process has been with the involvement of council related to the current local development applications for lot subdivisions on KHD land. Albeit these consultation programs are not related directly to the proposal they are discussing relevant issues of environmental impact assessment and cover discussion on the wider KHURA development proposition.

A recent event was held on 3 June 2024. The project was conducted by consultation consultants and ecological experts. The meeting was attended by members of the Eco Network Port Stephens, the Koala Coalition EcoNetwork and Voice of Wallalong and Woodville.

Items of discussion included:

- The draft planning agreement with council
- The proposed areas of conservation, green corridors methodology, health of wetlands and interaction with Williams River
- Survey work and ecological assessment and comparisons of the TCS Act and BC Act
- Cumulative impact of future development.

Local media and opinions from these groups are consistently known and the views are respected and considered. The projects related to KHURA and the proposal have applied significant consideration to the issues raised by these groups.

The issues of engaging the views of wider community members who do not hold a specific and direct consistent issue of concern relating to development is a challenging to engage. A program to tackle this issue and seek communities' views was conducted by independent professional community engagement and polling firms skilled at seeking community views for those majority sectors that are not specifically motivated to attend workshop consultation programs.

4.1.7 Local community attitudes to housing and environmental issues

In 2014 the project engaged specific targeted polling from experienced pollster firm Crosby Textor. The polling was conducted across the LGA and provided the following summary of evidence of the community views on the KHURA and the need for housing (Figure 34).

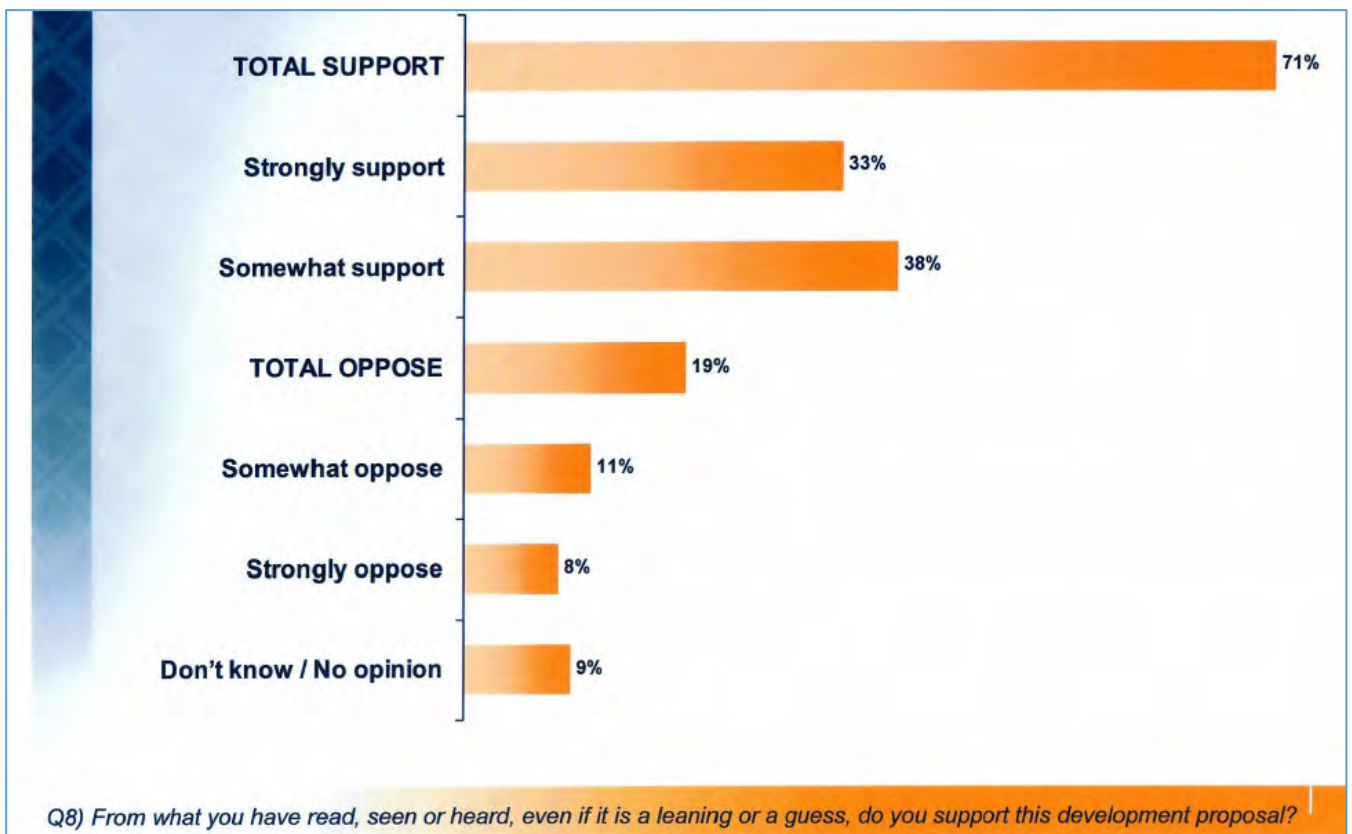


Figure 29 2014 PS LGA Community views on KHURA summary

In May 2024 a new round of polling was undertaken in the LGA and the wider region to test the public views. This polling conducted by Resolve Strategic. The overarching aim of this research and consultation was to better understand and measure public opinion in relation to housing issues; what the pressure points are, how wide the impact is felt and by whom, who they expect to act, what they think of them and want from them, and their support for local development the results are summarised below.

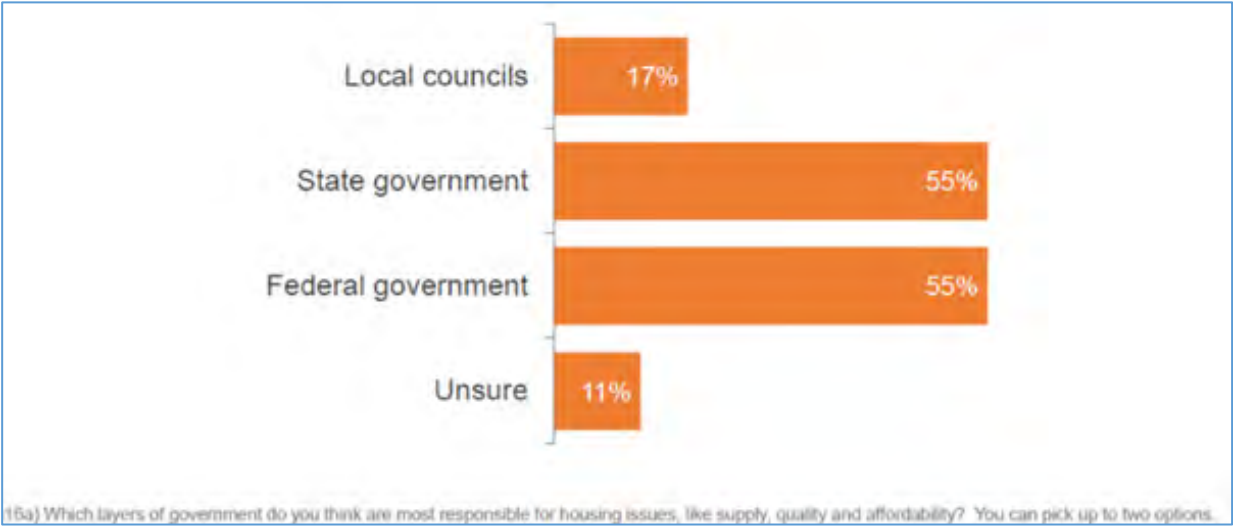


Figure 30 Resolve question results on who is responsible for housing issues.

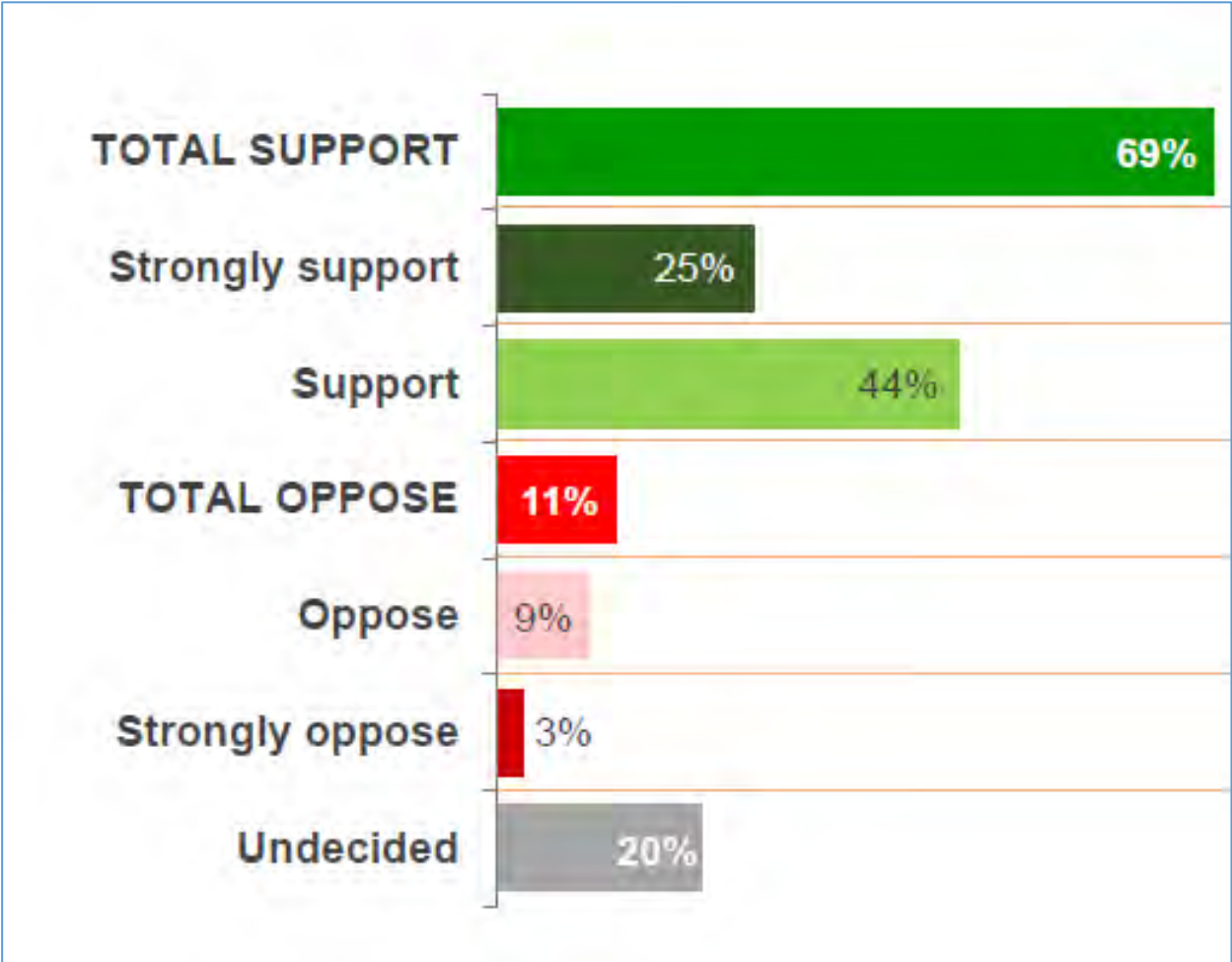


Figure 31 2024 Hunter region support for new housing development

Further to the 2024 report when the consultation by Resolve expanded the question to provide more information the following shift in views was observed (Figure 37).

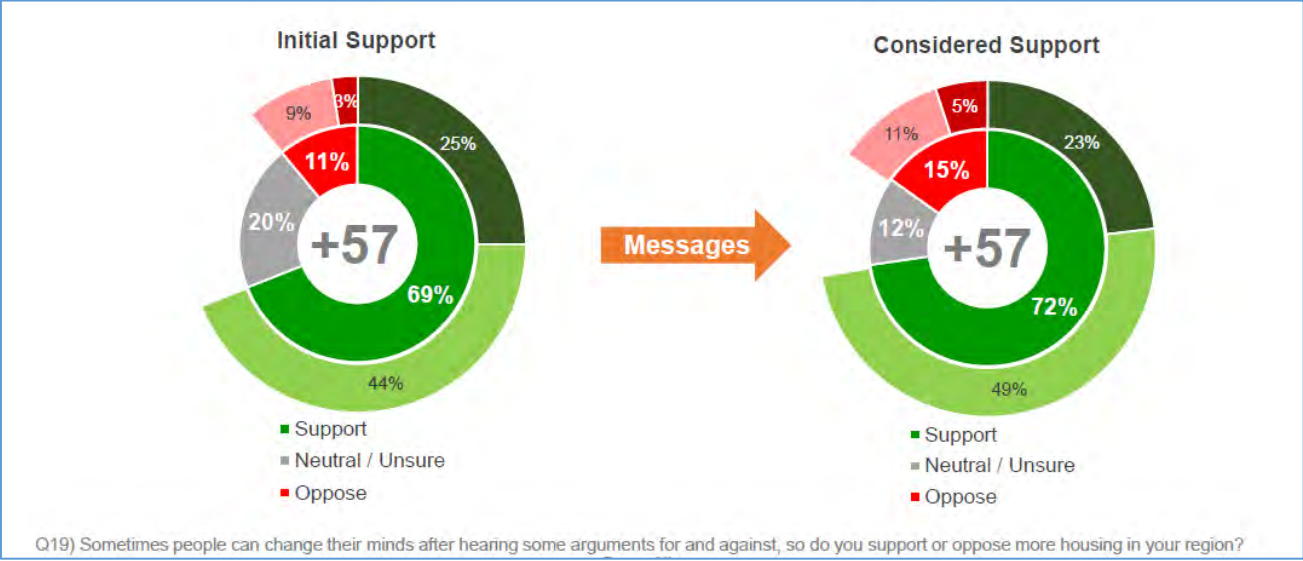


Figure 32 Shift in opinion once more detail provided.

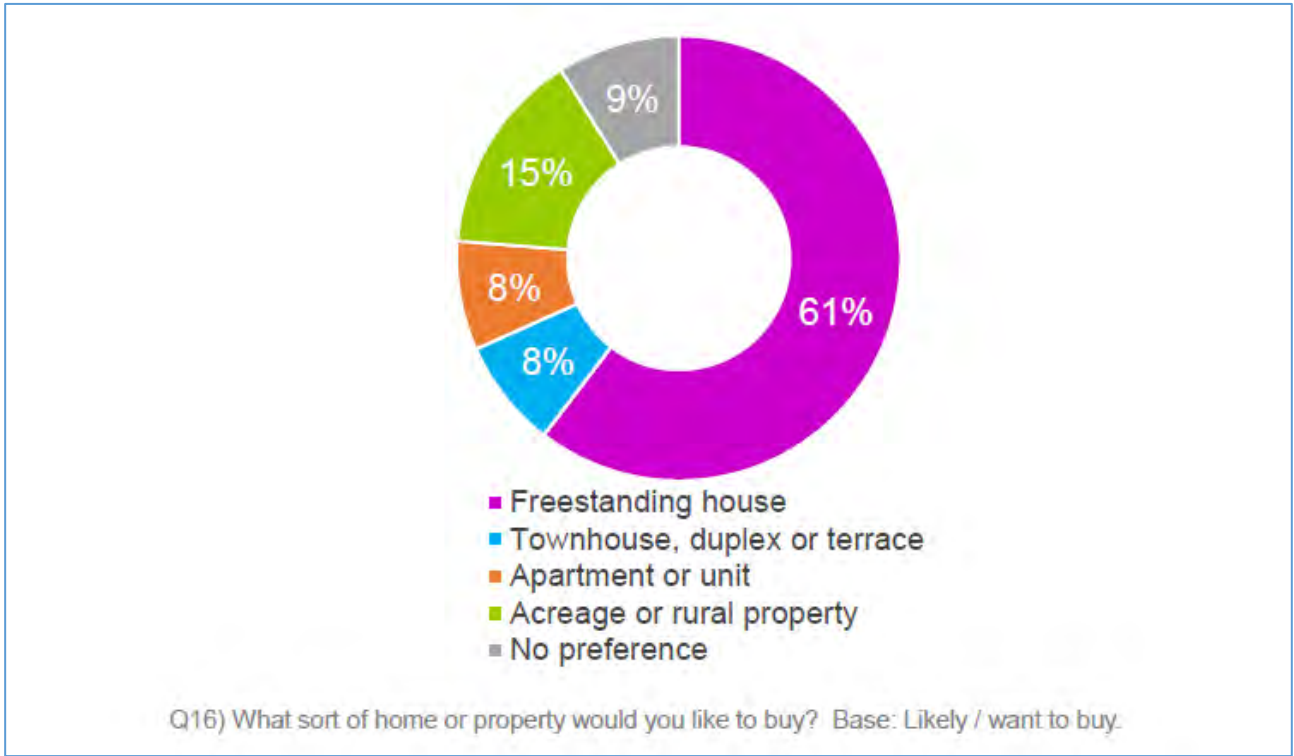


Figure 33 What type of home would you want to buy?

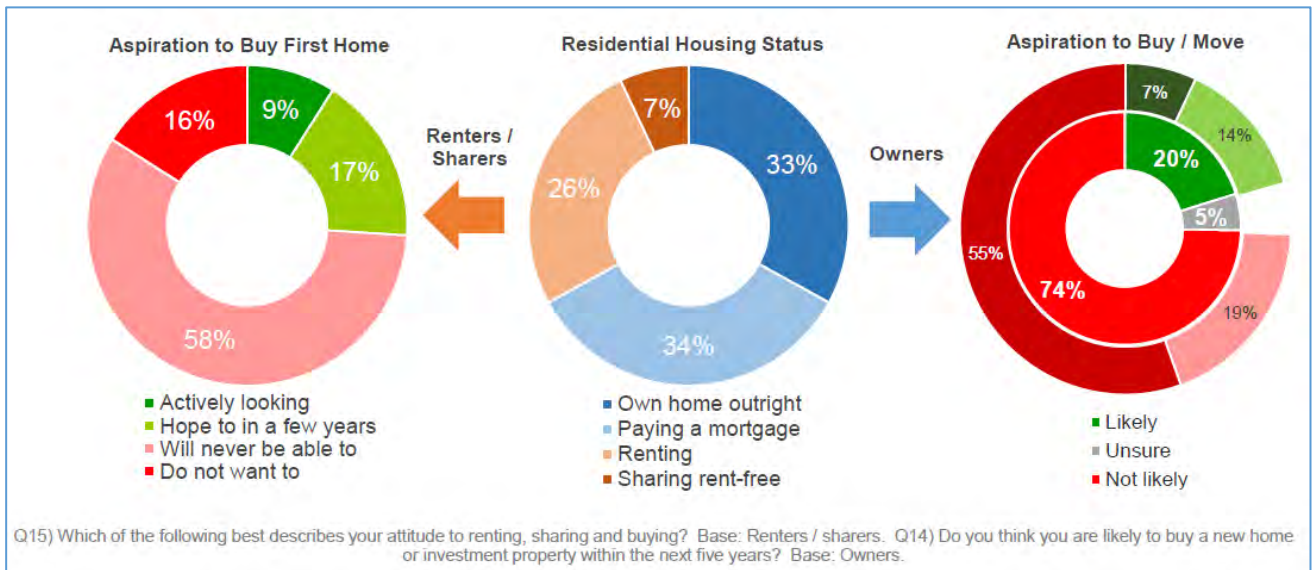


Figure 34 Attitude to wanting to buy a home.

It is a sobering statistic that over half of renters and sharers would like to buy a home but do not expect they will ever be able to do so. This dream is out of reach.

During the Resolve consultation program, living costs also feature prominently when locals were asked to rate a list of prompted issues. Of relevance to this study, housing and jobs are deemed important, but flora, fauna, planning and development are low order.

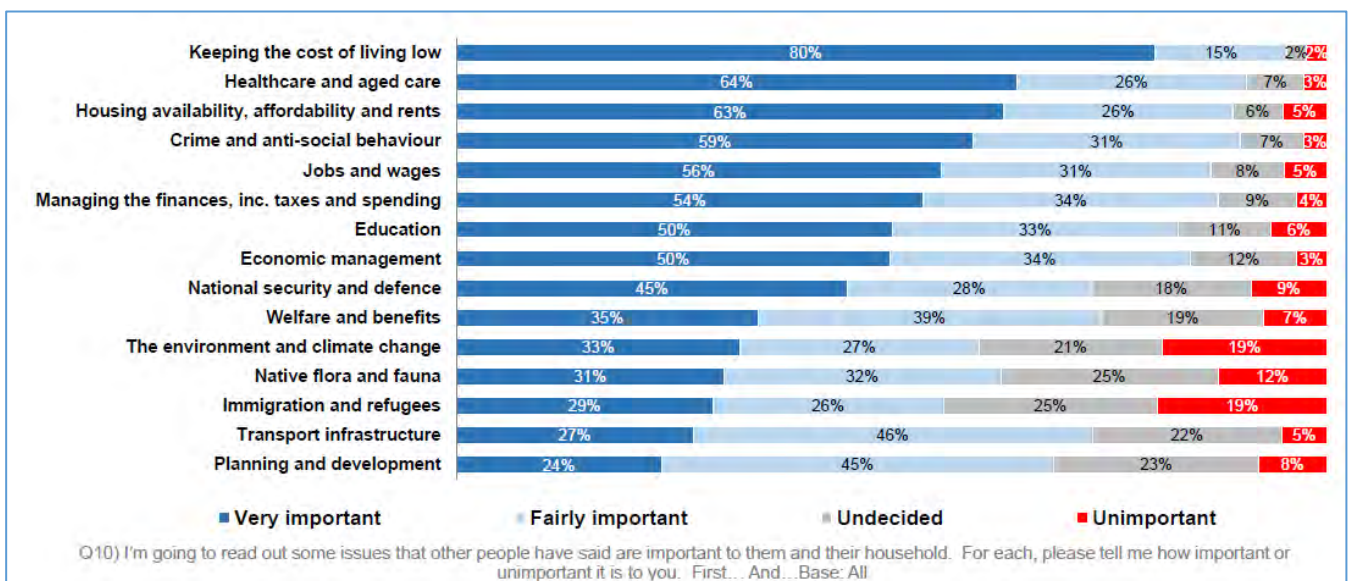


Figure 35 Prominent issues response.

When asked to nominate just one issue as a priority for governments to tackle, living costs were again in the number one spot. Housing availability, affordability and rents take second place, with wildlife, planning and development again lower order priorities.

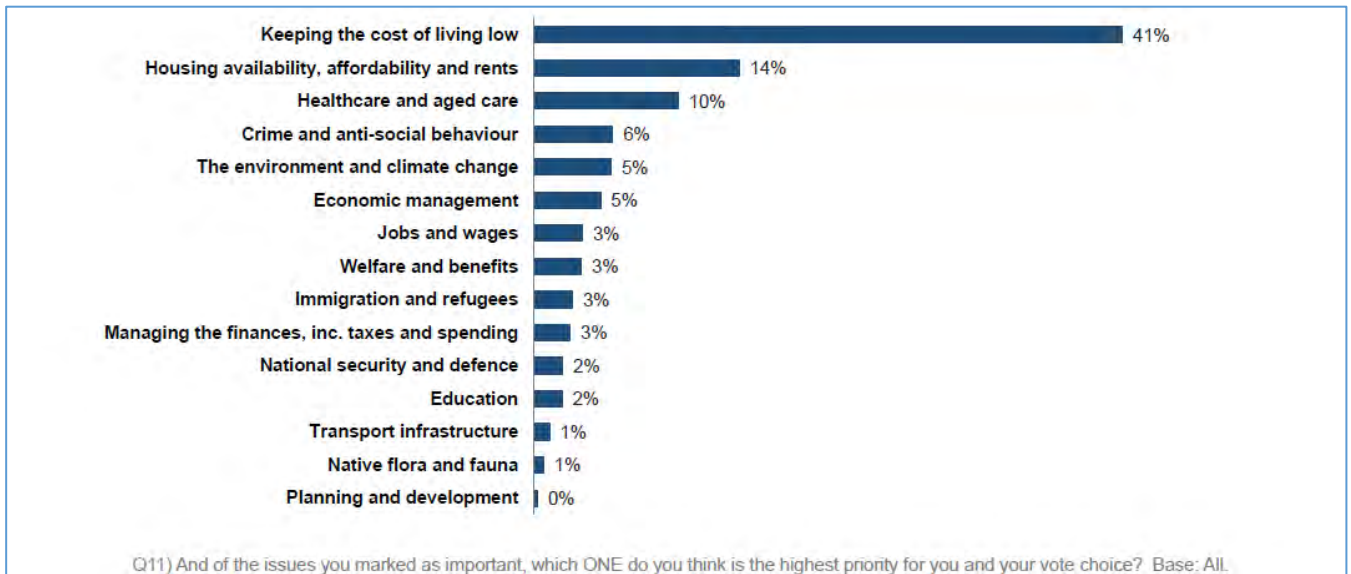


Figure 36 Single issue for governments to tackle.

The Resolve study was conducted to seek an understanding of the local community's views towards housing and their consideration of the level of importance of issues for them.

Crucially, 69% support more housing being built across the region, and only 11% oppose the idea to any extent.

Importantly, around half of mentions of housing related to prices, a third to rentals and another third to supply. Very few mentioned problems with quality or placement. The responses were focused on availability and affordability, which is judged to have very real and serious consequences. A sample of verbatim responses to the consultation on this issue were the following:

Q9) What are the most important issues to you and your family? Can you explain that? Anything else? Anything else? Base: All. – Housing related responses:

"I'm young, and house prices at a minimum of ten times my salary. It's ridiculous."

"We need housing solutions urgently. We've got enough space!"

"The price of rentals is expensive and there aren't that many around. I think a lot of places are holidays homes or offered on AirBnB."

"Try paying rent or a mortgage on Jobseeker!"

"There's real pressure on the market here. The amount of people moving to the area, the immigration into the country, is just overwhelming. There's jobs but nowhere to live."

"I probably won't be able to afford a home in my lifetime..."

"While house prices continue to go up wages don't, so you see so many people on Facebook saying they are becoming homeless, living in their cars or moving away."

"I don't own a property so I'm at the mercy of landlords and real estate agents."

"There's not enough fixed and low-income housing around here. I'm in a caravan park that wants to get rid of the caravans and annexes. If they do that, I'm homeless."

4.2 Post SEARs engagement program

Locally, there has been a consistent and organised campaign of interest and a level of consistent opposition to the redevelopment of the KHURA based on ecological issues and concern that any development will promote poor ecological outcomes. However, what is seen is that a comparison of the wider community concerns shows that this issue is of very low importance generally when compared to the issues of housing delivery.

The project benefits from a detailed program to develop a SPA, a 15 year long history of ecological analysis and progression of specific environmental considerations related to the proposal and the KHURA delivery. The proposal is also benefited from significantly progressed Part 5 application program with accompanying detailed designs of infrastructure components and supporting construction delivery methodology.

Additionally, the proposal is supported by a koala habitat assessment process , including expert input by DR Stephen Phillips (Biolink – engaged in collaboration by both council and KHD) over a significant number of years specific to this project and also the wider Port Stephen Koala Management Plan. These ecological studies are supported by independent expert peer review.

The EIS program is proposed to be supported by a detailed and robust engagement program to the community and specific ecological stakeholders by a suitably qualified and reputable social impact and engagement firm.

It is intended to seek a similar engagement program from Resolve prior to and during various stages of the anticipated assessment process. The engagement program will seek engagement with those in the community (the majority) that do not typically seek to be part of formal engagement and workshop programs.

Noting this is a challenging group to engage with, Resolve will be asked to devise a specific program and series of questions to inform the community of the proposal, if they are aware of the time period of delay and why and to enquire if they would seek to provide any views or seek further information on the proposal. The program will seek to inform the community about the options proposed for ecological management , the intended outcome of the proposal and how they feel about issues and their level of importance to them, how the KHURA proposal is linked to the delivery of state infrastructure as a requirement in the PSLEP and if they feel state government and specific agencies responsible for the management of housing delivery policy implementation programs should be assisting and promoting efficient process to deliver the sustainable outcomes of the KHURA.

Further, it is proposed specifically to request Resolve to devise a program of informing the community of the statutory framework and particularly the objectives and methodologies of the HRP2041 as an endorsed strategy of the NSW government and if the objectives and requirements of the HRP 2041 in relation to the KHURA should be applied by the department.

4.2.1 Summary of proposed engagement post issuing of SEARs

In addition to the Resolve program the project will also seek to engage in a consultation program guided and developed in line with the department's guide on social impact and community engagement.

Specifically, the following attributes will be applied:

- Engaging a respected and experienced consultant to prepare and manage a stakeholder engagement program.
- Establish a Community Consultative Committee for the project, in accordance with the department's *Community Consultative Committee guide*
- Leverage the existing project website to be relevant to the proposed engagement program with a specific process where community members can engage and be provided regular updates on key project actions and engagement activities.
- Commencing a program to support community education and seeking feedback from the community on the project in general with specific target to demographics groups with social media and other forms of media engagement to maximise a diverse range of stakeholder engagement.
- Progressing targeted engagement with ecological based local organisation stakeholders on the detailed assessment of key matters of interest.
- Continuation of the existing Aboriginal community engagement process and Local land council process.

[Appendix C2](#) of this report provides a summary synopsis of the program and desired methodology. The approach aims to balance the critical need for new housing, essential social infrastructure, with preservation of ecological values in a clear and transparent process.

5 Proposed assessment of impacts

The Environmental Impact Statement (EIS) for the Kings Hill concept proposal will assess the potential environmental, social and economic impacts of the project in accordance with Part 4, Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and relevant statutory instruments including the *State Environmental Planning Policy (Housing) 2021* (HSEPP), the *Biodiversity Conservation Act 2016*, and the *Coastal Management SEPP*. The assessment will be guided by the Secretary's Environmental Assessment Requirements (SEARs), once issued, and will draw on best-practice scientific and technical methods.

While the EIS will relate only to the land nominated for State Significant Development (SSD), the impact assessment will be informed by a broader precinct-based planning framework to ensure cumulative effects and interfaces with land subject to local development applications are transparently addressed. This integrated assessment approach reflects the coordinated delivery strategy for Kings Hill and seeks to support consistent planning outcomes across both local and State-led pathways.

Each relevant impact theme is addressed below, with consideration given to the required technical studies, methodological approach, and anticipated matters for agency and community interest. The assessment will be proportionate to the scale and complexity of the project, and will also be responsive to strategic objectives in the *Hunter Regional Plan 2041*, and the State's housing and environmental priorities. Specific reference will be made to agency guidelines, statutory triggers, and relevant planning policies to ensure alignment with the SEARs framework and to facilitate streamlined concurrence.

5.1 Biodiversity and ecological sustainability

The Kings Hill site contains a mosaic of ecological values, shaped by historical land disturbance, legacy extractive use, and ongoing urban pressure. While certain areas exhibit low ecological integrity, large sections retain vegetation communities with recognised habitat function, including for species listed under the *Biodiversity Conservation Act 2016*. The site also sits within the strategic footprint of the *Port Stephens Koala Strategy* and adjacent to habitat areas identified under the *Koala SEPP*. Two fragmented koala populations have been observed in proximity—north and south of the Pacific Motorway—highlighting the importance of restoring east–west and north–south connectivity. This presents an opportunity to deliver a development framework that integrates biodiversity values into structure planning, corridor protection, and long-term land stewardship.

A Biodiversity Development Assessment Report (BDAR) will be prepared in accordance with the *Biodiversity Assessment Method (BAM) 2020*, undertaken by an accredited BAM assessor. The BDAR will include site-specific vegetation mapping, floristic surveys, and targeted fauna assessments, supported by seasonal monitoring and GIS-based ecological modelling. Particular attention will be given to threatened ecological communities (TECs), hollow-bearing trees, and species with known or likely habitat in the project area (e.g. koala, grey-crowned babbler, phascogale, and squirrel glider). The BDAR will quantify direct and indirect impacts, including fragmentation, edge effects, and operational disturbance, and will propose avoidance, mitigation, and offset strategies consistent with BAM guidelines and applicable offset rules.

The assessment will also address the integration of ecological networks into the proposed concept plan, including staging and open space layout, fire edge interface management, and potential co-location of corridors and passive recreational space. The role of Aboriginal knowledge holders in shaping ecological stewardship strategies will be a core focus of the biodiversity approach, consistent with the NSW Government’s *Connecting with Country Draft Framework (2020)*. The EIS will identify how cultural values can inform koala habitat management, restoration planning, and education programs embedded in the development.

The BDAR will be supported by complementary studies including hydrology, bushfire, and urban design, to ensure that biodiversity outcomes are not treated in isolation but are interwoven into the precinct’s design and infrastructure logic. The approach reflects the principles of ecologically sustainable development under section 1.3 of the *EP&A Act* and aligns with the objectives of the *Hunter Regional Plan 2041*, which calls for biodiversity-led urban structure in growth precincts.

5.1.1 Commonwealth assessment under the EPBC Act

The project area includes native vegetation and potential habitat for species listed as matters of national environmental significance (MNES), including the koala (*Phascolarctos cinereus*), under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. In recognition of this, the proponent will refer the proposal to the Commonwealth Minister for the Environment to determine whether it constitutes a controlled action.

If the project is determined to be a controlled action, the proponent intends to pursue assessment under the bilateral agreement between the Commonwealth and New South Wales made under section 45 of the *EPBC Act*, enabling the NSW Environmental Impact Statement (EIS) to satisfy both State and Commonwealth assessment requirements. The assessment of MNES will be embedded within the broader biodiversity assessment and prepared in accordance with the *Significant Impact Guidelines*

1.1 (Matters of National Environmental Significance), including targeted survey methods, habitat mapping, and impact mitigation measures. Where applicable, offset requirements under the *EPBC Act Environmental Offsets Policy (2012)* will be coordinated with the NSW Biodiversity Offset Scheme to ensure consistency and avoid duplication.

This pathway supports consistency in ecological assessment and will facilitate early engagement with both State and Commonwealth regulators on the appropriate management of habitat and species conservation within the Kings Hill precinct.

5.2 Aboriginal cultural heritage

The land at Kings Hill forms part of a broader cultural landscape with ongoing significance to the Worimi people, the Traditional Custodians of this region. Historical disturbance, including grazing and extractive use, has altered some surface features; however, Aboriginal cultural heritage values extend beyond archaeological traces to encompass intangible connection, cultural landscape interpretation, and the role of Country in structuring long-term land use and stewardship. Building on the established agreement between Kings Hill Development Pty Ltd and the Worimi Local Aboriginal Land Council (WLALC), the project adopts a partnership approach to cultural heritage assessment and integration.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be prepared in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and relevant OEH/DPHI guidelines. This process will involve detailed desktop review, site inspections, and subsurface testing (where required), with direct involvement of Registered Aboriginal Parties (RAPs). The ACHAR will identify known or potential Aboriginal objects, places, and cultural values within the project area and assess the potential impacts of the proposed development on those values. The assessment will evaluate both physical and cultural heritage, recognising that Aboriginal connection to land is often expressed through continuing stories, practices, and responsibilities rather than solely material evidence.

Beyond the statutory ACHAR process, the project will also apply a *Connecting with Country* approach to structure planning, recognising that Aboriginal input can enhance ecological management, place-based design, interpretation, and education initiatives. Worimi knowledge holders will be invited to shape koala corridor design, bushfire interface planning, and open space programming. This will provide an enduring legacy for Worimi-led stewardship within the urban landscape and support broader government priorities for Indigenous participation in place-making and environmental management.

The ACHAR and cultural engagement program will also inform broader social impact and education planning, particularly in relation to opportunities for youth learning, cultural tourism, and reconciliation initiatives within the precinct. The assessment of Aboriginal heritage will be undertaken early in the EIS process to allow sufficient time for meaningful engagement, field survey coordination, and integration of outcomes into the concept master plan.

5.3 Historic heritage

Although the Kings Hill site is not known to contain listed heritage items under the *Heritage Act 1977* or the Port Stephens Local Environmental Plan, its historical land uses—including agricultural clearing, timber-getting, quarrying, and post-war rural occupation—may have contributed to landscape or structural elements of local significance. The cultural layering of land use across the site may also yield

evidence of early settlement-era modifications, such as fencing remnants, wells, track alignments, or building foundations associated with mid-20th century use.

A Historic Heritage Assessment will be undertaken to confirm the presence or absence of heritage fabric, structures or archaeological potential within the SSD site area. This work will be guided by the *NSW Heritage Manual*, *Archaeological Assessment Guidelines*, and LEP heritage schedules. The assessment will include: a comprehensive desktop study of available records and registers (including the State Heritage Inventory and local heritage studies); targeted site inspections; and, if required, archaeological testing to clarify subsurface potential. Particular consideration will be given to any potential for relics under section 4(1) of the *Heritage Act 1977*, which may require further approvals or mitigation.

The assessment will evaluate any potential heritage impacts associated with future development, including ground disturbance, visual setting changes, or removal of elements of historic interest. Where appropriate, recommendations will be made for conservation, adaptive reuse, documentation (archival recording), or interpretive integration of heritage values into the urban structure. This may include the use of signage, cultural trails, or place naming strategies to acknowledge the site's historic evolution and former land uses.

The outcomes of the Historic Heritage Assessment will be integrated with Aboriginal cultural heritage and social planning work to ensure that the cultural narrative of the site is fully understood and appropriately reflected in the development's identity and public domain design. The EIS will document the process and findings and include agency and community engagement undertaken in relation to any identified heritage features.

5.4 Social impact and affordable housing

The Kings Hill project responds directly to critical social and housing pressures affecting the Port Stephens and Greater Newcastle region. The concept proposal includes a minimum of 10% affordable housing across the SSD area and will be supported by a robust Social Impact Assessment (SIA) in accordance with the *Social Impact Assessment Guideline for State Significant Projects* (DPHI, 2021). The SIA will provide an evidence-based analysis of how the development will affect people, communities and local institutions, and ensure that housing, infrastructure and amenity outcomes are socially inclusive and responsive to need.

The assessment will draw on ABS census data, Housing Register demand profiles, service provider input and stakeholder engagement to identify local and regional demographic trends, service shortfalls, and priority cohorts in need of secure housing. It will assess potential social risks and benefits, including access to employment, education, health and open space, and consider distributional equity across dwelling types, tenure options and precincts. The SIA will also assess the integration of social infrastructure—such as early education, community centres and health support—across staging plans. This will assist in defining a logical sequence of delivery that supports social cohesion, safety and inclusiveness from the earliest stages of occupation.

A core component of the SIA will be the design and implementation of an *Affordable Housing Strategy* for the SSD component, supported by financial modelling and delivery pathway analysis. The strategy will identify how a minimum of 10% affordable housing can be feasibly delivered, managed and maintained over the long term. It will also test the potential to exceed this threshold through innovative funding mechanisms, partnerships with Community Housing Providers (CHPs), or cross-subsidised

delivery models. Spatial distribution principles will ensure that affordable housing is tenure-blind, well integrated into the neighbourhood fabric, and located in proximity to open space, services and transport.

The SIA will also consider the diversity of built form required to support socially sustainable outcomes, including apartment, manor house and terrace formats, adaptable housing, dual-key models, and dwellings suitable for older people, single parents, key workers and people living with disability. Consultation with CHPs, local councils, health agencies and education providers will be undertaken to ensure the housing and infrastructure design meets the needs of both incoming and existing communities.

Importantly, the assessment will articulate how the SSD concept plan supports the social objectives of the *Housing SEPP*, the *Hunter Regional Plan 2041*. It will demonstrate how the project goes beyond compliance to proactively structure a new urban precinct around long-term housing need, resilience and inclusion.

5.5 Urban design and visual impact

The concept proposal will be supported by a comprehensive Urban Design Report that articulates the urban structure, built form typologies, public domain interfaces and view impacts associated with the development. The report will provide a precinct-wide vision for how Kings Hill can deliver high-quality, walkable, mixed-tenure communities that integrate housing, open space, and infrastructure in a coherent and place-responsive framework. This assessment will reflect State and local design guidance, including the *Apartment Design Guide*, *Urban Design for Regional NSW*, and relevant council development controls.

The urban design strategy will describe the spatial organisation of the SSD precincts, including: the layout of the movement network; neighbourhood nodes and centres; public open space distribution; interface with natural features and vegetation; built form envelopes; and transition edges with existing or future urban development. Particular attention will be paid to the staging logic, ensuring that early phases establish strong amenity, safety, connectivity and urban legibility. The strategy will define a structure of streets, parks and blocks that reinforces a fine grain, walkable and climate-responsive neighbourhood model.

A visual impact assessment will be undertaken to evaluate views to and from the site, including long-range view corridors from elevated land east of the Pacific Motorway and short-range views from surrounding rural-residential areas. The assessment will identify potential massing and height impacts and propose strategies for visual absorption, interface planting, and stepped built form where necessary. 3D modelling and cross-sectional views will assist in demonstrating how the proposal responds to the site's topography and surrounding context.

Design excellence principles will underpin the plan-making process, including attention to solar access, streetscape quality, passive surveillance, orientation, and adaptable built form. The Urban Design Report will also articulate how the project reflects place identity, integrates with ecological features and koala corridors, and supports high-quality public domain design that encourages community interaction, inclusion and active lifestyles. These elements will inform the development of future design guidelines or DCP provisions for detailed built form stages.

The visual and urban design components will support the project's broader planning merit and assist in demonstrating compatibility with surrounding land use character under the *EP&A Act* and *Housing*

SEPP. They will also align with the place-based objectives of the *Hunter Regional Plan 2041*, which encourages well-designed, sustainable and inclusive growth precincts.

5.6 Traffic, transport and access

A comprehensive Transport Impact Assessment will be prepared in accordance with Transport for NSW's *Guide to Traffic Generating Developments* and associated SSD assessment protocols. The assessment will address the likely transport impacts of the concept proposal, including both interim and ultimate scenarios based on anticipated development yield, staging, modal share, and infrastructure delivery timeframes. The objective of the assessment is to ensure that the future road, active transport, and public transport network can support the proposed urban outcomes without causing unreasonable congestion, safety issues, or access inequities for existing or future users.

The Transport Impact Assessment will assess: existing and future traffic volumes; network capacity and level of service for key intersections and corridors; trip generation and distribution patterns for residential and supporting uses; and the cumulative impacts of SSD and non-SSD precincts under the wider Kings Hill planning framework. The modelling will take account of committed and proposed upgrades by council and State agencies, including any improvements to regional connectivity, key collector roads, and public transport services. SIDRA or equivalent traffic modelling software will be used to simulate key intersections and network performance under projected development staging.

The assessment will also evaluate pedestrian and cycle movement, particularly in relation to safe access to neighbourhood centres, schools, open space and public transport. Active transport infrastructure—including shared paths, pedestrian priority treatments, and green links—will be integrated into the structure plan to promote walkability and healthy movement options. Opportunities to co-locate active transport with ecological corridors or riparian zones will also be tested, where consistent with environmental and cultural outcomes.

A preliminary public transport assessment will be undertaken in consultation with TfNSW and local bus operators to assess the current level of service and future coverage requirements. This will inform proposed road cross-sections, turning paths, bus stop locations and walkable catchment radii. Car parking and access principles will be defined in accordance with the *Housing SEPP*, the *Apartment Design Guide*, and council DCP rates, with consideration given to on-street versus off-street provision, visitor parking, and controls to manage overspill or clustering impacts.

The EIS will document mitigation strategies to address any identified impacts, including staged infrastructure upgrades, developer contributions, intersection improvements or bus service enhancement. The transport strategy will form a core element of the concept plan and will be coordinated with the staging, urban design, and social infrastructure assessments to ensure integrated delivery across the precinct.

5.7 Flooding, stormwater and water cycle management

The Kings Hill site includes multiple sub-catchments, with areas of variable topography, historical disturbance, and interface with downstream water-dependent ecosystems. A flood impact and stormwater management strategy will be prepared to assess the site's suitability for urban development in accordance with the *NSW Floodplain Development Manual (2005)*, the *Water Management Act 2000*, and council's stormwater and development control policies. The strategy will address both flood risk

and integrated water cycle management objectives to ensure that stormwater runoff is managed in a way that protects environmental values, supports amenity, and facilitates staged delivery.

Flood modelling will be undertaken using a combination of hydrologic and hydraulic models to determine the extent and frequency of flood inundation across the site. This will identify high hazard areas, safe evacuation paths, and required development setbacks from flood-affected land. The assessment will also test cumulative effects from the full build-out of the precinct, accounting for climate change sensitivity scenarios, sea level rise (if applicable), and local drainage constraints. These findings will inform the concept layout, zoning and infrastructure delivery strategy to ensure appropriate sequencing and minimise flood-related risks.

The stormwater management framework will adopt a water sensitive urban design (WSUD) approach and will address the quantity and quality of runoff under each development stage. It will include proposed detention and retention strategies, treatment train design, and proposed management of pollutant loads and sedimentation during both construction and operation phases. The plan will include potential locations for bio-retention basins, gross pollutant traps, vegetated swales, and wetlands integrated with the open space and environmental corridor network. Design objectives will be guided by council's WSUD policy, the *Managing Urban Stormwater: Soils and Construction* guidelines (4th edition), and *Australian Rainfall and Runoff (2019)* principles.

Groundwater conditions will also be reviewed, particularly where interaction with wetlands, shallow water tables, or contaminated fill is anticipated. Where necessary, additional studies (e.g. hydrogeological investigations or groundwater modelling) will be completed to inform wetland protection strategies and to mitigate any risk of groundwater mounding, interception or degradation. Integration of stormwater and flooding assessments with the broader ecological, contamination, and urban design assessments will ensure the project delivers a safe, resilient and environmentally responsible urban water cycle.

5.8 Contamination and geotechnical constraints

The Kings Hill site includes areas of known historical disturbance, including former quarrying, earthworks, and landfill operations. A staged approach to geotechnical investigation and contamination assessment has already commenced, with initial findings indicating that with appropriate remediation and management, the land can be made suitable for its intended residential and infrastructure purposes. The EIS will consolidate and update these studies to provide a detailed and site-specific understanding of sub-surface conditions, environmental constraints, and required land preparation measures.

A Detailed Site Investigation (DSI) will be prepared in accordance with the *Contaminated Land Management Act 1997*, the *Managing Land Contamination Planning Guidelines* (EPA/DUAP, 1998), and the National Environment Protection Measure (NEPM) for contaminated sites. The DSI will assess: the location and extent of any contaminated soil or fill; the presence of hazardous substances including asbestos, heavy metals, hydrocarbons or leachate; the potential for soil gas migration or vapour intrusion; and any identified risk to human health or sensitive receptors. The findings will be used to define a remediation action plan (RAP), where required, and to confirm that each precinct of land is or can be made suitable for its proposed use in accordance with the *National Environmental Health Standing Committee (enHealth)* guidance.

In parallel, a Geotechnical Investigation will be prepared in accordance with AS 1726–2017 *Geotechnical Site Investigations*, and will include assessment of soil classification, fill depth and stability, bearing capacity, excavation conditions, and potential geohazards such as acid sulfate soils or ground movement. Areas of cut and fill will be reviewed to confirm slope stability and foundation suitability for future built form. Recommendations will be made regarding ground improvement, footing design, and bulk earthworks sequencing, to support the civil engineering design and ensure future certification pathways under subdivision and construction approvals are not constrained.

Legacy issues such as methane and leachate migration from historic fill and adjacent landfill activity will also be addressed, including the installation of monitoring bores and gas testing to assess off-site migration risk and any implications for dwelling siting or infrastructure installation. Where appropriate, buffer zones, ventilation measures or gas membranes may be incorporated into the planning and design solution.

Together, the geotechnical and contamination assessments will provide the evidence base to demonstrate that the site is physically capable of supporting the intended development and that risks to human health and the environment can be appropriately mitigated. This work will also support the sequencing of future development staging and subdivision approvals.

5.9 Bushfire risk

The Kings Hill site is identified as bushfire prone land under the certified bushfire mapping prepared by Port Stephens Council. The site includes direct interface with native vegetation corridors and undeveloped land to the west and south, creating exposure to potential bushfire attack under a range of topographic and weather scenarios. A Bushfire Risk Assessment will be prepared to inform the concept layout and ensure compliance with *Planning for Bush Fire Protection 2019 (PBP)* and section 4.14 of the *Environmental Planning and Assessment Act 1979*, which requires consideration of bushfire risk in all development applications on bushfire-prone land.

The assessment will be undertaken by a suitably qualified bushfire consultant and will include site-specific analysis of vegetation classification, slope analysis, bushfire attack levels (BAL), access for firefighting, water supply, and asset protection zones (APZ). A key focus will be to determine how APZs can be integrated within the development structure (e.g. through road edges, open space or riparian buffers) to ensure effective bushfire mitigation without compromising ecological, cultural or urban design values.

The Bushfire Risk Assessment will also consider staging implications, particularly how early development phases can be delivered while maintaining safe emergency access, defensible space and continuity of infrastructure. Emergency evacuation modelling may be undertaken to test local road network performance under bushfire threat scenarios, including identification of potential pinch points and opportunities to improve regional connectivity. Where relevant, the findings will be coordinated with the Traffic and Flooding Assessments to identify any constraints to safe evacuation and firefighting access.

Consideration will also be given to the protection of vulnerable and disadvantaged populations within the precinct, including social and affordable housing residents, older people, and people with disability. The assessment will define specific design responses and staging safeguards to ensure that bushfire resilience is embedded into the physical and social infrastructure of the development.

The outcomes of the bushfire assessment will directly inform the concept master plan and any necessary conditions or controls to be applied through subdivision and detailed DA stages. The development will be designed to be consistent with the principles of *ecologically sustainable development*, balancing fire safety, ecological values and long-term land use viability.

5.10 Wetlands and coastal environmental planning

Portions of the Kings Hill site are affected by mapped coastal wetlands under the *State Environmental Planning Policy (Resilience and Hazards) 2021*, specifically the provisions formerly embedded in the *Coastal Management SEPP*. These areas lie predominantly along drainage depressions and shallow riparian corridors near the site's eastern edge and present potential constraints to development unless appropriately planned for, assessed and managed. In addition to mapped wetlands, the site includes land within the *proximity area for coastal wetlands*, which triggers additional assessment and consultation requirements under the SEPP framework.

A targeted Wetland Impact Assessment will be undertaken to identify the location, type, function and environmental condition of these features. The assessment will define the spatial extent of any relevant wetland vegetation, water-dependent ecosystems or groundwater-dependent ecosystems (GDEs), and will consider the cumulative influence of historical land disturbance, altered hydrology, and nutrient or sediment inputs. This assessment will build on existing ecological and hydrological studies and will be supported by field validation, mapping, and groundwater level testing where necessary. It will be informed by the *Wetlands Policy of the Commonwealth Government of Australia (1997)* and the Ramsar principles where relevant, although the site does not contain any formally listed Ramsar wetlands.

Where wetlands or watercourses are confirmed to be ecologically or hydrologically significant, the development will seek to avoid encroachment into these areas, establish appropriate buffers, and incorporate passive stormwater treatment and filtration methods. The role of wetlands as ecological assets and their potential co-benefits in stormwater treatment, microclimate control, and passive recreation will also be considered. Opportunities to integrate wetlands into the open space and koala corridor network will be evaluated, provided such integration does not compromise ecological or hydrological performance.

The project team acknowledges that the current EPI mapping may include anomalies or legacy data that require clarification. Accordingly, a request to review or amend the mapped wetland boundaries may be made through the EIS process, supported by verified field data and expert justification. Where such adjustments are proposed, a clear rationale will be provided, including consistency with the objectives of the *Coastal Management Act 2016*, the *Water Management Act 2000*, and the broader ecological and planning framework.

The assessment will also ensure that no adverse downstream impacts occur to receiving waters or coastal floodplains, particularly in high rainfall events or under urbanisation scenarios. This analysis will be coordinated with the flood and stormwater assessment to demonstrate an integrated, low-impact approach to water cycle and landscape planning.

5.11 Noise and vibration

The Kings Hill site is subject to several existing and potential noise sources, including the Pacific Motorway (M1), proximity to regional road infrastructure, operational landfill activities to the east, and intermittent aircraft overflight from nearby aviation facilities. A detailed Noise and Vibration Impact

Assessment will be prepared in accordance with the *NSW Noise Policy for Managing Noise from Industrial Premises (2017)*, the *Infrastructure SEPP noise criteria*, and the *NSW Road Noise Policy (2011)*. The assessment will identify potential noise impacts arising from both external sources and future internal development operations, including construction and occupation phases.

The study will quantify background noise levels through unattended noise monitoring at representative receiver locations across the precinct. Noise modelling will be undertaken to assess LAeq and LMax levels under existing and projected future conditions, with particular attention to dwellings and sensitive land uses (e.g. schools, childcare, aged care) proposed adjacent to known or likely noise sources. Vibration risk will also be assessed for key infrastructure construction activities such as bulk excavation or civil engineering works, especially where in proximity to existing structures or environmentally sensitive areas.

The assessment will inform the master planning process, including:

- Establishment of appropriate interface buffers or landscape treatments;
- Acoustic performance requirements for future buildings (e.g. glazing, wall and roof construction);
- Road network design to manage traffic noise propagation; and
- Noise-sensitive use allocation and orientation strategies within blocks.

Opportunities for noise mitigation through urban design (e.g. dwelling orientation, podium treatments, topography, passive screening via berms or vegetation) will be explored prior to relying on built form mitigation. Where relevant, the report will set design parameters for future stages and inform the conditions under which future subdivision or built form DAs must demonstrate compliance.

Construction noise and vibration impacts will also be addressed, with reference to the *Interim Construction Noise Guidelines (2009)*. The EIS will define anticipated construction methodologies, indicative plant and equipment, duration and hours of work, and outline the requirement for construction noise and vibration management plans (CNVMPs) as part of future conditions of consent.

Cumulative noise impacts will be evaluated where development staging overlaps or interfaces with other non-SSD precincts or State infrastructure. Engagement with council, EPA, and potentially affected stakeholders will be undertaken to test assumptions and verify appropriate mitigation strategies.

5.12 Air quality and odour

The Kings Hill site is located in proximity to several potential air quality and odour sources, including the existing landfill facility to the east, high-volume traffic corridors (notably the Pacific Motorway), and future construction activities associated with both local and State-led development stages. A comprehensive Air Quality and Odour Impact Assessment will be undertaken to assess both existing ambient conditions and potential future impacts associated with development. The assessment will be prepared in accordance with the *NSW EPA Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016)*, the *National Environment Protection (Ambient Air Quality) Measure (NEPM)*, and the *Technical Framework for Odour Assessment (EPA, 2006)*.

Baseline air quality conditions will be determined through a combination of desktop review, meteorological analysis and, where required, on-site monitoring of key pollutants such as particulate

matter (PM10 and PM2.5), nitrogen oxides, and ozone. These pollutants are relevant to nearby traffic corridors and any potential legacy emissions from adjacent industrial or landfill uses. Modelling will be undertaken using appropriate dispersion software (e.g. CALPUFF, TAPM) to predict concentrations of pollutants at sensitive receiver locations, particularly within early residential stages closest to potential emission sources.

The odour assessment will consider:

- Current and historic operations of the adjacent landfill and any legacy gas migration.
- Potential influence of prevailing winds on odour dispersion.
- Seasonal variation and time-of-day sensitivity.
- Buffer distances required to mitigate potential nuisance or health risk.

Where required, engagement with the landfill operator and Port Stephens Council will be undertaken to clarify existing landfill management practices and to define appropriate interface and design responses. These may include minimum separation distances, vegetation buffers, land use zoning transitions, and appropriate building orientation or ventilation measures.

The construction phase of the project will also be assessed in terms of dust generation and diesel emissions from plant and vehicle movements. The assessment will define mitigation measures consistent with the *Managing Urban Stormwater: Construction Guidelines*, including dust suppression strategies, equipment controls and scheduling to avoid adverse cumulative effects.

The air quality and odour assessment will inform the layout, staging and development parameters of the concept plan and will be integrated with broader environmental health, social impact and design assessments to ensure a safe, comfortable and resilient living environment. Where appropriate, conditions or guidelines for detailed subdivision or built form DAs will be recommended.

5.13 Hazards and risk

A range of natural and anthropogenic hazards have been identified as potentially relevant to the Kings Hill site, including bushfire, landfill gas migration, flooding, aircraft operations, and construction-related environmental risks. The EIS will include a comprehensive Hazard and Risk Assessment to identify, characterise and appropriately manage these risks across the lifecycle of the proposed development. This assessment will be prepared in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021*, the *SEPP (Transport and Infrastructure) 2021*, and relevant EPA, CASA and NSW Health guidance.

5.13.1 Aircraft operations and OLS penetration

Portions of the site fall within the obstacle limitation surface (OLS) and controlled airspace buffer for regional aviation operations. A preliminary Obstacle Assessment will be undertaken in consultation with the Civil Aviation Safety Authority (CASA) and relevant airport authorities to determine the maximum building height envelope permissible under the *Airspace Protection Regulations*. This analysis will inform the urban design and height strategy for the site and will ensure that no structures compromise navigational safety or airspace regulatory compliance.

5.13.2 Landfill gas and leachate migration

Due to historical and ongoing landfill activity on adjacent land, there is a potential for off-site migration of methane, carbon dioxide, leachate or other by-products of waste decomposition. The EIS will include a landfill gas and leachate assessment in accordance with EPA landfill management guidelines. Monitoring wells and gas testing may be conducted at the interface with the landfill boundary to identify whether any migration is occurring and whether risk pathways exist to future development. Risk management options may include buffer zones, gas membranes, ventilation systems, and land use allocation controls.

5.13.3 Ground stability and geotechnical hazards

As discussed in Section 6.8, areas subject to historical quarrying or unconsolidated fill will be reviewed for geotechnical stability, landslip risk, and excavation feasibility. These hazards will be managed through appropriate engineering design, site remediation and, where needed, development exclusion zones.

5.13.4 Flood and evacuation-related hazard

Residual flood risks identified in the stormwater and flooding assessment (Section 6.7) will be incorporated into the hazards assessment, with particular focus on evacuation route functionality, access continuity and staging implications for vulnerable populations during flood or bushfire events.

5.13.5 Acid sulfate soils (ASS)

The potential for acid sulfate soils will be assessed in accordance with the *Acid Sulfate Soils Manual* and LEP mapping. Where identified, an ASS Management Plan will be prepared to inform earthworks and construction controls.

5.13.6 Cumulative hazard risk and mitigation

All hazard categories will be evaluated in combination to determine any cumulative risk to health, safety or environmental performance. The EIS will identify any residual risks that cannot be mitigated through standard planning, design or engineering controls and recommend conditions or development exclusions as required.

The hazard and risk assessment will ensure that the development meets the objectives of the *EP&A Act* in relation to orderly and safe land use and provides a robust evidence base to support the staging, infrastructure and layout decisions embedded in the SSD concept plan.

5.14 Infrastructure and utilities

A detailed assessment of infrastructure capacity and utility servicing will be undertaken to ensure that the Kings Hill development can be feasibly and sustainably delivered in accordance with staging, yield and precinct layout. This Infrastructure and Utilities Assessment will address water supply, wastewater, stormwater, electricity, telecommunications, and gas, and will be prepared in consultation with relevant asset owners, including Hunter Water, Ausgrid, NBN Co and Port Stephens Council.

The assessment will confirm existing network capacity, identify augmentation or connection requirements, and define servicing strategies aligned with staging of development and civil works delivery. Key objectives include:

- Supporting early occupation phases without overloading existing off-site infrastructure;
- Providing for timely and cost-effective upgrades where required; and
- Integrating utility corridors with road networks, open space and koala connectivity where possible.

5.14.1 Water and wastewater

Hunter Water will be consulted early to confirm existing headworks capacity and proposed extension of services into the site. The EIS will define a sewer servicing strategy including proposed connection points, pumping requirements, pipe alignments and staging. Opportunities for water efficiency, non-potable reuse and integration with WSUD measures will be explored to reduce long-term system demand.

5.14.2 Electrical and telecommunications

Ausgrid and NBN Co will be engaged to confirm power and telecommunications servicing strategies. Electrical infrastructure planning will consider load demand projections, potential for embedded networks, and integration of street lighting and smart city systems. Telecommunications planning will support delivery of high-speed broadband to all stages of the development.

5.14.3 Gas

The assessment will confirm whether reticulated gas is available or proposed for the site and whether alternative energy provisions (e.g. electric-only precincts) should be explored, consistent with net-zero targets and infrastructure policy trends.

5.14.4 Staging and delivery

The infrastructure strategy will include an implementation plan that aligns utility delivery with housing rollout. This will define logical sequencing of precincts and identify enabling works required to unlock early stages. Where infrastructure crosses public or environmentally sensitive land, appropriate easements or agreements will be secured. Development contributions, VPA mechanisms or servicing agreements will be considered where augmentation is needed.

The EIS will demonstrate that infrastructure delivery can occur in a timely and coordinated manner and will not impede the project's urban, environmental or social outcomes. It will also ensure that infrastructure and servicing needs of the SSD area are considered in an integrated way with the remainder of the Kings Hill release area.

5.15 Recommended secretary's environmental assessment requirements

To assist the Department in formulating the Secretary's Environmental Assessment Requirements (SEARs), the following draft requirements are proposed based on the identified key issues and relevant statutory obligations:

5.15.1 Biodiversity and ecological sustainability

The Environmental Impact Statement (EIS) will assess potential impacts on native vegetation, fauna, and threatened ecological communities, including species listed under the *Biodiversity Conservation Act 2016*. A Biodiversity Development Assessment Report (BDAR) will be prepared in accordance with the *Biodiversity Assessment Method 2020*. The proposal will demonstrate how ecological values are integrated into the urban structure through the inclusion of habitat corridors, koala habitat protection, and long-term environmental management strategies. The assessment will also address biodiversity offset requirements consistent with the NSW Biodiversity Offset Scheme. Aboriginal cultural input will be incorporated into ecological and open space planning, drawing on the principles outlined in the *Connecting with Country Framework*.

5.15.2 Commonwealth environmental matters

The EIS will identify whether the project is likely to significantly impact matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Where a controlled action is determined, the assessment will be undertaken in accordance with the bilateral agreement between the Commonwealth and NSW. The EIS will contain sufficient information to support EPBC approval, where relevant.

5.15.3 Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be prepared in consultation with Registered Aboriginal Parties and in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)*. The assessment will consider both archaeological and intangible cultural values. Aboriginal perspectives will inform ecological planning, open space networks and place-making strategies within the master plan.

5.15.4 Historic heritage

The EIS will assess potential impacts on historic heritage, including archaeological sensitivity, in accordance with the *Heritage Act 1977*, relevant local environmental plans and the *NSW Heritage Manual*. Where relics may be affected, the assessment will identify appropriate mitigation, conservation or interpretation measures.

5.15.5 Social impact and affordable housing

A Social Impact Assessment (SIA) will be undertaken in accordance with the *Social Impact Assessment Guideline for State Significant Projects (2021)*. The assessment will address the social implications of the development, including demand for services and infrastructure. An Affordable Housing Strategy will be prepared to confirm delivery mechanisms, tenure mix, integration within the precinct, and partnerships with Community Housing Providers. The EIS will also identify priority population groups and assess how their needs will be met.

5.15.6 Urban design and visual impact

An Urban Design Report will be prepared addressing built form strategy, landscape and open space networks, interface conditions and integration with the public domain. Visual impact will be assessed,

including the extent of visibility from surrounding areas and proposed mitigation measures to manage adverse impacts.

5.15.7 Traffic, transport and access

A Transport Impact Assessment will be undertaken in accordance with *Transport for NSW's Guide to Traffic Generating Developments*. The EIS will model vehicle, pedestrian and cyclist movements and identify infrastructure upgrades or interventions required to support safe, efficient access and staging. Parking, access and public transport integration will also be addressed.

5.15.8 Flooding, stormwater and water cycle management

Flooding and stormwater impacts will be assessed consistent with the *Floodplain Development Manual* and relevant council policies. The EIS will identify water-sensitive urban design responses and provide a framework for integrated water cycle management.

5.15.9 Contamination and geotechnical conditions

Detailed Site Investigations (DSI) will be undertaken and a Remediation Action Plan prepared if required, in accordance with the *Managing Land Contamination: Guidelines for NSW*. A Geotechnical Assessment will inform infrastructure and road delivery, as well as staging of built form.

5.15.10 Bushfire risk

A Bushfire Risk Assessment will be prepared consistent with *Planning for Bushfire Protection 2019*. The assessment will demonstrate how risk mitigation measures are embedded in the layout, access arrangements and staging strategy.

5.15.11 Wetlands and coastal management

The proposal will identify and assess any coastal wetlands or proximity areas in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021*. The assessment will confirm wetland location, condition and ecological value, and define avoidance, buffer or integration strategies as required.

5.15.12 Noise and vibration

The EIS will assess both construction and operational noise and vibration impacts, referencing the *NSW Noise Policy for Industry (2017)* and *Interim Construction Noise Guidelines (2009)*. Mitigation measures for sensitive receivers and design controls for subsequent detailed applications will be outlined.

5.15.13 Air quality and odour

Existing air quality conditions and potential impacts will be assessed in accordance with the *National Environment Protection (Ambient Air Quality) Measure* and relevant EPA guidance. Odour impacts, particularly those related to nearby landfill operations, will also be addressed through interface planning and mitigation strategies.

5.15.14 Hazards and risk

A cumulative Hazard and Risk Assessment will be prepared to address potential risks associated with landfill gas, bushfire, flooding, geotechnical hazards and proximity to aircraft operations. The assessment will demonstrate that risks can be effectively managed throughout the development lifecycle.

5.15.15 Infrastructure and utilities

The EIS will confirm the servicing strategy for water, wastewater, electricity, gas, telecommunications and stormwater. Staging of infrastructure will be coordinated with land release and housing rollout. The assessment will identify augmentation needs and outline appropriate delivery mechanisms, in consultation with relevant agencies.

5.16 Conclusion to Section 6

This section has outlined the comprehensive assessment framework that will underpin the Environmental Impact Statement for the Kings Hill State Significant Development (SSD) proposal. The scope and methodology of each study have been tailored to reflect the site's physical characteristics, ecological values, cultural and social context, and regional infrastructure settings. The assessments will be prepared in accordance with relevant statutory instruments, guidelines and agency protocols, ensuring that environmental, social and economic impacts are addressed in a proportionate and coordinated manner.

Consistent with the integrated planning approach for Kings Hill, the EIS will assess cumulative effects across the broader precinct while maintaining a clear focus on the SSD site. Technical studies will inform the design and staging of the concept plan and will support the delivery of a safe, resilient and well-serviced urban outcome aligned with the objectives of the Housing SEPP and the Hunter Regional Plan 2041.

The assessment will also consider the potential for impacts on matters of national environmental significance (MNES), particularly koala habitat, and will be supported by a referral under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Should the project be determined a controlled action, the proponent will seek to progress assessment under the bilateral agreement between the Commonwealth and New South Wales, enabling the EIS to satisfy both State and Federal requirements.

To support clarity and transparency, an assessment matrix has been provided below. The matrix summarises the key environmental themes, identifies proposed technical studies, and outlines the relevant legislative and policy framework that will guide the preparation of the EIS.

6 Appendix A1 – Scoping summary table

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Detailed	Biodiversity and ecological sustainability	Y	Targeted engagement with DCCEEW (Biodiversity Division and Koala Strategy team); coordinate with Port Stephens Council ecologists; early agency input on corridor protection, offsetting and SEPP Koala application	Biodiversity Conservation Act 2016; Biodiversity Assessment Method 2020; Port Stephens Koala Strategy; Hunter Regional Plan 2041	Section 6.1
Detailed	Commonwealth EPBC Act matters	Y	Bilateral referral and early liaison with DAWE (Commonwealth) and DCCEEW	Environment Protection and Biodiversity Conservation Act 1999; Significant Impact Guidelines 1.1; Bilateral Agreement (NSW–Cth)	Section 6.1.1
Detailed	Aboriginal cultural heritage	Y	Ongoing engagement with WLALC and Registered Aboriginal Parties (RAPs)	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010; Connecting with Country Framework	Section 6.2

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Standard	Historic heritage	Y	Desktop-based; consult Heritage NSW only if relics/potential items are identified	Heritage Act 1977; NSW Heritage Manual; Port Stephens LEP	Section 6.3
Detailed	Social impact and affordable housing	Y	Engagement with CHPs, DPHI Housing Policy, and local service providers	Social Impact Assessment Guideline 2021; Housing SEPP; Hunter Regional Plan 2041	Section 6.4
Detailed	Urban design and visual impact	Y	Collaboration with DPHI Urban Design and Council urban design staff	Urban Design for Regional NSW; Apartment Design Guide; Port Stephens DCP	Section 6.5
Detailed	Traffic, transport and access	Y	Consultation with TfNSW and council on network upgrades and public transport	Guide to Traffic Generating Developments; Austroads Guide to Traffic Management; TfNSW protocols	Section 6.6
Detailed	Flooding, stormwater and water cycle management	Y	Technical consultation with council engineers and DCCEEW (flooding/WSUD)	Floodplain Development Manual 2005; Australian Rainfall and Runoff 2019; Council WSUD policies	Section 6.7

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Standard	Contamination and geotechnical constraints	Y	EPA and council environmental staff if landfill risk or remediation triggers arise	NEPM (Contamination); Managing Land Contamination Guidelines; AS 1726–2017; enHealth guidelines	Section 6.8
Detailed	Bushfire risk	Y	Consultation with RFS and council bushfire planning officers	Planning for Bushfire Protection 2019; RFS Guidelines; EP&A Act s4.14	Section 6.9
Standard	Wetlands and coastal environmental planning	Y	Liaison with DCCEEW (wetlands and coastal policy team) and council	SEPP (Resilience and Hazards) 2021; Coastal Management SEPP; Wetlands Policy (1997)	Section 6.10
Detailed	Noise and vibration	Y	EPA consultation as needed, depending on interface with landfill and freeway	NSW Noise Policy for Industry 2017; Interim Construction Noise Guidelines 2009; Infrastructure SEPP	Section 6.11
Detailed	Air quality and odour	Y	Landfill operator engagement; EPA review of landfill gas and odour buffers	NEPM Air Quality; EPA Modelling and Odour Framework Guidelines	Section 6.12

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping report reference
Detailed	Hazards and risk	Y	CASA (airspace); EPA (landfill gas, ASS); RMS or Transport for NSW if required	SEPP (Resilience and Hazards) 2021; CASA Airspace Protection Guidelines; EPA landfill and ASS policies	Section 6.13
Detailed	Infrastructure and utilities	Y	Early contact with Hunter Water, Ausgrid, NBN Co and council for servicing capacity	Hunter Water guidelines; Ausgrid servicing codes; Port Stephens Council engineering requirements	Section 6.14

7 Appendix A - Site considerations summary.

7.1.1 Slope analysis

The KHURA comprises land ranging from about 10m AHD to 130m AHD, with the highest point known as ‘Kings Hill’. The URA comprises an elevated ridgeline traversing the land with a southwest-northeast orientation. The ridgeline forms a ‘backdrop’ to the urban zoned land, which generally has a south, southeast, and eastern aspect.

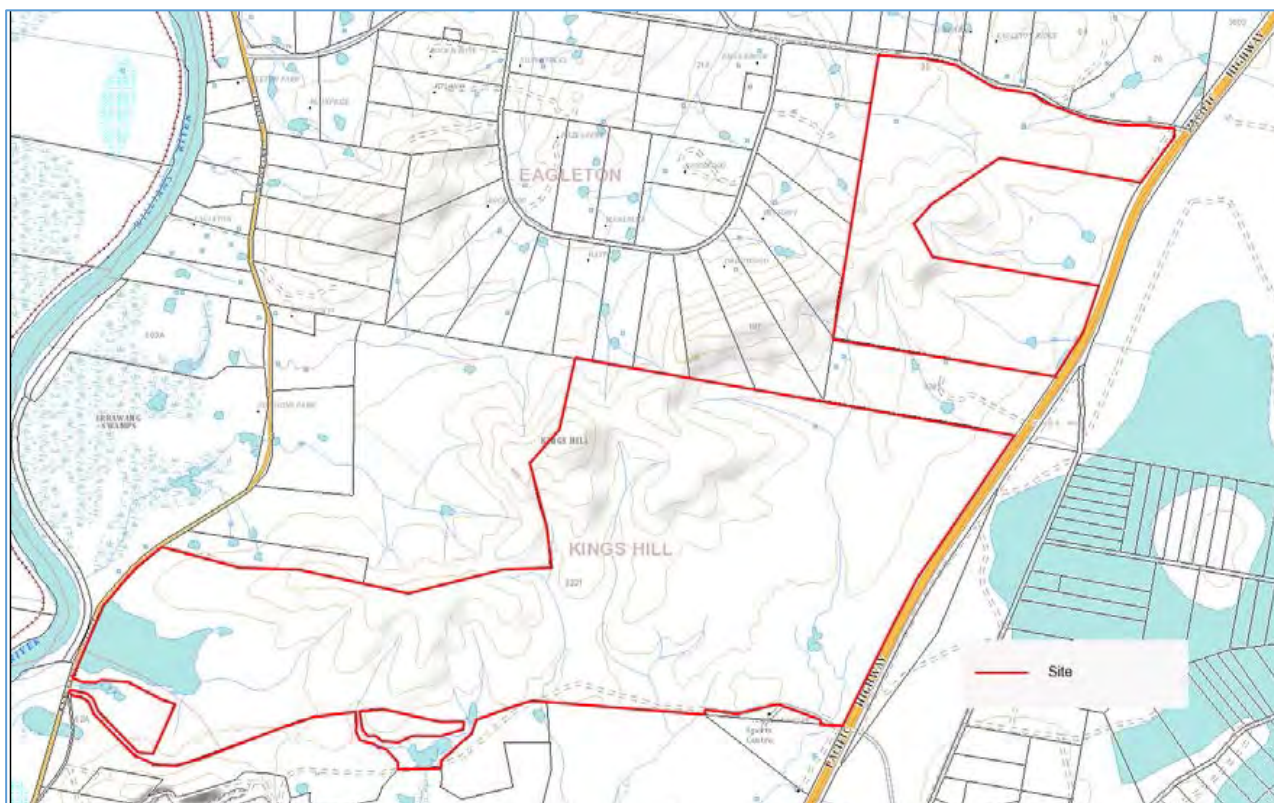


Figure 37 Site topography

As apparent from Figure 42, and although a range of environmental factors informed the zone types and the zone boundaries, there is generally a correlation between the zoning and the site terrain, with the elevated ridgelines and drainage lines retained within the E2 Conservation zone, and the ridgeline flanks and associated slopes zoned for urban purposes (R1 Residential, MU1 Mixed Use, and B2 Commercial zones).

With additional and more detailed environmental and design investigations, including a complete detail survey of ground levels and site features, a less extensive development footprint than enabled by the site zoning emerged, with the resulting concept development area relative to the zone boundaries and the topography.

The concept development area under this application predominately involves land with slope that is between 0% and 10% (up to 6 degrees - depicted green). Elevated areas, particularly the southern and western flanks of the site, involve land more typically up to 20% slope (up to 11.5 degrees - depicted yellow and brown), with very occasional areas of up to 30% slope (17 degrees – depicted red) - see Figure 44.

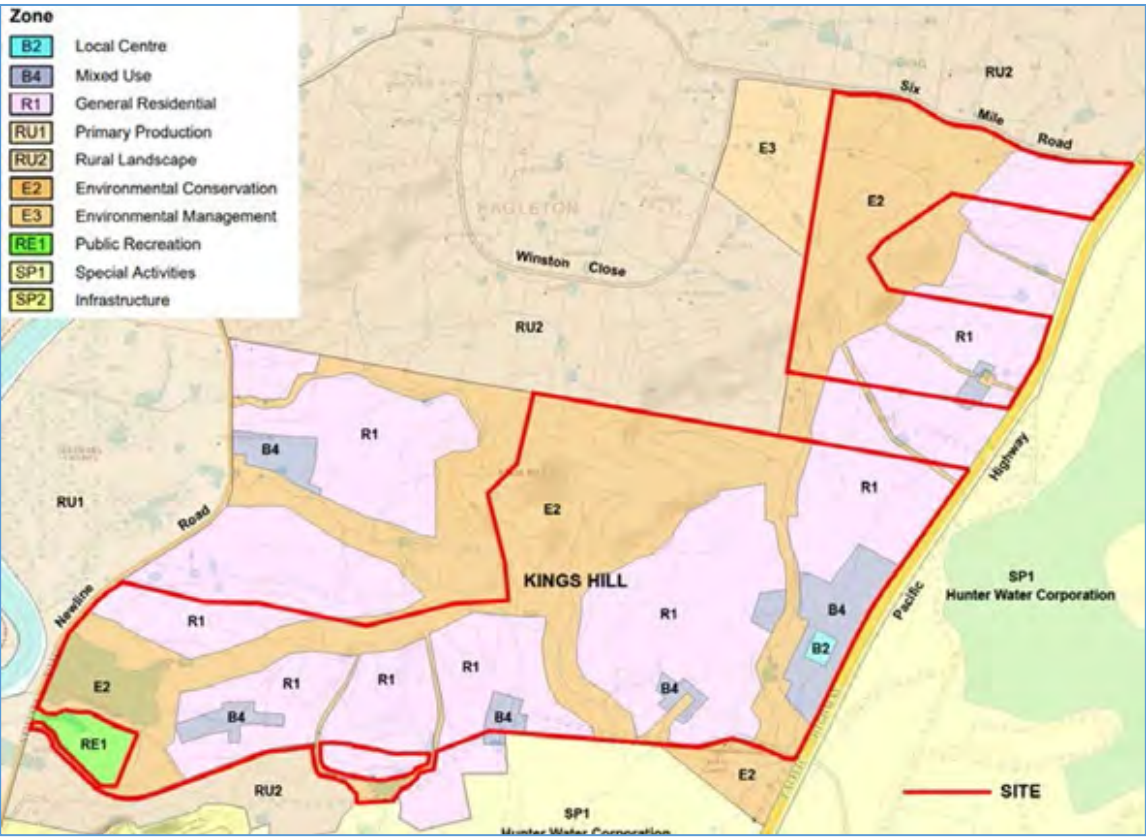


Figure 38 2010 zoning map informed by environmental factors

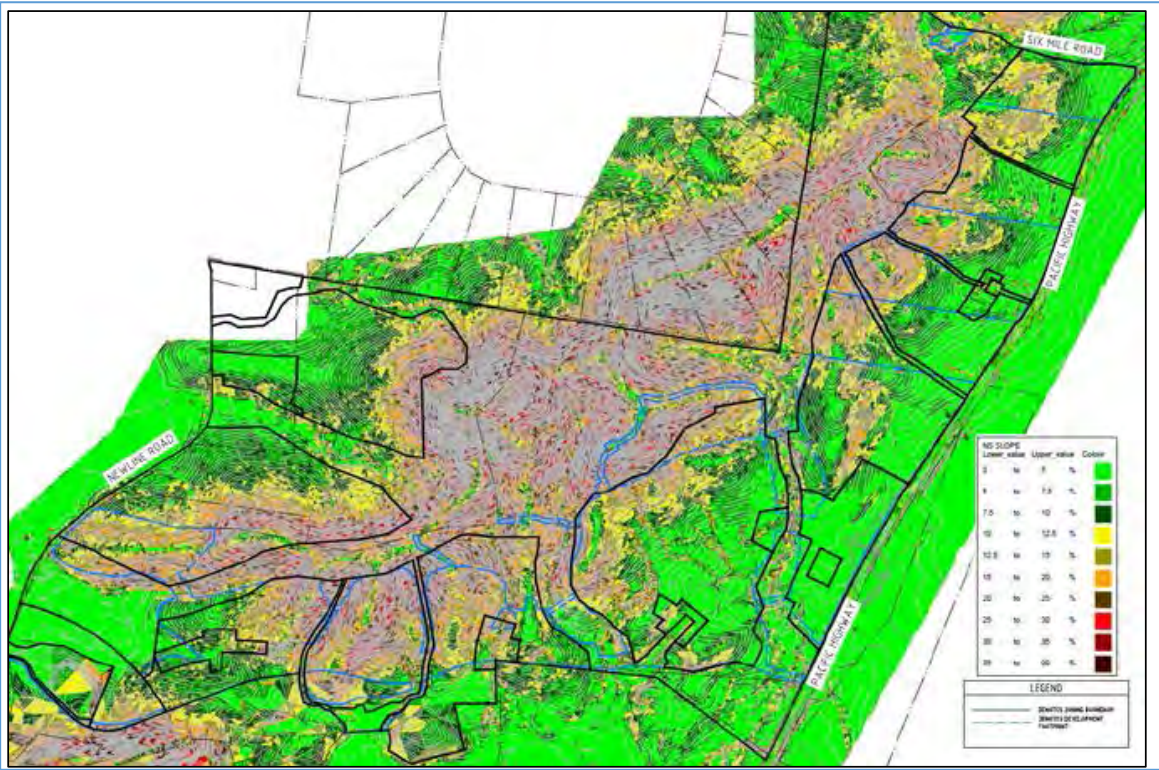


Figure 39 R1 and MU1 zoned land relative to slope

7.1.2 Visual context

The site is most commonly viewed from the Pacific Highway, and the steep terrain and tree cover associated with the elevated ridgeline, provides views of scenic amenity. A visual assessment during the rezoning by urban designers, Deicke Richards, determined that the more visible land is generally as of the 1 in 4 slopes, complimented when on the site or when viewed from Newline Road by the associated wetlands and water bodies (refer Figure 45).

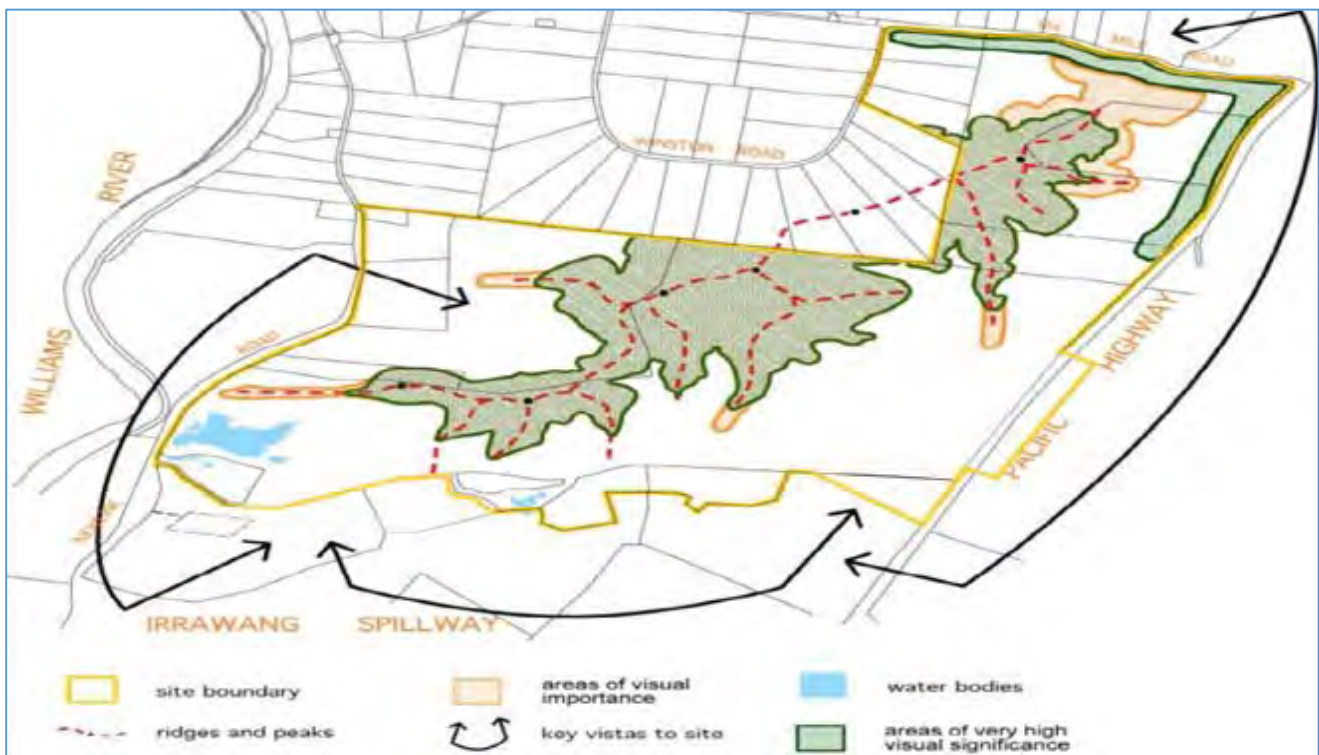


Figure 40 Visual context.

7.1.3 Geology

Preliminary geotechnical and contamination investigations were carried out during the rezoning process by Douglas Partners Pty Ltd.

Geotechnical conditions determined by field observations and subsurface investigations informed a 'Terrain Units' map delineating areas of similar site (see Figure 46) and described in Table 7.

7.1.3.1 Foundational conditions and depth of rock

The subsurface conditions can be broadly divided into two categories:

1. Lower slopes with variable soil depth from 0 m to >2 m depth. Soil composition generally comprising near surface silt/sand overlying clays, overlying a variety of rock types.
2. Upper slopes, spur lines and hill crests with shallow (less than 1 m) to no soil cover. Soils generally sandy and silty overlying predominantly sandstone and conglomerate.

The clay soils across the site were generally observed to be reactive, and further testing would be required to address clay reactivity and to determine site classification for foundation design.

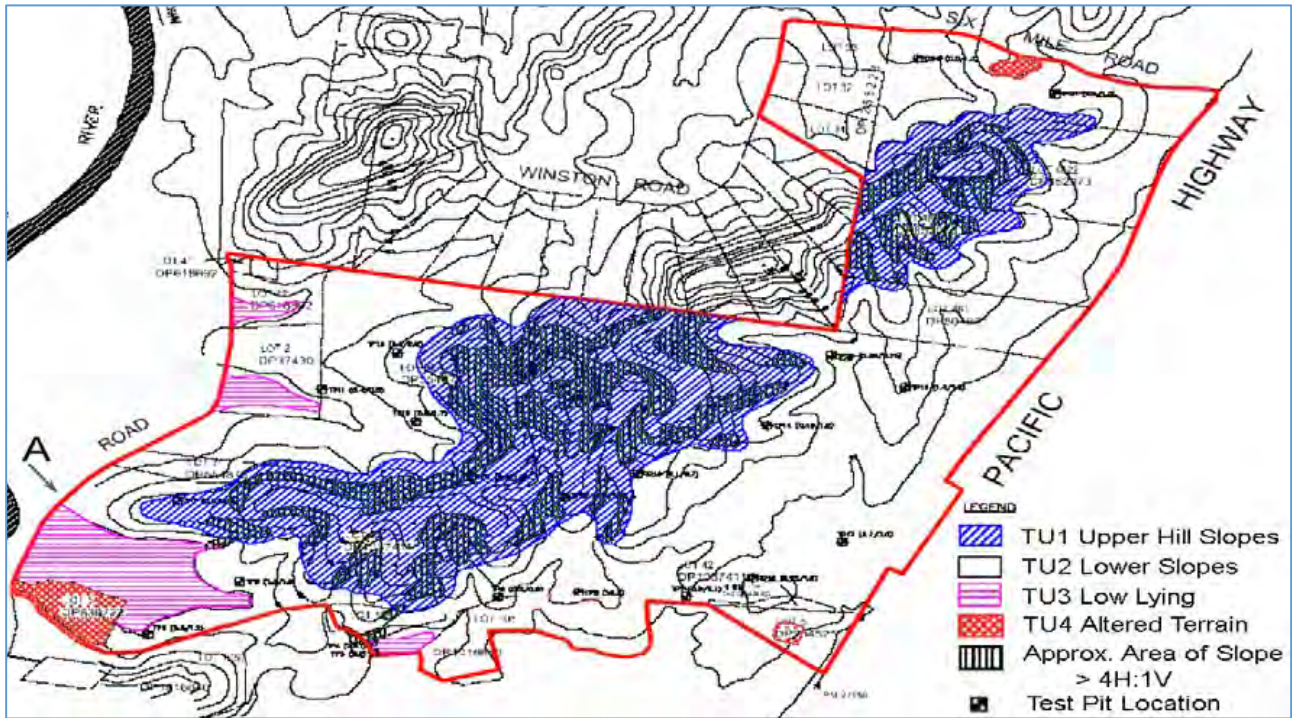


Figure 41 Terrain considerations

7.1.3.2 Slope stability

No overt signs of deep seated instability were observed during field investigation. Ongoing slope evolution processes and earthworks during development may nonetheless result in some natural instability in areas comprising slopes in excess of 4H:1V or small dams. Stability issues of this kind would not preclude development and are readily mitigated by specific geotechnical investigation prior to construction design in each stage, where relevant.

Table 5 Terrain units - Douglas and Partners

Terrain	Description	Features	Geotechnical Constraints
TU1	Upper hill slopes, gully flanks, hill crests and spur lines (see also 4H:1V slope drawing)	- including steep slopes in excess of 4H:1V - typically shallow rock, <1 m deep - common rock outcrop - includes cliff lines	- potential stability issues associated with loose boulders and cliff lines, impacting on down slope areas, specific stability assessment recommended where slope in excess of 4H:1V - difficult excavation, possible heavy ripping or drill and blast

TU2	Lower slopes, base of gullies	• slopes generally less than 4H:1V • variable depth to rock (0 m to >2 m) • variable soil types, predominantly high plasticity clays • gully erosion on some parts of site, where clearing has been undertaken • presence of earth dams in some gullies variable	• potential stability issues associated where upslope boulders could impact on development • difficult excavation in some areas • potential for erosion caused by development • water logging of soils in some areas, particularly gully bases and low elevation • potential reactive soils, site classification required • remediation or removal of dams
TU3	Low lying areas	• low lying areas and wetlands below about RL 10	• existing wetlands • poorly drained • prone to inundation, 1 in 100 yr flood level at about RL 5 • potential acid sulphate soils below RL 5
TU4	Altered terrains	• disturbed soils • quarries • landfill	• stability issues in and around quarries, remediation of quarries may be required • uncontrolled filling • settlement of landfill

7.1.3.3 Erosion and dispersion

The site contains soils with an erosion hazard. These soils are readily amenable to standard mitigation measures to address the potential for soil erosion.

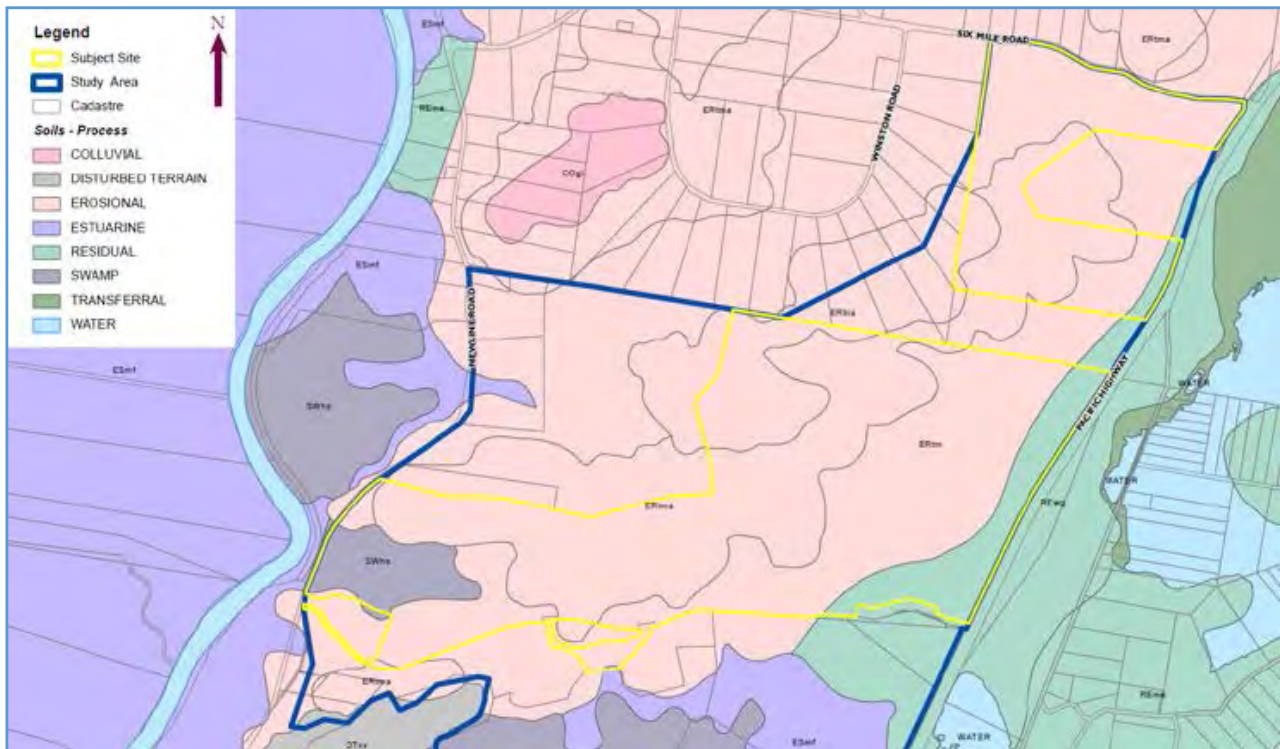


Figure 42 Soil types

7.1.3.4 Potential acid sulphate soils

The Karuah and Maitland Acid Sulphate Soil Risk indicate that there is a high probability of acid sulphate soils within 1m of the ground in the western part of Lot 41, DP1037411.

7.1.4 Drainage catchments and watercourses

Kings Hill comprises three catchments to be considered in the formulation of storm water management measures (refer Figure 48).

7.1.4.1 Kings Hill East - Grahamstown Dam catchment

To the north-east part of the study area, the catchment forms part of the water supply catchment leading into the Grahamstown Dam, one of Newcastle's main water supply dams.

7.1.4.2 Kings Hill South - Irrawang Swamp catchment

The southern part of the study area drains toward the Irrawang Swamp, an area largely controlled by Hunter Water as it contains the overland flow path for overflow from the Grahamstown Dam.

7.1.4.3 Kings Hill West - Williams River catchment

The north-western portion of the study area generally drains toward the Williams River.

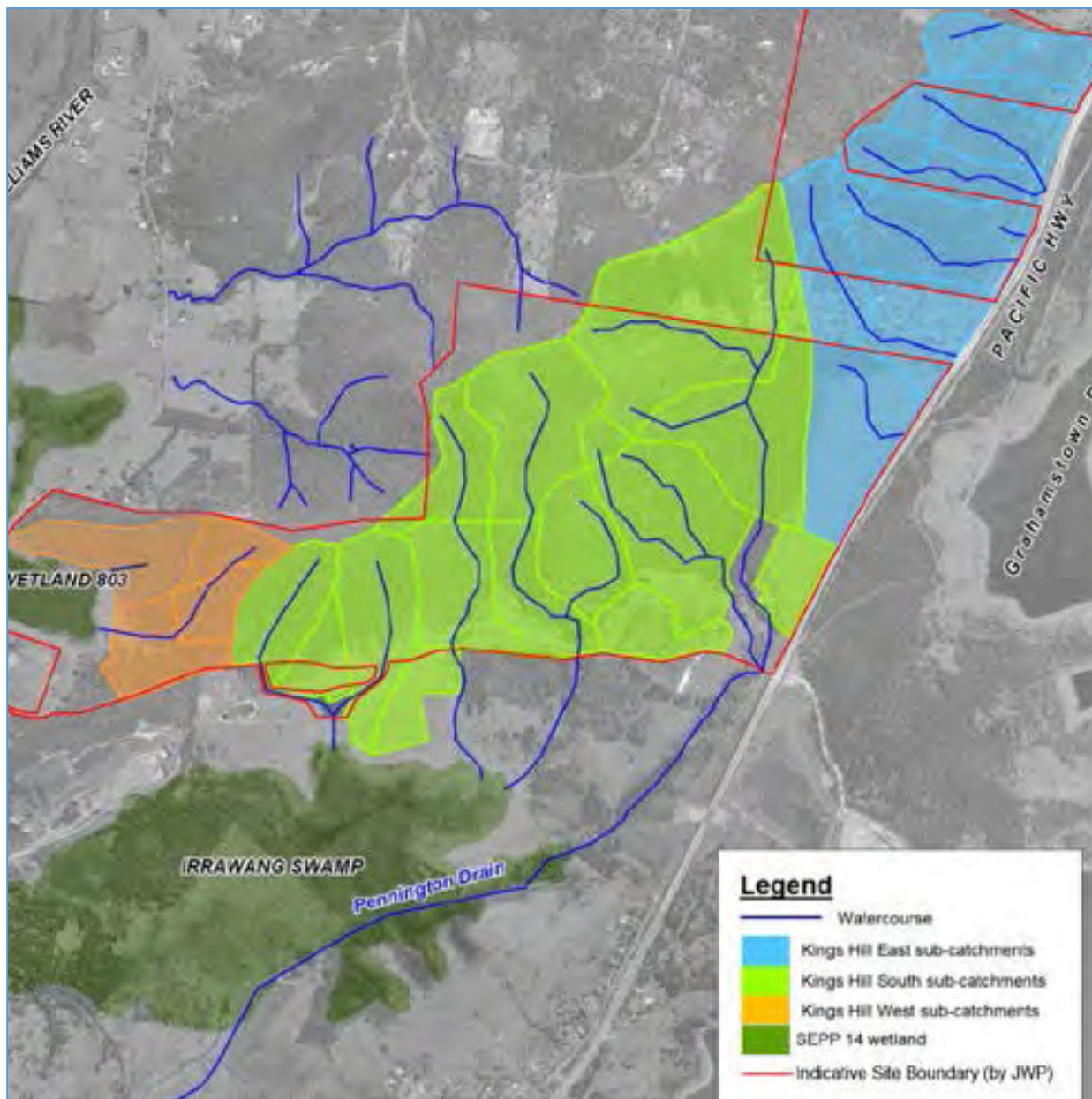


Figure 43 Catchment boundaries

7.1.5 Flooding

Northrop Engineers (acting for KHD) and BMT WBM (acting for PSC) advise that flood events affecting the site can be generated from a number of sources, which are not necessarily independent. Internal creek lines and the relevant flood levels are illustrated in Figure 49.

7.1.5.1 Internal drainage lines

Internal drainage lines are generally ephemeral (refer Figure 49).

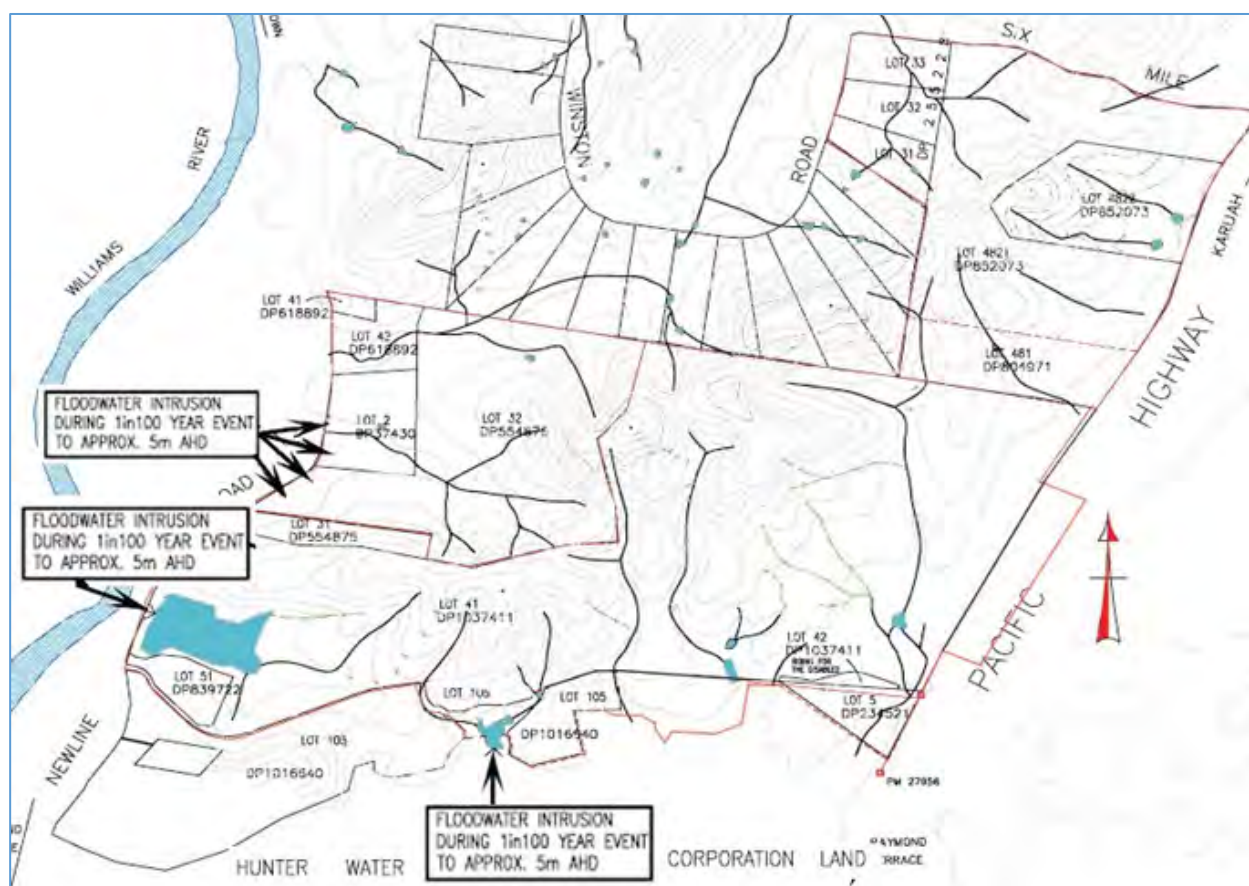


Figure 44 Internal drainage lines

7.1.5.2 Flooding from Grahamstown Dam

Table 6 Flood levels – southern boundary

Event Average Recurrence Interval (ARI)	Predicted Flood Level
1 in 2 year	1.93 m AHD
1 in 5 year	2.26 m AHD
1 in 20 year	2.68 m AHD

7.1.5.3 Flooding from the Williams River

Table 7 Flood levels – Williams River

Event ARI	Predicted Flood Level
1 in 100 year	5 m AHD (1955 flood)
1 in 200 year	5.2 m AHD
1 in 2000 year	5.7 m AHD

The flood behaviour of the Williams River is documented in the BMT WBM Williams River Flood Study (June 2009), commissioned by PSC.

In 2013, BMT WBM was further commissioned by PSC to prepare *KHURA Water Management Strategy Guidelines* and *Kings Hill Flood Free Access Study*. An extract of the 1% AEP map illustrates the extent of a 1% flood event relative to the site is provided in Figure 50.



Figure 45 BMT WBM Flood Free Access Study 2013

7.1.6 Coastal wetlands

The site comprises three (3) main catchments that currently drain to separate receiving environments (refer Figure 51).

Kings Hill South drains to Irrawang Swamp (Coastal Wetland 804) which is located between Newline Road and the Pacific Highway. Kings Hill West drains to an unnamed wetland (Coastal Wetland 803) located adjacent to Newline Road to the north of Irrawang Swamp. Kings Hill East currently drains to Grahamstown Dam and runoff from this catchment is proposed to be diverted via a stormwater channel running between the Pacific Highway and the Grahamstown Dam discharging to Irrawang Swamp to protect water quality in the dam.

Irrawang Swamp and Coastal Wetland 803 are both mapped coastal wetlands under SEPP (Coastal Management) 2018 (SEPP 2018).

Each wetland contains a number of species that are susceptible to impacts from altered hydrological regimes, and the dominant risks to the vegetation in the wetlands from hydrological changes include:

- extended periods of increased inundation depth; and
- reductions in seasonal drying patterns.

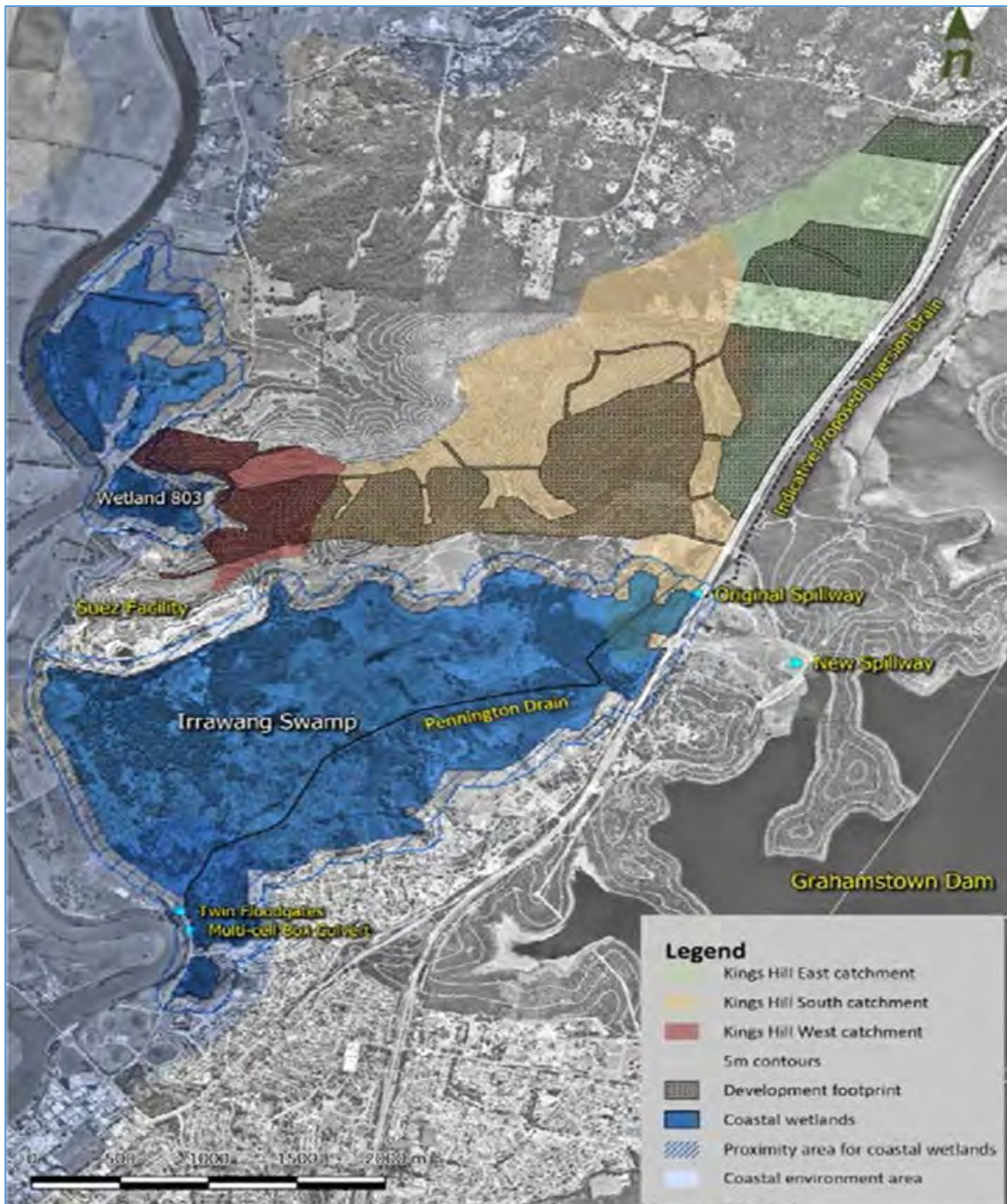


Figure 46 Downstream coastal wetlands

7.1.6.1 Irrawang Swamp

Surface runoff currently drains into Irrawang Swamp from the surrounding catchment and additional flow is contributed from Grahamstown Dam during periods when the spillway level is exceeded. Surface runoff drains from the forested and pastured upper slopes of Kings Hill in a southerly direction along unnamed ephemeral watercourses into the northern section of Irrawang Swamp. Existing and future residential development in Raymond Terrace drains into the swamp from the south.

7.1.6.2 Wetland 803

The majority of the Kings Hill West catchment drains to Wetland 803 located adjacent to Newline Road. The catchment is primarily forested in the upper reaches with cleared grazing areas observed around the lower reaches and the wetland perimeter. The hydrology of Wetland 803 is influenced by catchment inflows and tidal inflows from the Williams River.

7.1.7 Biodiversity

The Proposal involves land generally disturbed by a history of logging and quarrying, and in more recent times, the land has become disturbed by weed and pest invasion associated with a long history of grazing activities under the former rural zone (which continue today under existing use rights).

For rezoning purposes, ecological and biodiversity assessments were conducted over all the land within the KHURA by Hunter Wetlands Research (HWR) in 2004 for the landowners, and by EcoBiological in 2009 for Port Stephens Council. Site investigations by KHD since the rezoning of the land in 2010, and preparation of an SIS by RPS Group during 2018 and 2019, provide an improved and contemporary understanding of biodiversity values. Collectively, environmental monitoring and assessment of KHDs land has spanned a considerable period of time, being some 16 years of data collected between 2003 and 2019.

7.1.7.1 Threatened flora

About 20% of the flora on the subject site is exotic, with 377 native flora species and 98 exotic species recorded. Three (3) threatened flora species are known to occur within the subject site as outlined in Table 7, which also provides estimates of the number of individuals from direct counts and habitat area mapping using a 30 m buffer from recorded individuals.

Table 8 Threatened flora

Species	TSC Act	Proposal Footprint		Conservation Area	
		Count	Habitat Area (ha)	Count	Habitat Area (ha)
<i>Maundia triglochinoides</i>	Vulnerable	50	0.08	42	0.15
<i>Pterostylis chaetophora</i>	Vulnerable	20	1.41	468	4.36
<i>Corybas dowlingii</i>	Endangered	118	4.66	1,467	8.62

The location of threatened flora recorded within the subject site is shown in Figure 52.

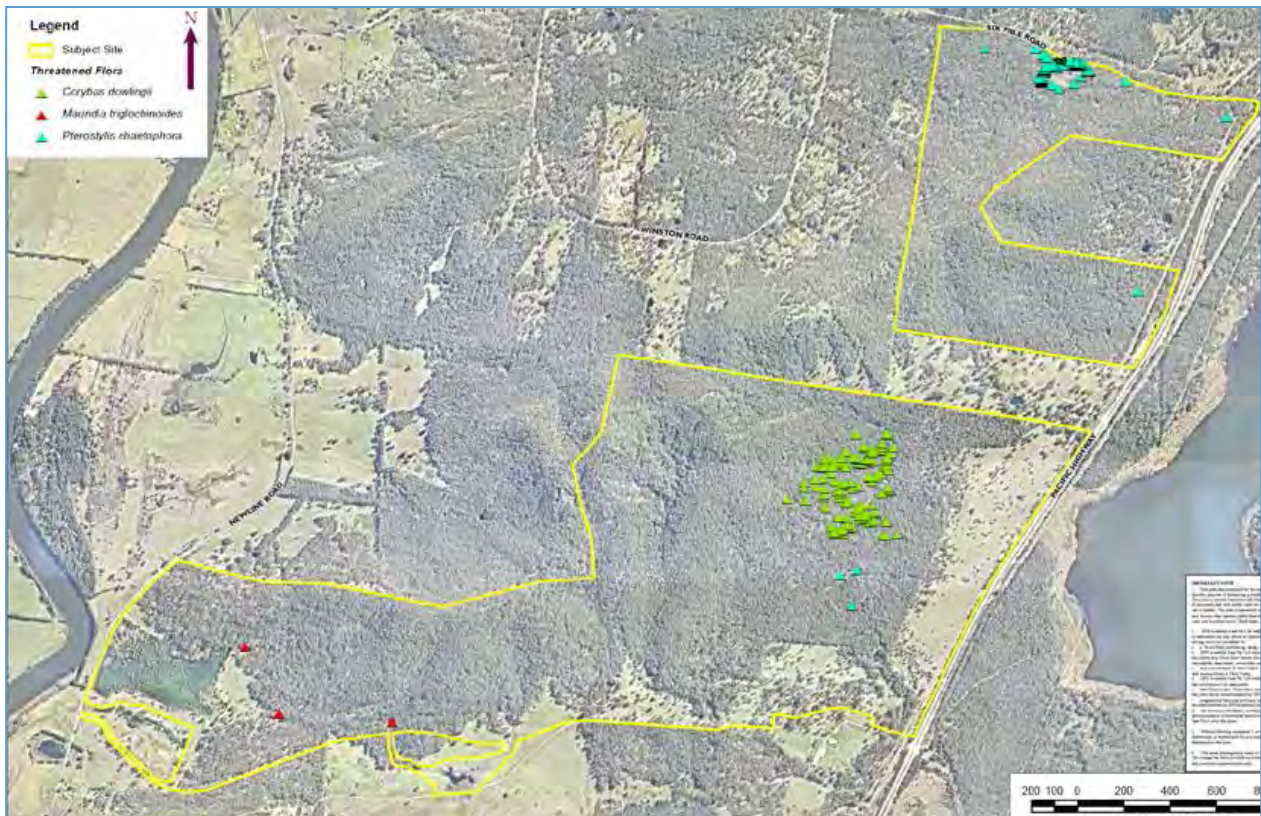


Figure 47 Threatened flora location

7.1.7.2 Threatened fauna

Threatened fauna species recorded within the subject site are:

- Glossy-black Cockatoo; Brown Treecreeper; Varied Sittella;
- Little Lorikeet;
- White-bellied Sea Eagle; Grey-crowned Babbler; Powerful Owl;
- Koala;
- Brush-tailed Phascogale; Grey-headed Flying Fox; Eastern Bentwing-bat; Little Bentwing-bat; and Eastern Freetail-bat

Locations of threatened fauna recorded within the subject site are shown in Figure 53.

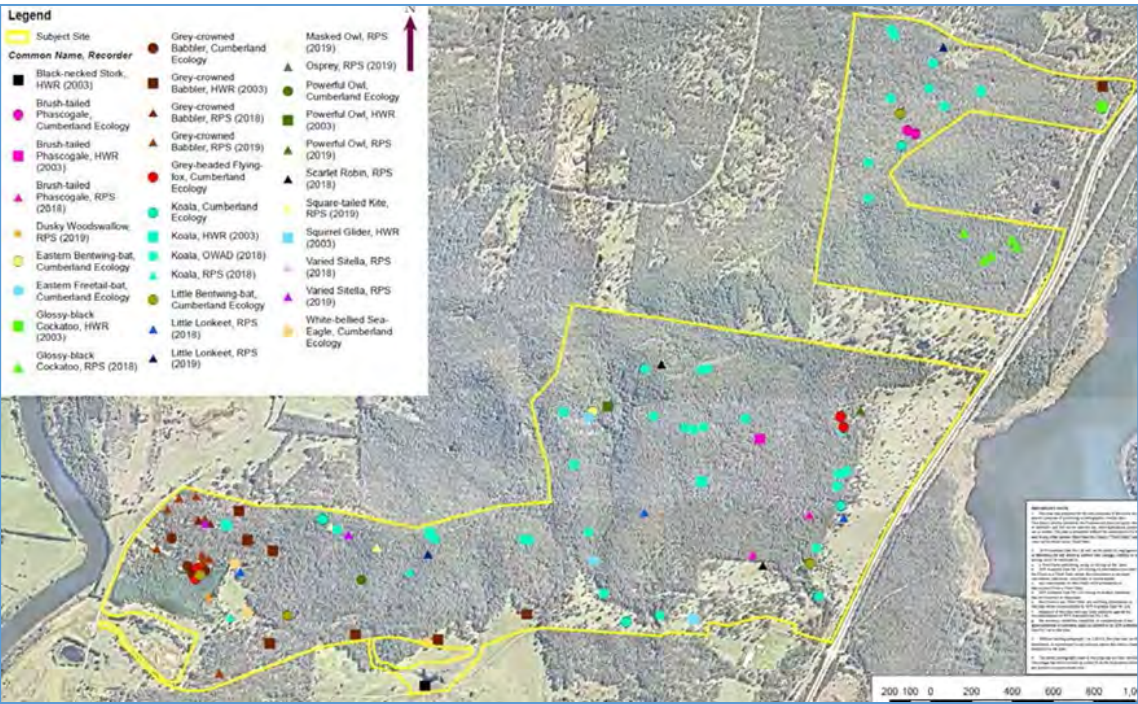


Figure 48 Threatened fauna

7.1.7.3 Key fish habitat

In addition to the key fish habitat mapped by NSW DPI within the Williams River and within Irrawang Swamp (both receiving waters), mapped key fish habitat exists on the site is depicted in Figure 54.

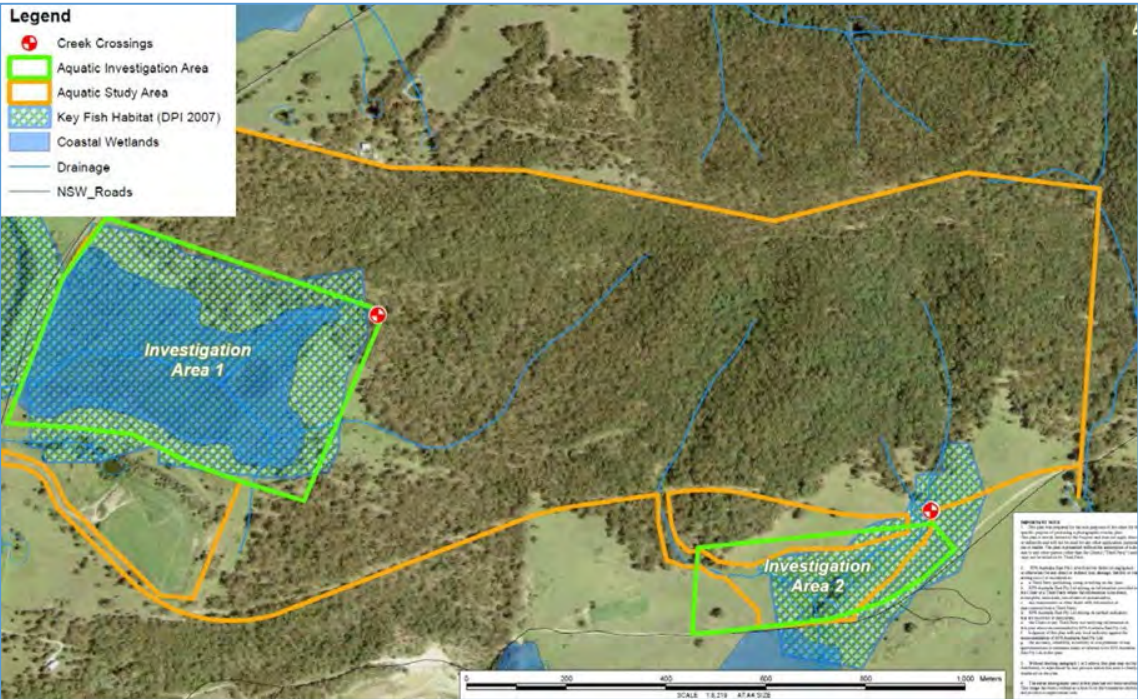


Figure 49 Key fish habitat

7.1.7.4 Threatened ecological communities

Vegetation forming part of the following listed threatened ecological communities occurs within the subject site (refer Figures 55 and 56):

- Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions;
- Lower Hunter Valley Dry Rainforest in the Sydney Basin and NSW North Coast Bioregions VEC;
- Lower Hunter Spotted Gum – Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions EEC (preliminary listing);
- Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions EEC; and
- Swamp Oak Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions.

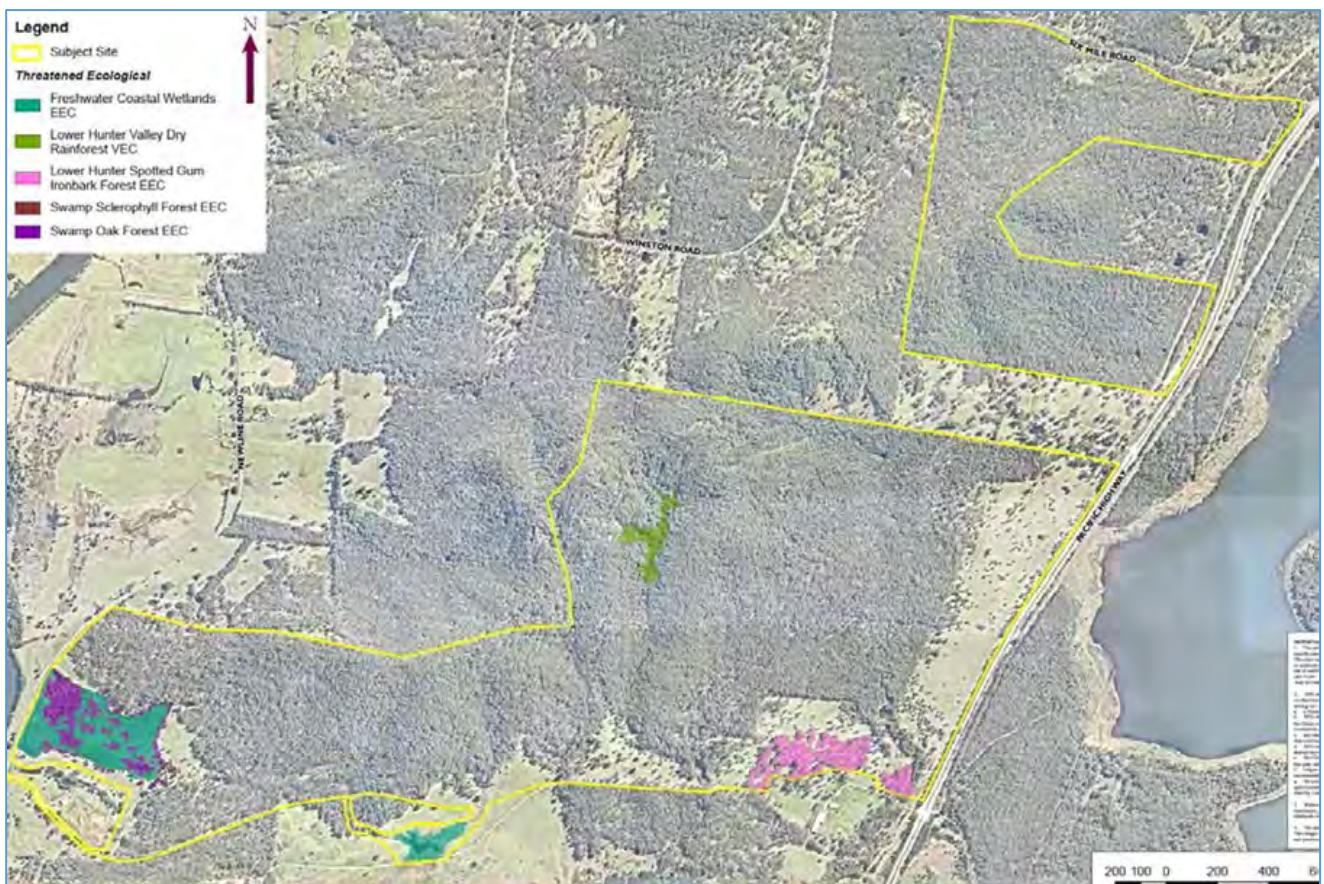


Figure 50 Threatened ecological communities

7.1.7.5 Vegetation communities

Seven native plant community types (PCTs) are mapped within the site (with minor modifications made for the subject site as recommended by BioLink) (refer Table 11).

Table 9 Native plant community type

PCT	TEC	PCT Name	Condition	Subject Site (ha)
783	Yes ¹³	Coastal freshwater swamps of the Sydney Basin Bioregion	Medium	11.37 ¹⁴
1230	Yes ¹⁵	Swamp Mahogany swamp forest on coastal lowlands of the NSW North Coast Bioregion and northern Sydney Basin Bioregion	Poor	0.15
1525	Yes ¹⁶	Sandpaper Fig - Whalebone Tree warm temperate rainforest	High	2.42
1584	No	White Mahogany - Spotted Gum - Grey Myrtle semi-mesic shrubby open forest of the central and lower Hunter Valley	High	149.45
1590	No	Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest	High	262.46
1590	No	Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest	Medium	2.15
1590	No	Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest	Poor	5.89
1600	Pre ¹⁷	Spotted Gum - Narrow-leaved Ironbark shrub - grass open forest of the central and lower Hunter	Medium	6.21
1728	Yes ¹⁸	Swamp Oak - Prickly Paperbark - Tall Sedge swamp forest on coastal lowlands of the Central Coast and Lower North Coast	Medium	5.49
TOTAL				445.59

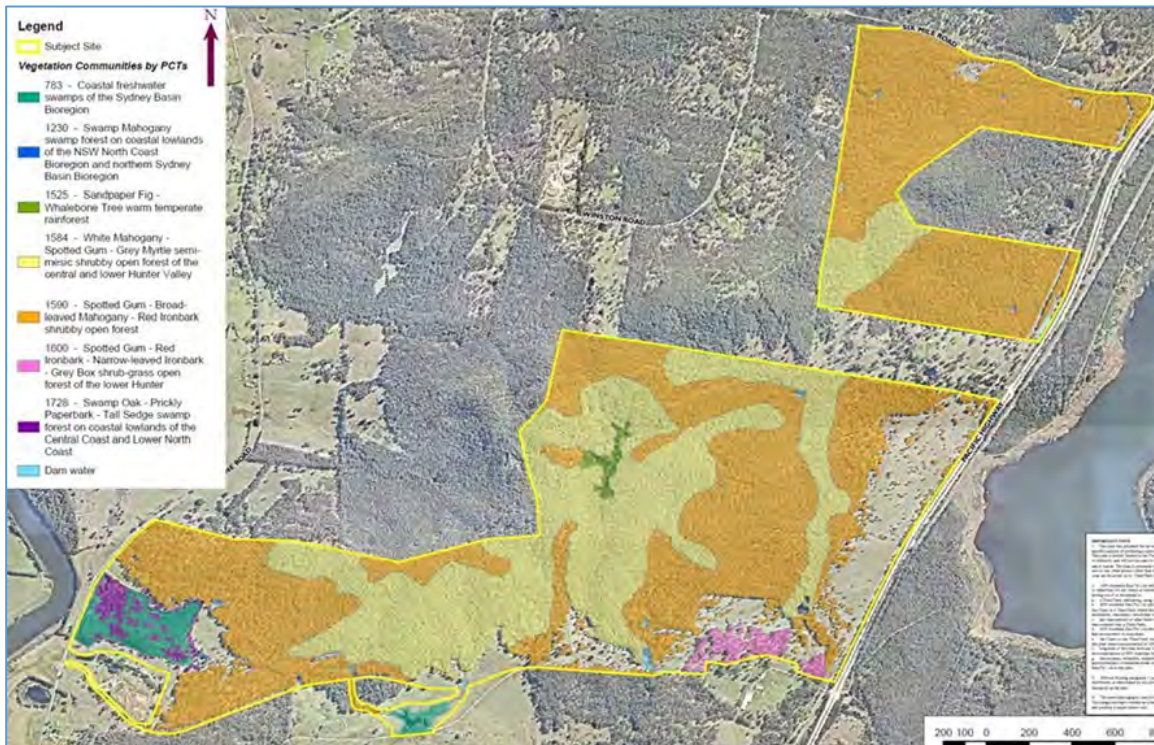


Figure 51 Native plant community types

7.1.7.6 Bushfire prone land

The subject sites are mapped as bushfire prone land and therefore the application of Planning for Bush Fire Protection is relevant to the development proposal (refer Figure 57).

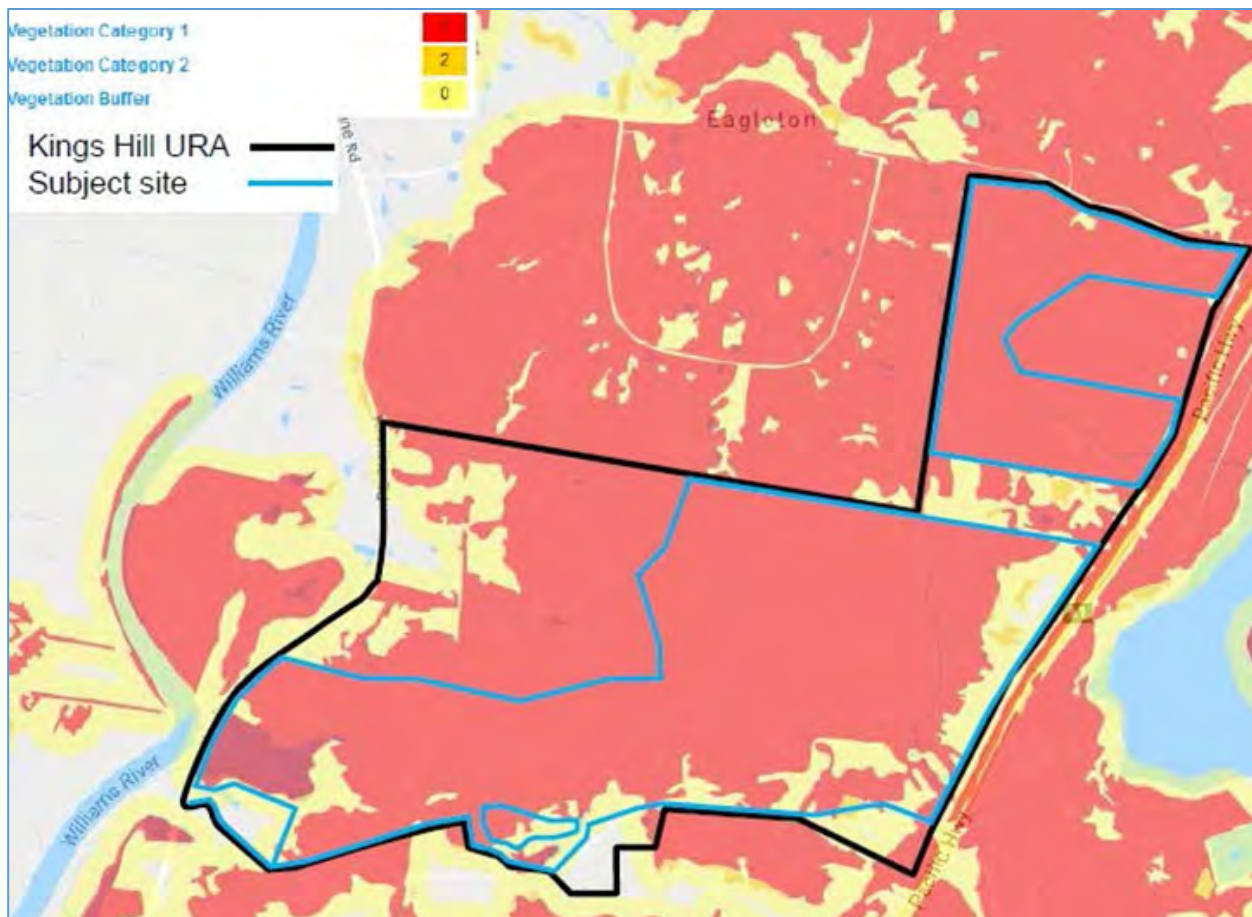


Figure 52 Bushfire prone land map

7.1.7.7 Aboriginal archaeology

Myall Coast Archaeological investigated the land during the rezoning process in consultation with the Worimi Local Aboriginal Land Council.

No artefactual evidence was found on the site along the drainage lines, trails exposed areas or during the geotechnical analysis. Nonetheless, Kings Hill, its associated ridgeline and the wetlands are of significance). In particular:

Caves and Shelters

Series of rock shelters, caves and rock outcrops are located along the entire ridgeline.



Figure 53 Rock shelters

Lookout and telecommunications

The several high points along the ridgeline would have been the high places used for signal places through fires and smoke.

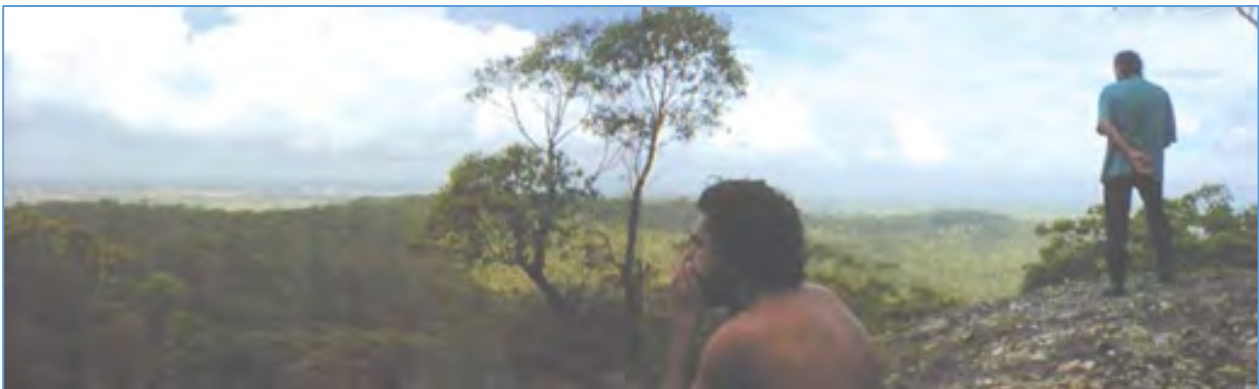


Figure 54 Aboriginal lookout

Ceremonial grounds

The topography and landform of Kings hill and the next hill to the north indicate ceremonial grounds such as bora grounds and male ritual.

Aboriginal pathway

Historical information and anecdotal evidence suggests that the ridgeline was used by early Europeans as a bridal trail and a roadway during floods. This tends to strongly indicate the ridge top was a transport corridor from the Williams River to Karuah, Port Stephens and the Tilligerry and Tomaree Peninsulas (refer Figure 60).



Figure 55 Aboriginal pathways



Figure 56 Area of significance

The establishment of the nearby Grahamstown Dam has severely disturbed the landscape to such an extent that the full significance of the ridgeline to the total picture cannot be fully appreciated or assessed.

7.1.8 Potential contamination

A review of site history and observation during site investigations suggest that the site is generally unlikely to contain gross environmental impact associated with the current and former site activities. The principal sources of potential contamination relevant to the site are nonetheless noted as:

- Council's former landfill site off Newline Road (see Figure 62) - possible migration implications due to its proximity to the wetland, with capping of the landfill only recently implemented by council.
- Localised dumping/stockpiles – may contain a range of potential contaminants, including metals, hydrocarbons etc.
- Former quarry (northern site area off Six Mile Road) – may contain localised heavy metal, hydrocarbon impact from former quarry equipment and machinery.

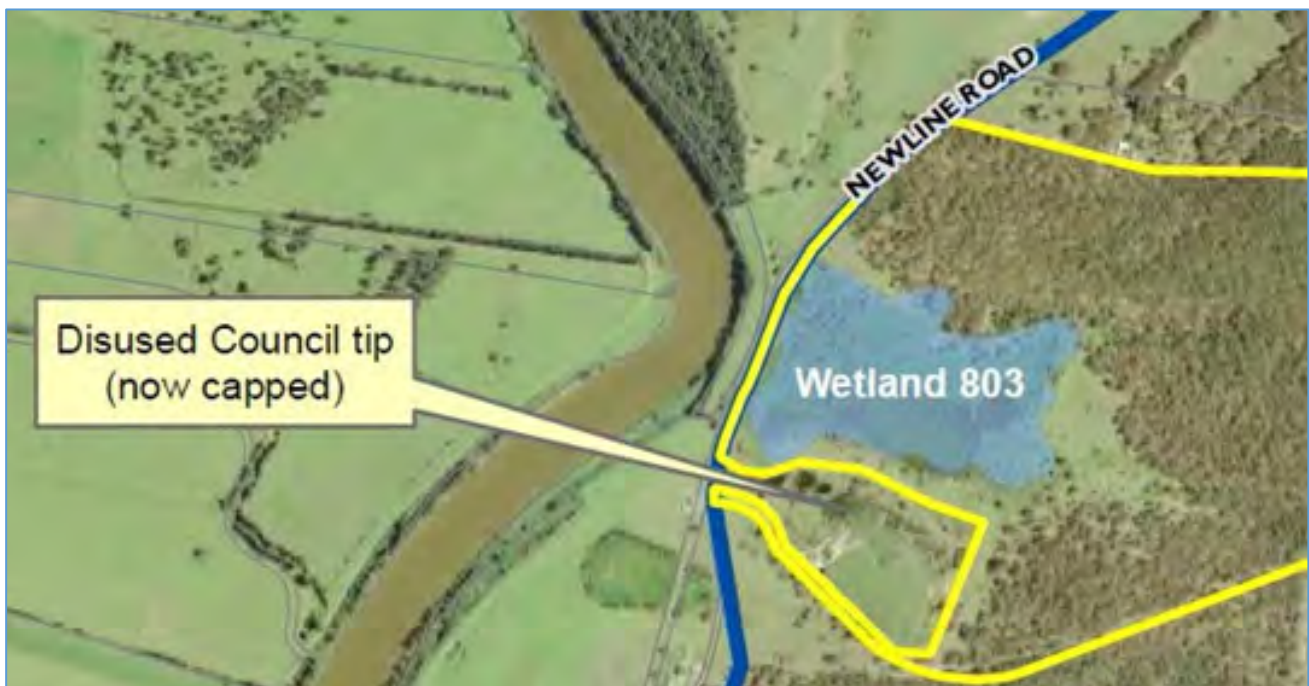


Figure 57 Council landfill site (former)

7.1.9 Air quality

Discussion with council in respect of the now capped landfill has indicated a requirement to monitor gas release levels associated with the former prior to any application to carry-out subdivision within 250m of the site.

Additionally, a submission by the operators of the current waste resource and landfill centre south of the site off Newline Road (Suez Pty Ltd) has sought consideration in any application to carry out subdivision within 250 of the site's boundary with their operations.

The extent of the site subject to these considerations under a future application to subdivide the land is mapped in Figure 64.

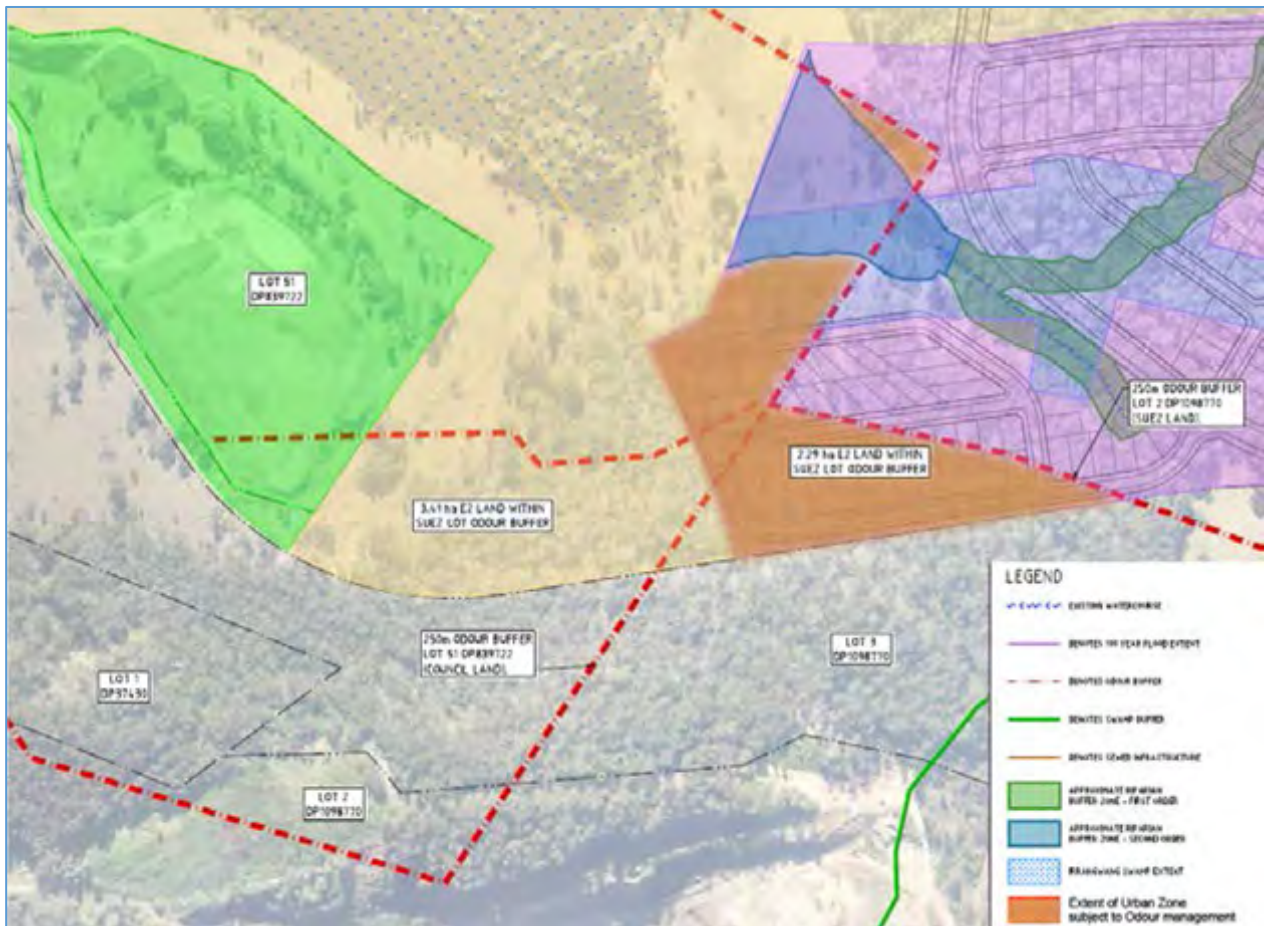


Figure 58 Air quality

7.1.10 Road access

The site is accessed via existing points off Newline Road, Six Mile Road and the Pacific Highway, although access via Newline Road is severed during only moderate flood events (see Figure 65).

TfNSW will not permit any intensification of land use that would rely on direct access to the Pacific Highway on safety and network efficiency grounds. With Newline Road cut by flood event by sometimes days at a time, upgrades are required to Newline Road to enable flood free access until a grade separated interchange is constructed to enable direct access to the Pacific Highway. With minor upgrades in the locations shown in Figure 28 and prior to the completion of the interchange access would be from the north along Newline Road, linked to Pacific Highway via Six Mile Road.

The Six Mile Road intersection with the Pacific Highway has been determined by TfNSW to have safe capacity for the level of traffic generated by up to 400 lots within KHURA. Each existing lot within the KHURA with access via Newline Road will be permitted (subject to entering arrangements with the NSW State government to contribute to the funding of the interchange) a pro-rata proportion of 400 lots before an interchange is operational.

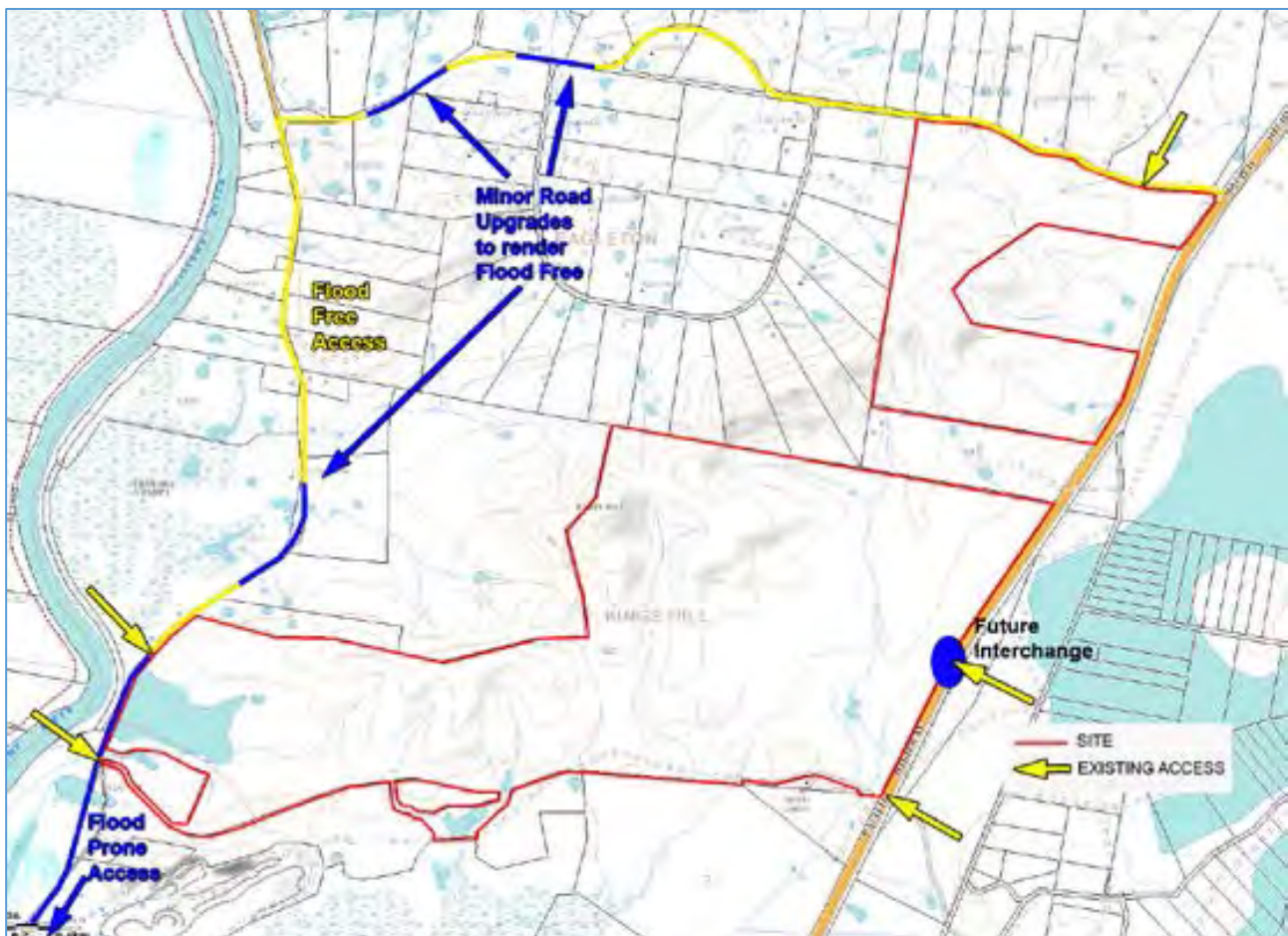


Figure 59 Road access

7.1.11 Acoustic environment

7.1.11.1 Road traffic noise

Long-term attended noise monitoring was completed by EMM Pty Ltd along the entire URA frontage to the Pacific Highway to establish existing ambient noise levels and road traffic noise exposure across the subject site.

Measured noise levels were assessed with reference to the then Clause 102 of the infrastructure SEPP (2007) and DPIE's "*Development near Rail Corridors and Busy Roads – Interim Guidelines*" (2008). Road traffic noise levels were predicted across the site at hypothetical single story dwellings.

The results of noise modelling indicate that the relevant requirements regarding road traffic noise intrusion will be achieved for the large majority of hypothetical dwellings by adopting standard, complying development construction techniques and including an alternate means of ventilation as per the DPIE's "*Development near Rail Corridors and Busy Roads – Interim Guidelines*" (2008).

For a small number of hypothetical residences fronting the Pacific Highway, the 60 dB noise contour marginally encroaches into their respective allotments, which requires consideration of dwelling siting, floor plan and construction type to ensure that category two construction can satisfy the relevant internal noise goals at these locations.

Figure 65 illustrates the *existing* nighttime road traffic noise levels along the Pacific Highway frontage, without screening.

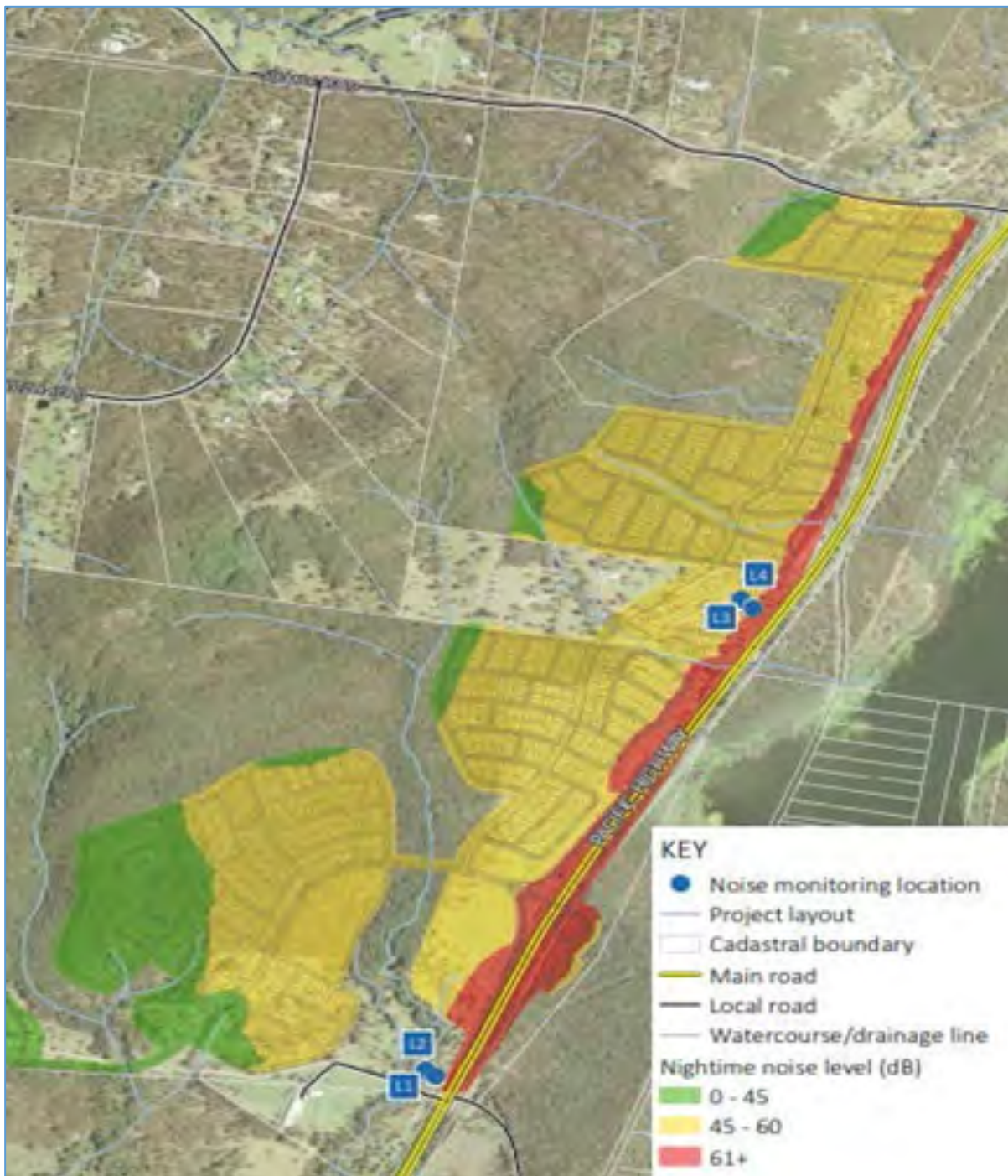


Figure 60 Existing road traffic noise

7.1.11.2 Aircraft noise

Although military and civilian passenger aircraft are commonly seen on approach or departure from Williamtown RAAF based/Newcastle airport, the KHURA is not mapped as being within the Australian Noise Exposure Forecast 2025 (ANEF) associated with the airbase (see Figure 66).

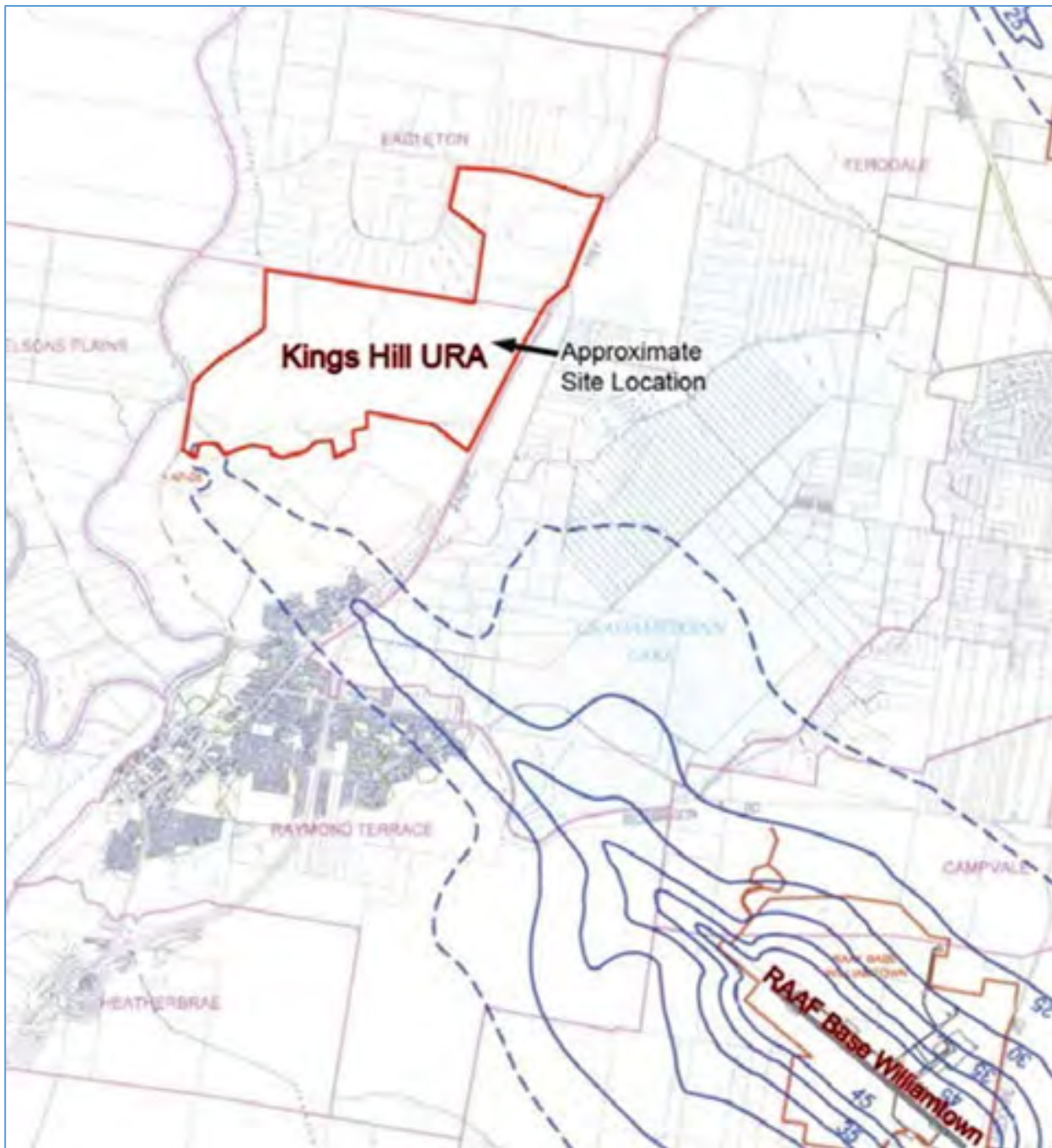


Figure 61 Williamstown ANEF 2025

7.1.12 Utilities and infrastructure

7.1.12.1 Sewer and water

Existing Raymond Terrace sewer and water networks are operating near capacity, and connection points for the URA are the Tomago Water Treatment Works (WTW) and the Raymond Terrace Wastewater Treatment Works (WWTW).

Hunter Water Corporation has endorsed a servicing strategy which involves new lead-in mains to the site via the Pacific Highway, and a separate DA with an Environmental Impact Statement is lodged with Council in respect of those works (see proposed alignment in Figure 67).

To service all land within the KHURA in a manner that ensures security of supply, and to ensure pressure for both domestic supply and fire-flow, two (2) x 5ML Water Reservoirs are proposed to be located in elevated areas of the site:

- A low level reservoir servicing areas below 35m AHD; and

A high level reservoir, servicing areas above 35mAHD but below 60m AHD

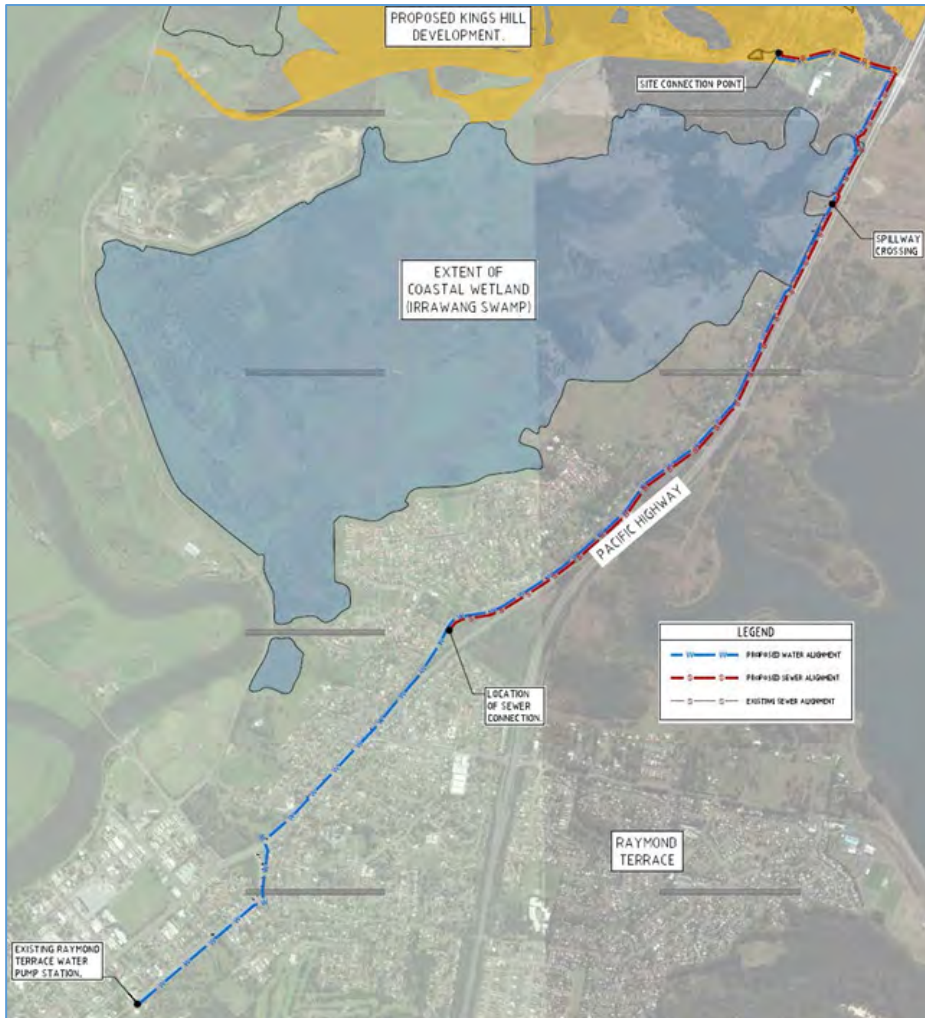


Figure 62 Water and sewer connections

7.1.12.2 Electricity

The site is located within the Ausgrid supply network. Existing supply is in the form of 11KV transmission lines along Newline Road and the Pacific Highway (see Figure 68). Ausgrid confirm in a letter dated August 2019 that:

- The total load requirement for 1900 lots is 7.7MVA or 400A at 11kV including capacity for 2 potential schools, staged over 12 years.
- The entire Kings Hill development (3500 lots) is expected to have a total demand of 13.5MVA or 650A at 11kV.
- the area is presently supplied by Raymond Terrace 11kV feeders 81240L and 81244L. Brandy Hill 11kV feeder 82578 is to the north of the proposed development.

- there is currently sufficient capacity on these feeders for the supply of approximately 2 – 3MVA to the general area including surrounding developments.
- there is presently sufficient spare capacity for approximately 0.5 – 1MVA or 200 lots on both sides of the Kings Hill development area.
- there is available capacity for approximately 600 - 800 residential lots in the area including adjacent developments, subject to the new load being divided across feeders with appropriate interconnections through the new development (from the Pacific Highway to Newline Rd). The staging will have an impact on how many lots can be connected without network augmentation.
- Network augmentation will be required to supply the ultimate Kings Hill development area.
- There are several options for the network augmentation however it is likely that one or more new 11kV feeders will be required from Raymond Terrace Zone Substation. Associated interconnection works between feeders in the area will also be required.

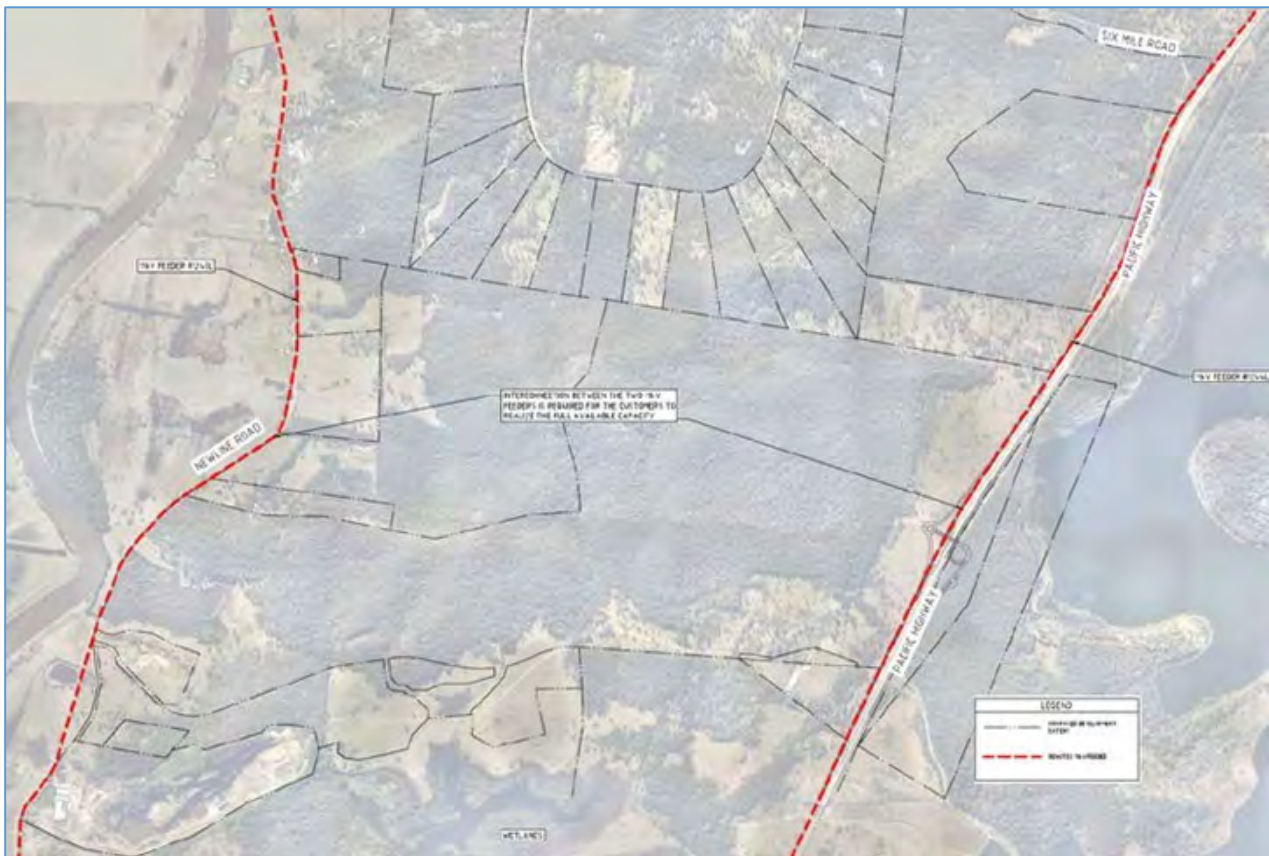


Figure 63 Electrical grid supply and capacity

7.1.12.3 Gas supply

Jemena is responsible for managing the gas distribution network in this area, and Jemena advise the nearest connection point is in Raymond Terrace. Upon approval, application can be made to Jemena to assess the load and connection options.

7.1.12.4 Communications

Optic Fibre runs along the Pacific Highway frontage of the site, and approvals are in place to relocate the asset clear of future subdivision and interchange delivery works.

KHD has also worked with Telstra and the NBN to ensure capacity and access via a local node during the NBN network rollout. This is to ensure communication, social and employment opportunities are in line with metropolitan areas, for example, working from home.

8 Appendix B – Constraints review

The constraints plan derived from the site analysis provides a basis for urban land use to be compatible with the site and its terrain, and the conservation objectives for the site.

It provides a framework for efficient internal road alignments, urban precincts with character and a sense of place, and a subdivision layout comprising a mix of lot sizes and densities commensurate with site attributes.

To ensure the conservation objectives are ultimately realised and not compromised by urban development within the site, the measures recommended by the SIS have been incorporated into this first option and description of the proposal:

8.1 Habitat protection

8.1.1 Fencing

The SIS recommends that the interface between the impact area and the conservation area is to be characterised by a Koala proof fence with Koala bridges and grids, which will have the purpose of:

- Excluding free ranging Koala's from the urban area to prevent mortality from domestic dog attack, swimming pool entrapment, and vehicle strike;
- Excluding domestic dogs from the conservation area to prevent mortality from domestic dog attack and enable wild dog management; and
- Aiding the efficient movement of koalas within the conservation area along designated habitat corridors.

The SIS specifies that the fence is to be readily visible from the perimeter roadside environment (i.e. to minimise the incidence of vandalism and loss of primary function) and constructed in a manner so as to allow access for:

- recreational uses (e.g. bush walking, trail riding (mountain bikes and/or horses where appropriate))
- biodiversity management (e.g. implementation of ecological burns, management of edge effects)
- bushfire management works (e.g. fire trail and regular access points)
- maintenance (e.g. fence maintenance, weed and pest management).

Fencing is also proposed in the form of herbivory exclusionary fencing around certain threatened flora species within the Conservation Area. Such fencing is to protect existing populations and future recruitment.

Fencing will also protect the Conservation Area from undesirable activities (such as illegal dumping, 4WD and motorbike activities, logging) and from existing rural activities that are likely to continue until land in the Impact Areas are developed (e.g. grazing by cattle, horse and goats).

A typical koala fence deemed suitable for this site is shown in Figure 78, while Figure 79 indicatively depicts proposed fencing and access points relative to access trails and Impact Areas, subject to survey of the alignment and construction certificate information (without compromising the



Figure 64 Typical koala fence

conservation area).

Source: RPS Biodiversity Management Plan

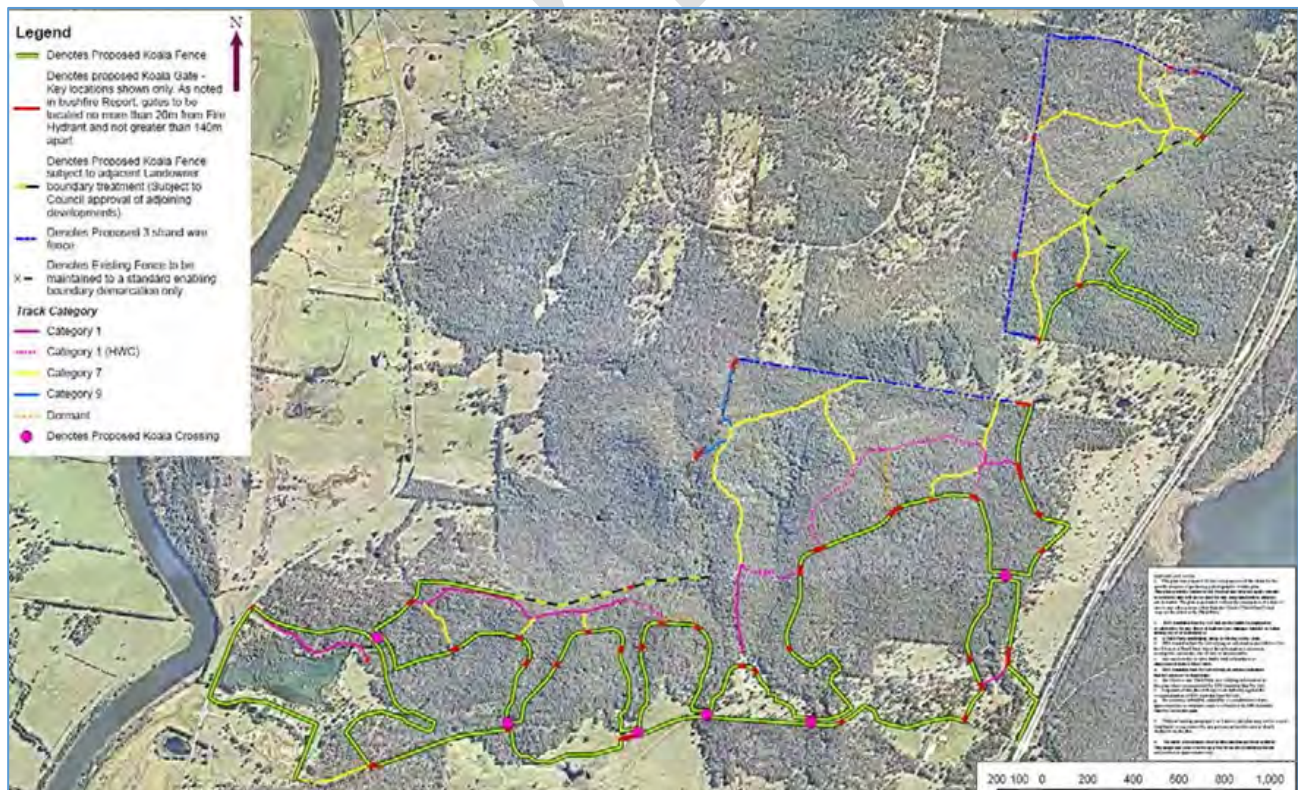


Figure 65 Fencing and access to the proposed koala area

8.1.2 In-perpetuity conservation agreement

Following successful management by the applicant of the conservation area under the BMP it is proposed to hand over ownership of the conservation area to council for the public benefit in-perpetuity. A voluntary planning agreement is proposed (as previously endorsed by council) to ensure a mechanism is in place to fund and deliver the conservation works in-perpetuity. The voluntary planning agreement will ensure a contiguous parcel of land is managed under one custodian, delivers ecological and cultural benefits as well as public access and utility such as active recreation.

Combined, the management plans provide a framework that will minimise impact intensity on sensitive biodiversity values; thereby minimising the magnitude of both direct and indirect impacts associated with the listed key threatening process (KTP) of ‘land clearing’ and correlated KTPs. The key principles that underpin this strategy are:

- Avoid impact amplification through indiscriminate habitat removal.
- Progressively remove vegetation and habitat using sensitive time, method and area based prescriptions to permit ongoing ecosystem functioning.
- Maintain the functionality of vegetated corridors.
- Increase residual patch size (i.e. revegetation works).
- Reduce edge to area ratios (i.e. managing edge effects on residual vegetation).
- Minimising short, medium and long term impacts on sensitive biodiversity through managed retention and protection in the conservation area (e.g. hollow dependent species and specialist folivores).

8.2 Vegetation management plan

The vegetation management plan (VMP) aims is to provide a considered and orderly approach to the removal and/or modification of vegetation and habitat to enable the Concept Development, particularly the removal of vegetation and habitat (i.e. impact minimisation) in a manner consistent with the Section D14.33 of Port Stephens Council DCP 2014. The VMP will provide a program and specifications for works that aim to:

- Restore and protect creek line and riparian areas.
- Manage impacts on threatened species, endangered ecological communities and habitat trees through implementation of a progressive clearing process that allows time for species to adjust and/or relocate from impact areas to conservation areas.
- Outline the management framework for minimising impacts on vegetation and habitat within the impact area.
- Identify the appropriate timing of works including site preparation, resource recovery (extraction of timber, native plants and bushrock etc), planting, weed management, and also providing a schedule of works.
- Identify and assign responsibilities for ongoing management actions.

- Ensure that the project is planned, designed and implemented by informed experienced contractors in order to avoid harm to the quality, stability and natural functions of remnant bushland and riparian areas.

8.3 Concept development proposal

8.3.1 Structural elements of the concept proposal

The concept proposal is summarised as comprising the following (see Figure 71):

- Urban development within the urban zoned land with a targeted lot yield of approximately 1,900 residential lots distributed between seven (7) residential precincts (see Figure 72);
- A new commercial and retail town centre adjacent the Pacific Highway, supported by mixed use zoned land within the walkable catchment of the town centre;
- A public primary school site collocated with proposed open space with capacity for sporting fields;
- A 3.5km long east-west collector road and prospective bus route linking between the residential precincts, the school sites, and the new town centre (providing flood free access for the KHURA between Newline Road in the west, and the Pacific Highway in the east), including:
 - o a potentially iconic/entry statement bridge span; and
 - o dual lanes in each direction for 750m of the eastern extent;
 - o eight (8) creek crossings (including the abovementioned bridge span)
 - o 2.5km long north-south collector road linking between the proposed new town centre and Six Mile Road and four (4) creek crossings (about 50% of the collector road and three(3) of the creek crossing s are located on adjoining land).

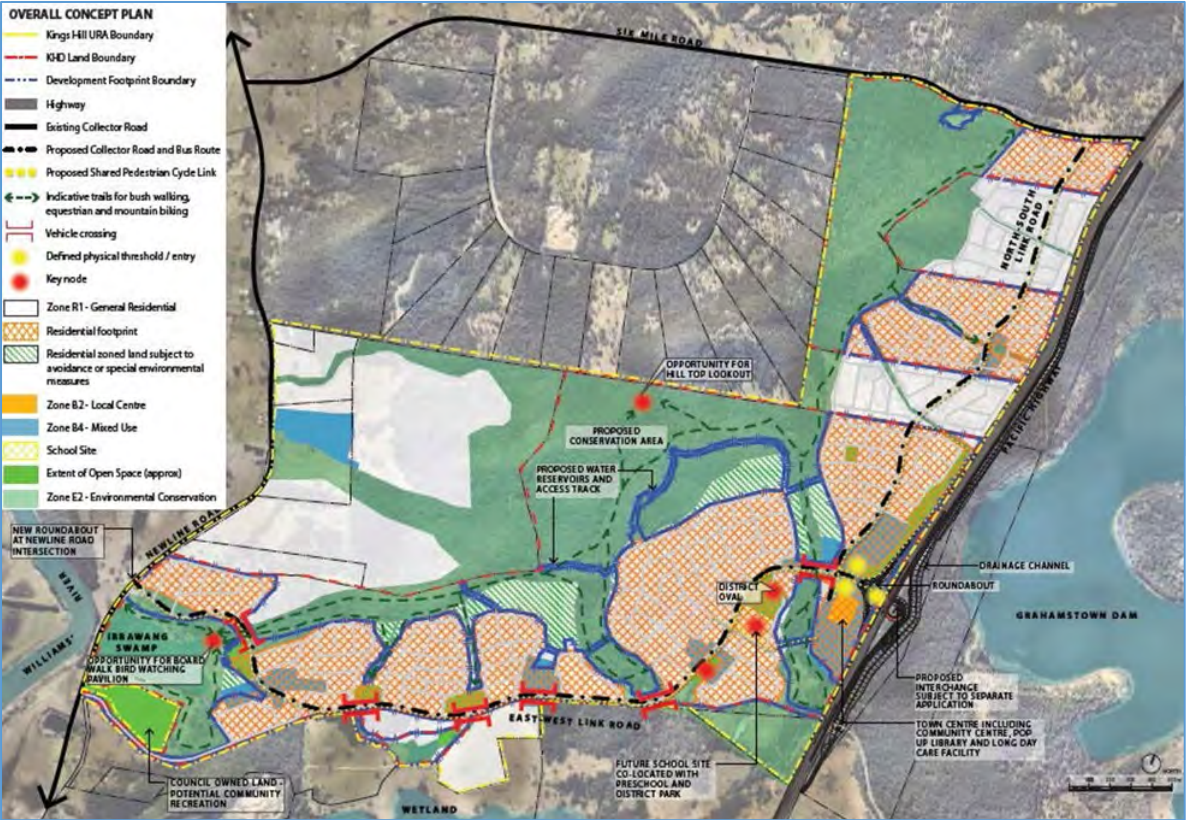


Figure 66 Concept plan

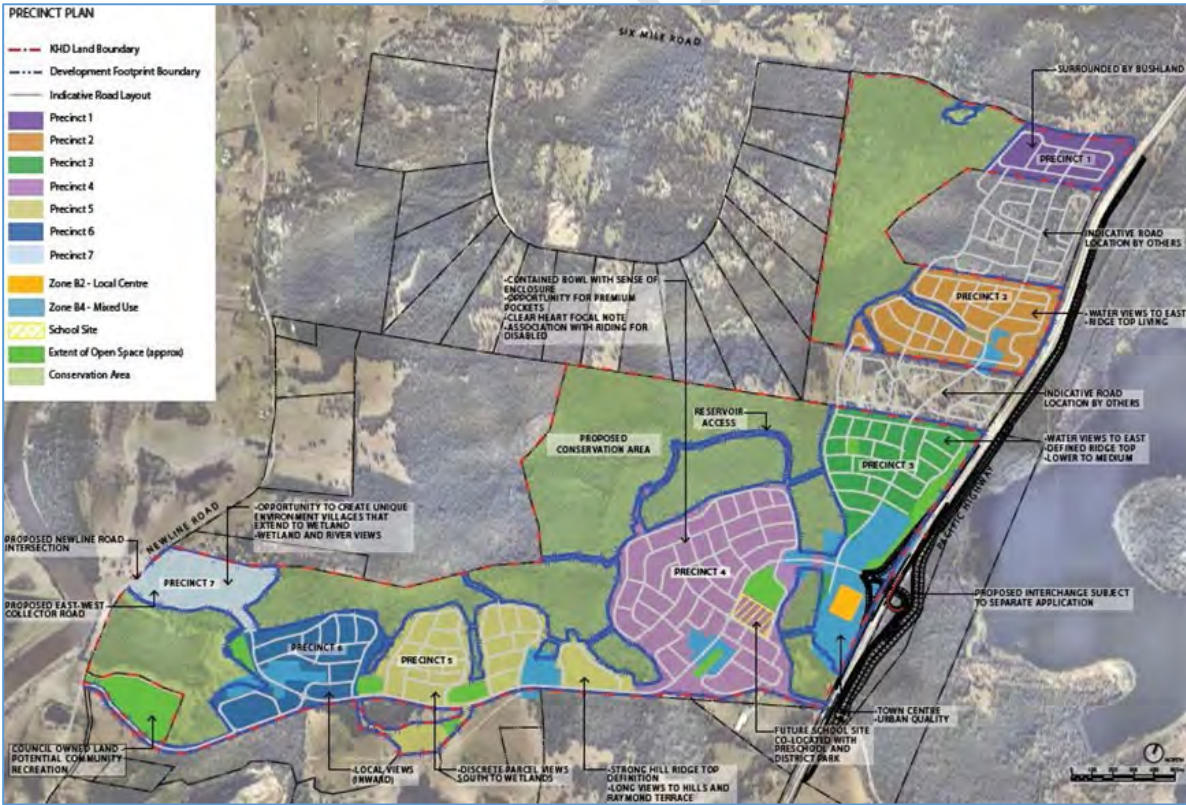


Figure 67 Concept precinct plan

8.3.2 Proposed access and connectivity

Proposed access to the external road network, and internal road, cycle and pedestrian connectivity consists of the following elements:

- Four new intersections:
 - o The primary access point - a grade separated interchange connecting the East-West Collector Road with the Pacific Highway (subject of separate approval process – to be delivered under State VPA by the TfNSW).
 - o A roundabout connecting the East-West Collector road with Newline Road.
 - o An internal, at-grade four (4) leg signalised intersection proving access between the proposed new town centre, the North-South Collector Road, and the Pacific Highway interchange.
 - o A simple Give Way controlled T-intersection connecting Six Mile Road with the proposed North-South Collector Road.
- Perimeter roads and associated bushfire asset protection zones within each residential precinct, and along the fenced interface with the proposed conservation area.
- A shared pedestrian and cycle path in parallel with and passively supervised by both collector roads, suitable for all ages and abilities running along flat grades, interconnecting the residential precincts with the school site, the proposed town centre and associated employment areas, and passive and active recreation nodes including each open space area (see Figure 73).
 - A potentially iconic pedestrian and cycle bridge linking the town centre with the school site and associated residential precinct.

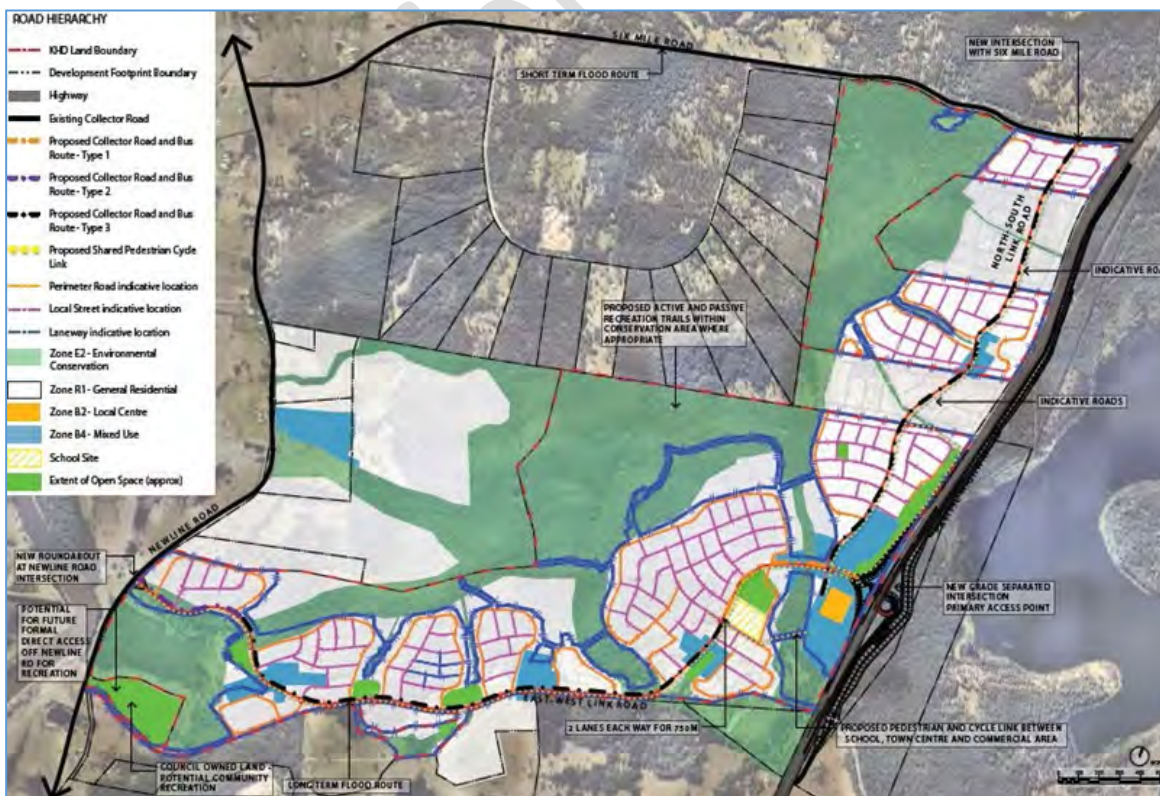


Figure 68 Access and connectivity

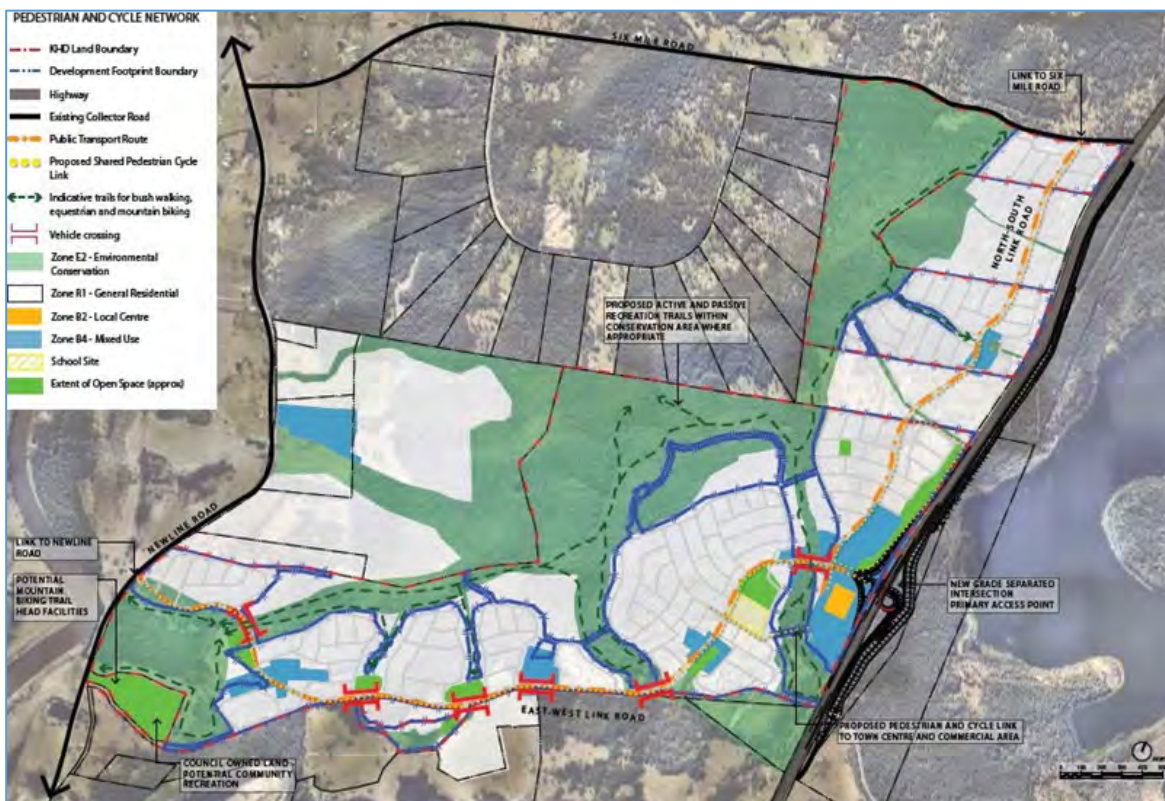


Figure 69 Pedestrian and cycle network plan

Upon the Pacific Highway interchange becoming operational, the State VPA and the TfNSW require closure of all existing site access points with the Pacific Highway including the existing Riding for the Disabled access point (to be serviced by new access within the first stage of future development reliant on interchange), and the closure or modification of the Six Mile Road intersection with the Pacific Highway to a Left-in Left-out configuration.

8.3.3 Proposed community, open space and recreation facilities

Provision is made in the proposal for a range of community and recreation facilities as recommended by the *Kings Hill Urban Release Area Community and Recreation Infrastructure Study* (GHD, March 2020). In accordance with the study, the plan includes (see Figure 75):

- Six local parks (total 3.5ha) co-located with water management devices where appropriate, with four furnished with playgrounds;
- One district park (3.5ha) with capacity to be furnished with a skate park and two (2) multipurpose courts;
- One community centre and library (200m²) to be located in town centre/district park;
- Two long dare care centres to be co-located with community centre and/or public school;
- One preschool to be co-located with public school;
- One RFS Building (to be planned in consultation with RFS)

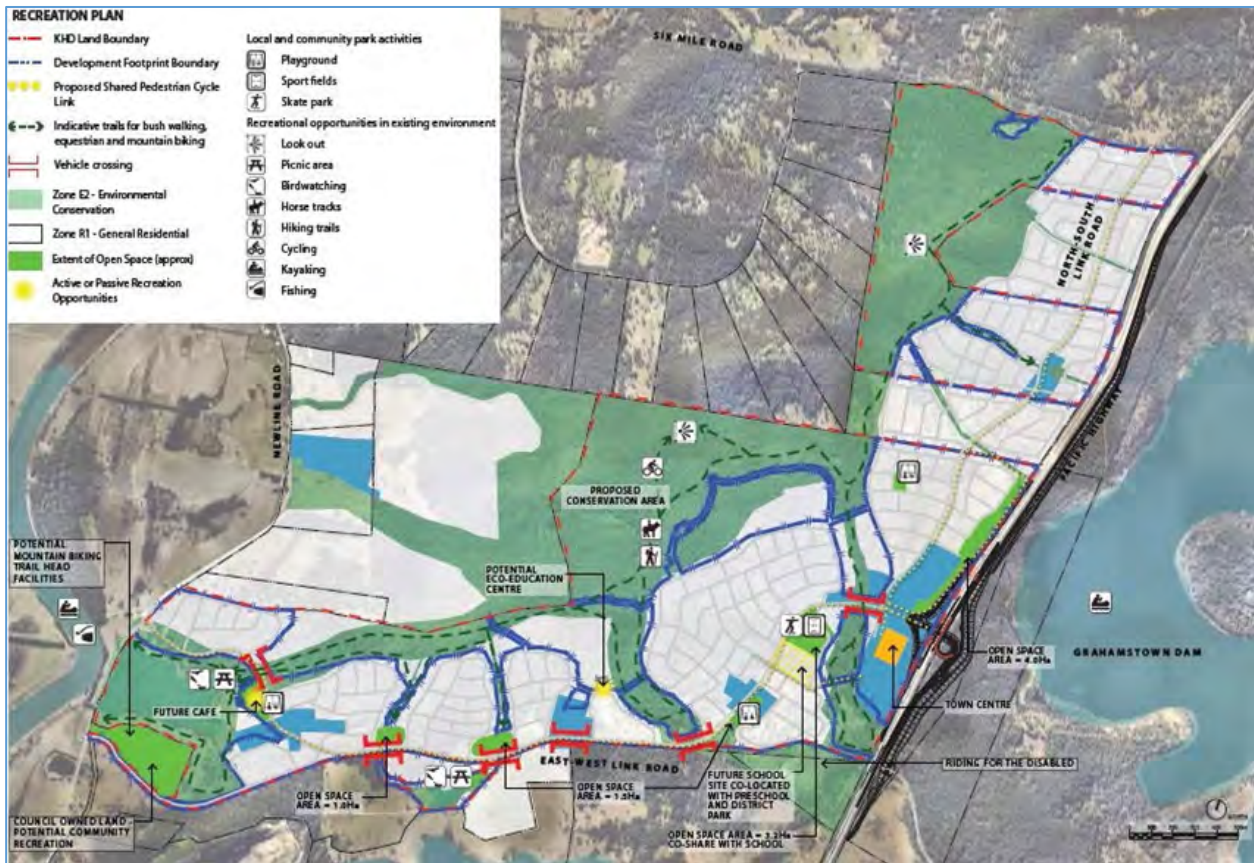


Figure 70 Proposed open space and school sites – recreational plan

The proposal also identifies other opportunities to be further explored by KHD in collaboration with council, owing to the attributes of the site and the comparative advantages of the location. Broader public benefits are available to the local community and the wider population of Port Stephens and the Lower Hunter given the potential for public and/or private ventures within and adjacent the site. The recreation plan (see Figure 75) therefore makes provision for:

- Two (2) sites selected with potential for active or passive recreation opportunities such as eco or cultural ventures, or research and education facilities
- Potential to use the council owned open space off Newline Road for Mountain Bike trail head and associated active recreation facilities and activities (subject to refining arrangements with Council) ; and
- Passive recreation opportunities within the proposed Conservation Area (horse, mountain bike and bushwalking trails) in locations determined compatible with Conservation objectives (existing and proposed dual purpose bushland trails (for maintenance access, biodiversity management and monitoring, and bushfire management), a boardwalk along wetland 803, and two (2) proposed birdwatching platforms.

8.4 Proposed ancillary infrastructure

Water supply and stormwater management infrastructure is proposed in the following forms and locations within the Proposal:

- Two water supply reservoirs (high level and low level) with provision for two reservoir access roads.
- Stormwater management devices, including bio filtration and retention basins, and a prospective environmental protection works depot.

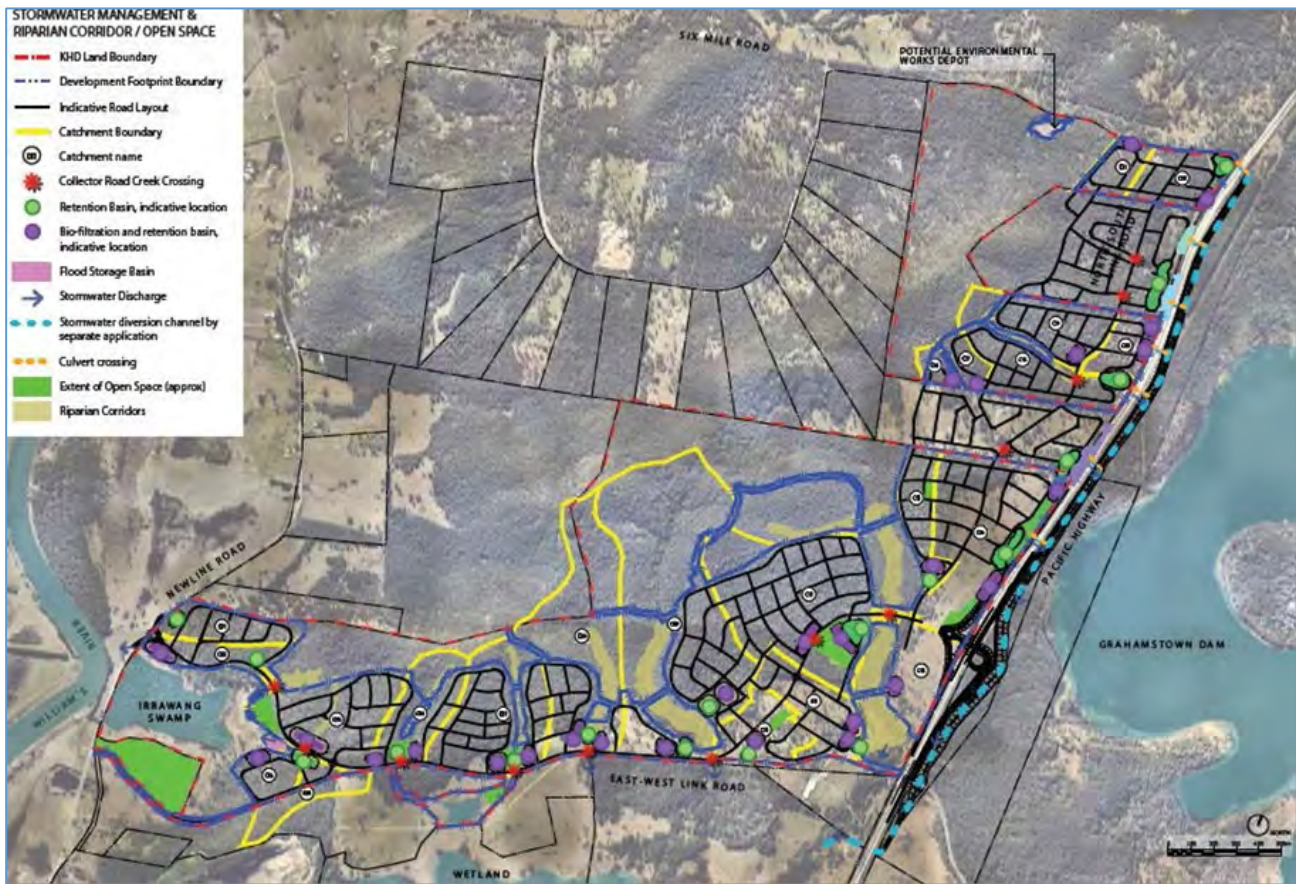


Figure 71 Stormwater catchments and treatment

A stormwater diversion channel to protect Grahamstown Dam drinking water supply is proposed which is the subject of a separate approval process and is to be delivered under the State VPA by the TfNSW.

8.4.1 Proposed earthworks

Northrop Engineers have determined during preliminary engineering design that earthworks and regrading will be required across the majority of the site for the provision of access, drainage and the creation of residential lots. Detailed levels and cut/ fill plans will be confirmed within each DA for subdivision. Preliminary design of roads and drainage indicates that in terms of cut and fill:

- Most roads will involve some adjustment to existing surface levels. It is expected that the roads will vary from either cut or fill and therefore earthworks batters from the edge of the road reserve will extend into adjacent lots by a distance which will be relative to the height of cut or fill at the road centre line. Due to the steep nature of the site, it is expected that retaining walls or vegetated batters with grades up to 1:3 will be required, particularly around the perimeter roads.

- Above ground detention and water quality basins will require adjustments to existing surface levels (both cut and fill) to achieve the necessary embankment heights and floor depths/grades within the basins. Basins will generally be located at the downstream end of each precinct, which typically has flatter grades, so it is possible to minimise batters.
- Development areas along existing watercourses may require filling to ensure building areas are located above the expected 100-year ARI flood level.
- The removal of dams from within the site will require appropriate earthworks to return to the natural or proposed topography.
- Any proposed re-alignments of ephemeral watercourses will require the filling of existing gullies and the creation of new watercourses by cut and fill to achieve the desired cross-sectional shape. Wherever possible, natural stream forms will be adopted, including the provision of pool and riffles, a meandering low flow channel, natural erosion protection (e.g. rock rip rap), the introduction of rock bars at regular intervals to act as bed control structures and dense “three storey” indigenous riparian vegetation planting along the core riparian zones.
- Some filling of development lot areas may occur to smooth out any localised surface high or low points which might affect the development lot. This would assist with ensuring that surface runoff occurs in a sheet flow manner rather than concentrating into small gullies which may produce erosion problems and drainage issues for newly constructed buildings.

8.4.2 Proposed stormwater management

Northrop Engineers developed a preliminary stormwater management strategy consistent with the *Kings Hill Urban Release Area Water Management Strategy Guidelines by BMT WBM* (dated 16 October 2013) and the PSC DCP, specifically Section D14.D relating to stormwater. The strategy also adopts *Landcom Water’s Stretch Targets* in the management of the stormwater impacts of the development on the Irrawang Swamp.

With the ultimate discharge of managed stormwater into the Irrawang Swamp and Wetland 803, detailed investigation was carried out by Alluvium Pty Ltd to assess the direct and indirect environmental impacts of the discharge on each wetland.

Alluvium’s detailed analysis determined that major risks to the wetlands, including increases in periods of increased inundation depth and reductions in seasonal drying patterns, are unlikely to occur. The report proposes a number of measures are put in place to manage water quantity and quality from development areas, including:

- Reducing stormwater runoff during frequent smaller rainfall events;
- Implement measures including disconnecting impervious areas, oversized BASIX rainwater tanks, infiltrating bio filtration systems, stormwater retention and harvesting systems;
- Ensuring that the majority of future runoff passes through appropriately sized stormwater retention/detention measures to protect ephemeral watercourses from erosion; and

- Management of stormwater runoff quality to prevent coarse sediment, dissolved nutrients, fine sediment and other diffuse source stormwater pollutants from impacting on the wetland ecology. This includes effective measures (including regular inspections) in the subdivision construction, building construction and post development Phases.

These measures have been incorporated into the proposed stormwater management plan, which proposed the introduction of a number of stormwater management devices (see Figures 77 to 79). These devices include gross pollutant traps, bio-filtration basins, retention basins and detention basins.

Additional stormwater management options such as vegetated swales, rain gardens integrated into the streetscape, wetlands and proprietary products used for conveyance and treatment may also be considered on a site by site basis at DA for subdivision stage.

8.4.2.1 Management of water quantity

Detention basins are proposed at 12 different locations across the site. Five of the 12 proposed detention basins will be offline (not within a classified watercourse), while seven will be online (within a classified watercourse). Online detention basins are proposed to be located along 1st and 2nd order streams within the site boundary which is allowable in accordance with the NSW Guidelines for Riparian Corridors on Waterfront Land, 2012.

8.4.2.2 Management of water quality

Northrop determined that bio-filtration basins in combination with gross pollutant traps (GPTs) are the most efficient and economical treatment devices for the Kings Hill development at a precinct scale. Rainwater tanks at a lot scale have also been included as the first step in the treatment train. Preliminary Stormwater Management design for the Proposal is depicted in Figures 77 to 79.

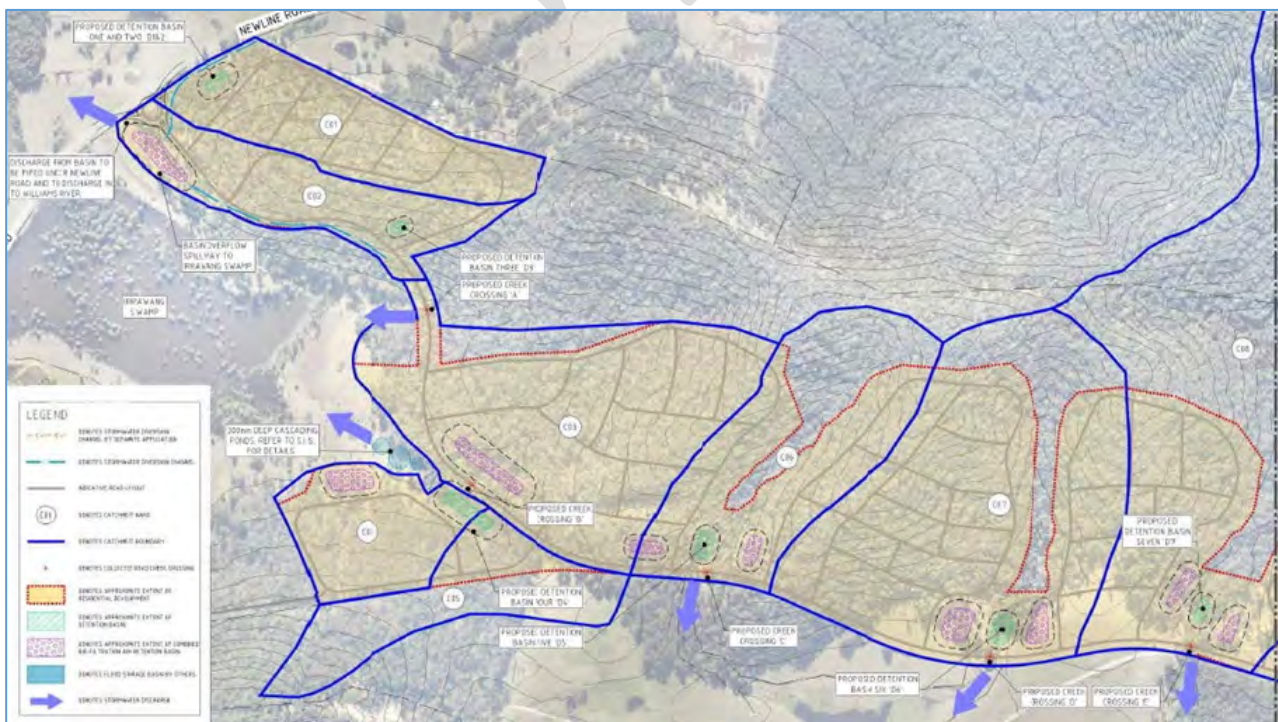


Figure 72 Concept stormwater management -western catchments

Source: Northrop Engineers

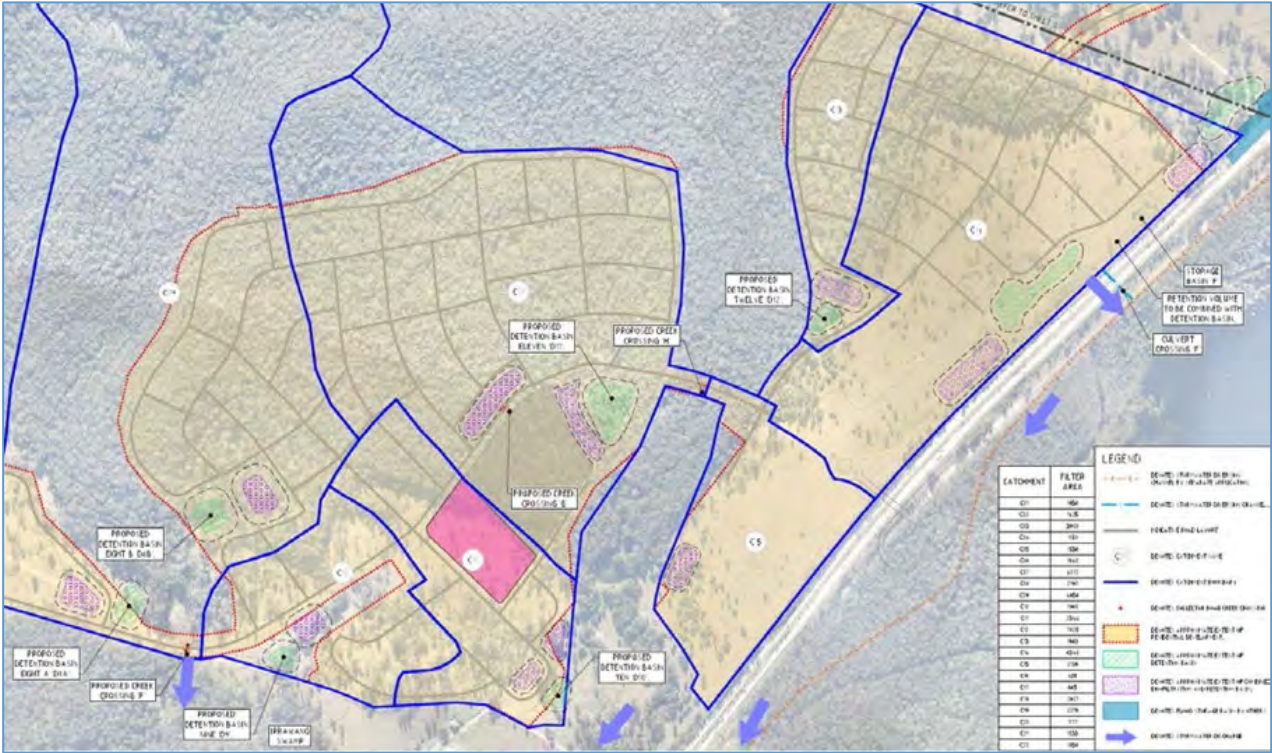


Figure 73 Concept stormwater management – eastern catchments



Figure 74 Proposed stormwater management – northern catchments

8.5 Proposed school site

A state Primary School site is proposed in a location collocated with proposed open space with capacity for fields (see Figures 80).

Demand for the primary school is based on the ultimate expected population of 10,000 persons within the KHURA. Under the State VPA, an unconstrained and serviced school site is to be dedicated to the NSW Department of Education prior to the issue of a subdivision certificate for the creation of the 900th lot within the KHURA.

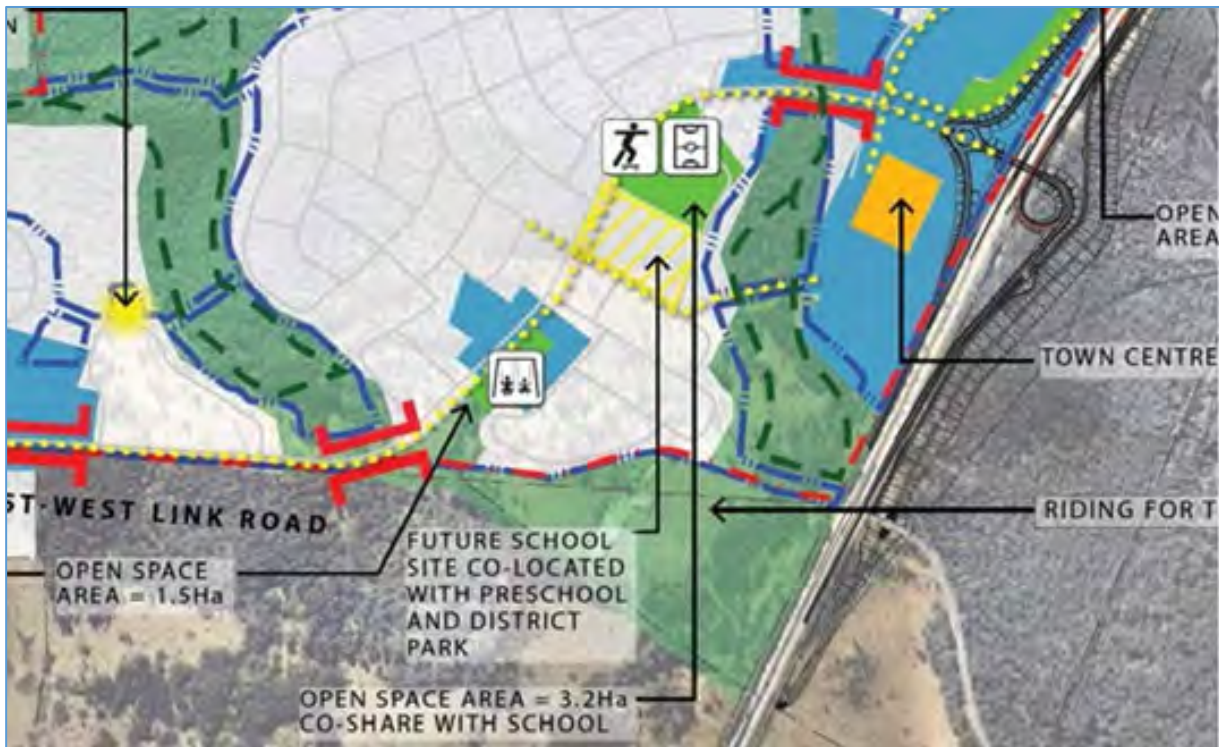


Figure 75 Proposed public school site

Source: PDS

The proposed school site meets or exceeds the criteria for public school sites (determined during consultation with the NSW Department of Education) and the site and location criteria (where specified) in the following:

- Planning New Schools School Safety and Urban Planning Advisory Guidelines (Sept 2016).
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017; and
- Schedule 5 of the State VPA executed between KHD, DPIE and the RMS (now TfNSW).

The NSW Department of Education require Primary School sites to comprise a usable site area of 2ha with a maximum of 3ha on Greenfield sites or in regional areas. The site is 2.1ha and meets the following site criteria of the NSW Department of Education:

- Site must be substantially regular with have a minimum frontage of 200m and road frontage ideally on 3 but not less than 2 sides.
- Site must be located near land adjacent open space and recreation on land with less than 1 in 10 slope and with consistent topography and well drained.
- Site must be clear of 1 in 100 year flood risk and be free of contamination, and be provided with suitable bushfire measures, if mapped as bushfire prone land.
- Site must be properly serviced with water, sewer, power, telecommunications, local traffic infrastructure (such as kerb, gutter, footpath, roundabout, crossings, pedestrian pathways).

9 Appendix C 1 – State infrastructure consultation

Table 10 Stormwater channel consultation summary

Stakeholder	Activity	Issue/feedback received
Port Stephens Council	April 2015 Meeting with Council's working group Various meetings and correspondence as part of the overall Kings Hills project	Options considered for the project Approval path and clause 228(2) considerations Stormwater drainage channel details Operational arrangements Project cost Downstream impacts Drinking catchment / Irrawang Swamp water quality impacts Agency consultation
	March 2017 Workshop with Hunter Water, Council	Capacity and bund height of channel Water quality treatment during operation of channel Access arrangements into Grahamstown Dam for Hunter Water personnel Relocation of utilities Irrawang Swamp (existing environment, potential operational impacts, mitigation measures) Koala habitat and connectivity Hollow-bearing trees Threatened species
	April 2017 Meeting with Council's Natural Resource Coordinator and Senior Environmental Scientist	Scope of additional biodiversity surveys carried out April/May 2017 Fauna connectivity issues Proposed biodiversity mitigation measures
	July 2017 Meeting with Council to discuss status of REF prior to lodgement	Water quality impacts on downstream environments Outcomes of additional biodiversity surveys completed in May 2017 Operational management of the stormwater channel
	August 2017 Workshop with environmental representatives, maintenance staff and environmental planners from Council, Hunter Water and Umwelt	Workshop to discuss results of third-party review of draft REF (i.e. by Umwelt on behalf of Council)
	February 2019 Correspondence	Approval from Council on Koala HUB Assessment scope for the Kings Hill URA
	September 2018 Meeting	Kings Hill URA Pre-DA lodgement meeting Mention of proposal as key infrastructure

Stakeholder	Activity	Issue/feedback received
	February 2019 Meeting with Council, ANU, RPS	Kings Hill URA biodiversity discussions: Koala habitat, wetlands, corridors, Koala DNA work, cumulative impacts, mitigation and offsetting, SIS submission Kings Hill URA lodgement, assessment and referral process
	May 2019 Meeting	Pre-DA lodgement meeting with Council for the Kings Hill Water and Wastewater Infrastructure (subject to separate environmental assessment and approval) Minor mention of the status of the Channel REF
	June 2019 Roads and Maritime independently facilitated options value management workshop	Council attended and provided input at Roads and Maritime Options Review (see details below in Roads and Maritime section)
Hunter Water	May 2015 Meeting with Hunter Water staff at the Newcastle offices and correspondence	Impacts on the Grahamstown Dam service road; maintain road access to their land Stormwater discharge arrangements. No discharge into Grahamstown Dam The relocated Grahamstown Dam access road should be trafficable on a 0.2%AEP rainfall. New drainage channel (which falls outside the scope of this proposal) to cater for the critical 0.2% percent annual exceedance probability rainfall event to prevent water entering Grahamstown Dam. Relocation of power lines running parallel to Pacific Highway
	March 2017 Workshop with Hunter Water and Council	As described for Port Stephens Council (refer to above)
	April 2017 Consultation with Hunter Water's Senior Ecologist / Environmental Planner	Scope of additional biodiversity surveys carried out April/May 2017 Fauna connectivity issues Proposed biodiversity mitigation measures
	May 2019 Meeting	Meeting with Hunter Water to discuss the Kings Hill Water and Wastewater Infrastructure (subject to separate environmental assessment and approval) Minor mention of the status of the Channel REF
	June 2019 Roads and Maritime independently facilitated Options Review Workshop	Hunter Water attended and provided input at Roads and Maritime Options Review (see details below in Roads and Maritime section)
Roads and Maritime	Correspondence; face to face meetings with Roads and Maritime Hunter Region staff	Impacts on Pacific Highway / classified road network Access track connection to the Pacific Highway: vehicle entry/exit arrangements

Stakeholder	Activity	Issue/feedback received
	March 2017 On-site meeting with Roads and Maritime Environment Officer and Aboriginal Cultural Heritage Officer	Interchange footprint and design features, with focus on drainage arrangements, biodiversity issues and Aboriginal heritage issues, and context with regard to proposed stormwater channel footprint
	August 2017 Workshop with Roads and Maritime Hunter Region staff	Interchange geometry and design Relocation of utilities: timing, methodology and proposed alignments Proposed drainage infrastructure and stormwater management, with and without construction of the proposed stormwater channel east of the interchange
	May 2019 Meeting with Roads and Maritime Hunter Region staff	Aboriginal heritage assessment requirements Legislative updates Confirmed comments from March 2017 Workshop with Hunter Water and Port Stephens Council are to be addressed Discussion of Roads and Maritime options analysis
	June 2019 Independently facilitated Options Review Workshop	Workshop to review options for proposed stormwater channel location. Workshop attended by representatives from Roads and Maritime, Council, Hunter Water, KHD and Gwynvill
	July 2019 Meeting with Roads and Maritime Hunter Region staff	Biodiversity offset strategy approach Koala land bridge Verification of project description and consideration of construction traffic movements Confirmation of study area
Gwynvill Trading Pty Ltd	August 2016 Correspondence	All details related to the proposal provided to landowner Information was reviewed and concurrence and support confirmed
Telstra	August 2014 Correspondence and phone discussions	Impact on Telstra copper communication cables
	July 2019 Correspondence	Relocation of Telstra optic fibre cable
Ausgrid	August 2017	Relocation of 11Kv overhead powerline
Dams Safety Committee	February and May 2017	Proposed drainage channel and bund design
Stephen Phillips Managing Director / Principal Research Scientist	September 2017 Meeting with Arcadis, KHD, JW Planning, BIOCM	Significance of impacts of the proposal on koalas, mitigation measures to be implemented to reduce impacts on koalas, and measures to provide for habitat connectivity into and through the proposal footprint (and surrounding landscape).

Stakeholder	Activity	Issue/feedback received
Biolink Ecological Consultants	March and May 2018 Meetings	Kings Hill URA HUB Assessment outputs, recommendations and updates Kings Hill URA Koala corridor
	Ongoing 2019 Correspondence	Ongoing discussions surrounding Koala habitat, Koala land bridge, mitigation measures, etc.
Department of the Environment and Energy	October 2017	Discussions regarding the potential for the proposal to trigger an EPBC Referral due to impacts to the Koala
Department of Planning, Industry and Environment (formerly Office of Environment and Heritage, OEH)	April 2018 Meeting	Consultation regarding DGRs, offsetting, SIS, approach for future Das, approach to Koala impacts (related to Kings Hill URA)
	August 2018 Meeting	Kings Hill URA Pre-SIS consultation
	February 2019 Meeting with OWAD, RPS, JW Planning, ANU	Kings Hill URA Pre-DA lodgement consultation

Table 11 Consultation process for the interchange

Stakeholder	Activity	Issue/feedback received
NSW Department of Planning, Industry and Environment	Ongoing since 2014 Meetings and correspondence regarding funding, proposal timing and coordination of processes and approvals	Approval framework Reasonable and Proportionate Funding mechanisms Expected timing
Port Stephens Council	April 2015 Meeting with Council's working group Various meetings and correspondence as part of the overall Kings Hill development	Interchange ownership Property adjustment and acquisition requirements Stormwater management system arrangements Drinking catchment / Irrawang Swamp water quality impacts
	March 2017 Workshop with Hunter Water, Council	Access arrangements into Grahamstown Dam for Hunter Water personnel Relocation of utilities Irrawang Swamp (existing environment, potential operational impacts, mitigation measures)
	April 2017	Proposed stormwater channel biodiversity discussions

Stakeholder	Activity	Issue/feedback received
	Meeting with Council's Natural Resource Coordinator and Senior Environmental Scientist	
	July 2017 Meeting with Council to discuss status of Stormwater Channel REF prior to lodgement	Water quality impacts on downstream environments Channel-related material
	August 2017 Workshop with environmental representatives, maintenance staff and environmental planners from Council, Hunter Water and Umwelt	Workshop to discuss results of third-party review of draft REF (i.e. by Umwelt on behalf of Port Stephens Council) Cumulative impacts of the interchange and proposed stormwater channel, particularly the loss of native vegetation and threatened species habitat
	February 2019 Correspondence	Approval from Council on Koala Hub Assessment scope for the Kings Hill URA
	September 2018 Meeting	Kings Hill URA Pre-Development Application (DA) lodgement meeting Mention of proposal as key infrastructure
	February 2019 Meeting with Council, ANU, RPS	Kings Hill URA biodiversity discussions: Koala habitat, wetlands, corridors, Koala DNA work, cumulative impacts, mitigation and offsetting, Species Impact Statement (SIS) submission Kings Hill URA lodgement, assessment and referral process
	May 2019 Meeting	Pre-DA lodgement meeting with Council for the Kings Hill Water and Wastewater Infrastructure (subject to separate environmental assessment and approval) Minor mention of the status of the Interchange REF
Hunter Water	May 2015 Meeting with Hunter Water staff at the Newcastle offices and correspondence	Impacts on the Hunter Water Grahamstown Dam maintenance access track; proposed relocation of the track Stormwater discharge arrangements and avoidance of discharge into the Grahamstown Dam The relocated Grahamstown Dam access road should be trafficable on a 0.2%AEP rainfall. New drainage channel (which falls outside the scope of this proposal) to cater for the critical 0.2% percent annual exceedance probability rainfall event to prevent water entering Grahamstown Dam. Relocation of power lines running parallel to Pacific Highway
	March 2017 Workshop with Hunter Water and Council	As described for Port Stephens Council (refer to above)

Stakeholder	Activity	Issue/feedback received
	May 2019 Meeting	Meeting with Hunter Water to discuss the Kings Hill Water and Wastewater Infrastructure (subject to separate environmental assessment and approval) Minor mention of the status of the Interchange REF
Roads and Maritime	Ongoing since 2014 Correspondence; face to face meetings with Roads and Maritime Hunter Region staff	In principle support for the proposal Feedback on initial design for preferred option Options considered for the location of the Grahamstown Dam service road connection Impacts on Pacific Highway / classified road network Overpass bridge clearance and impacts on the highway lane widths Ramps length to allow for appropriate deceleration/acceleration Methodology of noise assessment Requirement for stand-alone biodiversity assessment in accordance with <i>Environmental Impact Assessment Practice Note – Biodiversity Assessment</i> (EIAN06) guideline (Roads and Maritime Services, 2016)
	March 2017 On-site meeting with Roads and Maritime Environment Officer and Aboriginal Cultural Heritage Officer	Interchange footprint and design features, with focus on drainage arrangements, biodiversity issues and Aboriginal heritage issues, and context with regard to proposed stormwater channel footprint
	August 2017 Workshop with Roads and Maritime Hunter Region staff	- Interchange geometry and design, including overpass height and shoulder width on overpass - Relocation of utilities: timing, methodology and proposed alignments - Proposed drainage infrastructure and stormwater management, with and without construction of the proposed stormwater channel east of the interchange
	May 2019 Meeting with Roads and Maritime Hunter Region staff	Aboriginal heritage assessment requirements – PACHCI Stage 2 Legislative updates Confirmed comments from March 2017 Workshop with Hunter Water and Port Stephens Council are to be addressed
	July 2019 Meeting with Roads and Maritime Hunter Region staff	Verification of proposal description and consideration of construction traffic movements Confirmation of study area
Telstra	August 2014 Correspondence and phone discussions	Impact on Telstra copper communication cables
	July 2019 Correspondence	Relocation of Telstra optic fibre cable

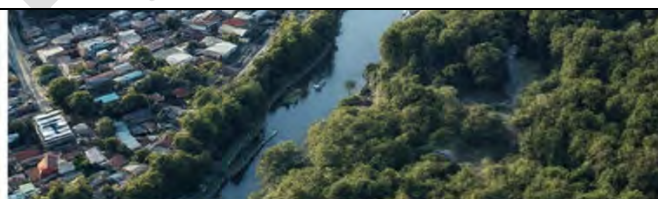
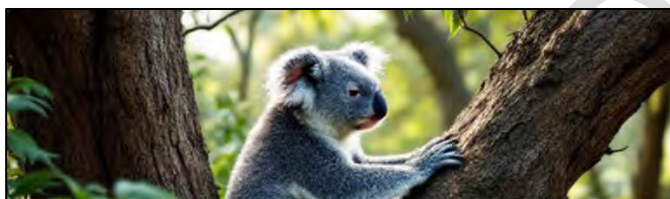
Stakeholder	Activity	Issue/feedback received
Ausgrid	August 2017	Relocation of 11Kv overhead powerline
Gwynvill Trading Pty Ltd	August 2016 Correspondence	All details related to the proposal provided to landowner Information was reviewed and concurrence and support confirmed
Riding for the Disabled Association	June 2019 Meeting with committee members	Details related to the proposal provided to the Association Discussion of operational and access requirements
Stephen Phillips Managing Director / Principal Research Scientist Biolink Ecological Consultants	September 2017	Significance of impacts of the proposal on koalas, mitigation measures to be implemented to reduce impacts on koalas, and measures to provide for habitat connectivity into and through the proposal footprint and surrounding landscape.
	September 2017 Meeting with Arcadis, KHD, JW Planning, BIOCM	Significance of impacts of the proposal on koalas, mitigation measures to be implemented to reduce impacts on koalas, and measures to provide for habitat connectivity into and through the proposal footprint and surrounding landscape.
	March and May 2018 Meetings	Kings Hill URA Hub Assessment outputs, recommendations and updates Kings Hill URA Koala corridor
	Ongoing 2019 Correspondence	Ongoing discussions surrounding Koala habitat, Koala land bridge, mitigation measures, etc.
Department of the Environment and Energy	October 2017	Discussions regarding the potential for the proposal to trigger an EPBC Referral due to cumulative impacts associated with the adjacent proposed URA development
Department of Planning, Industry and Environment (formerly Office of Environment and Heritage, OEH)	April 2018 Meeting	Consultation regarding DGRs, offsetting, SIS, approach for future DAs, approach to Koala impacts (related to Kings Hill URA)
	August 2018 Meeting	Kings Hill URA Pre-SIS consultation
	February 2019 Meeting with OWAD, RPS, JW Planning, ANU	Kings Hill URA Pre-DA lodgement consultation

10Appendix C2 - Engagement methodology

Kings Hill Urban Release Area: Stakeholder and Community Engagement Strategy

The Kings Hill Urban Release Area project, proposed by Kings Hill Development, aims to create residential, mixed-use, and commercial developments. This presentation outlines a comprehensive stakeholder and community engagement strategy to address past misconceptions, re-educate key stakeholders, inform decision makers and garner informed support for the project.

Our approach focuses on sustainable development, ecological protection, local Indigenous inclusion, and meeting community expectations while fulfilling legislative requirements. We'll explore four key components designed to ensure transparent communication and informed decision-making.



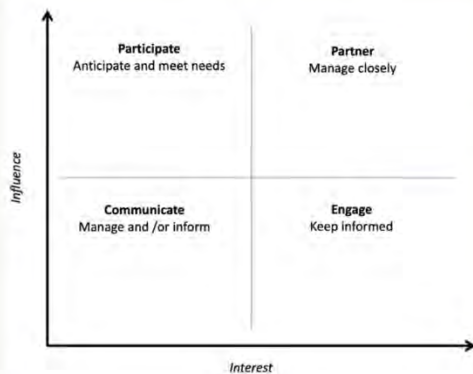
Project Background and Challenges

- 1 — **2010: Land Rezoning**
New South Wales Government rezoned land at Kings Hill for development.
- 2 — **Development Consent Requirements**
Suitable vehicular access from Kings Hill URA to Pacific Highway and stormwater management solution for Grahamstown Dam needed.
- 3 — **Community Concerns**
Environmental groups link development to negative impacts, particularly on koala population.
- 4 — **Current State**
Project marred by misrepresented commentary and misinformed opinions by some agencies and community organisations.

Stakeholder Identification and Analysis

Key Stakeholders

- Government agencies
- Environment conservation groups
- Adjoining neighbours
- Other relevant developments
- Surrounding communities
- Media
- Affected landowners
- Indigenous groups



Stakeholder Mapping

A framework will be applied to map each stakeholder according to their level of influence and interest. This will highlight high-interest, high-influence stakeholders for focused communication, and those with high interest but low influence who need regular updates.

On-going information provision

Develop a targeted communications plan

Establish a project specific web – enabling on-going, two-way and regular feedback

Regular community surveys to understand views and to test sentiment

Community Sentiment Research

- 1 Review Existing Surveys**
Examine previous community surveys on housing delivery to establish a baseline for understanding community sentiment.
- 2 Conduct Targeted Survey**
Develop a granular community sentiment survey to explore potential benefits and impacts of the Kings Hill project in detail.
- 3 Analyse Results**
Use survey results to understand levels of interest, existing knowledge, attitudes, and concerns about ecological impacts.
- 4 Inform Strategy**
Apply insights to develop an evidence-based, targeted communication and engagement strategy.





Communication and Engagement Strategy

Authentic Two-Way Communication

Develop tools for genuine dialogue, especially where emotions are heightened and expert information is needed.

Leverage Existing Resources

Utilise and enhance the project website to meet communication needs and support the Social Impact Assessment.

Digital Engagement

Consider implementing a digital engagement platform like social pinpoint for broader community reach.

Non-Digital Mechanisms

Develop non-digital communication tools to ensure inclusive engagement across all demographics.

Robust Community Engagement: Supporting Assessment Functions



Evidence-Based Documentation

Our engagement program systematically collects, analyzes and documents community interactions to provide clear evidence of consultation outcomes and stakeholder positions.



Assessment-Ready Reporting

The program follows the state-significant development framework, delivering structured documentation that supports statutory assessment requirements.



Traceable Feedback Integration

Comprehensive records of stakeholder input demonstrate how community feedback is evaluated and addressed in accordance with assessment criteria.



Verification Mechanisms

Multi-stakeholder validation steps ensure assessment officers can verify the thoroughness and authenticity of consultation outcomes.

Citizens Jury: Deliberative Engagement



The Citizens Jury will bring together up to 25 participants for a three-five-day deliberative session, led by Professor Roberta Ryan. This process aims to reset relationships, educate the community, build trust and transparency and provide decision-makers with clear insights into community perspectives.

Following the Citizens Jury



Establish a Community Consultative Committee

Compliant with the State Guidelines, a CCC will be established and independently chaired to ensure rigorous, ongoing inputs. CCC members selected from the Jury.



Conduct post Jury community survey

To test the findings of the Citizens Jury, a post Jury survey will be conducted. This ensures that their views and recommendations are tested with the broader community. These can become ongoing engagement.



Informing decision makers

The recommendations of the Citizens Jury and post Jury survey provide clear, methodologically robust guidance to decision makers as to the areas of agreement and disagreement, based on informed community deliberations.



Community led Community informed

The project will be informed by the robust, ongoing community and engagement. Their recommendations will inform key aspects of design, governance and delivery.



12Appendix E- Draft precincts masterplan



Document produced by Deicke Richards

Version	Date	Prepared	Reviewed
A	31.08.20	TR	PR
B	11.10.20	MC	PR

This report was prepared with the assistance of APP and relevant stakeholders.

Introduction	1
Purpose	1
Typologies	2
Dwelling types	2
Urban form	4
Master Plan	5
Proposal + Yield	5
Staging	6
Existing Configuration	7
First Neighbourhood Master Plan	8
Proposed	8
Slope analysis	9
Main Centre Master Plan	10
Proposed	10
Slope analysis	11
Second Neighbourhood Master Plan	12
Proposed	12
Slope analysis	13

Deicke
Richards

Introduction

Purpose of this document

Purpose

This document sits as an addendum to the 'Kings Hill URA - Urban Analysis' report. It describes the dwelling typologies and proposes a master plan of the proposed Kings Hill URA.

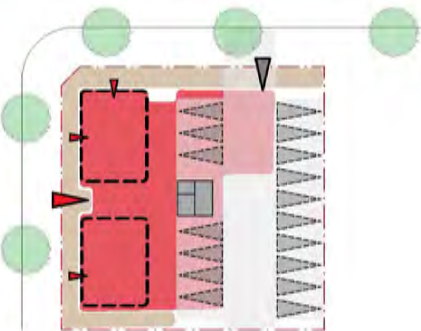
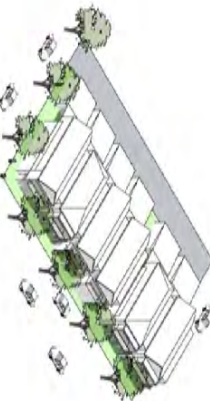
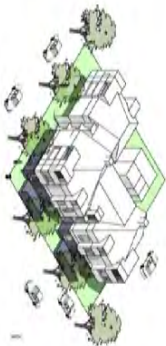
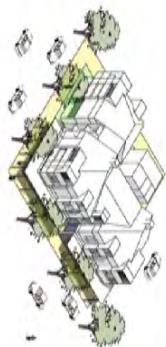


Typologies
Dwelling types

- Typologies
- Apartment
 - Row houses and duplexes
 - Small lots
 - General lots
 - Larger lots
 - Structure
 - Greenspace/backpack zones

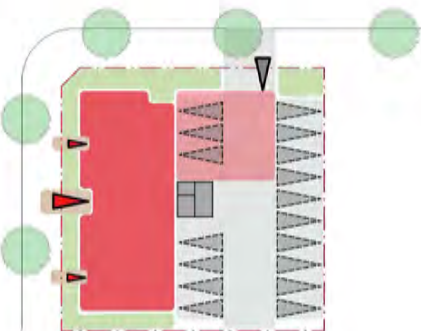
Typologies 1500

Kings Hill URA Master Plan



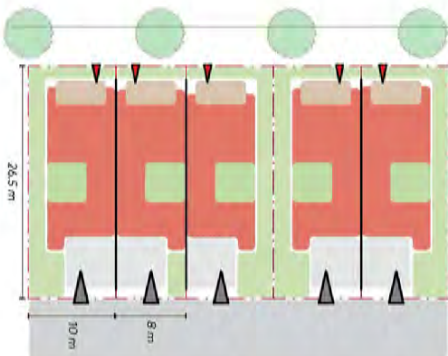
Three-story mixed use
30 metres X 30 metres
900m² (nom.)

Located within neighbourhood/town centres and/or along primary through streets near centres.



Two-story apartments
30 metres X 30 metres
900m² (nom.)

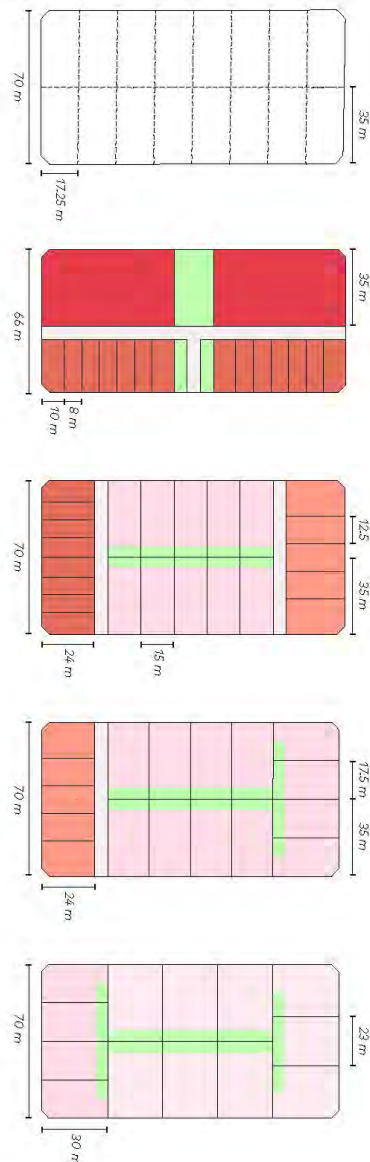
Located within 250 metres of neighbourhood/town centres on flatter land.



Row houses and duplexes
8-10 metres X 26.5 metres
200m² - 265m² (nom.)

Located within 250 metres of neighbourhood/town centres on flatter land.

Typologies Urban form



1:2,000



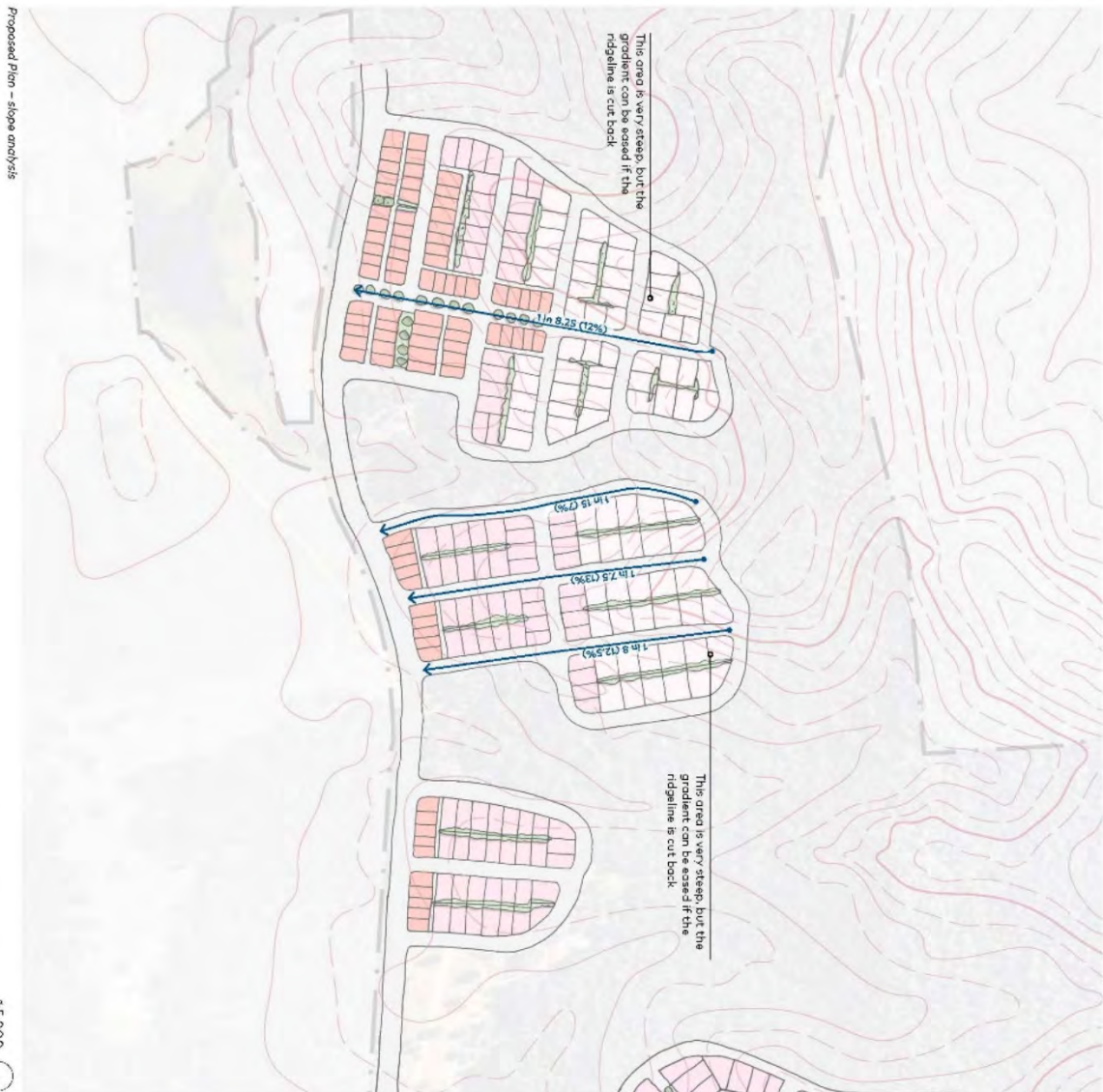
density	17 dw/ha	50 dw/ha	25 dw/ha	18 dw/ha	14 dw/ha
location	Existing pattern has a smaller configuration throughout, providing a density of 17 dwellings per hectare.	Neighbourhood/town centres and/or along primary through streets near centres.	Within 250 metres of neighbourhood/town centres on flatter land.	Outer neighbourhood, about 250-400 metres from neighbourhood/town centres and on steeper land.	Larger blocks occur on steeper slopes and towards the ridgelines and vegetated areas.
dwelling types		Apartments (3 storeys) and narrow lot row houses, both accessed from rear lanes.	Row houses and narrow lot houses, rear loaded at the heads of blocks. Typical houses located within the middle of the block. Opportunities for deep planting at rear of lots to maintain a treed environment.	Narrow lot houses, rear loaded at the heads of blocks closer to neighbourhood centres. Typical houses located within the middle of the block. Opportunities for deep planting at rear of lots to maintain a treed environment.	Typical houses located at the heads of blocks. Larger houses located within the middle of the block and at the end of blocks near the ridgelines. Opportunities for deep planting at rear of lots to maintain a treed environment.



Typologies 1500

Second Neighbourhood Master Plan Slope analysis

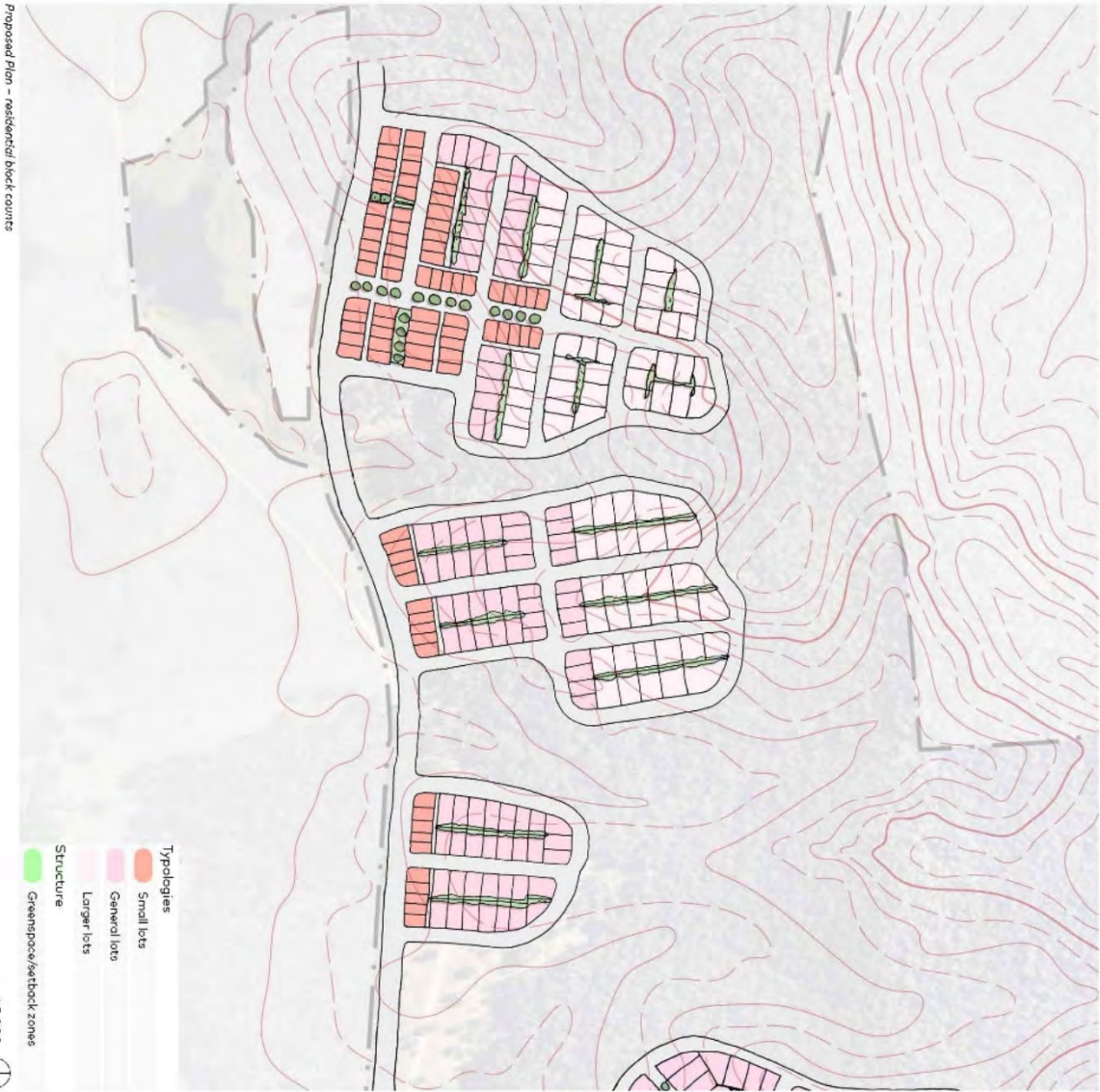
- The street network has been designed to respond to the topography with a modified grid pattern
- Larger lots are provided where steeper and higher areas are
- Higher lots ensure access is provided east-west across the slope
- Some areas are quite steep and may need further consideration



Second Neighbourhood
Master Plan
Proposed

The anticipated yield of approximately 260 dwellings (subject to more detailed design), this comprises the following mix of typologies:

Typology	Yield (approx.)
Small lots	85
General lots	90
Larger lots	85
Total	260



Main Centre Master Plan Slope analysis

- This area is relatively flat, closer to the highway.
- The street network and lot layout respond to the topography and surrounding context.



Main Centre Master Plan Proposed

There Main Centre master plan has a ridge line to the north-west and a small park is located on the ridgeline which has good views over the Grahamstown Dam. The anticipated yield of approximately 690 dwellings (subject to more detailed design), this comprises the following mix of typologies:

Typology	Yield (approx.)
Apartment	120
Row houses and duplexes	45
Small lots	150
General lots	135
Mixed use dwellings	240
Centre	5,000sqm
Total	690 dw + 5,000sqm



**First Neighbourhood
Master Plan**
Slope analysis

- The street network has been designed to respond to the topography with a modified grid pattern
- Some areas are quite steep and need further consideration
- Most sites can drain to the street
- In a few locations lots drain to the rear.



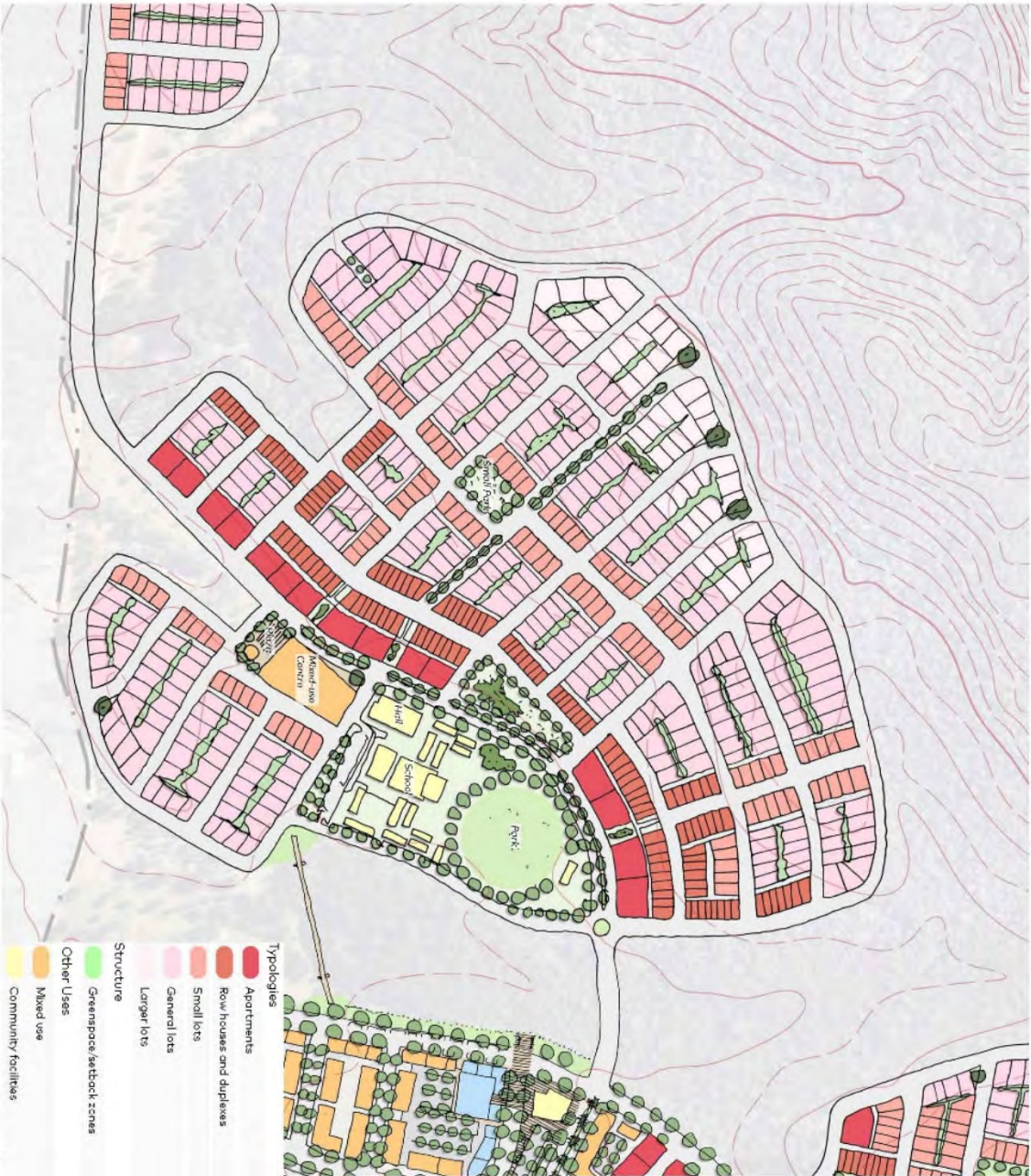
First Neighbourhood Master Plan Proposed

Proposed master plan

The proposed master plan for this section comprises a mixture of the five different housing typologies.

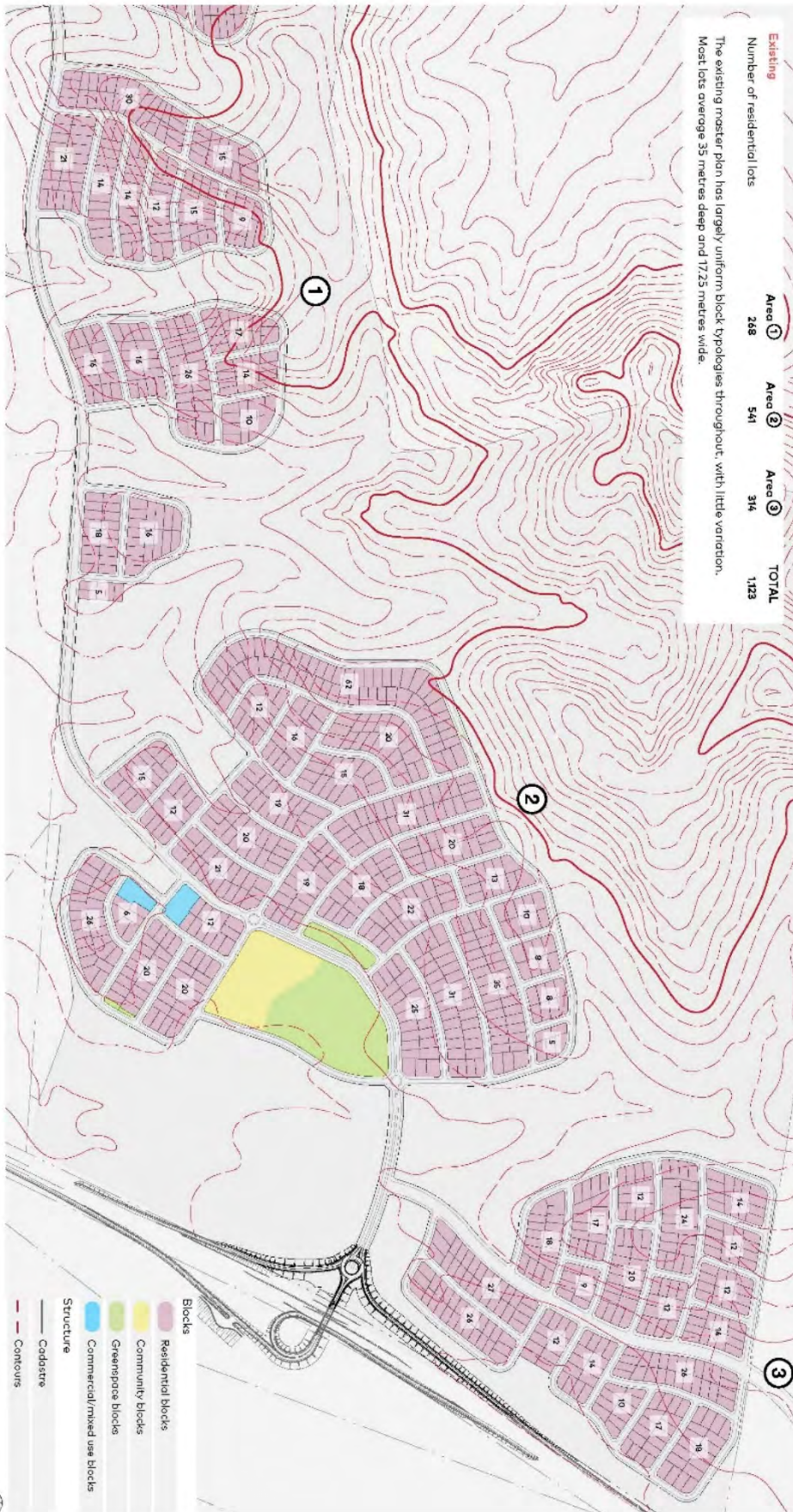
The anticipated yield of approximately 735 dwellings (subject to more detailed design), this comprises the following mix of typologies:

Typology	Yield (approx.)
Apartments	120
Row houses and duplexes	140
Small lots	100
General lots	290
Larger lots	45
Mixed use dwellings	40
Total	735

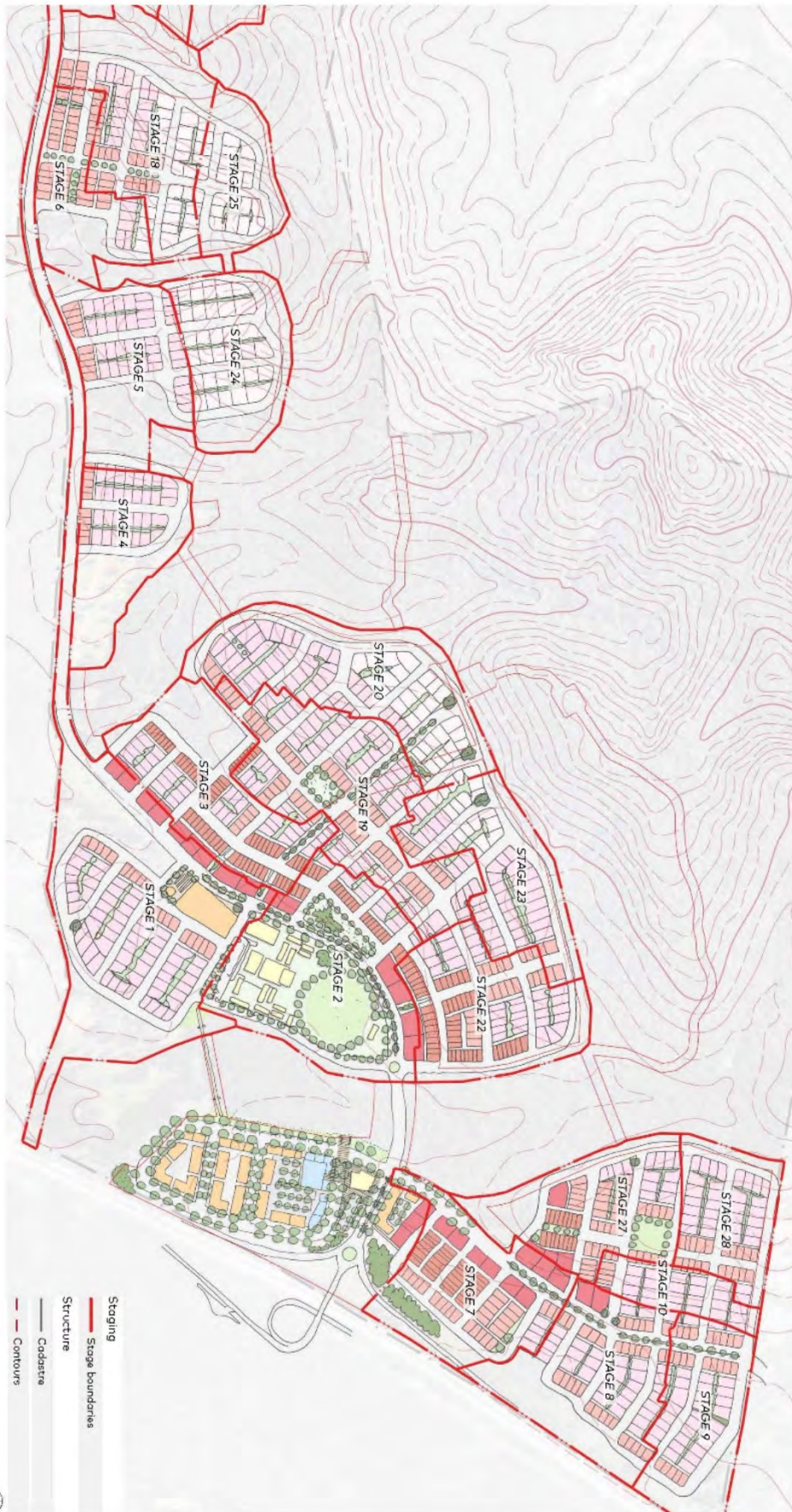


Master Plan

Existing configuration



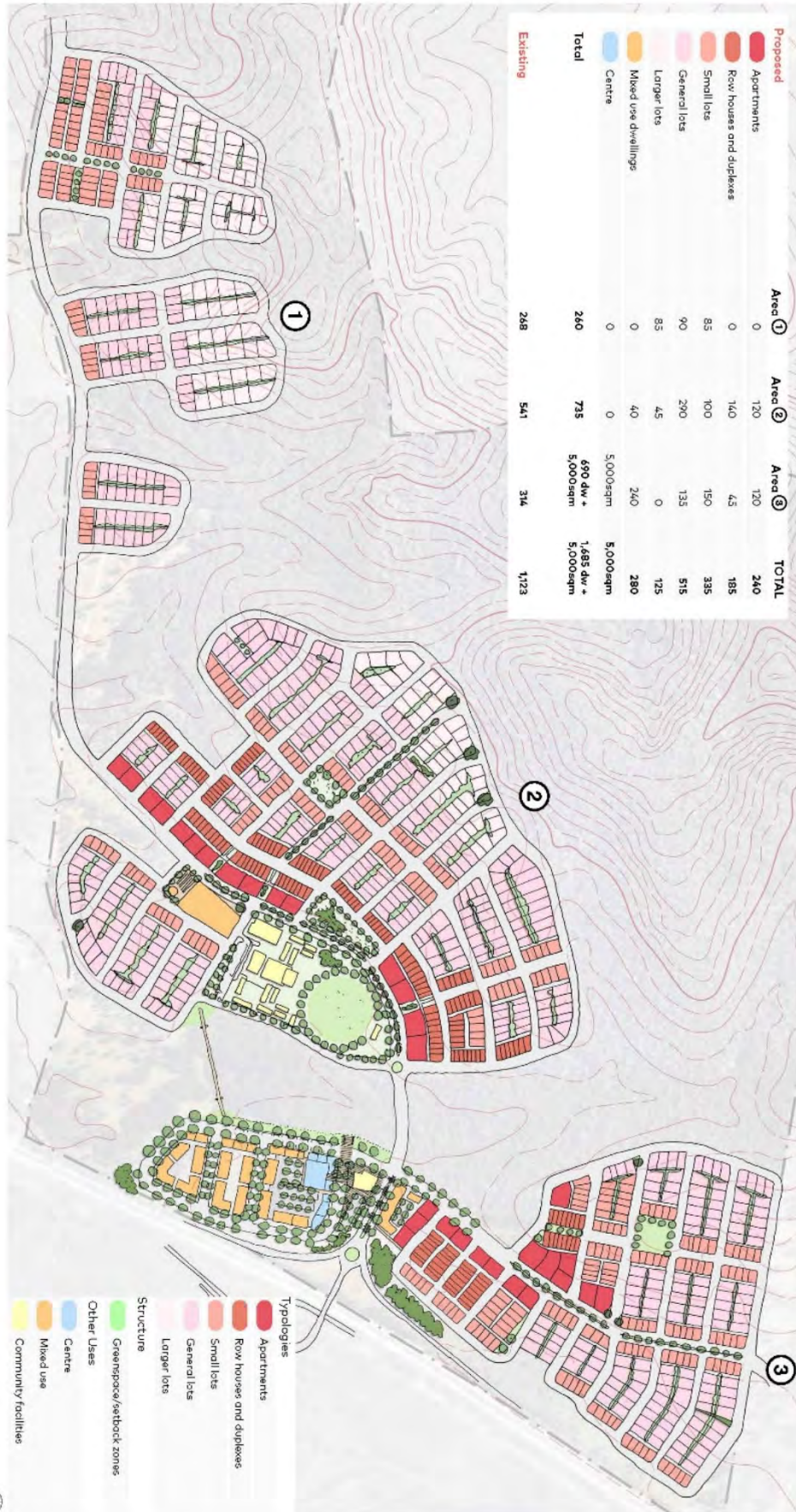
Master Plan Staging



6

Kings Hill URA Master Plan

Master Plan Proposal + Yield

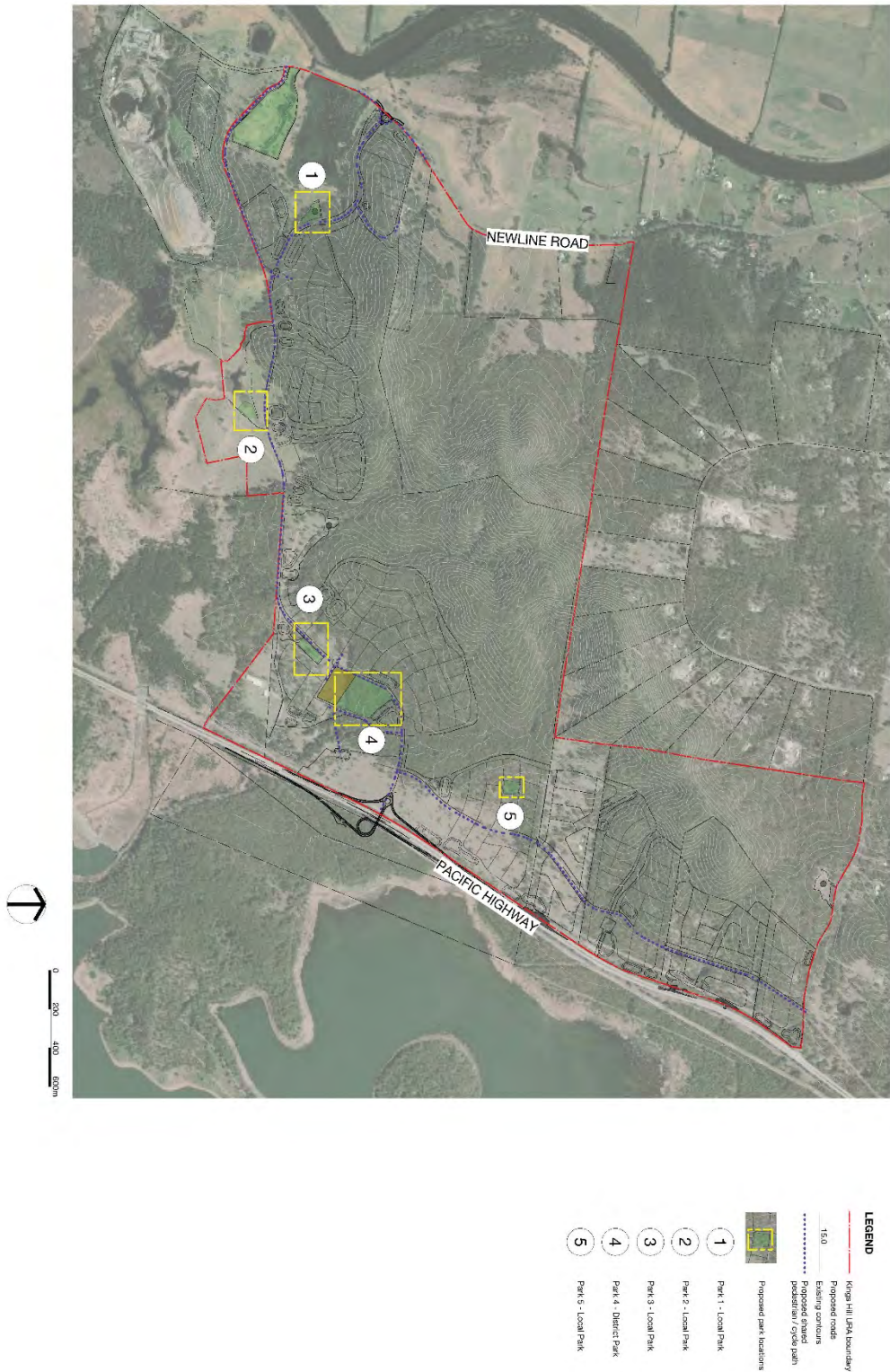


13Appendix F-Draft landscape and open space concept



KEY PLAN

KINGS HILL DISTRICT & LOCAL PARKS



- LEGEND**
- Kings Hill LRA boundary
 - Proposed roads
 - Existing services
 - Proposed trails
 - Proposed trails
 - Proposed park locations
- Park 1 - Local Park
 - Park 2 - Local Park
 - Park 3 - Local Park
 - Park 4 - District Park
 - Park 5 - Local Park

LANDSCAPE CONCEPT PLAN - PARK 5

KINGS HILL DISTRICT & LOCAL PARKS



- ① Park entry signage
- ② BBQ shelter with picnic seating
- ③ Park shelter with picnic seating
- ④ Junior playground
- ⑤ Nature playground - timber teepees, stepping logs, timber sleepers for kids to engage with nature.
- ⑥ Seats
- ⑦ Path
- ⑧ Path winding through ex. tall canopy trees
- ⑨ Existing trees + supplementary parkland planting
- ⑩ Open picnic area
- ⑪ Drinking fountain
- ⑫





- 

LANDSCAPE CONCEPT PLAN - PARK 1

KINGS HILL HISTORIC & LOCAL PARKS



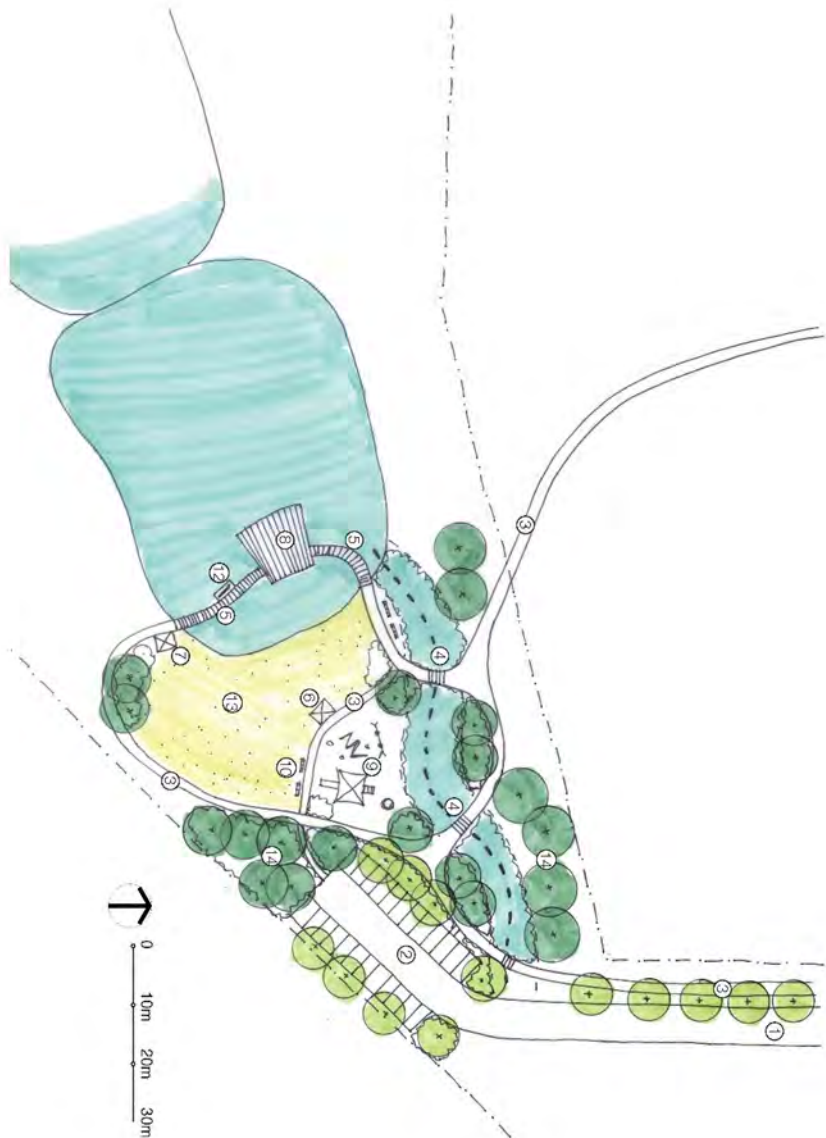
- ① Entry sign
- ② Carcark
- ③ Gate with outdoor seating
- ④ Shade trees
- ⑤ Junior playground
- ⑥ Flying fox
- ⑦ Pedestrian path
- ⑧ BBQ shelter with picnic seating
- ⑨ Shelter with picnic seating
- ⑩ Halfsize basketball court
- ⑪ Turned open space
- ⑫ Sandstone log seating





LANDSCAPE CONCEPT PLAN - PARK 2

KINGS HILL DISTRICT & LOCAL PARKS



- ① Entry road
- ② Carpark
- ③ 2.5m shared path / cycleway
- ④ Bridge
- ⑤ Boardwalk
- ⑥ BBO shelter with picnic seating
- ⑦ Shelter with picnic seating
- ⑧ Viewing platform with seating
- ⑨ Playground
- ⑩ Seating
- ⑪ Wetland planting along creekline
- ⑫ Wetland / wildlife viewing & information panel
- ⑬ Turfed open space
- ⑭ Tall canopy native trees with understory planting of native grasses



Fitness station
Source: Centennial Park, NSW / www.freeoutdoorfitness.net



Parkland amphitheatre
Source: Roma Street, Parklands, QLD / www.visitbrisbane.com.au



Source: Cornells Point Reserve, NSW / www.moduplay.com.au



Flying fox
Source: Lemvig Skatepark, Denmark / www.landezine.com



Half basketball court
Source: The Bower, NSW / www.mccobygroup.com.au



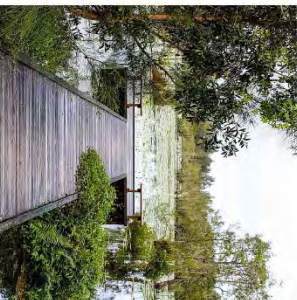
Sports field
Source: Croemr Park, NSW / www.mwfa.com.au



Skate park
Source: Mutch Park, NSW / www.skateboard.com.au



Amenities block
Source: Black Gully Park, QLD / www.weekendnotes.com



Wetlands boardwalk
Source: Cattai Wetlands, NSW /
www.northcoastnswlifestyle.com.au



BBQ shelter
Source: www.outdoordesignsource.com.au



Park sculpture
Source: Pt. Leo Estate, VIC/
www.morningtonpeninsulawineries.com.au



Nature playground
Source: Centenary Park, QLD / www.landscapearchitectureprojects.com

14Appendix G-Worimi Local Aboriginal Land Council and KHD MOU

VISION STATEMENT

Together, KHD and the Worimi Local Aboriginal Land Council (WLALC) wish to establish a Biodiversity Conservation Area that preserves, promotes and enhances the natural, historical and culturally significant attributes of Kings Hill.

Our shared vision is supported through a common interest to restore, protect and preserve the wealth and variety of species, habitats and ecosystems that are vital to the health and wellbeing of our community/s.

This will be achieved via traditional and contemporary land management practices that compliment and promote:

- *Nature Reserves and habitat restoration;*
 - *Reduction of invasive species;*
 - *Captive breeding and seed banks;*
 - *Research into reducing climate change.*

Through active partnership and investment; KHD and the WLALC seek to protect and promote cultural and educational values; that give provision to the training, development and employment of the Aboriginal Community in areas such as (not limited to) tourism, education, recreation and biodiversity land care activities.

Worimi Local Aboriginal Land Council

Name: Mr. Leigh Ridgeway

Position: WLALC Chairperson

Signature:

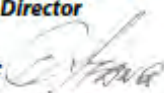


Kings Hill Developments

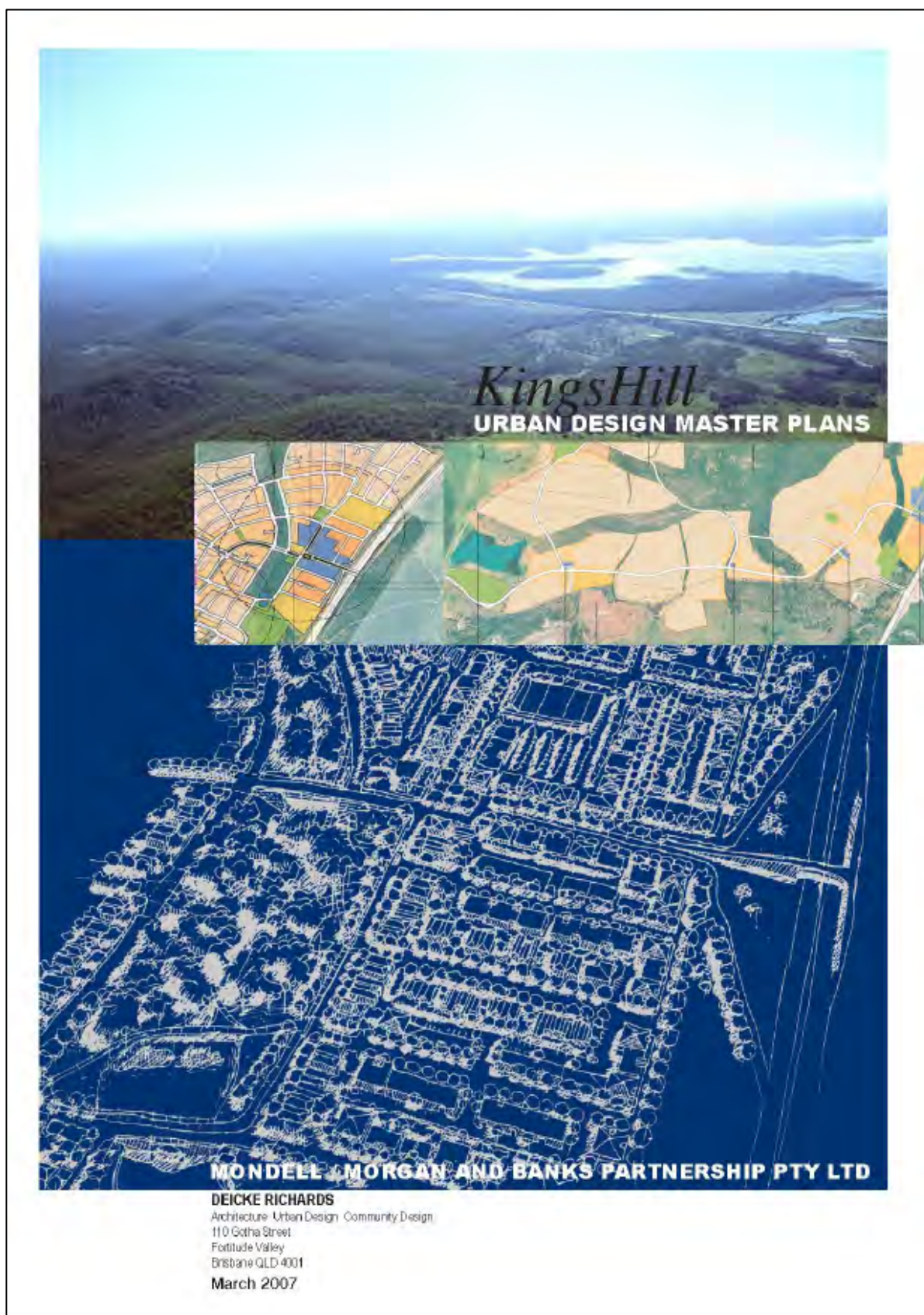
Name: Mr. David Fang

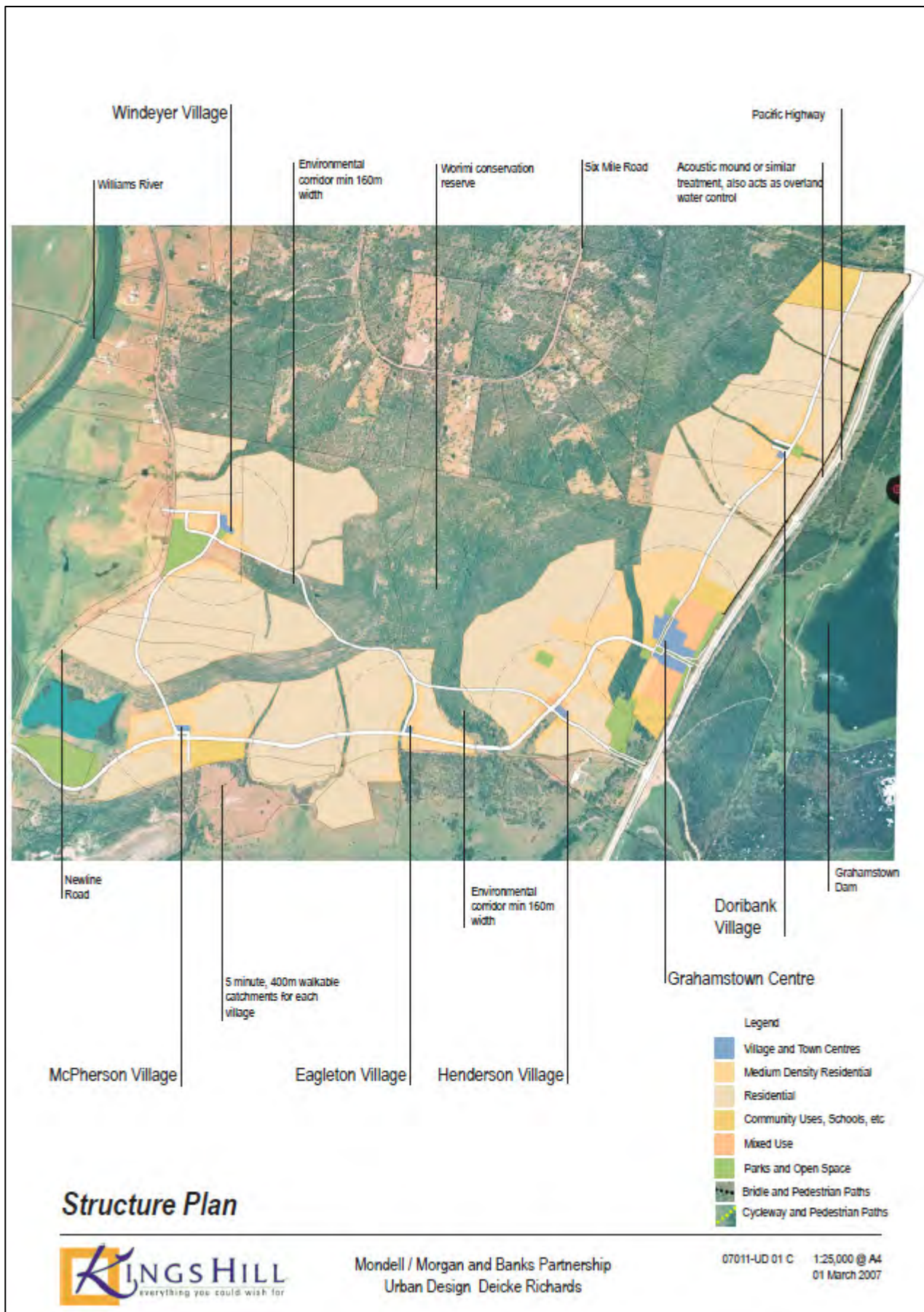
Position: Director

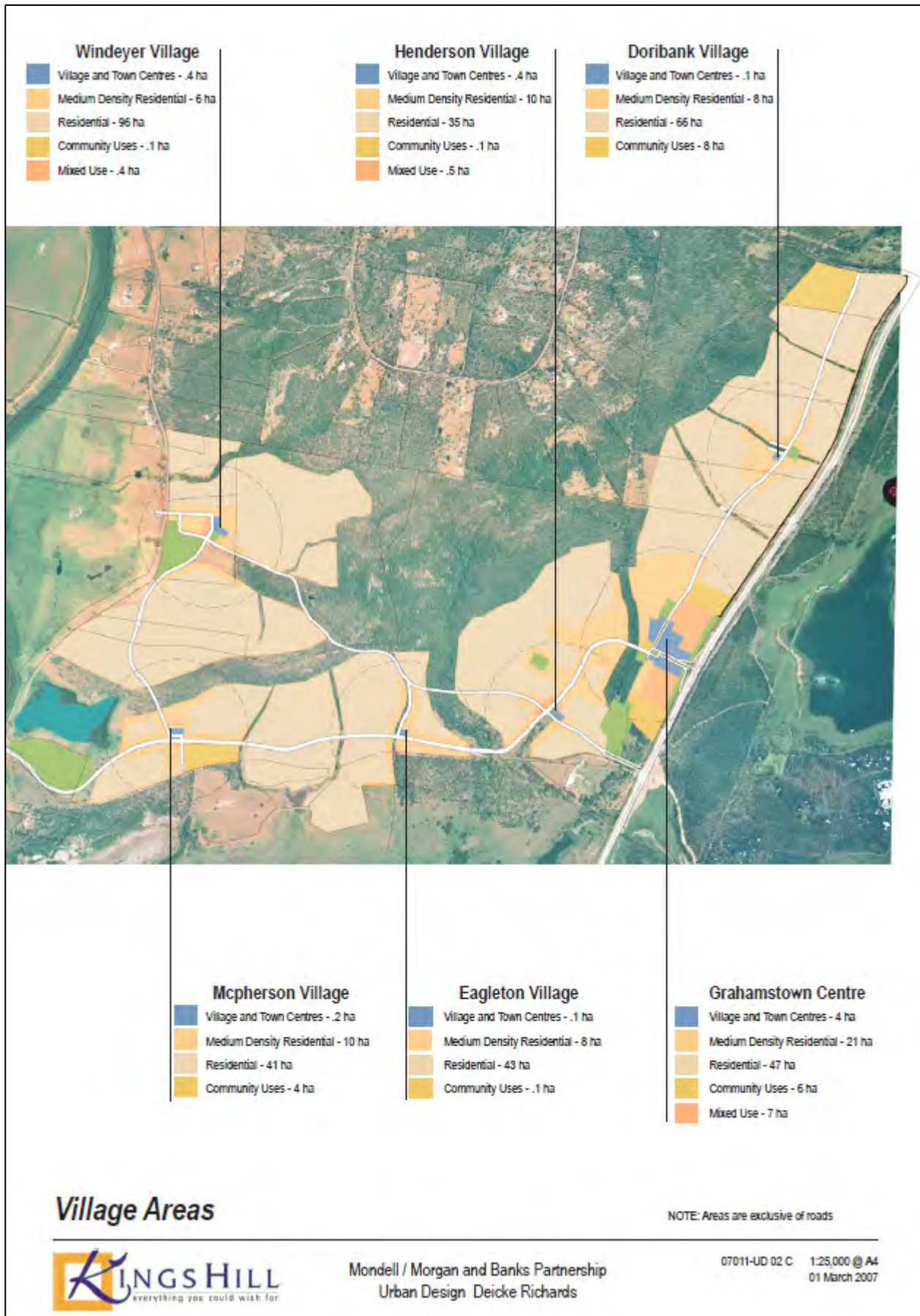
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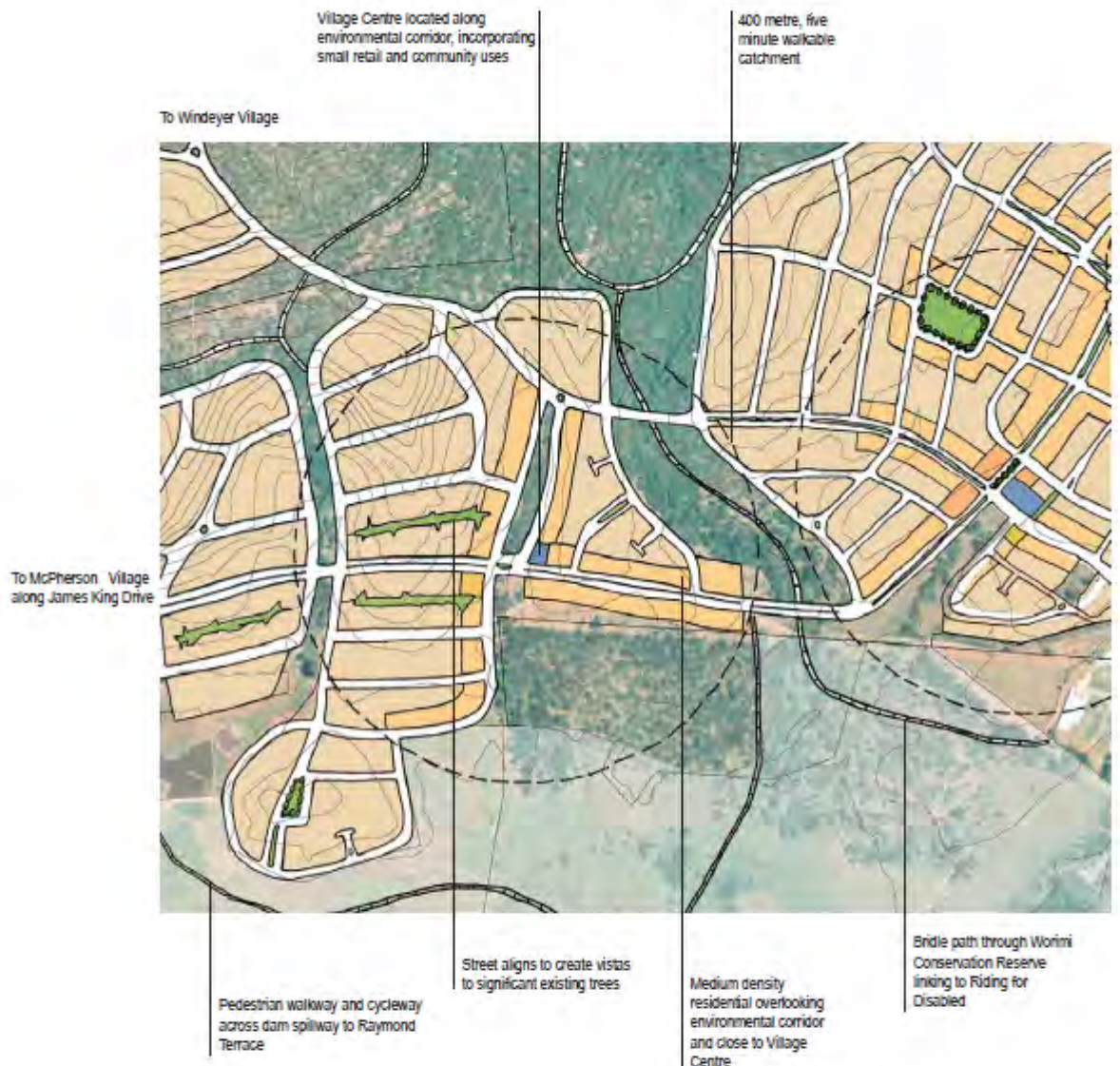

15Appendix H-Pre rezoning masterplan









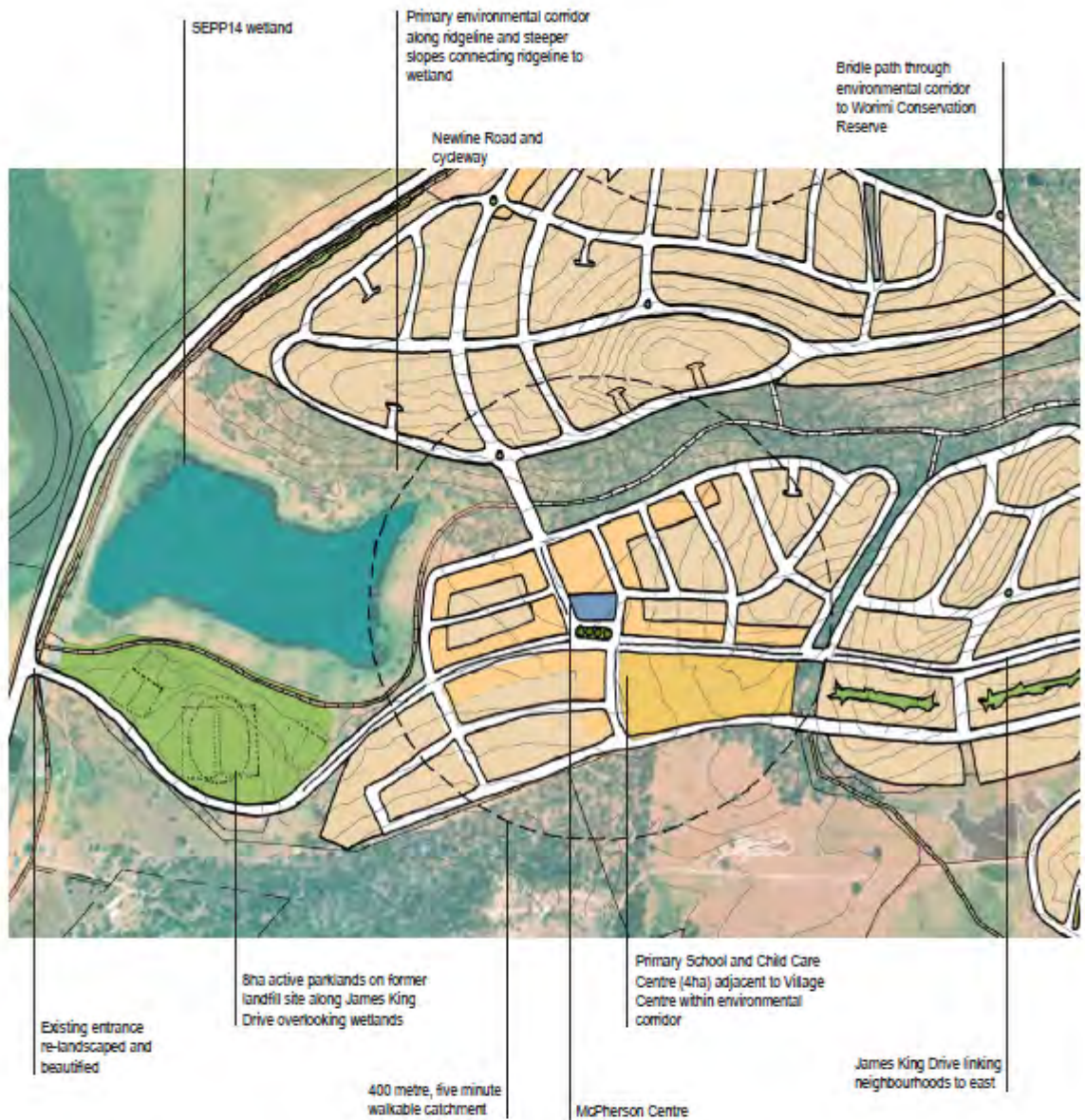


Eagleton Village



Mondell / Morgan and Banks Partnership
Urban Design Deicke Richards

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28 February 2007

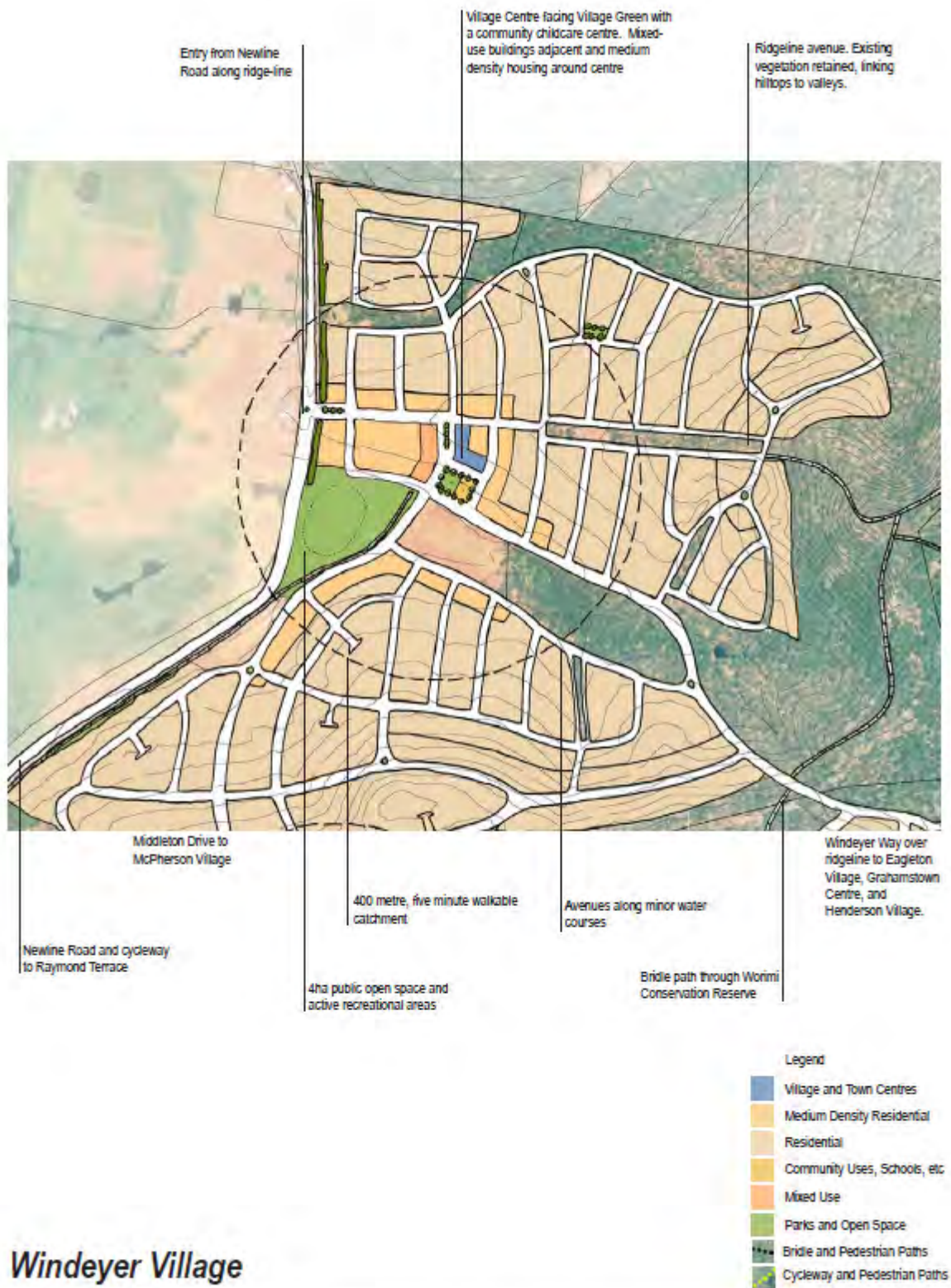


McPherson Village



Mondell / Morgan and Banks Partnership
Urban Design Deicke Richards

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01 March 2007

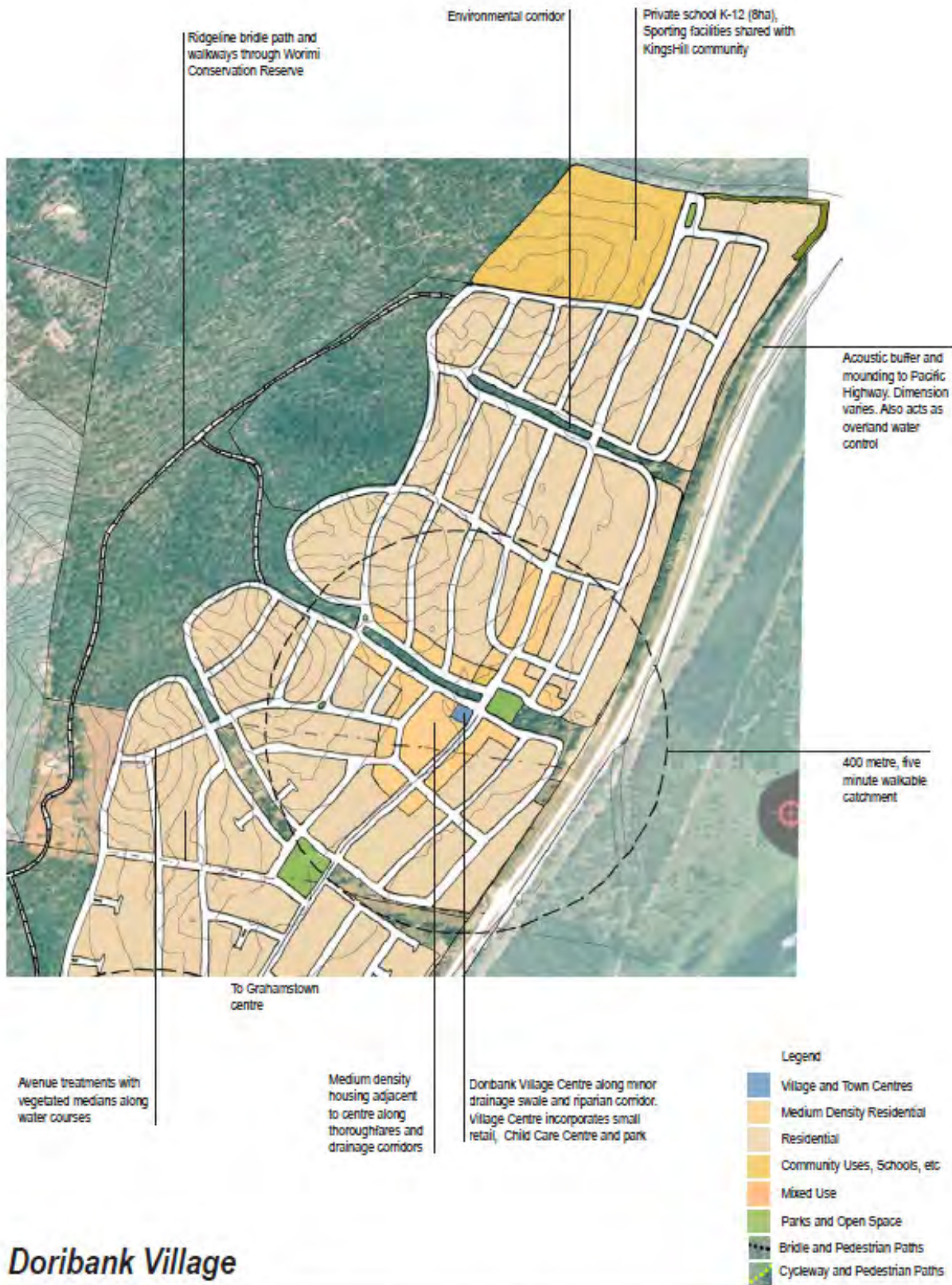


Windeyer Village



Mondell / Morgan and Banks Partnership
Urban Design Deicke Richards

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28 February 2007

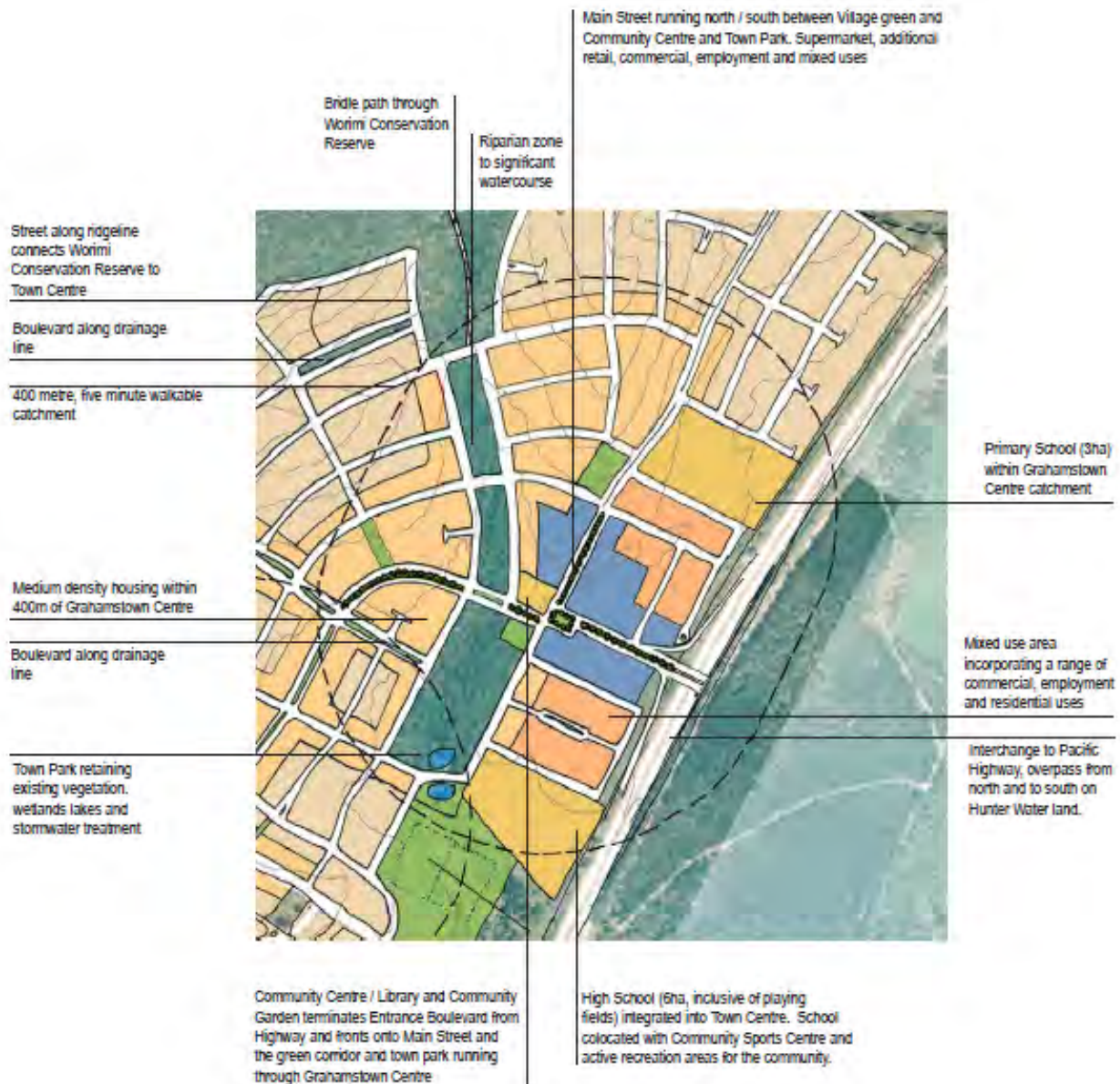


Doribank Village



Mondell / Morgan and Banks Partnership
Urban Design Deicke Richards

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Grahamstown Centre

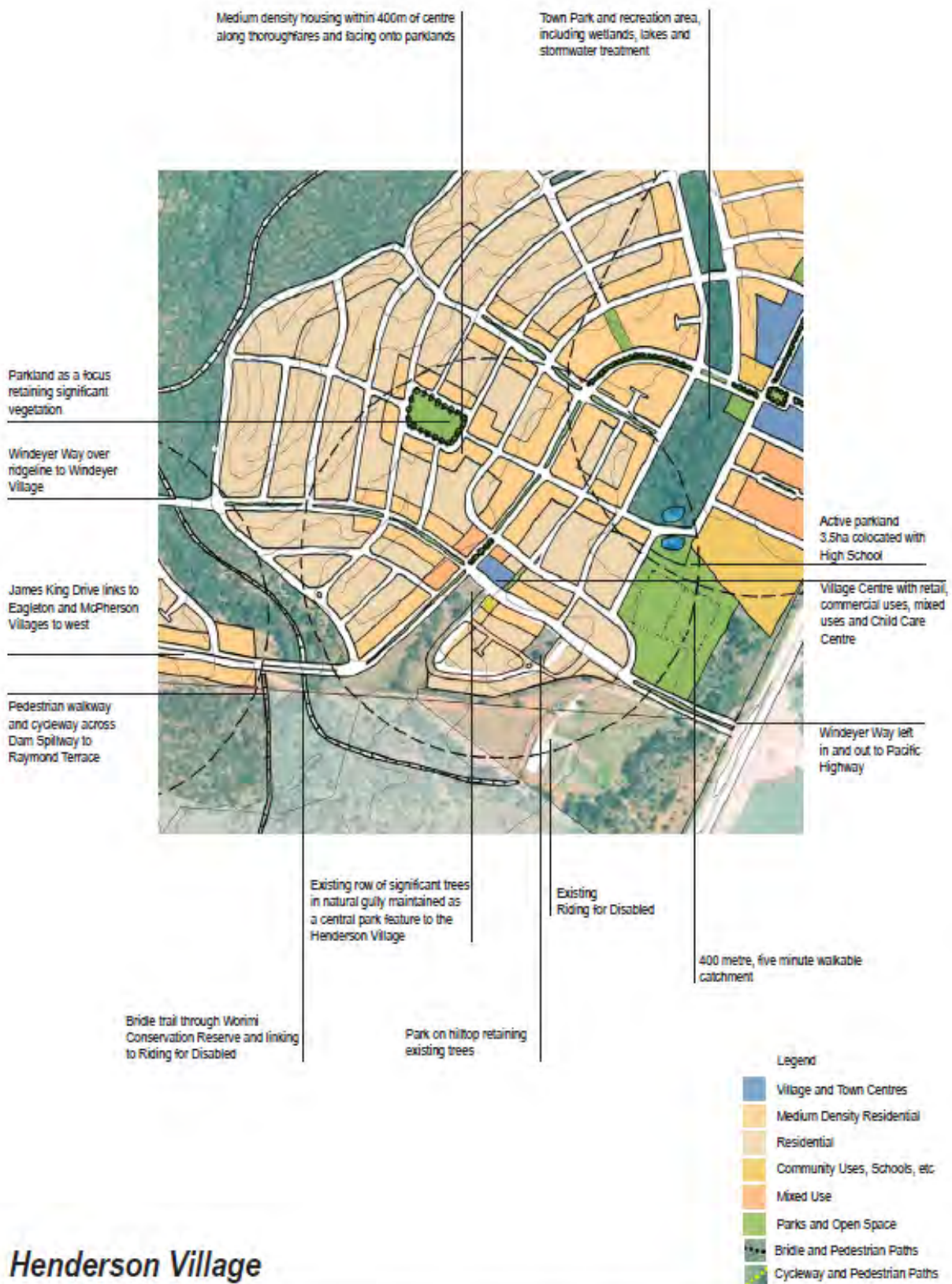
Mixed use centre with primary school to the north and high school to the south, integrated into Village Centre with publicly accessible playing fields adjacent



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28 February 2007

- Legend
- Village and Town Centres
 - Medium Density Residential
 - Residential
 - Community Uses, Schools, etc
 - Mixed Use
 - Parks and Open Space
 - Bridge and Pedestrian Paths
 - Cycleway and Pedestrian Paths



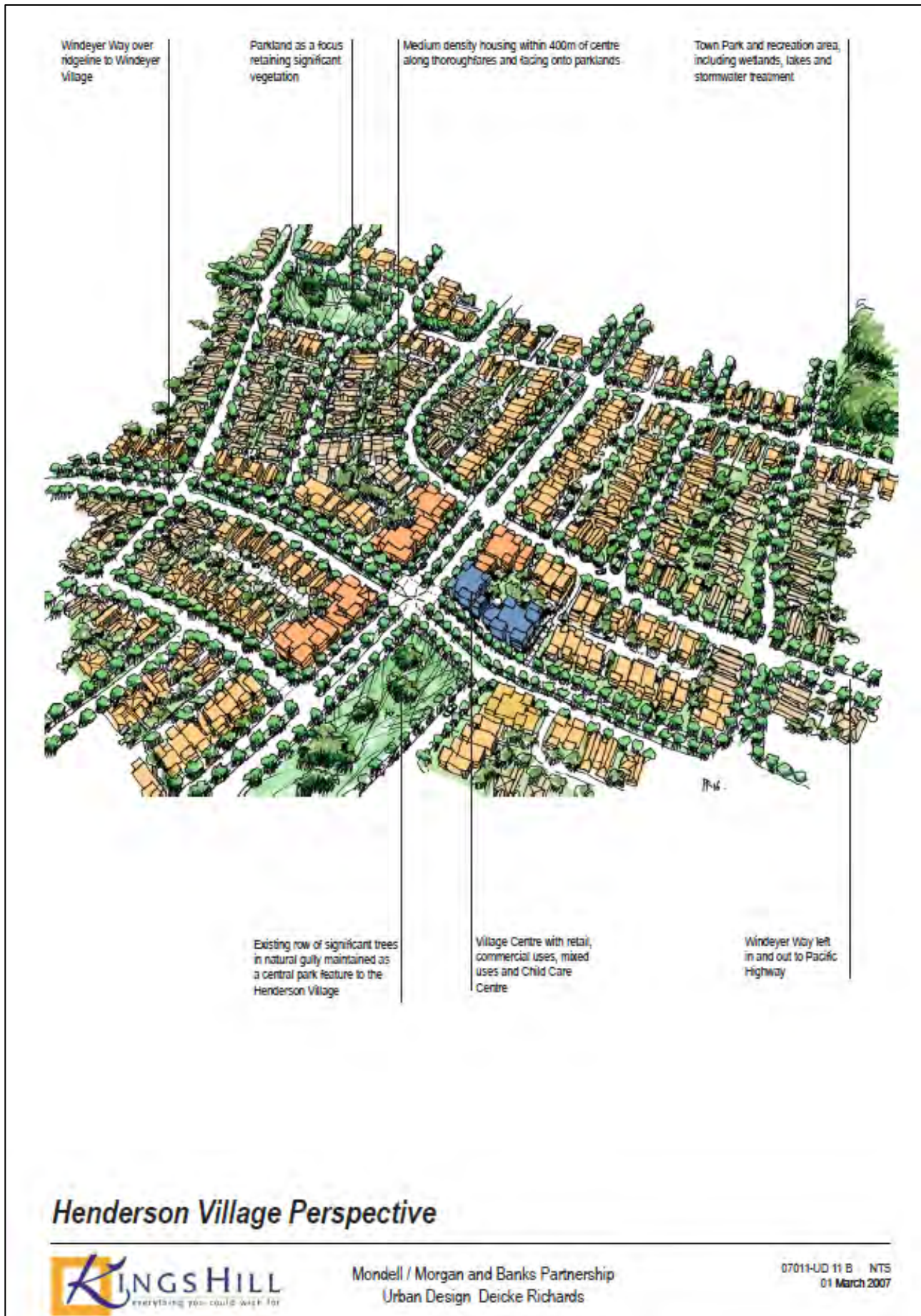
Henderson Village



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28 February 2007







DEICKE RICHARDS
Architecture Urban Design Community Design
110 Gotha Street
Fortitude Valley
Brisbane QLD 4001
July 2005

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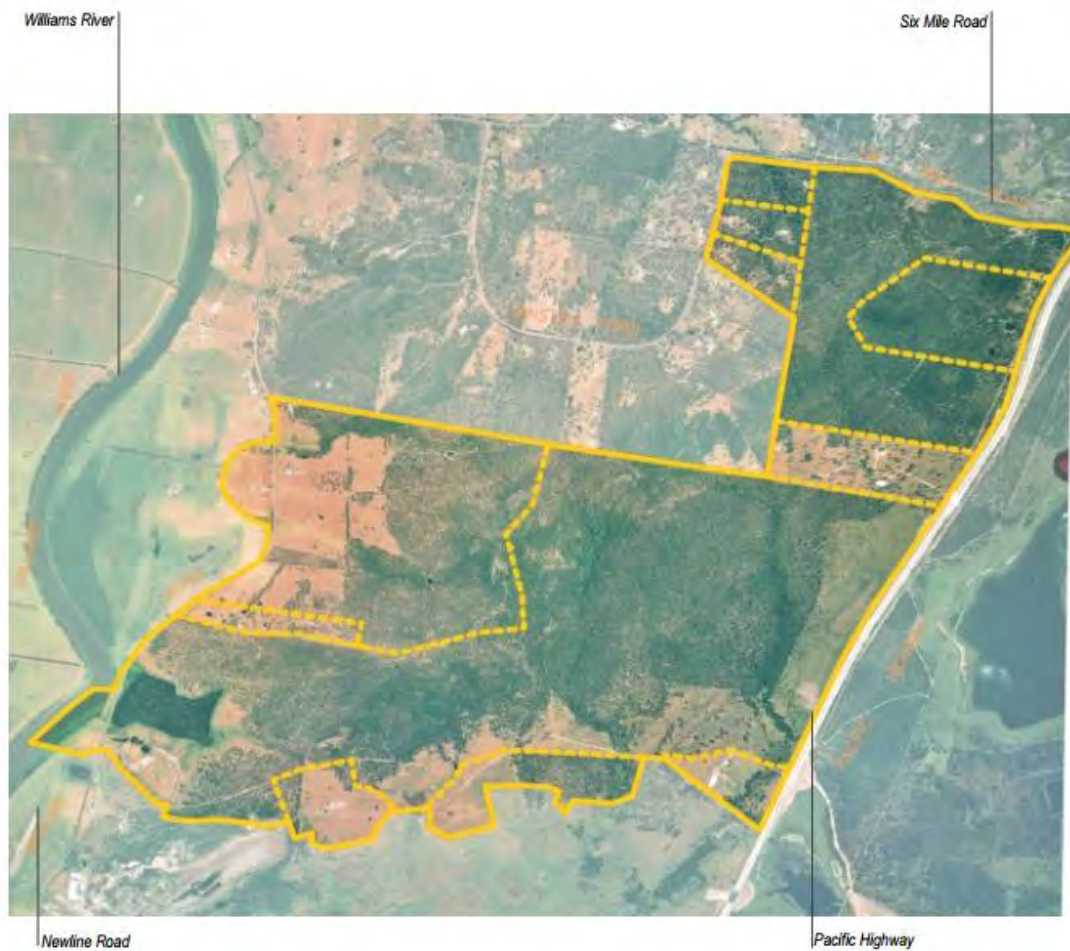


FIGURE 1 - STUDY AREA

*KingsHill***URBAN DESIGN MASTER PLAN****1.0 INTRODUCTION****1.1 BACKGROUND**

This masterplan describes the proposed urban design plan for a new town of KingsHill, located over and around a dominant series of forest-covered hills about 4 kilometres north of Raymond Terrace, close to the town of Raymond Terrace in Port Stephens Council Area.

The study area comprises a series of ownerships to the north of the Bedminster recycling plant and Riding for the Disabled complex. Newline Road, the most direct access into Raymond Terrace, forms the western boundary, the Pacific Highway to the east. The northern boundary is Six Mile Road and the rear boundaries of the large rural lots that front onto Winston Road. Three sites at the northern end of Winston Road are included. Refer Figure 1.

To the south of the site is a low-lying seasonally flooded wetland which is the spillway to the Grahamstown Dam. This area separates the site from the town of Raymond Terrace. To the west of the site is undulating farmland on the alluvial plains and the Hunter and Williams Rivers. To the north is further hills and to east the Pacific Highway the Grahamstown Dam and coastline of the Tomaree Peninsula.

Due to the elevated nature of the site, there are high quality views from low, mid height and elevated sections of the site to the landscape features of this region including Newcastle city, the coast. KingsHill at 130 AHD is the highest point in the immediate locality along this visually significant ridgeline. This is unusual. Few locations can provide virtually 360-degree views of such interest, and from the majority of the site.

This masterplan demonstrates the site has great potential for a high quality urban design outcome, which is a demonstration of the design principles in the Port Stephens Settlement Strategy, the document adopted by Council as its strategy for future growth of the council area. The site is identified as an investigation area in the strategy.

There are a number of reasons why this high quality urban outcome could be achieved:

- The site is in close proximity to Raymond Terrace, and can be a complementary, new settlement. Development can be configured as a township comprising a series of neighbourhoods, rather than a low-density sprawling residential expansion of the existing town.
- Additional population close to Raymond Terrace can support commercial and community uses within the town e.g. the existing supermarkets, industrial, work places and community as a possible new library.
- Varied topography with high hilltops, distinctive ridge lines and steep valleys gives the site considerable amenity. Development has the potential to retain these distinctive landscape features and to provide the infrastructure to enable public access to those areas for the benefit of the wider Port Stephens community and visitors.
- The extent of lower land suitable for development provides enough areas for development to create walkable neighbourhoods instead of small pockets of unrelated developments. These site qualities allow the incorporation of a

wide range of housing types and styles.

- Creating a mixed-use centre with retail, commercial and higher density housing is possible in places of high amenity on the lower flatter land eg. near the wetland and lake on the western side.
- The location of the site between the Pacific Highway and Newline Road allows the incorporation of through streets, so a bus route linking the new community to Raymond terrace can easily be achieved and incorporated.

1.2 PROCESS

The preparation of the master plan was an interactive process focusing on a series of workshops:-

- Council staff visioning and goal setting.
- Team briefing, constraints synthesis workshops,
- Team and agencies review of constraints, opportunities and design principles,
- Urban Design team review and critique,
- Individual consultation with council and government agencies.

1.3 MASTER PLAN STRUCTURE

Section Two identifies the core urban design principles that underpin the master plan. These principles are drawn from NSW government policy and good urban design practice. The rationale for the master plan approach is included.

Section Three discusses the key constraints and site qualities that have underpinned the design.

Section Four outlines requirements for the future urban structure of Kingshill.

Section Five proposes detailed urban design layouts for the six main villages at Kingshill.

Sections Six and Seven detail design controls for subdivision, street design and building types.

1.4 RESOURCE DOCUMENTS

The primary reference document which underpins this Masterplan is the Port Stephens Settlement Strategy (2001) which provides excellent guidance in the principles of sustainable urban design.

Specialist Studies have been commissioned to inform this Master Plan. These are:

- Town Planning
- Flora Fauna
- Bushfire
- Stormwater
- Traffic & Transport
- Urban Sustainability
- Economics
- Social Impact
- Noise

1.5 PROJECT TEAM

The project team from Deicke Richards includes: Peter Richards, Arno King, Mike McKeown, Stephen Smith, Cassie Boyle, Tom Kaye



FIGURE 2 - TYPICAL NEIGHBOURHOOD

Legend

- | | |
|---|----------------------------|
| 1 Neighbourhood Centre | 4 Park |
| 2 Main roads linking to adjacent neighbourhoods | 5 Residential |
| 3 Higher density residential | 6 400m radius from centre |
| | 7 Environmental Open Space |



FIGURE 3 - NEIGHBOURHOOD CLUSTERS

Cluster of neighbourhoods forming a town. Major centre identified. Streets directly connect neighbourhood centres. Large open spaces and bushland frame town. Linear open space corridors through town. Schools located away from centres, on open space corridors

2.0 URBAN DESIGN PRINCIPLES AND OBJECTIVES

2.1 POLICY FRAMEWORK

The preferred urban development goals which underpin the design rationale for this area can be determined from a number of documents, specifically the Port Stephens Settlement Strategy. Other documents such as Coastal Council Design Guidelines, Sustainable Urban Settlement: Guidelines for Regional NSW 2000 and the State Environmental Planning Policy 71 provide support to the goals of the Port Stephens.

The goal from the Port Stephens Urban Settlement Strategy is to encourage urban growth and linkages between settlements whilst protecting the quality of the surrounding natural environment. The Strategy identifies that good urban amenity can be provided by designing towns, villages and neighbourhoods that are both vibrant and safe. This is achieved by creating opportunities for employment growth, providing a variety of housing locations and types, providing a high standard of residential amenity, increasing public transport opportunities, providing pedestrian and cycling connections and improving accessibility to services and facilities.

Other important design considerations within the Strategy are:

- The significance of built form and community character ensuring that villages remain visually attractive
- The provision of alternative transportation systems to private motor vehicles including regular and reliable public transport, walking and cycling opportunities
- Ensuring both local and regional environmental corridors and waterways are protected
- Encouraging areas for active community participation including open space
- Ensuring areas of agricultural significance, both scenic and rural landscapes are protected

The Sustainable Urban Settlement: Guidelines for Regional NSW 2000 describes sustainable communities as the most important feature of a sustainable local environment. The settlement guidelines describe how to develop a community culture in the following way.

- Plan a village-sized settlement that is large enough to support the proposed services, but not so large as to endanger the environment - a community of 5000 will support a primary school and neighbourhood shopping centre,
- Plan each settlement with a centre which has the service residents can get to by using walkways, cycleways or public transport (unlike 1950s-style dormitory suburbs where residents have to use cars or public transport to get to faraway services and workplaces)
- Ensure the environment is not damaged and is if possible, improved,
- Create or protect habitat areas, such as greenbelts, and integrate them into the future urban area
- Ensure waste products such as sewage are treated and recycled locally rather than sent to another area.

2.2 URBAN STRUCTURE

Sustainable Urbanism is achieved through the creation of neighbourhoods. Neighbourhoods cluster to support towns and town centres. The principles for neighbourhood design and the layout of neighbourhoods are as follows

Neighbourhoods have the following characteristics:

- Size and shape generally defined by a five minute walk from the neighbourhood centre to its perimeter, typically 400 metres;

*KingsHill***URBAN DESIGN MASTER PLAN**

- The centre acts as a community focus with a compatible mix of uses, which provide for a variety of daily needs and may include community facilities and urban open spaces such as a town square;
- To assist retail exposure and accessibility, the centre is located on or at the intersection of important local streets served by public transport;
- An interconnected street network with strong links between town and neighbourhood centres that has good accessibility, route choice and detailing to make walking and cycling pleasant, efficient and safe; and
- A range of residential densities that increase toward the neighbourhood and town centres.

Town Structure has the following characteristics:

- Informed by clustering of neighbourhoods, typically with six neighbourhoods needed for the adequate population to sustain a town centre with public transport and a wide range of goods and services;
- The town centre is central to the clustering of neighbourhoods, well linked and within reasonable walking distance of most residents;
- Major new transport routes are based upon desired town and neighbourhood structure;
- For commercial viability and accessibility, the town centre is located to the intersection of arterial routes and has a major public transport stop wherever possible; and
- A range of housing types with residential densities that increase towards the centre and can, over time support sufficient population to foster self-containment.

Community Structure has the following characteristics:

- Co-location of community facilities within or close to centres.
- Multi-use of open space and built facilities to accommodate a range of community activities within one location or precinct.
- Integration of functions within locations, i.e. medical, community, retail, and integration between functions with synergies, i.e. library with community centre or school.
- Universal access to all buildings, facilities and areas – achieved by application of Building Code of Australia disability access provisions.
- CPTED principles applied to design of all public areas, including, centres, parks, cycle and walking paths, recreational, sporting and community /cultural facilities.
- Public art to be incorporated where appropriate in sites of significance or meaning for the local community.

2.3 URBAN DESIGN RESPONSE : FUTURE SCENARIOS

In order to conceptualise an appropriate urban structure for the Kingshill master plan area, three alternative future strategies were developed (overleaf). These strategies were based upon similar locations for possible neighbourhoods as the land available is relatively limited once constraints are acknowledged. The differences then relate to the location of the main centre within the development as this will in turn determine where higher residential densities should occur and other land uses located.

Six evaluation criteria for the preferred main centre location have been developed based upon economical, environmental and community aspects of sustainability. Each criterion is listed in the column below with a short description of the characteristics at the criterion. Each option is then evaluated against the criteria with a ranking from 0-4 given. The preferred option is discussed in the following sections of this Master Plan.

AMENITY

Amenity relates to the potential for urban quality a distinctive sense of place to be created from the natural setting of the settlement and includes existing site features, topography, views.

RELATIONSHIP TO SURROUNDING DEVELOPMENT

The viability of centres depends partly on the size of the immediate catchment ie how much the development is close to the centre.

POTENTIAL ECONOMIC VIABILITY

Centres rely on vehicular traffic for economic viability as many shopping trips and work trips remain as car trips. Ease of vehicular access and visibility to passing traffic is important for economic viability.

RELATIONSHIP TO AND SUPPORT FOR RAYMOND TERRACE

Due to the proximity of the site to Raymond Terrace, the vision for the proposed new settlement is to be a complementary settlement, not a competing town in order to strengthen the existing centre which is the commercial, civic and community focus for the western region of the Port Stephens Council Area.

COST OF STREET INFRASTRUCTURE FOR ACCESS

The location of centres determines the location and length of roads that need to be constructed to provide access to and within the site. Some centres locations require long lengths of street that do not have much catchment, where others require major freeway interchanges to be constructed.

SPACE SYNTAX

A number of urban design models of analysis allow complex street networks to be evaluated to determine the locations within a settlement that are the most connected to other parts and hence where centres should be located.

CRITERIA	EVALUATION MATRIX OPTION 1 - MCPHERSON VILLAGE 
AMENITY EXISTING SITE FEATURES, TOPOGRAPHY, VIEWS, WATER; THAT MAY CONTRIBUTE TO A DISTINCTIVE SENSE OF PLACE	**** Natural amphitheatre with residential uses on surrounding hill Slopes with views to centre wetland over Williams River and Farmland watercourses as landscape features.
RELATIONSHIP TO SURROUNDING DEVELOPMENT HOW MUCH THE DEVELOPMENT IS CLOSE TO THE CENTRE	* Good immediate catchment 30% of balance of development within 1km
POTENTIAL ECONOMIC VIABILITY EASE OF VEHICULAR ACCESS	*** Easily accessible from virtually all parts of the development Visible and easily accessible from Newline Road for visitors Poor if interchange to Pacific Highway incorporated
LOCAL EMPLOYMENT CATEGORISED BY MAIN CENTRE	** Reasonable opportunities
RELATIONSHIP TO AND SUPPORT FOR RAYMOND TERRACE	*** Centre located in relatively close proximity to existing town. Focus towards Raymond Terrace away from Pacific Highway
COST OF STREET INFRASTRUCTURE FOR ACCESS	* * * Centre can be accessed with residential street infrastructure Long street over ridge line not necessarily needed
SPACE SYNTAX CONNECTIVITY ANALYSIS	* * Good location for main centre. Additional centre for community facilities in centre of site
TOTAL	18/28 64%

*KingsHill***URBAN DESIGN MASTER PLAN**

OPTION 2 - EAGLETON CENTRE



OPTION 3 - HENDERSON VILLAGE



OPTION 4 - GRAHAMSTOWN CENTRE



**
Long distance views over dam spillways
wetland and to Raymond Terrace
Watercourses as landscape features

Small hill tops
Views to east to Grahamstown Dam
Watercourses as landscape features

**
Gentle rise from street significant riparian
corridor adjacent.
Higher land above for views to east

**
Limited immediate catchment
50% of development within 1km

Excellent immediate catchment
60% of development within 1km

Central location on eastern side of
development
60% within 1 km

**
Located in 'centre' of township
Development in western areas need to 'back
track' away from Raymond Terrace to
access the centre so may lose patronage to
Raymond Terrace
Not visible from existing through traffic
routes

**
Close to Pacific Highway
Accessible and potentially visible from
Pacific Highway

Excellent access with interchange
Opportunity for centre to have a presence
on the highway

*
Few opportunities

Some opportunities

Excellent opportunity given highway
location

**
Central centre location suggests a stand-
alone settlement;
Neither a supporting role or competitive role
to Raymond Terrace

*
Township focus to broader regional
context - Newcastle
Little support for Raymond Terrace
Possible competition to Karuah and
Heatherbrae as 'highway' focused
developments in Port Stephens

**
Township has a broader regional focus
Additional population will support

**
Long street needed over hill top to provide
access

Highway interchange required near
existing Riding for Disabled intersection
at a prohibitive cost

*
Highway interchange located in a more
cost effective position

Preferred location for main centre in 'centre'
of development

Good location with access from Pacific
Highway and eastern side of development

Good location with access from Pacific
Highway
(Busiest street in locality)

15/28 53%

16/28 57%

20/28 71%

DEICKE RICHARDS XCEL PROPERTIES

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3.0 SITE CONSTRAINTS AND OPPORTUNITIES

VISION

The development of Kingshill respects the unique qualities of the site, particularly:

- Environmental qualities, hilltops, ridgelines, drainage corridors;
- Visual qualities, environmental qualities, hilltops, ridgelines, drainage corridors;
- Visual qualities including views from the site to regional landmarks and views onto the site;
- Existing infrastructure such as dams; and
- Appropriate relationship to Pacific Highway Quarry SEPP14 Wetlands.

DESIGN CRITERIA

Visual qualities of native vegetation on hilltops, ridgelines and steep hill slopes are retained to form a backdrop to the Master Plan.

Drainage corridors are identified by level of importance with appropriate design responses for each type.

- Type A -Important to retain
- Type B -LessImportant to retain

Developable Areas are flood free

Natural and existing site features are identified and used as opportunities in the design response

- SEPP 14 wetlands
- Dams
- Flatter areas on ridgelines
- High rock outcrops and aboriginal caves
- natural swales in the landscape
- large trees

Visual and acoustic impacts of Pacific Highway, and potential air pollution from recycling plant are minimised.

Development should not drain into the Grahamstown dam

PREFERRED OUTCOMES

Vegetation above 40m and 55m contour is visually significant.

Representative samples of native vegetation communities for significant wildlife habitat are retained.

Type A drainage corridors have a width of 40-80m.

Type B drainage can be integrated into the urban environment in narrow swales, avenues or piped within street reserves.

Refer Constraints Map

Refer Constraints Map

A buffer around SEPP14 wetlands reduce risk of impact.

Buffer to the Pacific Highway is provided in accordance with EPA acoustic Standards

Buffer to recycling plant.

Areas within the Grahamstown Dam Catchment are shown on Figure 4

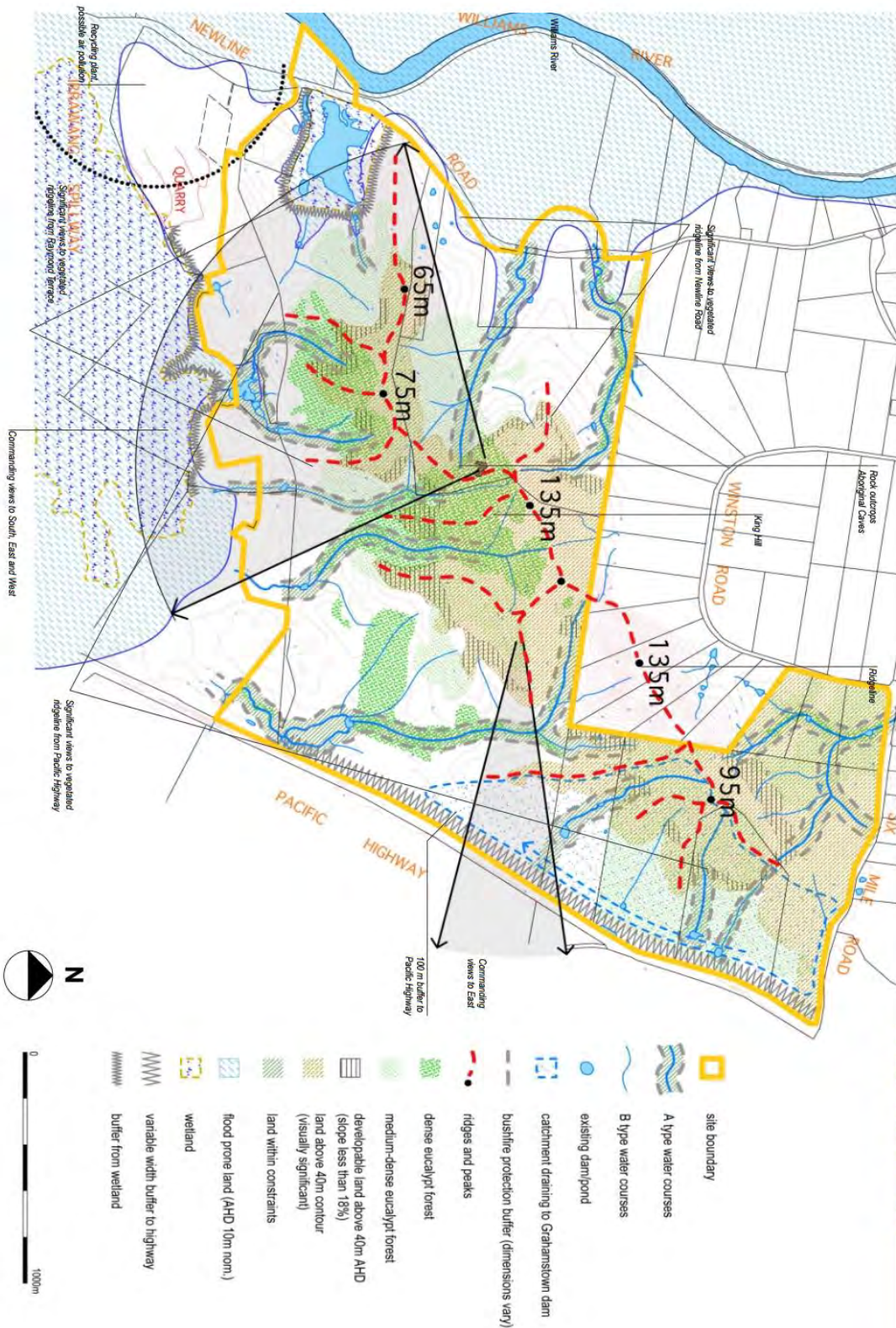


FIGURE 4 : CONSTRAINTS / OPPORTUNITIES
DECKE RICHARDS

4.0 URBAN STRUCTURE

4.1 PROJECT OBJECTIVES

The overriding design principles for the Masterplan are summarised as follows:

To create a new town that embodies the design principles from the Port Stephens Settlement Strategy (2000).

To create a new town that supports the existing town of Raymond Terrace while being a complementary settlement.

To create a more sustainable urban form that is relatively self-contained incorporating a wide mix of land uses including retail, employment, community facilities, a diversity and variety of housing including lifestyle living and high quality open spaces. This urban form will contain a number of discrete neighbourhoods, formed upon a five minute walk each with an identifiable centre. Each neighbourhood will have a unique relationship to site features, neighbourhood centres and contain a mix of uses.

To respect and enhance the natural and environmental features and qualities of the site such as hilltops, ridgelines, steep land, riparian corridors, environmental areas, wetlands, significant vegetation and culturally significant areas. To retain riparian corridors as environmental linkages.

To develop on lower slopes generally below highly visible vegetated ridgelines.

To create a main centre in an accessible and prominent location that contains a wide mix of uses to serve the needs of the emerging town including retail, commercial, employment and a greater variety and diversity of housing with the walkable catchment of the centre town and community needs.

To integrate community facilities including open space networks into the design of neighbourhoods.

To create street and lot layouts that allow for energy efficient building design.

To link the town into its region with pedestrian and cycle links from North Raymond Terrace to Raymond Terrace:

- Down Newline Road
- Across the Grahamstown Down Spillway to Raymond Terrace

To create a series of pedestrian walkways over the ridgetops acting as fire trails linking to each neighbourhood centre and forming an interconnected mesh of recreational routes.

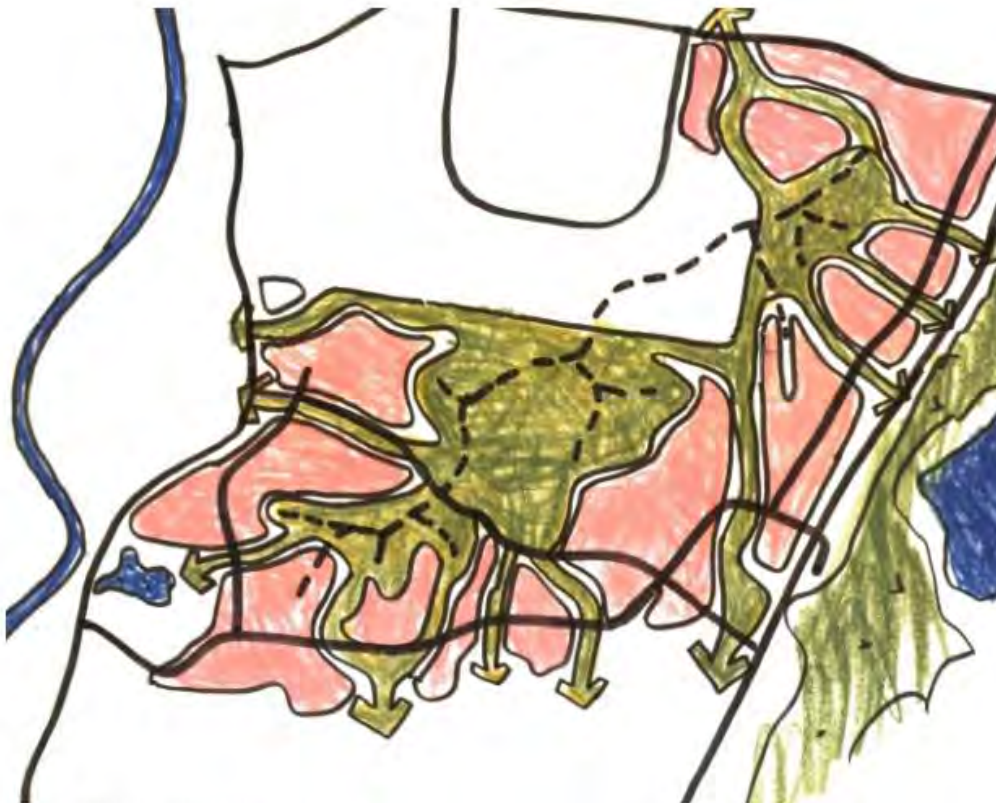


FIGURE 5 - CONCEPTUAL URBAN STRUCTURE

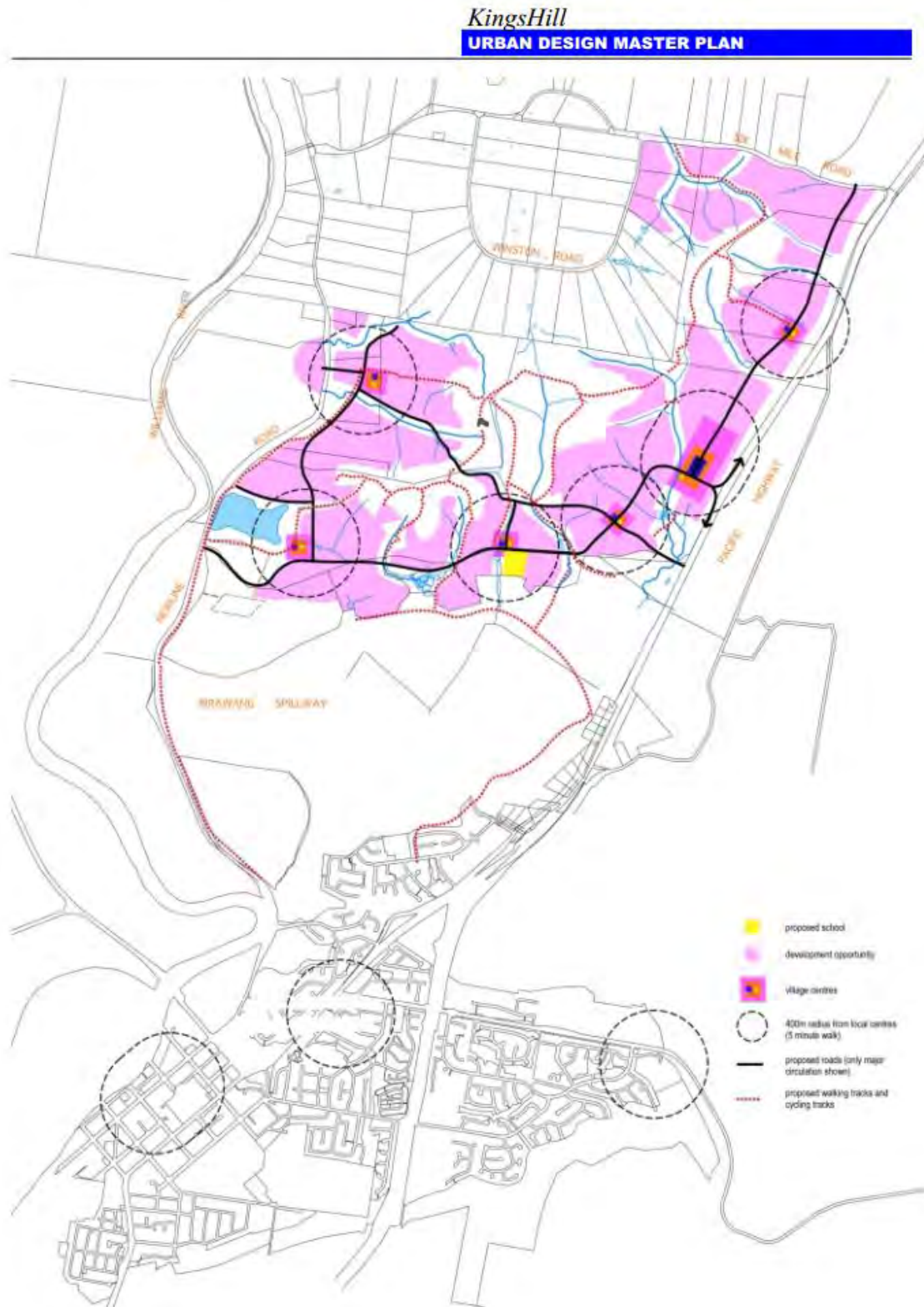


FIGURE 6 - RAYMOND TERRACE AND KINGSHILL

DEICKE RICHARDS XCEL PROPERTIES

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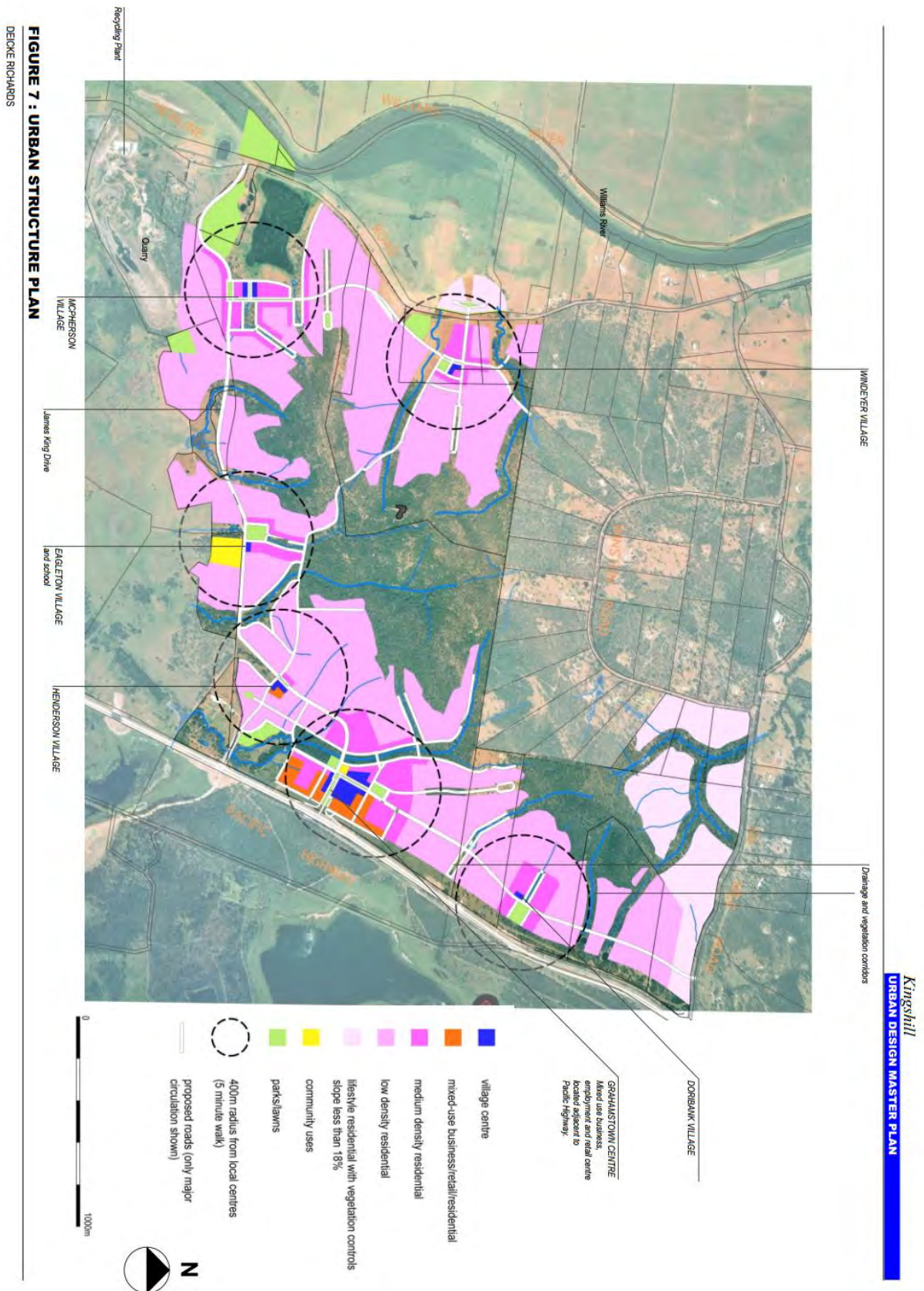
5.0 THE PROPOSED VILLAGES

VISION

KingsHill will become a township as a series of distinctive villages, respecting the unique qualities of the locality and with sensitivity to the natural environment.

KingsHill will be a complementary settlement to meet housing, employment, health, education and recreation needs of its community to 10,000 people.

DESIGN CRITERIA	PREFERRED OUTCOMES
VILLAGES Walkable Villages are located with centres that are : • Easily accessible and visible from the existing and future road network • In places high natural amenity • On flat land suitable in area for the ultimate centre size (i.e. 2ha-6 ha) • Where potential for a walkable catchment of at least 400 metres is available • 800 metres to 1200 metres from the next adjacent centre 'Main Streets' are the community and economic focus at the centre of neighbourhoods. Villages have distinctive and memorable centres, defined edges and are visually separated from existing villages with landscape elements. COMMUNITY INFRASTRUCTURE Community infrastructure is provided that is appropriate for the needs of a community of KingsHill. VEGETATION AND WATERCOURSES Visually significant vegetation is maintained and along significant watercourses MOVEMENT NETWORK James King Drive, designed for < 7000 vpd, provides direct access between village centres allowing local traffic movements between Newline Road, Six Mile Road and the Pacific Highway. Collector streets respond to natural topographic features such as ridge lines and valleys and are aligned towards natural landmarks such as stands of vegetation, linear green corridors, open spaces, hilltops within and beyond the site. Streets are located along interfaces between development and natural areas including parklands at a lower contour. Safe, accessible, pedestrian and cycle networks provide linkages between village centres, bushland, parkland, hilltops and ridgelines and important community uses such as school, and to Raymond Terrace.	Refer to URBAN STRUCTURE PLAN. Six villages are developed GRAHAMSTOWN CENTRE Main retail and commercial centre located near to Pacific Highway. Highest variety and density of housing including shop top housing, apartments, row houses HENDERSON VILLAGE Small centre located at the junction of Kingshill collector and southern connection to the Pacific Highway. Moderate medium density houses and corner store. EAGLETON VILLAGE Main Community Village incorporating small scale neighbourhood shopping, adjacent primary school and environmental centre and regional recreational facilities. School integrated with neighbourhood facilities , MCPHERSON VILLAGE Centre located close to main western access via Newline Road. Neighbourhood shopping, variety of housing and playing fields. Centre overlooks wetlands towards Williams River. WINDEYER VILLAGE Focus for the northwest precinct on the northern and western slopes of the central hilltop ridge line. Neighbourhood shopping with some medium density housing DORIBANK VILLAGE Focus for the residential uses in the northern part of the site. Refer URBAN STRUCTURE PLAN for preferred locations of collector streets within KingsHill. Grade separated connection to the Pacific Highway is provided at Grahamstown Centre, providing south-bound exit towards Raymond Terrace. Once implemented, the south access near Riding for Disabled becomes left-in, left-out only. Two street connections are provided on Newline Road.



5.0 THE PROPOSED VILLAGES

5.1 COMMUNITY INFRASTRUCTURE

VISION

To provide a diverse range of community and recreational facilities creating high quality lifestyle opportunities for future residents and visitors to KingsHill.

To reinforce a neighbourhood centre with the incorporation of community facilities to emphasis the Grahamstown Centre as the main centre of the town and to create recreation opportunities which take advantage of the natural features of the site.

DESIGN CRITERIA

A diversity of open spaces, passive and active recreation areas are distributed throughout the entire settlement within various neighbourhoods to suit the needs of the emerging community.

Open spaces, passive and active recreation areas are distributed through the entire settlement within the various neighbourhoods.

Recreation areas are located to take advantage of the natural aspects of the site:

- Distinctive ridgelines
- Grahamstown Dam spillway and wetland
- Wetland near Newline Road
- Williams River

Community facilities such as childcare and respite centres are provided to meet the needs of the emerging community and are generally located within neighbourhood centres:

- Community Centres
- Childcare Centres
- Day Respite Centre
- Youth Centre
- Public Schools

Village greens are incorporated as community focal points.

PREFERRED OUTCOMES

Recreation areas and community facilities such as childcare and respite centres are provided:

Grahamstown Centre:

- Community Centre on Main Street along riparian corridor.
- Parkland along riparian corridor
- Village green at northern end of main street.

Henderson Village:

- Central parkland on existing treed swale.

Eagleton Village:

- Primary school, library and adult education facing KingsHill collector street
- Community childcare centre

McPherson Village:

- Williams River parkland incorporating boat ramp, boat storage and clubhouse
- Passive recreation area, picnic and bbq's with community access
- Active recreation areas including playing fields on existing landfill site along entrance street into the west neighbourhood
- Respite centre.

Windeyer Village:

- Public open space and recreational areas on flood-prone land with wetland stormwater treatment area
- Community childcare centre.

Doribank Village:

- Village greens
- Community childcare centre

Worimi Conservation Reserve:

- Ridgeline hill top walkways, bridle path and walkway along ridgelines to King Hill and Aboriginal caves linking into neighbourhoods along ridgelines and riparian corridors.

Irrawang Spillway and Grahamstown Dam Spillway:

- Pedestrian access way and boardwalk linking to Raymond Terrace, sitting areas, bird watching hides and picnic areas close to development.

The conservation areas are maintained as a community aspect.

Village greens are incorporated within all neighbourhood centres. Refer Structure Plan.

KingsHill

URBAN DESIGN MASTER PLAN

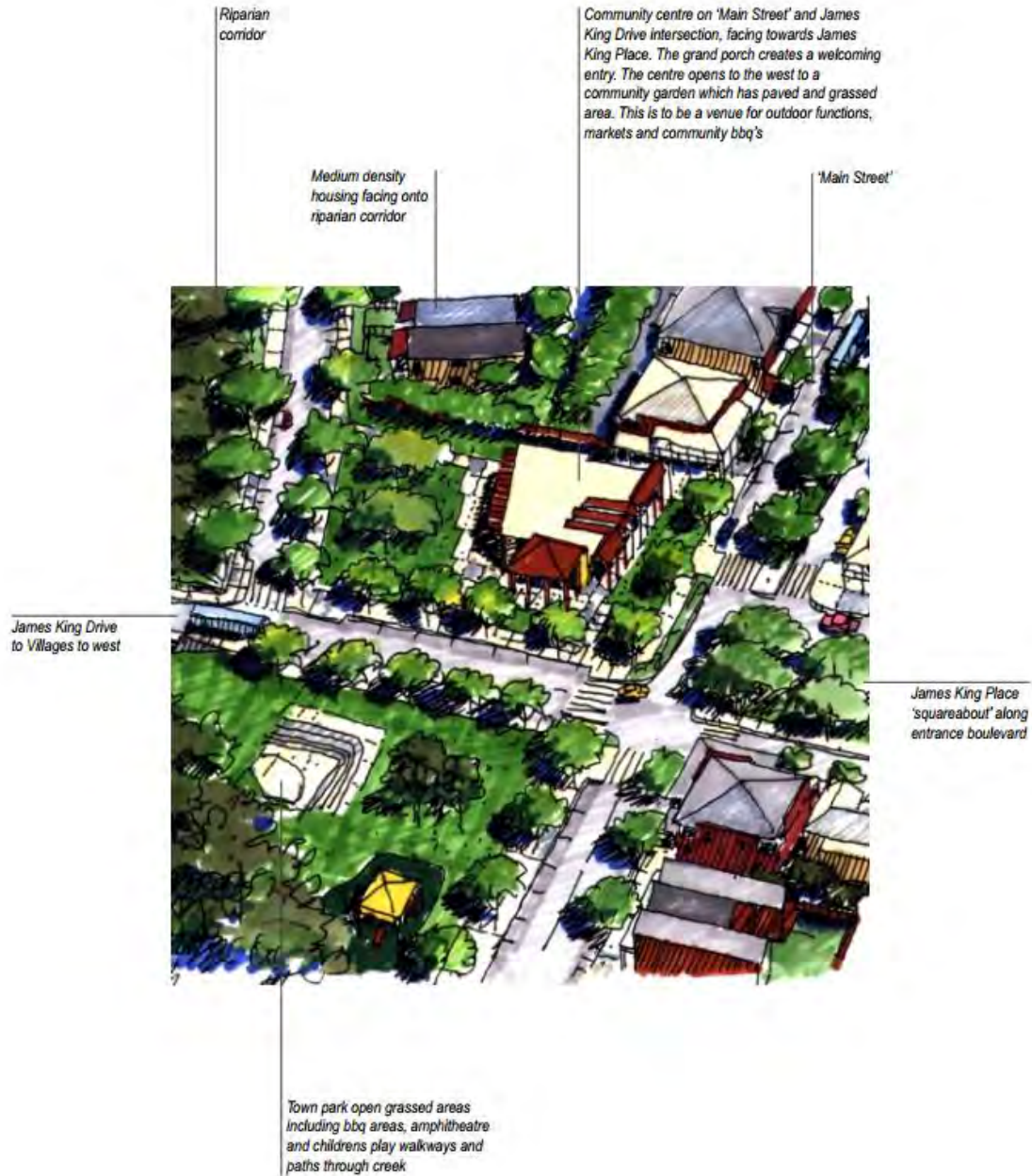


FIGURE 8 - VIEW OF COMMUNITY CENTRE

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Kingshill
URBAN DESIGN MASTER PLAN

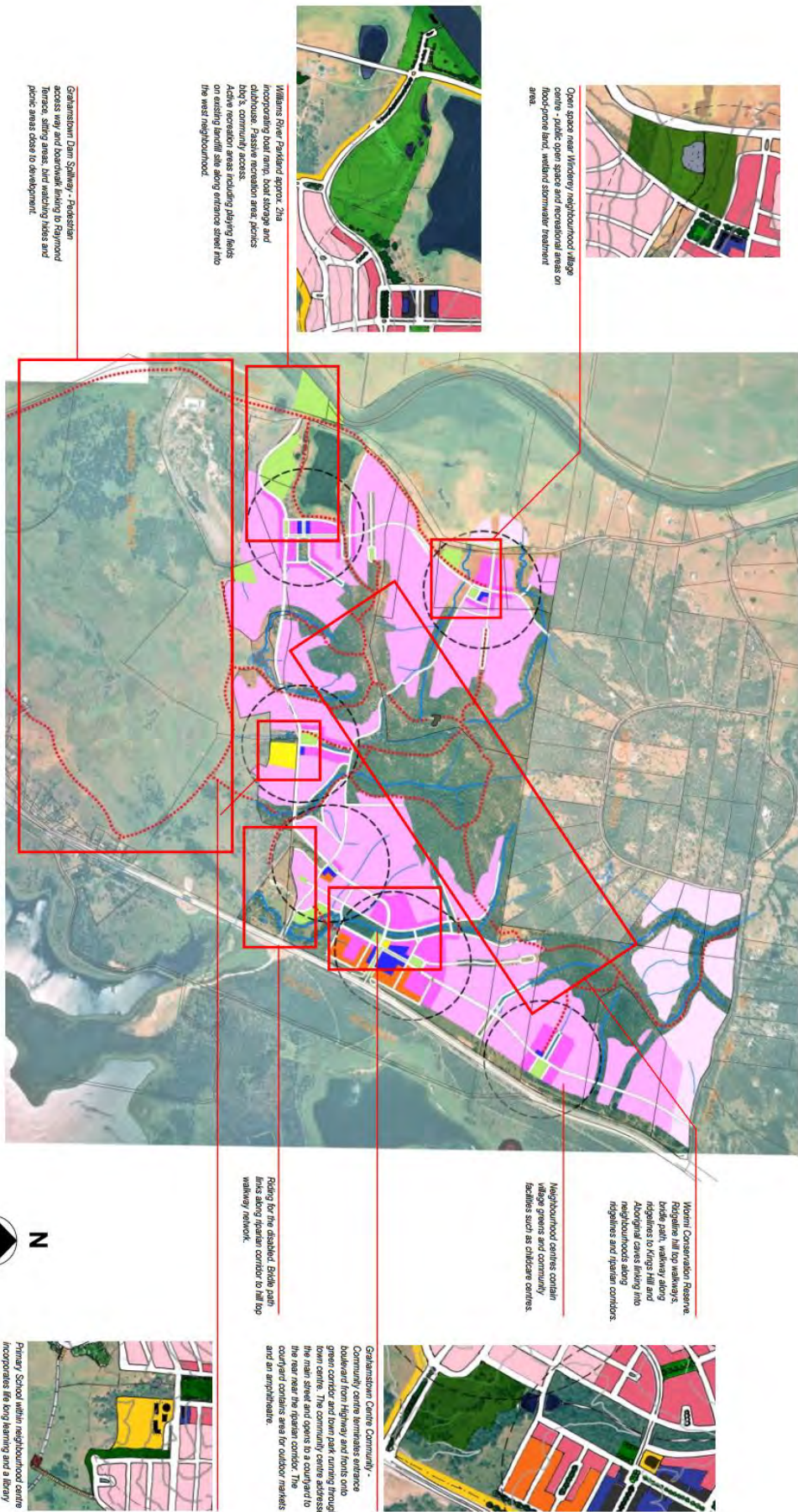


FIGURE 9: COMMUNITY INFRASTRUCTURE PLAN (1:30,000)
DECKE RICHARDS

5.0 THE PROPOSED VILLAGES

5.2 VILLAGE DESCRIPTIONS AND VISION

KINGSHILL VISION

KingsHill is a new rural town on a remarkable and dramatic site just north of the historic town of Raymond Terrace in the lower Hunter. The Pacific Highway, and the Grahamstown Dam bound the site to the east, Newline Road and the Williams River to the west, and Six Mile Road to the north. To the south are the Irrawang Spillway, the spillway for Grahamstown Dam and the town of Raymond Terrace.

The site is challenging with a long distinctive treed ridgeline and a number of watercourses and steep gullies draining into dams and wetlands. The design genuinely attempts to create a more urban settlement as a series of walkable, mixed-use neighbourhoods that will create memorable and diverse places.

The design of the town closely responds to the site features and qualities. Ridgelines, valleys and waterways become special places within the town and essential elements in the Villages and Village Centres. Each village has a varying relationship to the site and its features. The town is seen as a 'traditional' rural town.

GRAHAMSTOWN CENTRE

The Grahamstown Centre is the main centre and primary focus for the entire town located in an accessible and prominent location adjacent to the Pacific Highway. The centre is framed by the existing vegetation in the riparian corridor that also provides significant opportunities for urban amenity.

The Centre has the largest concentration of retail, commercial and employment uses including the main community centre for the town. This includes a supermarket of between 1500–3500 m2.

The supermarket acts as a catalyst for the vitality of the towns attracting other retail and commercial uses. This in turn encourages greater housing variety and density near the centre for there is a place with facilities for residents to use.

The centre is designed with an interconnected street system creating good accessibility and parcels of land appropriate for the various land uses within the town centre. James King Drive acts as an entry boulevard from the Pacific Highway to the Main Street that runs parallel to the Highway. The Main Street continues north to Six Mile Road. The Main Street acts as a retail focus of the town. It is anchored by a small supermarket and defined at each end with an open space.

The junction of Main Street and James King Drive, the busiest intersection in the town is a public square, effectively a 'square about', slowing traffic and allowing safer and convenient pedestrian access across the busiest intersection within the town. This square is seen as the place that marks the foundation of this town of KingsHill.

Across the square is the community centre, the community focus for the town centre. It is located on a prominent and visible site adjacent to the riparian corridor and terminates the view along James King Drive as it enters the town from the Pacific Highway. It has a verandahed urban frontage to the Main Street and Entry Boulevard, a welcoming grand porch to the south and the green corridor and a permeable rear façade that generously opens to a Community Garden. This garden is a paved and grassed area allowing a range of outdoor community activities and events including markets.

Housing within the Grahamstown Centre contains the highest diversity and density of housing types in KingsHill, including apartments, row houses, duplexes and small lot houses. This will

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provide opportunities for a variety of household types and resultant social mix.

The built form is diverse and comprises collections of smaller individual buildings. In the retail core, corner buildings have double storey verandahs over the street. Roof forms are pitched, hipped and skillion and incorporate parapets.

Residential buildings have stepped up pitch gables as a predominant roof form with verandahs, terraces and porches enlivening the streetscape. Busier streets with good frontage contain commercial uses while service and trades front less prominent commercial streets. Quieter streets and streets fronting parkland have residential uses. Uses change along new boundaries creating high quality streetscapes.

EAGLETON VILLAGE

Eagleton Village is the most central and accessible village within the town and is conceived as a place with a strong community focus as it contains the primary school, possibly co-located with a private school. The school has access to and looks over the Irrawang Spillway and North Raymond Terrace.

The village centre is located adjacent to a minor watercourse, which becomes a distinctive avenue through the village. A village green opens out the watercourse towards the Irrawang Spillway.

The school acts as a strong contributor to the urban quality of the village as a life long learning centre with buildings facing James King Drive allowing safe community access at night. The library is part of the village centre and has broad community access.

The centre otherwise contains a number of small shops and additional community facilities like a childcare centre.

WINDEYER VILLAGE

Windeyer Village is located in an adjacent valley in the north-west corner. Like other village it sits within a natural amphitheatre with a central ridgeline and two long watercourses that drain into the Williams River. These features have been utilised as key structural elements of the village.

The central spine is the ridgeline as a street with broader reserve to on the upper slopes that brings the ridgeline vegetation closer towards the centre. The street then follows the ridgeline up from Newline Road. The village centre is located close to the first intersection. This street is Middleton Drive and connects to Williams Waters Village to the south. The village centre faces onto a village green adjacent to the riparian corridor. These corridors will retain existing vegetation and act as significant green links from the ridgeline to the river.

The lower flatter lands near Newline Road contain residential areas that climb the hillsides with less dense development on higher slopes where existing vegetation can be maintained.

At the village centre a street running along the edge of the green corridor. This street, Windeyer Way, continues over the ridgeline and connects to Greenlakes.

HENDERSON VILLAGE

Dawson is the first village in KingsHill in the south-east corner. Windeyer Way forms the access from the Pacific Highway. The centre focuses on a distinctive natural site features broad treed

swale that runs down to the Irrawang Spillway. The swale is maintained as a natural area and a memorable and distinctive landscape feature, which anchors the centre of the village. A small hilltop occurs in the southern area of the village creating an exclusive residential precinct.

Windeyer Way curves along the contour of a hill on its way to the corner of James King Drive where the centre is located. James King Drive turns northward at the edge of Dawson Village along the edge of the central parkland swale.

MCPHERSON VILLAGE

This village is located in the south-west corner of KingsHill in a natural amphitheatre defined by treed ridgelines and focusing on a beautiful large wetland. The Williams River curves towards the wetland and these water bodies act as a feature of the village. Access to McPherson is from Newline road next to the Williams River Reserve, a recreational resource of parkland and waterfront activities for the broader lower Hunter community.

James King Drive commences at the reserve and travels up hill past the active recreational area on the former landfill site, it then curves to the north downhill towards the wetland then east towards the centre.

The 'main street' focus for this village centre is visible from James King Drive, but is one street back aligned on a minor watercourse. The intersection allows turning to the north along Middleton Drive and access to Windeyer Village to the north.

A park is located at the end of the main street, joining an angled avenue, which follows the valley towards the treed ridgelines. The main street then is an urban space between and linking green spaces. This design response is a feature of many of the Villages in KingsHill.

A green environmental corridor to the north of the centre provides a linkage from the wetland to the ridgeline.

This village has many areas of high amenity. The lower areas have aspect over parklands and waterbodies. The upper slopes have good views to these features and longer views to the Williams River and farmland beyond.

DORIBANK VILLAGE

Doribank Village is the focus of the parts of the town north of the Grahamstown Centre. Many parts of the village are undulating and steep as the ridgeline of the Worimi Conservation Reserve comes closer to the Highway.

A number of small watercourses traverse the area which are integrated into the development as drainage swales along boulevard streets. The Doribank centre is located along one of these drainage lines on the continuation of the 'Main Street' within Grahamstown Centre.

5.0 THE PROPOSED VILLAGES

5.3 GRAHAMSTOWN CENTRE & HENDERSON VILLAGE

VISION

To create a vibrant and sustainable town centre for KingsHill in a prominent and accessible location adjacent to the Pacific Highway.

To create a neighbourhood on land near the town centre beyond the 400 metre walkable catchment.



DESIGN CRITERIA

LAND USES

The Grahamstown Centre contains a mix of retail, commercial, community and open spaces with a wide variety of residential densities including the highest proportion of medium density housing within the settlement.

The town centre contains the highest mix of land-uses including higher order retailing such as a supermarket and commercial and community uses.

The Henderson Village forms a complementary smaller scale neighbourhood south of the town centre

MOVEMENT NETWORK

Streets are interconnected creating a permeable network of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood.

Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.

COMMUNITY INFRASTRUCTURE

Community facilities are located within Village centres.

A diversity of open spaces are in accessible and visible locations within the village located to take advantage of landscape features, topography, vegetation and drainage corridors.

Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors.

Pedestrian and cycle routes form a complementary movement network through the town including the main forested hill top range

BUILT FORM

Built form is appropriate for the village and its role in the township. creating high quality and memorable streetscapes

PREFERRED OUTCOMES

Refer detailed Grahamstown Centre and Henderson Village Plan. The Grahamstown Centre is the major mixed-use, commercial and medium density residential area for KingsHill. It is located close to the Pacific Highway at the major entrance point to Kingshill from the Pacific Highway.

The Main Street runs north/south between the Village Green and Community Centre and Town Park. The 'Main Street' is the Retail/ commercial focus for the town

The Henderson Village is located south of the town centre, to the north of the Riding for the Disabled centre. It contains a small neighbourhood centre overlooking the treed green swale and existing trees.

James King Drive comes from the west near the southern boundary and turns northward at the treed swale past the Henderson Village Centre and continues north turning to the right to arrive at the town centre and connect to the Pacific Highway.

Widener Way connects from the Henderson Village Centre to the Highway and over the ridge-line to Windeyer Village to the west.

The 'Main Street' connects into James King Drive and continues north to link with Six Mile Road.

The main community centre is located terminating the James King Drive entrance into the Grahamstown centre.

Riparian corridor to major watercourse passes through west of the town centre towards the Town Park.

Streets form edges to wetlands and riparian corridors, which are used as parks for stormwater management.

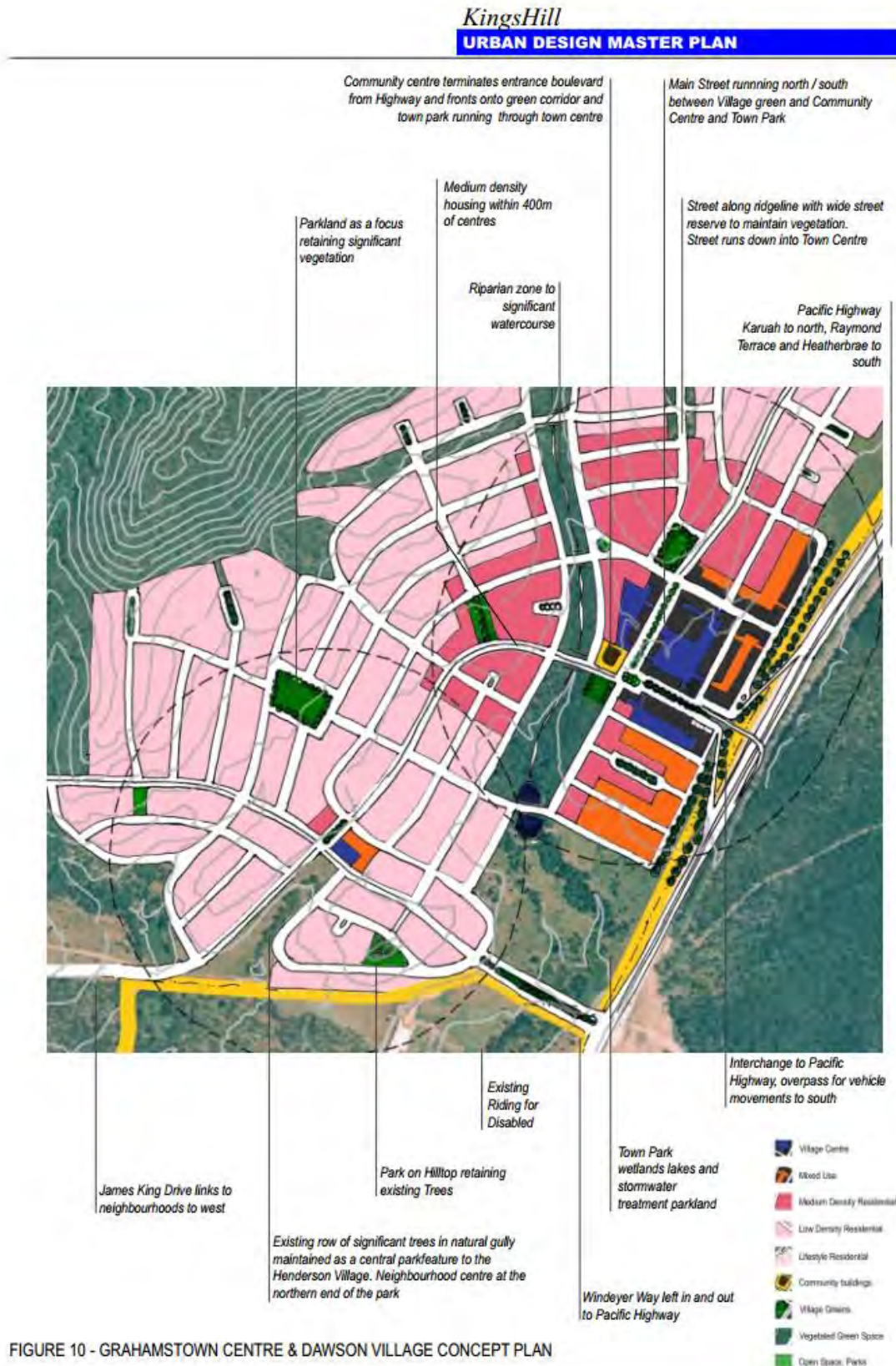


FIGURE 10 - GRAHAMSTOWN CENTRE & DAWSON VILLAGE CONCEPT PLAN

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5.0 THE PROPOSED VILLAGES

5.3 GRAHAMSTOWN CENTRE AND HENDERSON VILLAGE



The Riparian Corridor acts as a feature for the town linking the distinctive ridgeline to the wetlands of the Grahamstown Dam Spillway. This corridor passes through the town centre. The Kings Hill Collector crosses the corridor with a distinctive bridge and is greeted by the community centre and town square. Medium density housing incorporating home based business face the riparian corridor parkland system.



Main Street integrating a small supermarket. The focus at the Town Centre is a Main Street that incorporates a supermarket flanked by small shops facing onto the Main Street. The supermarket faces onto a car parking court and opens to the Main Street. The supermarket is an important contributor for sustainable urban design as it allows critical mass attracting other retail uses, employment, medical facilities which in turn can justify high density housing.



The town square is the focus of the entire town at the junction of the Entrance Boulevard and Main Street adjacent to the riparian corridor.

The Community Centre on Main Street terminates the view of the James King Drive entrance boulevard and is created by a large 'squareabout' to slow traffic, allow easy pedestrian crossing and mark the place for the founding of a new town.

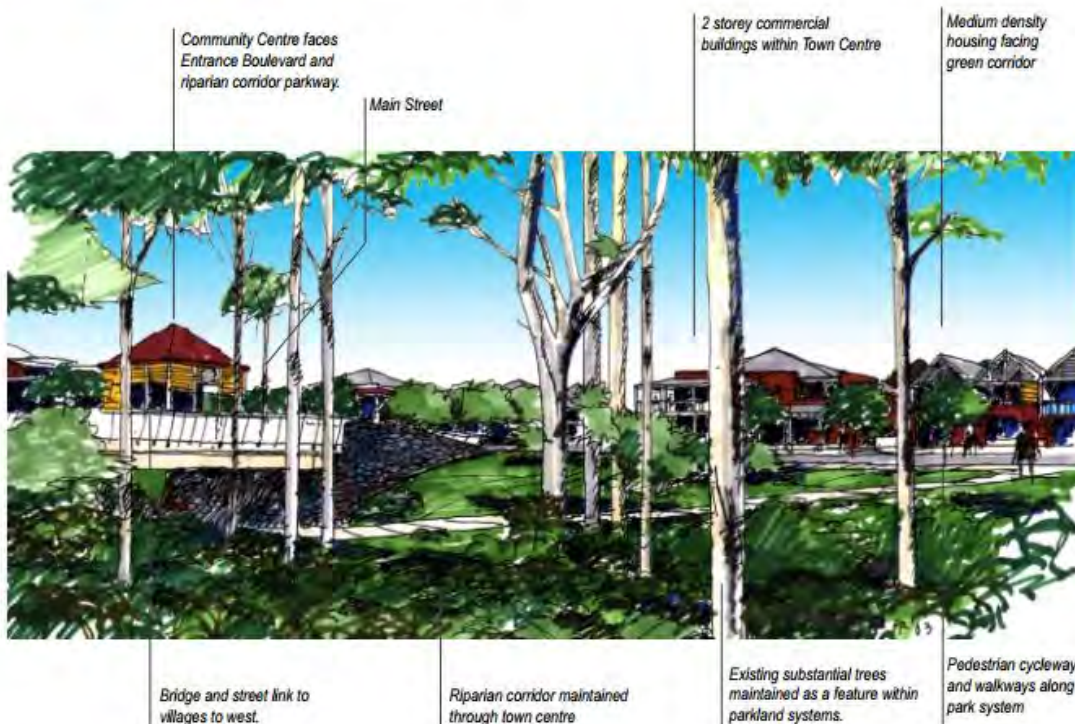


FIGURE 11 - CONCEPT VIEW TOWARDS GRAHAMSTOWN CENTRE FROM RIPARIAN CORRIDOR



FIGURE 12 - CONCEPT AERIAL VIEW OF GRAHAMSTOWN CENTRE

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KingsHill

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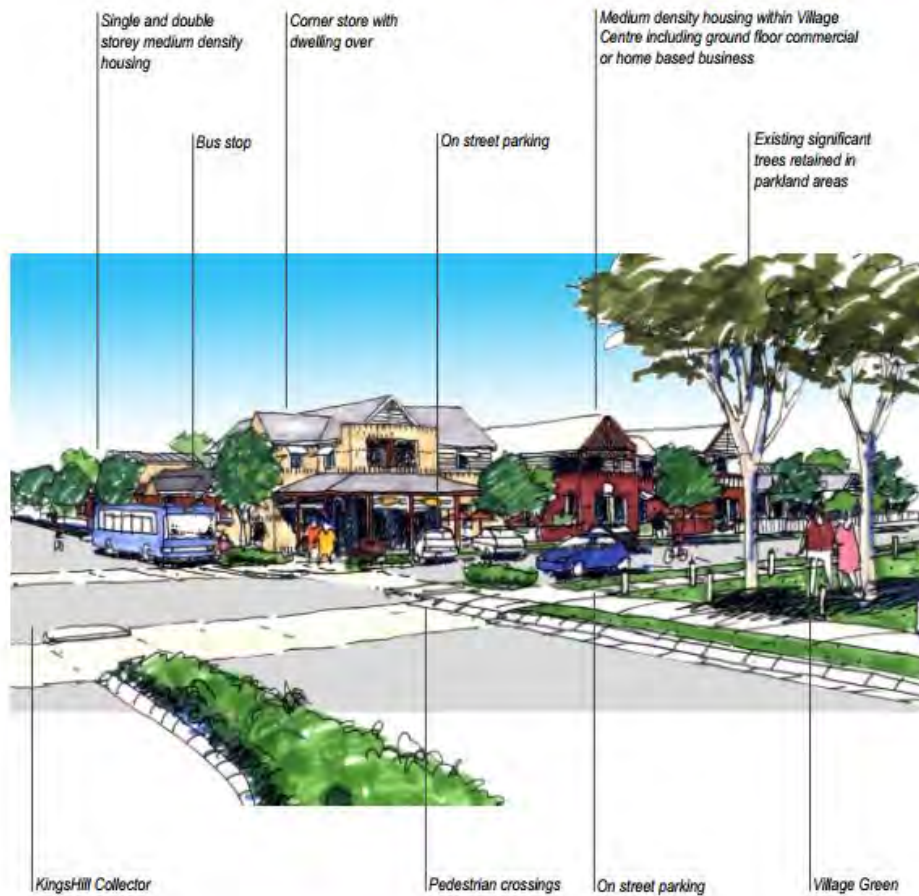


FIGURE 13 - CONCEPT VIEW OF HENDERSON VILLAGE CENTRE FROM JAMES KING DRIVE



FIGURE 14 - CONCEPT SECTION FROM GRAHAMSTOWN CENTRE TO PACIFIC HIGHWAY

5.0 THE PROPOSED VILLAGES

5.4 EAGLETON VILLAGE

VISION

Eagleton Village, located centrally to the settlement focuses around open space and a primary school/community education facility.



DESIGN CRITERIA

LAND USES

Eagleton Village is predominantly low density residential uses with a small commercial/retail centre with facilities servicing the local population.

A primary school incorporating life long learning and a library is located adjoining the centre of the village.

MOVEMENT NETWORK

Streets are interconnected creating a permeable network of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood.

Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.

Streets are located along interfaces between development and natural areas including parklands at a lower contour.

COMMUNITY INFRASTRUCTURE

Community facilities are located within Village centres.

A diversity of open spaces are in accessible and visible locations within the village located to take advantage of landscape features, topography, vegetation and drainage corridors. Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors.

Pedestrian and cycle routes form a complementary movement network through the town including the main forested hill top range

Bus stop located next to school and centre.

BUILT FORM

Built form is appropriate for the village and its role in the township, creating high quality and memorable streetscapes

PREFERRED OUTCOMES

Refer detailed Eagleton Village Plan.

Eagleton Village serves the local population. The Village Centre contains small scale local shopping located along James King Drive co-located with a primary school.

The Eagleton Village Centre is located adjacent to a drainage corridor enhanced as a neighbourhood park with avenue treatment along the corridor.

James King Drive traverses the village providing direct linkages to McPherson and Henderson Villages .

East-west residential streets in the south neighbourhood create visual linkages between parklands and riparian corridors that run north-south through the neighbourhood.

Open space spine runs north south through the centre which provides an outlook for adjoining multiple dwelling units.

Primary School is located within neighbourhood centre. Buildings are designed to face streets, allow community access and incorporate life long learning and a library

Buildings face all streets including with One to Two storey buildings.

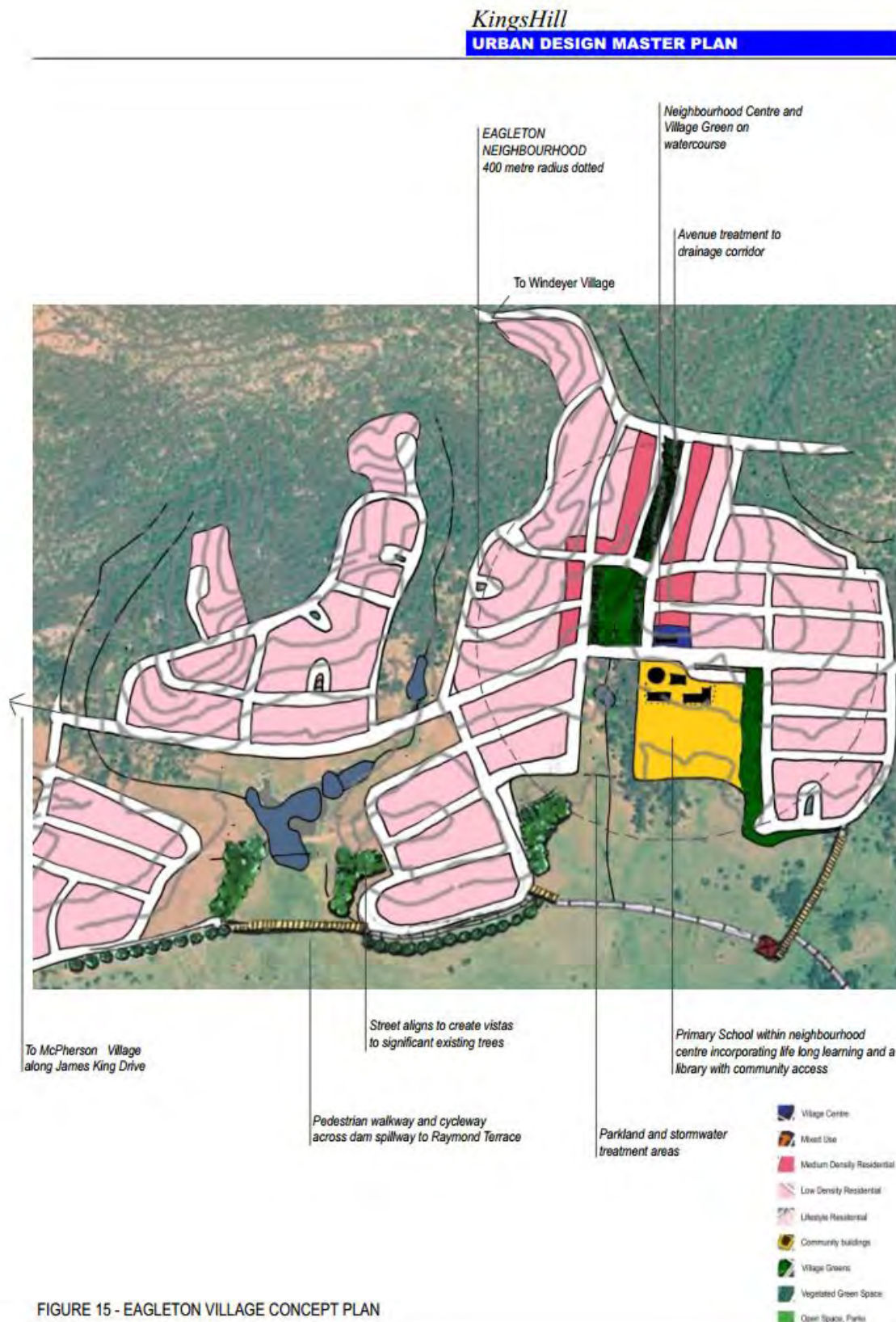


FIGURE 15 - EAGLETON VILLAGE CONCEPT PLAN

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5.0 THE PROPOSED VILLAGES

5.5 MCPHERSON VILLAGE

VISION

The McPherson Village is adjacent to wetland with Newline Road beyond, and will be a gateway to the KingsHill settlement with a strong recreation focus.



DESIGN CRITERIA

LAND USES

The neighbourhood focuses upon a small commercial centre adjoining a central park and large wetland area.

MOVEMENT NETWORK

Streets are interconnected creating a permeable network of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood.

Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.

Streets are located along interfaces between development and natural areas including parklands at a lower contour.

COMMUNITY INFRASTRUCTURE

Community facilities are located within Village centres.

A diversity of open spaces are in accessible and visible locations within the village located to take advantage of landscape features, topography, vegetation and drainage corridors. Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors.

Pedestrian and cycle routes form a complementary movement network through the town including the main forested hill top range.

BUILT FORM

Built form is appropriate for the village and its role in the township, creating high quality and memorable streetscapes

PREFERRED OUTCOMES

Refer detailed MCPHERSON VILLAGE PLAN

Main Street runs down to wetland with a 'dry creek' as a central median with a western aspect over wetland to Williams River.

A diversity of medium density housing surrounds the centre and along busier through routes. Streets run down contours providing views to wetland.

James King Drive winds around the wetland and active open space areas. It aligns and angles to emphasise the location of and views to the village centre.

James King Drive links all neighbourhoods with surrounding road network.

At the Village centre, Middleton Drive connects to the Windeyer Village to the north

Streets are treated as a Boulevard when running through neighbourhoods centres.

Possible community facility in a park at eastern end of the main street terminating the view along the main street. Park doubles as stormwater treatment location.

Active recreation area including playing fields on existing landfill site west of McPherson Village.

Riverside Parkland on opposite side of Newline Road incorporates a boat ramp, boat storage and clubhouse.

Streets form edges to wetland where shown on detailed Village Plan.

Buildings face all streets including with 1 to 2 storey buildings.



FIGURE 16 - MCPHERSON VILLAGE CONCEPT PLAN

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5.0 THE PROPOSED VILLAGES

5.6 WINDEYER VILLAGE

VISION

To provide a community village framed by existing waterway, bushland areas on upper slopes of the hillsides.



DESIGN CRITERIA

LAND USES

Windeyer Village contains a small neighbourhood centre framed by a creek corridor, open space and multiple unit dwellings. This village is set against the backdrop of King Hill. The village will contain a predominance of residential uses with a small commercial core which provides for the needs of local village residents.

MOVEMENT NETWORK

Streets are interconnected creating a range of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood.

Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.

Streets are located along interfaces between development and natural areas including parklands at a lower contour.

COMMUNITY INFRASTRUCTURE

Community facilities are located within Village centres.

A diversity of open spaces are in accessible and visible locations within the village located to take advantage of landscape features, topography, vegetation and drainage corridors. Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors.

Pedestrian and cycle routes form a complementary movement network through the town including the main forested hill top range.

BUILT FORM

Built form is appropriate for the village and its role in the township, creating high quality and memorable streetscapes

PREFERRED OUTCOMES

Small neighbourhood overlooking creek corridor and open space areas. Moderate amount of medium density housing close to village centre and along through traffic routes. Less dense housing on upper slopes. Detached housing generally with development on upper slopes vegetation controls concerning visual impact and bushfire risk.

Entry into the village is from Newline Road along ridge-line.

Middleton Drive acts as a collector street to McPherson Village runs to south and can link to Winston Close to the north if required.

Windeyer Way follows the riparian corridor and over the saddle on the ridgeline to Eagleton and Henderson Villages to the east.

Ridgeline vegetation retained above the 50 metre contour and retained where possible within development above 40 m contour

Ridgeline vegetation running down towards village centre retained within a ridgeline street.

Bushland pedestrian walkway to and past rock outcrops, aboriginal archeological caves and hilltops.

Public open space and recreational areas on flood-prone land, with wetland stormwater treatments. Avenue along minor water courses.

Buildings face all streets including Middleton drive and Windeyer Way with 1 to 2 storey buildings.

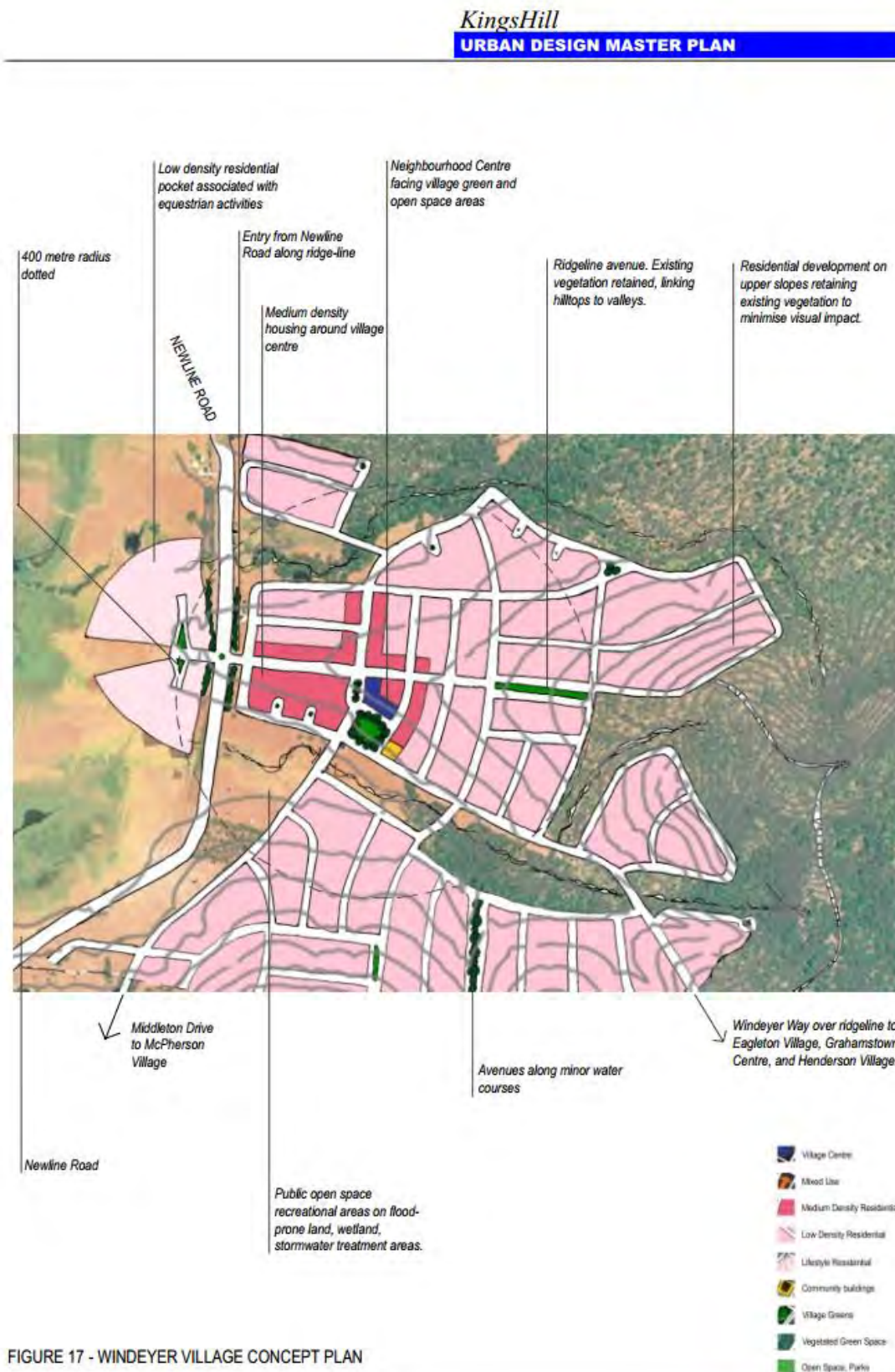


FIGURE 17 - WINDEYER VILLAGE CONCEPT PLAN

DEICKE RICHARDS XCEL PROPERTIES

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5.0 THE PROPOSED VILLAGES

5.7 DORIBANK VILLAGE

VISION

The Doribank Village is a focus of development between the Main Centre and Six Mile Road. Visible higher slopes contain lower density residential development that integrates with the natural environment



DESIGN CRITERIA

LAND USES

The neighbourhood focuses upon a centre containing mix of retail, commercial (serving local residents only), community, open spaces with a variety of generally lower residential densities including the lowest amount of medium density housing within the township.

MOVEMENT NETWORK

Streets are interconnected creating a range of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood

Within 400 metres of neighbourhood centres, the street network creates blocks have an area of approximately 1.25ha and a maximum perimeter of 450 metres. Cul-de-sac streets are minimised. Beyond 400m, larger blocks are acceptable

Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.

Streets are located along interfaces between development and natural areas including parklands at a lower contour.

COMMUNITY INFRASTRUCTURE

Community facilities are located within Village centres.

A diversity of open spaces are in accessible and visible locations within the village located to take advantage of landscape features, topography, vegetation and drainage corridors. Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors.

Pedestrian and cycle routes form a complementary movement network through the town including the main forested hill top range.

PREFERRED OUTCOMES

The Doribank Village acts as the focus for this extensive area. Small local shopping centre with medium density housing adjacent.

Lifestyle residential uses over ridgeline to north and along Six Mile Road

The 'Main Street continues north and connects to Six Mile Road.

Refer Detailed Village Plan for preferred street locations.

Streets form a boundary between development and retained vegetation.

Buffer and mounding to Pacific Highway provides visual and acoustic screening. 50m of buffer can be in residential ownership but no buildings permitted. See Figure 21.

Ridge top and steep land is maintained as publically accessible bushland reserve with a pedestrian and cycleway along the ridgeline.

Dams are maintained as water features and stormwater treatment areas.

Avenues with central landscaped medians are incorporated along drainage corridors and water courses.

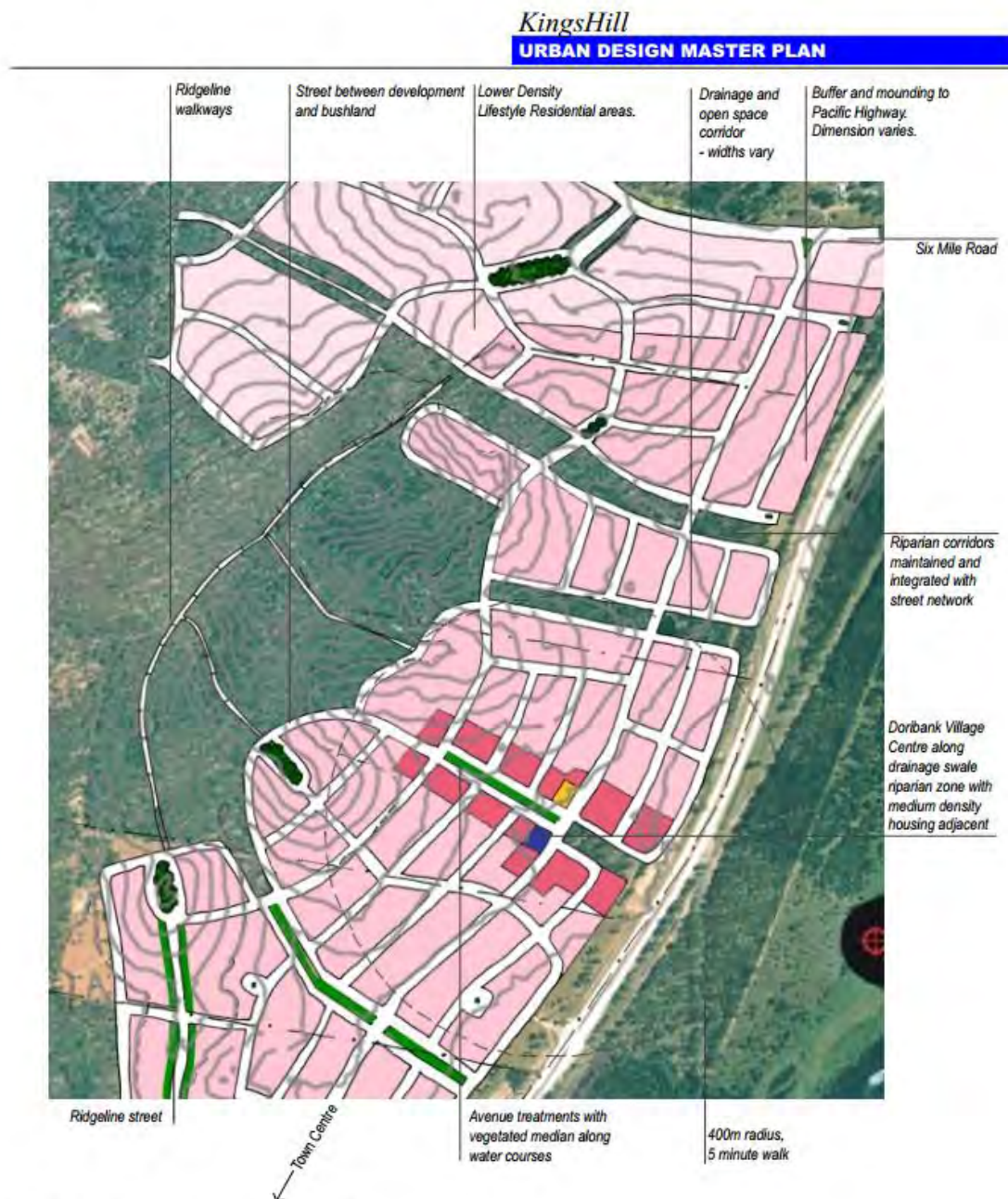


FIGURE 18 - DORIBANK VILLAGE CONCEPT PLAN

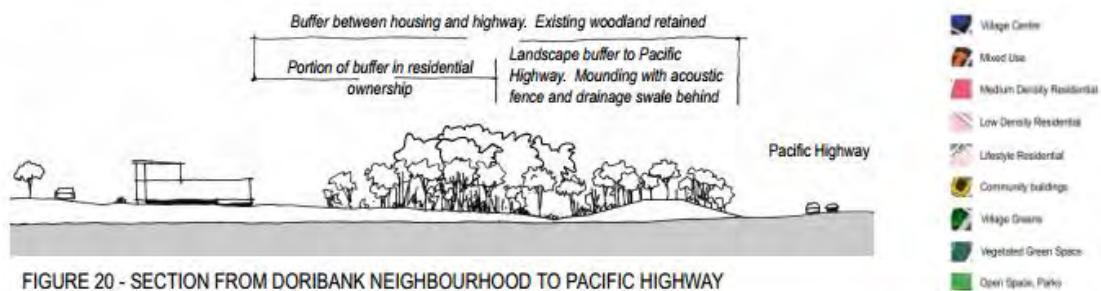


FIGURE 20 - SECTION FROM DORIBANK NEIGHBOURHOOD TO PACIFIC HIGHWAY

DEICKE RICHARDS XCEL PROPERTIES

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6.0 SUGGESTED DESIGN CONTROLS

6.1 SUBDIVISION PRINCIPLES

VISION

The subdivision layout creates a safe, legible and walkable street network that accommodates desired development with appropriate orientation for energy efficient development.

DESIGN CRITERIA	PREFERRED OUTCOMES				
Streets form an interconnected network creating a range of direct and legible routes to the neighbourhood centre and other destinations within the neighbourhood	Figure 21 Subdivision Guidelines demonstrates preferred outcomes				
Streets connect to pedestrian and cycle routes forming a complementary movement network including the forested hill top ridge line and Grahamstown dam spillway.	Use connected streets open to vehicles, cyclists and pedestrians.				
The street network is designed to enable development to front all streets, including collector streets for most of their length.	Within 400 metres of neighbourhood centres, the street network creates blocks have an area of approximately 1.25Ha and a maximum perimeter of 450 metres. Cul-de-sac streets are minimised. Beyond 400m, larger blocks are acceptable.				
Streets respond to natural topographic features such as ridgelines and valleys, and are aligned towards natural landmarks such as wetlands, dams, stands of vegetation, linear green corridors, open spaces and hilltops within and beyond the site.	Cul-de-sac streets, where used, are short <50m and are oriented towards riparian corridors, avenue streets in the direction of the nearby centre or nearest public transport route.				
Street are oriented to create lots with good solar orientation.	Refer to detailed village plans.				
	Streets are located along interfaces between development and natural areas including parklands at a lower contour.				
	Drainage corridors are integrated into the neighbourhood as linear open space features with streets forming edges and development enfronting the corridors. Streets are located between development and green areas.				
	Streets are generally aligned north/south or east/west within the following ranges.				
	<table> <tr> <td>north / south streets</td><td>30° east of north and west of south 20° west of north and east of south</td></tr> <tr> <td>east / west streets</td><td>30° south of east and north of west 20° north of east and south of west</td></tr> </table>	north / south streets	30° east of north and west of south 20° west of north and east of south	east / west streets	30° south of east and north of west 20° north of east and south of west
north / south streets	30° east of north and west of south 20° west of north and east of south				
east / west streets	30° south of east and north of west 20° north of east and south of west				
	Streets outside of this range have wider frontage lots for improved solar design of dwellings				
Design allows for mix of dwelling types and sizes of lots, both now and through future subdivision. Allows for mixed community to develop at Kingshill.	Blocks are designed to accommodate a diversity of lot sizes to achieve desired densities of the precinct.				

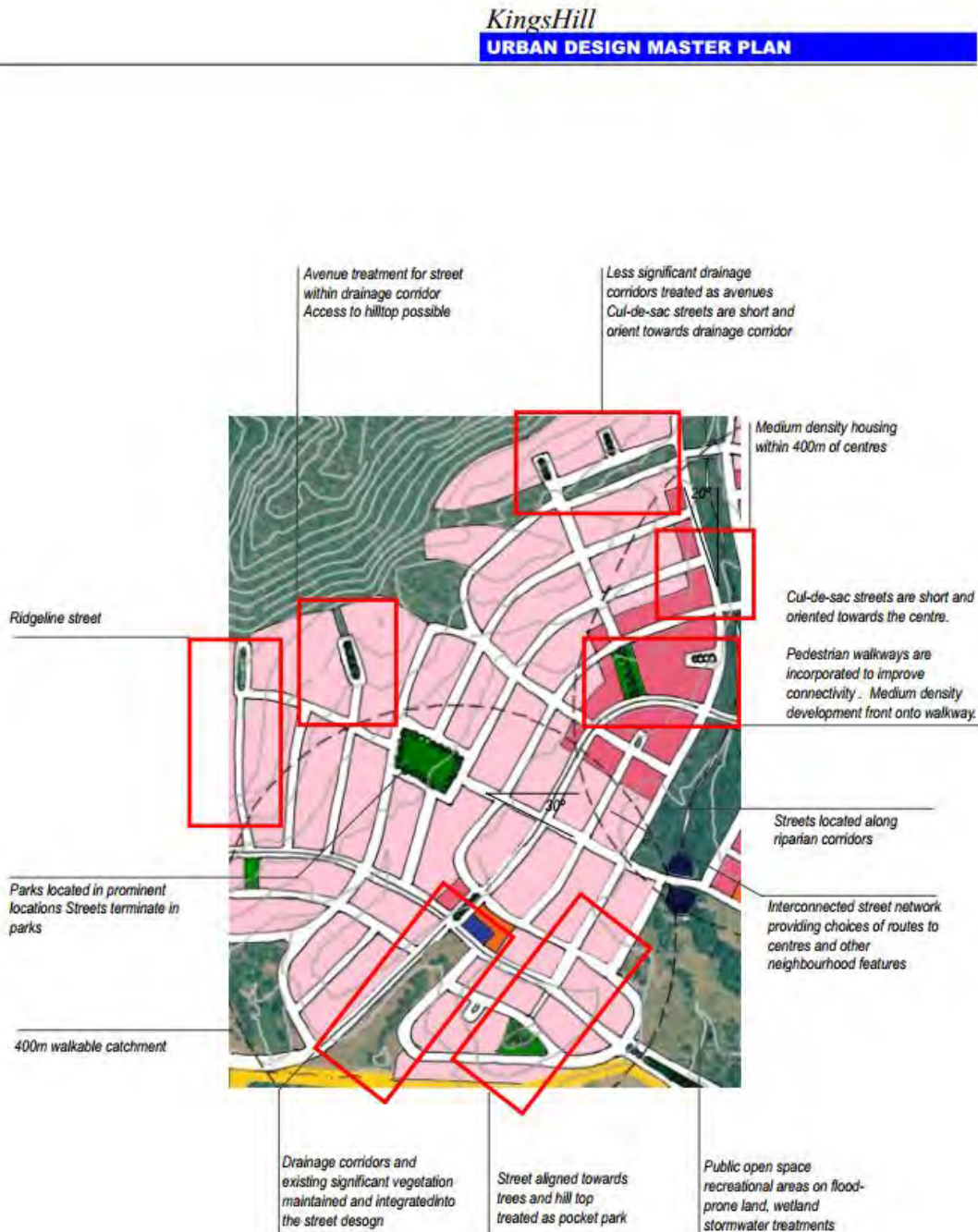


FIGURE 21 - SUBDIVISION GUIDELINES. ANALYSIS OF HENDERSON NEIGHBOURHOOD

6.0 SUGGESTED DESIGN CONTROLS

6.2 STREET TYPES

VISION

Street types are appropriate for the efficient movement of vehicles, buses cyclists and pedestrians.

DESIGN CRITERIA

The street network provides high amenity streets, acceptable levels of safety and convenience for all street users in residential, mixed use, neighbourhood and town centre areas.

The street network has clear physical distinctions between collector routes and local streets based on function, legibility, convenience, traffic volume, vehicle speed, public safety and amenity. Streets are designed to suit their role in the network.

Drainage swales are incorporated into street design. Drainage corridors are treated as avenues. Widths vary to suit topography, location in the catchment, flooding levels and existing vegetation.

Streets incorporate public transport movement and stops. Streets above 3000 vpd have defined cycles paths.

Local residential streets are designed for maximum traffic volumes of < 3000 vpd. Through traffic creating > 3000 vpd in local street is discouraged.

Streets are designed to enable development to front all streets, including collector streets for most of their length.

Streets accommodate public utility services.

PREFERRED OUTCOMES

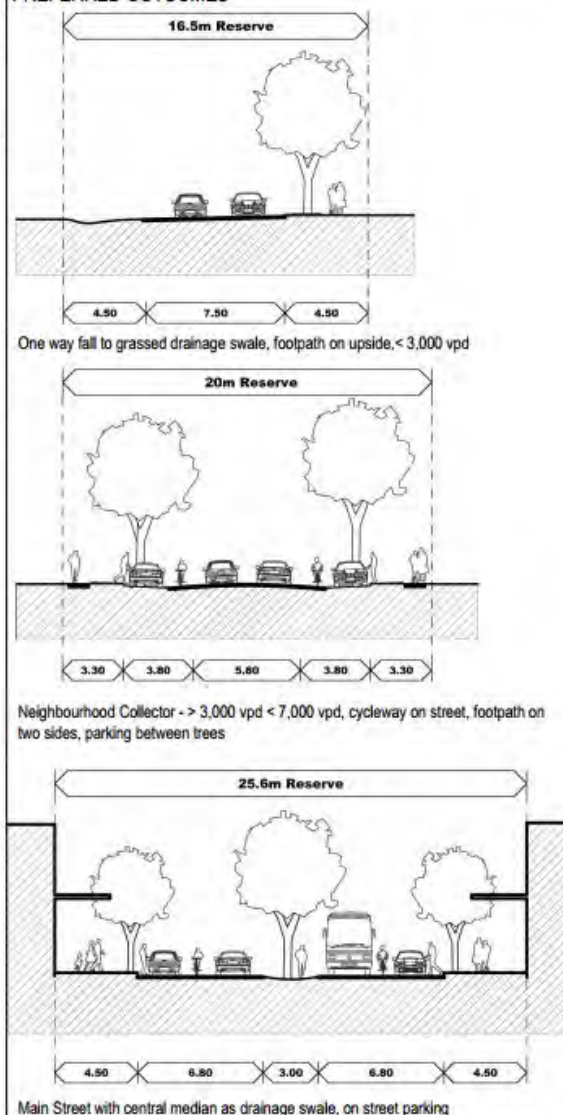
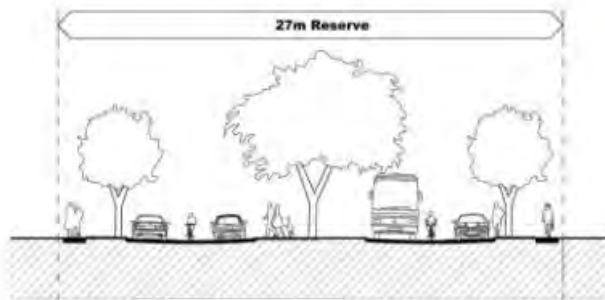


FIGURE 22-28 - KINGSHILL STREET TYPES

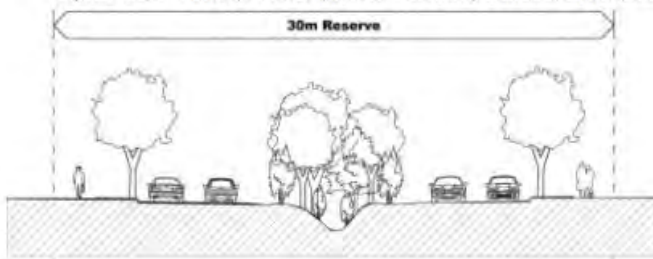
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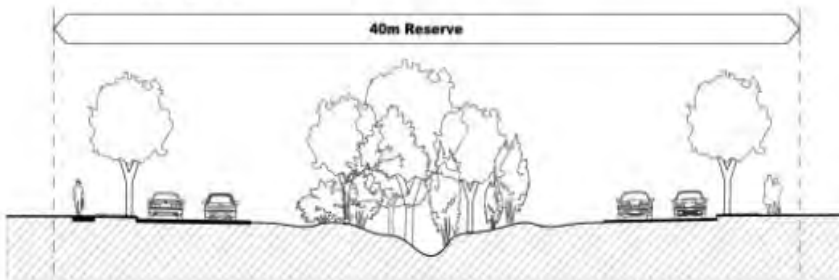
3.70 3.80 3.00 6.00 3.00 3.80 3.70

KingsHill Collector - > 7,000 vpd < 15,000 vpd, central median for right turn lanes, on street parking, cycleway, bus route



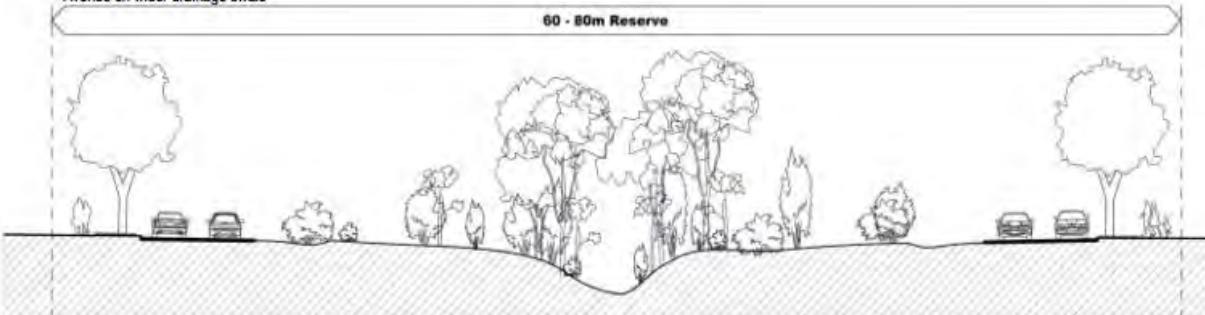
4.50 6.00 6.00 4.50

Avenue on narrow drain swale



4.50 6.00 6.00 4.50

Avenue on wider drainage swale



4.50 6.00 6.00 4.50

Avenues through riparian corridors, one way cross falls on streets to drainage swales

7.0 PREFERRED BUILDING TYPES

VISION

Town Centre buildings encourage higher density and mixed use development and the incorporation of home based employment within neighbourhood centres.

The town centre business precinct is to provide opportunities primarily for retail, administration, entertainment, business and commercial activities in centre locations. Built form in these locations is typically to 2-3 storeys in height with buildings built to the alignment addressing all frontages, streets and public spaces. Facades are active at street level with high levels of physical and visual permeability.

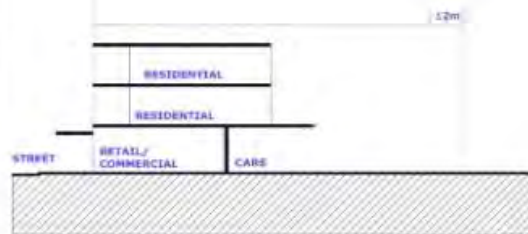
Above street level buildings have well detailed façades and distinct roof forms. Buildings overlook the street with generous balconies and fenestration that contribute to the visual interest and function of the façade.

Streets are tree lined comfortable spaces for pedestrians with awnings and shade devices. The distinction between public and private spaces is blurred with shop fronts spilling onto streets such and cafes. Kerbside car parking is available throughout the centre and contributes to street activity. See 6.2 for typical street details.

Development which provides on site parking along street frontages is not considered consistent with the Master Plan.

Development of non residential uses outside of the Villages, Town Centre and Mixed Use Precinct is not consistent with the Master Plan unless it can demonstrate an overwhelming community benefit and there is no ability to locate within an existing centre. In addition to this all development will be required to demonstrate compliance with the Villages Structure Plans.

7.1 TOWN CENTRE



REQUIREMENTS

Urban Housing, Shoptop housing, Apartments, 3 Storey Terraces.

Floor Space Ratio	1.20:1
Minimum Site Area/ Dwelling	150 m ²
Maximum Site Area/Dwelling Building Height	15 metres
Maximum Hardstand Area	N/A
Vegetation Area	N/A
Front Setbacks	1.5 metres average
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	0 metres to balconies and entrances for a height of 2 storeys
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	6 metres

BUILDING EXPRESSION

A variety of massing elements is used including verandahs, terraces and bay windows.

Large all and roof planes, long unbroken eaves and parapets are avoided.

*KingsHill***URBAN DESIGN MASTER PLAN****7.0 PREFERRED BUILDING TYPES****VISION**

To encourage a wide variety of dwelling types including higher density and mixed use development and the incorporation of home based employment within close proximity to neighbourhood centres.

Neighbourhood (medium density) Residential Areas are characterised by attached multiple unit dwellings arranged either horizontally (townhouses and duplexes) or vertically (apartment buildings) on group titled allotments. Built form is typically 2-3 storeys in height, located on larger lots generally greater than 800 square metres in area.

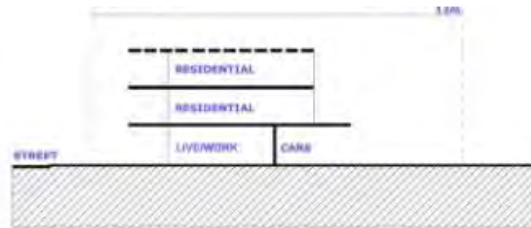
Creation of freehold lots for townhouse and duplex developments may be considered where development can be accessed from a rear lane and each lot is sufficient to contain the dwelling unit and its associated service, parking, access and recreation space.

All development is oriented towards the street with balconies, living areas and windows overlooking streets and public spaces. Residential units contain large outdoor living spaces both at ground and above ground which will flow from main living areas.

Car parking spaces, service and utility areas are integrated with the built form or are otherwise screened from view from public areas.

Non residential uses of a commercial nature such as offices, shops, industry, retailing etc are not consistent with this area. It is considered that because these Areas will be in close association with Town Centre and Mixed Use Areas. No commercial services or activities will be required in these Areas.

Use of a community nature such as schools, aged care centres, child care centres, churches and the like are consistent with this Area.

7.2 MEDIUM DENSITY RESIDENTIAL**REQUIREMENTS**

Dwellings, Dual Occupancies, Rowhouses

Floor Space Ratio	0.6:1
Minimum Site Area/ Dwelling	250 m2
Maximum Site Area/Dwelling	600 m2
Building Height	12 metres
Maximum Hardstand Area	75%
Vegetation Area	10%
Front Setbacks	3 metres to balconies and entrances, 6 metres to walls
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	3 metres
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	6 metres

BUILDING EXPRESSION

A variety of massing elements is used including verandahs, terraces and bay windows. Articulation and recesses in building to accommodate vegetation and entrances. Large walls and roof planes, long unbroken eaves and parapets are avoided.

7.0 PREFERRED BUILDING TYPES

VISION

To encourage detached dwellings on individual allotments of a variety of sizes within easy walk of neighbourhood centre.

Low Density Residential Areas are characterised by single detached houses on single freehold titles set back from the road in landscape lots. Built form is generally no greater than two storeys in height.

Multiple dwellings except duplexes are not consistent with this Area. Smaller allotment housing is considered acceptable where located close to centres, transport nodes, parks and open space areas and other community facilities.

Non residential uses of a commercial nature such as offices, shops, industry, retailing etc are not consistent with this Area. It is considered that because these Areas will be in close association with Town Centre and Mixed Use Areas no commercial services or activities will be required in these Areas.

Use of a community nature such as schools, child care centres, churches and the like are consistent with this Area.



Typical low density lot development

7.3 LOW DENSITY RESIDENTIAL



REQUIREMENTS

Dwelling House

Floor Space Ratio	0.5:1
Minimum Site Area/ Dwelling	450m ²
Maximum Site Area/Dwelling	1200m ²
Building Height	9 metres
Maximum Hardstand Area	75%

Vegetation Area	30%
Front Setbacks	6 metres average 4.5 metres minimum 7.5 meters to garage doors
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	3 metres
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	9 metres

BUILDING EXPRESSION

A variety of massing elements is used including verandahs, terraces and bay windows.
Garages less than 25% of facade area.

*KingsHill***URBAN DESIGN MASTER PLAN****7.0 PREFERRED BUILDING TYPES****VISION**

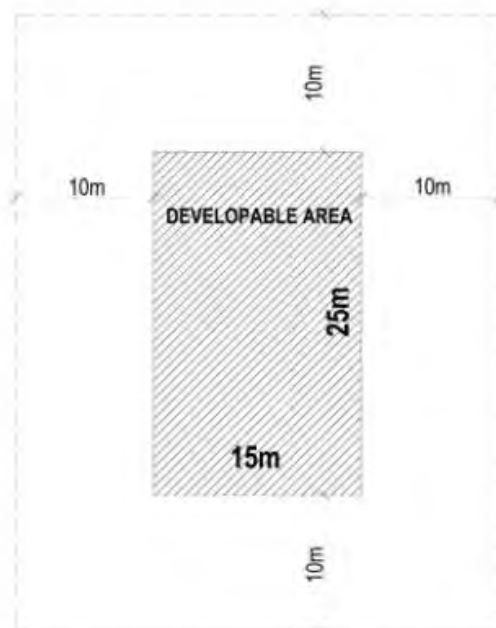
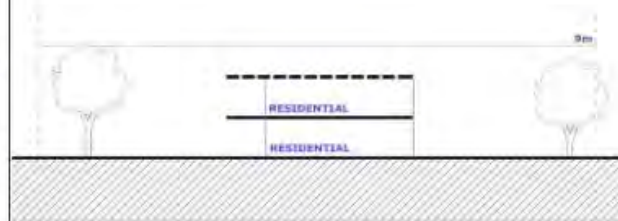
To encourage lower impact residential development in natural areas away from neighbourhoods.

Land in the Lifestyle Residential Housing Area is intended to provide a transition between urban and non urban areas. This Area provides for the retention of environmentally and visually significant areas whilst allowing for limited forms of residential development which do not compromise the retention of vegetation and other significant natural features and do not impact visually on the landscape.

To facilitate development of these sites subdivision of land may be either by freehold title or community title. Group title developments will be considered favourably where they promote the clustering of development on areas of less environmental significance maintaining the balance of the site in common property.

Freehold subdivision will need to demonstrate that each lot created is capable of containing a houses site that does not result in the loss of significant vegetation. Building envelope controls will need to be demonstrated prior to any subdivision.

Vegetation controls must be in place for lifestyle residential above 40 AHD, both to reduce visual impact and manage bushfire risks.

**7.4 LIFESTYLE RESIDENTIAL HOUSING****REQUIREMENTS****Dwelling House**

Floor Space Ratio	0.35:1
Minimum Site Area/ Dwelling	800 m ²
Maximum Site Area/Dwelling	1200 m ²
Building Height	9 metres
Maximum Hardstand Area	25%
Vegetation Area	50% of site area
Front Setbacks	10 metres average
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	10 metres
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	15 metres

BUILDING EXPRESSION

A variety of massing elements is used including verandahs, terraces and bay windows.

Articulation and recesses in building to accommodate vegetation entrances.

Large wall and roof planes, long unbroken eaves and parapets are avoided.

Colours complementary with the natural setting.

7.0 PREFERRED BUILDING TYPES

VISION

To encourage mixed-use development including employment generating uses.

The mixed use precinct contains opportunities for living and working and sees uses mixed both horizontally and vertically. Mixing of uses ensures that activity occurs both within and out of work hours.

Built form in this Area is typically 2-3 storeys and may be setback from the road alignment to allow landscaping and provide a clear transition between public and private space.

Development is neighbourly giving consideration to the form, nature and scale of uses both adjoining and nearby. The relative ability of a use to locate within this area will be based on its ability to maintain and enhance the existing and likely future amenity of the locality. In this regard it is considered acceptable to locate commercial buildings of 2-3 storeys (office and showrooms) facing busier roads (collector and above) with car parking located behind buildings, with residential uses located behind on quieter adjoining streets. Residential within the Mixed Use Area buildings may also contain combinations of live/work areas home business opportunities.

Buildings are designed to prevent impacts on adjoining uses. Development proposals that require substantial ameliorative measures in order to locate with this Area are not considered compatible.

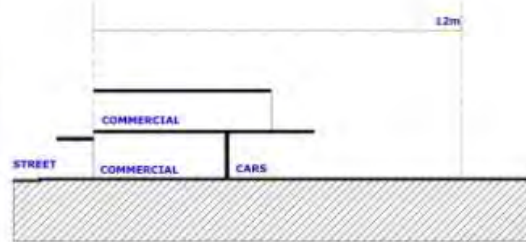
Uses in this Precinct are mostly service based, providing services, goods and facilities directly to the public. Uses typically include the co-location of a mix of industrial, transport, storage, educational, commercial and residential uses together with a limited range of retail and recreational uses. Motels are considered acceptable in these Areas as well. Uses that generate air, noise or other contaminants are not considered appropriate in this Area.

Development is compatible with the maintenance of a high standard of finish with respect to building design, landscaping and surrounds. Buildings are required to have a high level of articulation with respect to roof lines and facades and provide active and attractive facades to road frontages and public area

Buildings are designed to be climatically responsive and energy efficient. Their design and layout promotes the security of people and property.

Buildings containing uses which provide services to local residents such as corner stores and the like are consistent with this Area provided they form part of a mixed use development of a primarily residential nature and are consistent with the Villages Structure Plans.

7.5 MIXED USE PRECINCT

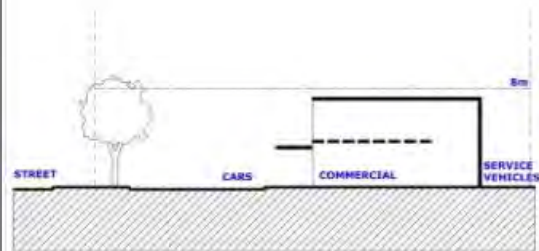


REQUIREMENTS

Floor Space Ratio	1:1
Minimum Site Area/ Dwelling	N/A
Maximum Site Area/Dwelling	N/A
Building Height	12 metres
Maximum Hardstand Area	90%
Vegetation Area	N/A
Front Setbacks	1.5 metres average
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	6 metres
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	N/A

BUILDING EXPRESSION

A variety of massing elements is used including verandahs and terraces. Verandahs can be constructed over the street. Buildings generally maximum 30m in length. Large wall and roof planes, long unbroken eaves and parapets are avoided.

*KingsHill***URBAN DESIGN MASTER PLAN****7.6 MIXED USE PRECINCT****REQUIREMENTS**

Floor Space Ratio	1:1
Minimum Site Area/ Dwelling	N/A
Maximum Site Area/Dwelling	N/A
Building Height	8 metres
Maximum Hardstand Area	90%
Vegetation Area	5% of site area
Front Setbacks	15 metres average
Side and Rear Setbacks to Walls and Screened Balconies and Terraces	12 metres to allow service vehicle turning
Side and Rear Setbacks to Primary Windows or Balconies of Living, Dining and Main Bedrooms	0 metres

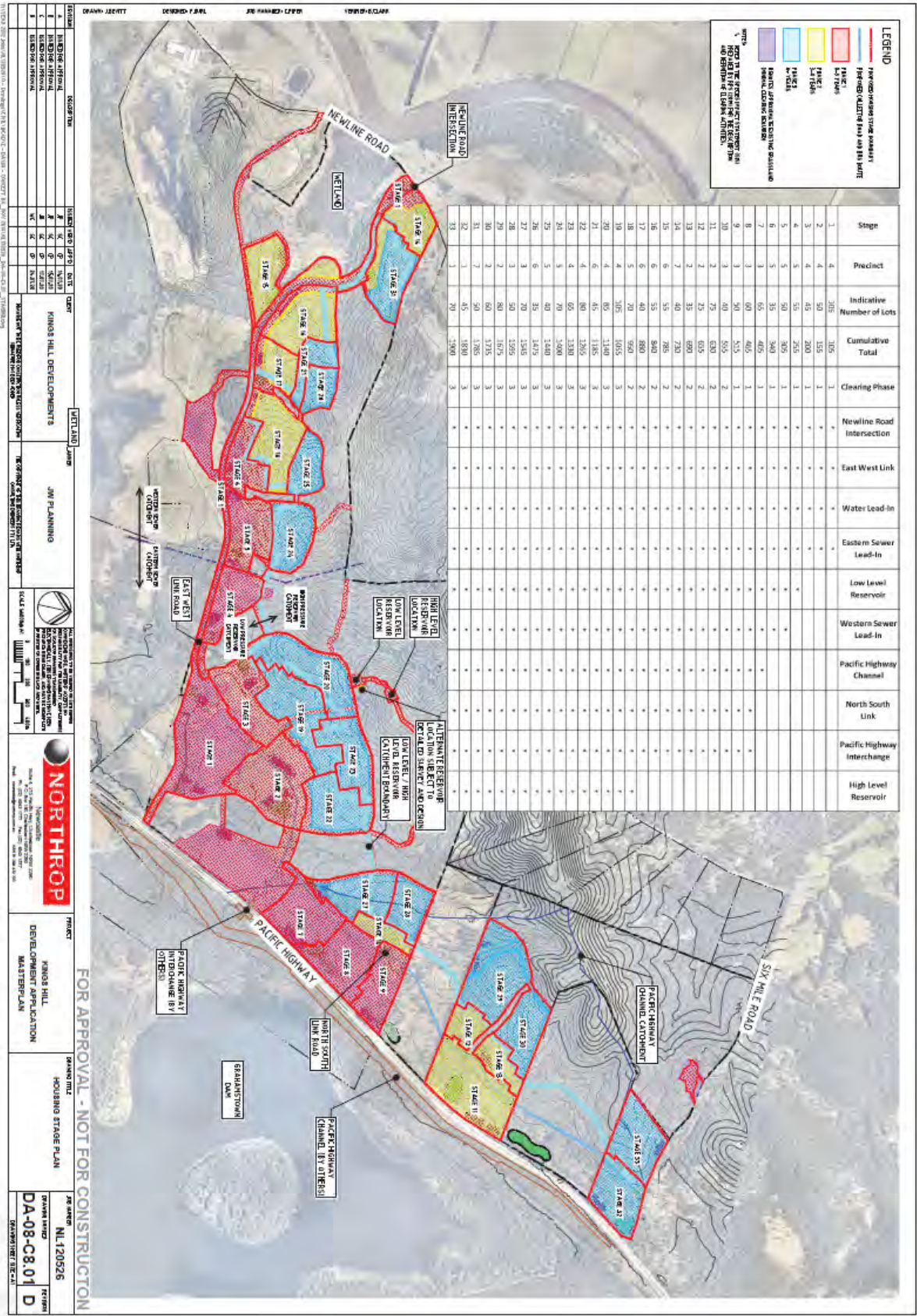
BUILDING EXPRESSION

Buildings face the street and are set back to allow carparking between the building frontage and the street. Additional parking is provided at the rear. Loading bays located at the side or rear of buildings is preferred. Loading bays facing the street are set back or recessed 3m from the front facade.

2m wide footpaths with continuous awnings over are provided along facades facing the street. Footpaths connect to adjacent development. Entrances are visible from the street and are expressed on the facade with building articulation, changes of material and/or colour. Pedestrian access is provided from the public footpath to entrances. Signage is integrated with the facade of the building near entrances.

Shade trees are provided at a minimum of every four parking bays along property alignment.

16Appendix I - Staging plan



17Appendix J - Draft place making report

Introduction Purpose of this report

Purpose

This report provides a vision for Kings Hill and shows how the refined design may respond to the natural amenity and quality of the site.

The report examines the surrounding settlements and characteristics of nearby settlements, Raymond Terrace, Morpeth and Maitland. It considers the character of these places and the activities to provide ideas for Kings Hill.

It considers the qualities of the site and the history of the James King, who was a significant local historical figure, after which Kings Hill has been named.

The town of Kings Hill has been envisioned for an extended time. The land now has the agreements in place with requisite zoning to commence more detailed consideration of the design and to demonstrate the potential quality of Kings Hill as a place.

The Kings Hill site presents a remarkable opportunity for a high quality new settlement that can make a fine contribution to the liveability of the region. Some of the emerging themes for the story of Kings Hill are as follows:

Kings Hill - a unique new town in the Lower Hunter

Hillside environmental living

The site offers a unique landform in this part of the Lower Hunter, with a high ridgeline (137m) running through the site. This elevation provides great views to the east, with the lower lands looking to Raymond Terrace to the south. All development can have close proximity to natural attributes: open spaces and bushland along the ridgeline and the many riparian corridors.

Active living

The site is ideally formed to encourage active living. There is already an established horse riding use (riding for the Disabled) adjacent to the site and the higher land provides opportunities for walking, running and mountain biking.

A special history

The site has strong connection to indigenous heritage with ridgeline migratory tracks and birthing caves. James King had a pottery nearby in the mid 1800s and the highest point of the ridgeline, Kings Hill is named after him.



The site Characteristics

Overview

The site has many different natural characters form the low lands with wetlands to the high ridge lines and the many riparian corridors running down the slopes. The master planning form the start of the project has endeavoured to recognise these qualities and utilise them important contributors to the place making within the design.

- Varied landscape offering multiple outlooks and vantage points
- Significant views to the south
- Natural wetlands and dams on lower levels
- Steeper land with ephemeral wetlands
- Rock outcrops and coves



Native vegetation



The grove in the first village



Existing dams, lagoons and wetlands natural amenity



Local history

Worimi people

Indigenous Australians

Kings Hill, the associated ridgeline, and wetlands are considered to be of Aboriginal Heritage significance (as determined from a 2003 field study). Within the study area four key Aboriginal sites/areas were identified, as follows:

1. Caves and Shelters

A series of rock shelters, caves and rock outcrops are located along the entire Kings Hill ridgeline.

2. Ceremonial grounds

Kings Hill and the next hill to the north indicate ceremonial grounds. The topography and landform appear to meet the criteria and description of ceremonial places. In particular bora grounds and male ritual areas.

3. Lookout and telecommunications

The several high points along the ridgeline offer incredible and magnificent views for many, many miles. These would have been the high places that were used for signal places through fires and smoke.

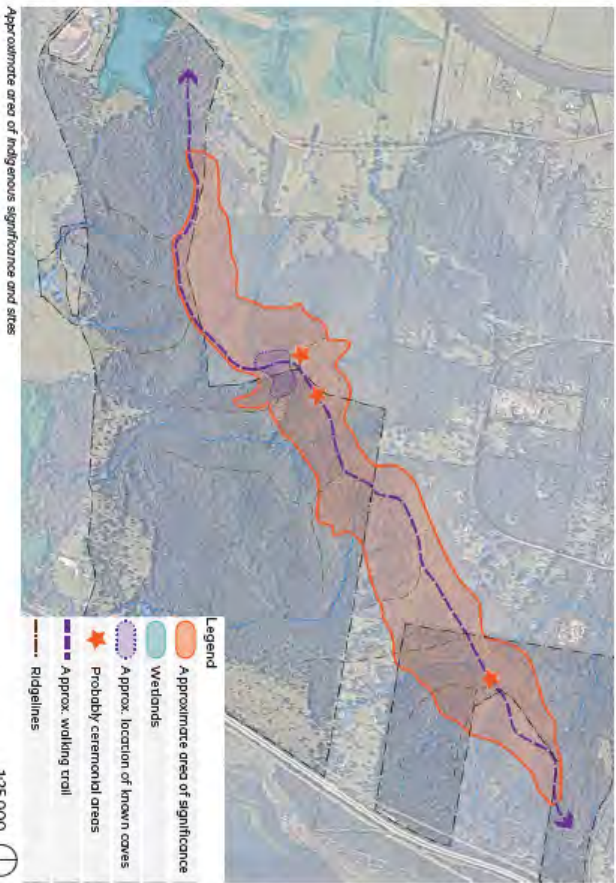
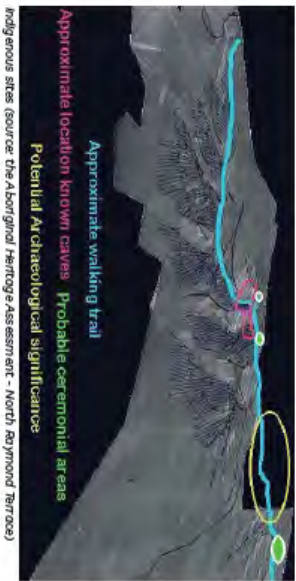
4. Aboriginal Way

Although the ridgeline is steep along the sides and edges there is an easy walkway along the ridgetop. Ethnohistorical records indicate that Europeans used the ridgeline as a bridal trail and also a roadway during floods. This tends to strongly indicate the ridgetop was a transport corridor from the Williams River to Karuah, Port Stephens and the Tilligerry and Tomaree Peninsulas as well as the Barrington Tops.

Recommendations

The following recommendations were provided by Len Roberts in regards to the Archaeological Survey conducted by Myall Coast Archaeology. These recommendations were made in consultation with the Local Aboriginal Land Council and under the legal requirements of the NPWS Act 1974.

- That steps be taken to enable, Kings Hill, associated ridgeline, caves and rock outcrops to be declared an Aboriginal Place and be known as Worimi Way Aboriginal Heritage Trail or similar naming recognition.
- That the approximate area as shown on the figure at right (reproduced from the Aboriginal Heritage Assessment - North Raymond Terraces) form the basis for negotiation between the proponent, Worimi Aboriginal Land Council and Port Stephens Council to ground survey the area of significance to be declared an Aboriginal Place.
- That the above area confirmed by survey, be rezoned with an appropriate zoning in recognition of Aboriginal Heritage, allowing for recreation and tourism.
- That the care, control and management of the culturally significant area to be negotiated between Port Stephens Council, Worimi Land Council and the proponent.
- That a management plan be formulated for the areas of cultural significance.
- That when a management plan is considered, the Land Council in consultation with NPWS and an appropriate university investigate archaeological research possibilities for the site.
- That provided the above recommendations are implemented there is no restriction to development over the rest of the study area for Aboriginal Cultural Heritage reasons.
- If however, in the process of land preparation, artefacts are found, then work must cease and the LALC and NPWS to be informed. To knowingly remove or destroy artefacts without a permit is an offence under section 90, of the NPWS Act, 1974.



Local history James King

Blowing Pottery

James King (1796-1857) was a Scottish immigrant to Australia who moved to Australia in 1827. He started farming (grain and cattle) at Raymond Terrace from 1828. He planted grapes there in 1832, and wine was produced in early 1836. He started a pottery in 1833 to make domestic wares in earthenware (from 1835), and later stoneware (from about 1844). Wine was produced in early 1836. The pottery ceased production by 1853, and was sold in 1855. King employed English-trained potters, both free and ticket-of-leave, and used many moulds for his wide range of wares, imported from England.

King won a silver medal (first class) for his wines at the exhibition of 'Natural & Industrial Products of New South Wales' held at the Australian Museum in 1854, and at the same time exhibited 30 pieces of Irawong pottery, which won him the opportunity to represent NSW at the Paris Exhibition in 1855.

There is an opportunity to refer to this history through entry features, terracotta elements, plaques, street signs, place markings, urban furniture, seats, bins and so forth. A pottery gallery could be included with pottery classes offered.



Irawong Pottery Jug, c. 1844-1853 (© MAA5)



Irawong Pottery Jar, c. 1844-1853 (© MAA5)



Remains of site in 2010 (© Dr Julie McInyre, UoM)



Irawong Vineyard and Pottery c. 1839



Irawong Vineyard and Pottery site in relation to Kings Hill

Local character Raymond Terrace

Background

- Raymond Terrace is the town immediately south of Kings Hill.
- James King was an early settler within the Raymond Terrace area, establishing a vineyard and pottery on his property 'Irrawang'.
- With the growing river trade to Morpeth, the colonial settlement of Raymond Terrace was founded in c. 1837 at the confluence of the Hunter and Williams Rivers.
- As a major port of call on the Hunter River, warehouses and stores were established in a similar manner to Maitland and Morpeth, with frontages to the river and main thoroughfare 'King Street'.
- Marriage Trees formed a powerful, yet simple gesture.



Raymond Terrace – context map

1:10,000



King Street typologies – Raymond Terrace



Aggregation of relatively small buildings with gabled roofs facing the street. Skillion verandah roofs, some with bull nose over the footpath. Buildings are single and double storey with masonry and timber cladding.



King Street typologies – Raymond Terrace



Marriage Trees – Raymond Terrace



King Street, Raymond Terrace c. 1900s



King Street, Raymond Terrace c. 1920s

Local character
Maitland

Background

- Colonial settlement founded in 1820 (then West Maitland) at the upper tidal reach of the Hunter River.
- The historic High Street's location permitted warehouses and stores to have direct access to both the river and roadway.
- The settlement grew into the commercial centre of the prosperous Hunter Valley, where goods were unloaded and distributed to the region.
- Incoming and outgoing goods were transported from downstream Morpeth, which was the head of navigation for larger ships.
- During the 1820s-1850s Maitland was the second largest town in Australia.



High street typologies – Maitland



River front access 'Riverlink' – Maitland



Waterfront – Maitland Riverwalk (@ McGregor Coxall)



High street typologies – Maitland



Maitland – context map



High street typology – Maitland c. Early 1900s



High Street – Maitland c. 1912 (@ Maitland City Library)



Activities – Maitland Riverlights Festival (@ The Viney 2020)

Local character Morpeth

Background

- Colonial settlement founded in c. 1834, as a private town.
- As the head of navigation on the Hunter River, the town's 'Queens Wharf' served as a major port for the region.
- Before the development of the railway, Queens Wharf was one of Australia's most important inland wharves.
- As with Maitland, the main street of the settlement 'Swan Street' runs parallel to the river, permitting businesses to have direct access to both the river and roadway.
- The town includes many historic colonial buildings and developments.
- Morpeth is where the Arnott's family started their biscuit industry, with the c. 1851 bakehouse still standing to this day.



Swan Street typologies – Morpeth



Buildings are characterised by masonry walls with relatively steeply pitched metal roofs, and upper level verandahs over the street.



Swan Street typologies – Morpeth



Swan Street typology – Morpeth Museum



Swan Street typology – Morpeth Gallery



Swan Street typology – Campbell Stores



Morpeth – context map

1:10,000



Pictograph of Morpeth c. 1878 (© University of Newcastle)



Swan Street typology – Morpeth c. 1900s (© Maitland City Library)



Arnott's Biscuit Factory (© Morpeth Soundbys)

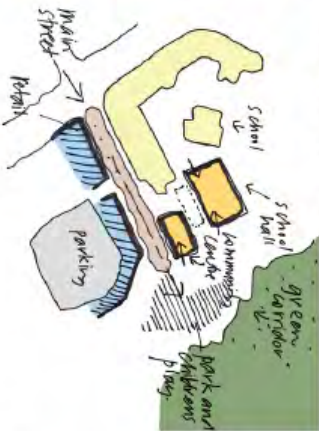
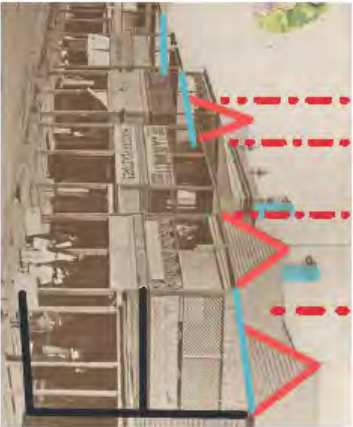
Kings Hill stories

Create a network of memorable places and experiences

Capitalise on the environmental characteristics of the site

Build a place from the start

Respond to the historic character of the region



— Three neighbourhoods with centres that have a unique mix of uses on a main street – retail, community education, architecture.

— The remarkable bushland and high ridgelines with great views, and the indigenous heritage.
— The design should maintain clear connections between the lower ground with the high hilltops in addition to the riparian corridors.

— Build a community from the start with a village centre as the focal place. Collocate a village green, a distinctive retail, commercial mixed-use development and community uses.
— The centre can accommodate the sales suites and the offices needed to construct the project. (as Stockland has done in Baringra, Queensland)
— The centre can accommodate higher density residential development in time in order to create a diverse community.

— Create a distinctive architectural response with design elements that resonate with the regional context such as King Street, Raymond Terrace and other nearby towns.
This could include:
— repeated steeply pitched gable roofs, with regular vertical rhythm;
— shallow single pitched verandah roofs with timber boarding and/or batted ends;
— rendered masonry and horizontal timber boarding;
— vertical window proportions;
— visible chimneys; and
— verandahs and verandah posts.

Remember James King



James King is an important historical figure and the Ironwing Pottery was a significant local business. The legacy of James King can be remembered through the use of terracotta as a material for public infrastructure, signage and as a cladding for buildings.

Kings Hill could have a focus on pottery.

Provide unique place based activities



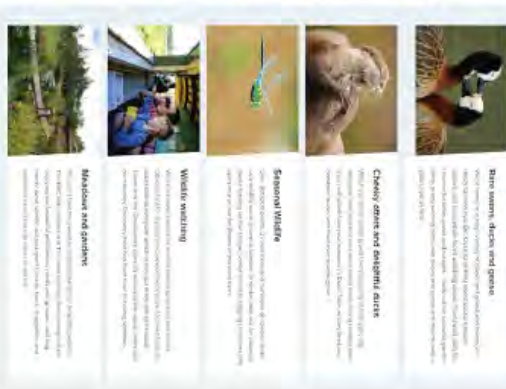
From the start, Kings Hill has a range of activities that capitalise on the natural qualities and activities offered on the site.

This can include the experience of the unique natural environment, bush walking and the proposed activities of mountain biking, horse riding, and running. (A Kings Hill run).

Unique events can be created to bring people to Kings Hill and establish the stories of the place. Include local businesses, food trucks etc.



Meet our wildlife superstars



Establish a civic architecture



Kings Hill has a civic infrastructure in public buildings and the public space structures.

Maitland has demonstrated how a civic gateway with public toilets and a cafe can connect a town centre to its surrounding natural assets.

The artist James Turrell has created a light based artwork (Aurora) within a large, prominent shade structure at Mona in Hobart, Tasmania. This space also functions as a special event location.

Structure plan
Kings Hill proposed and revised
structure plan

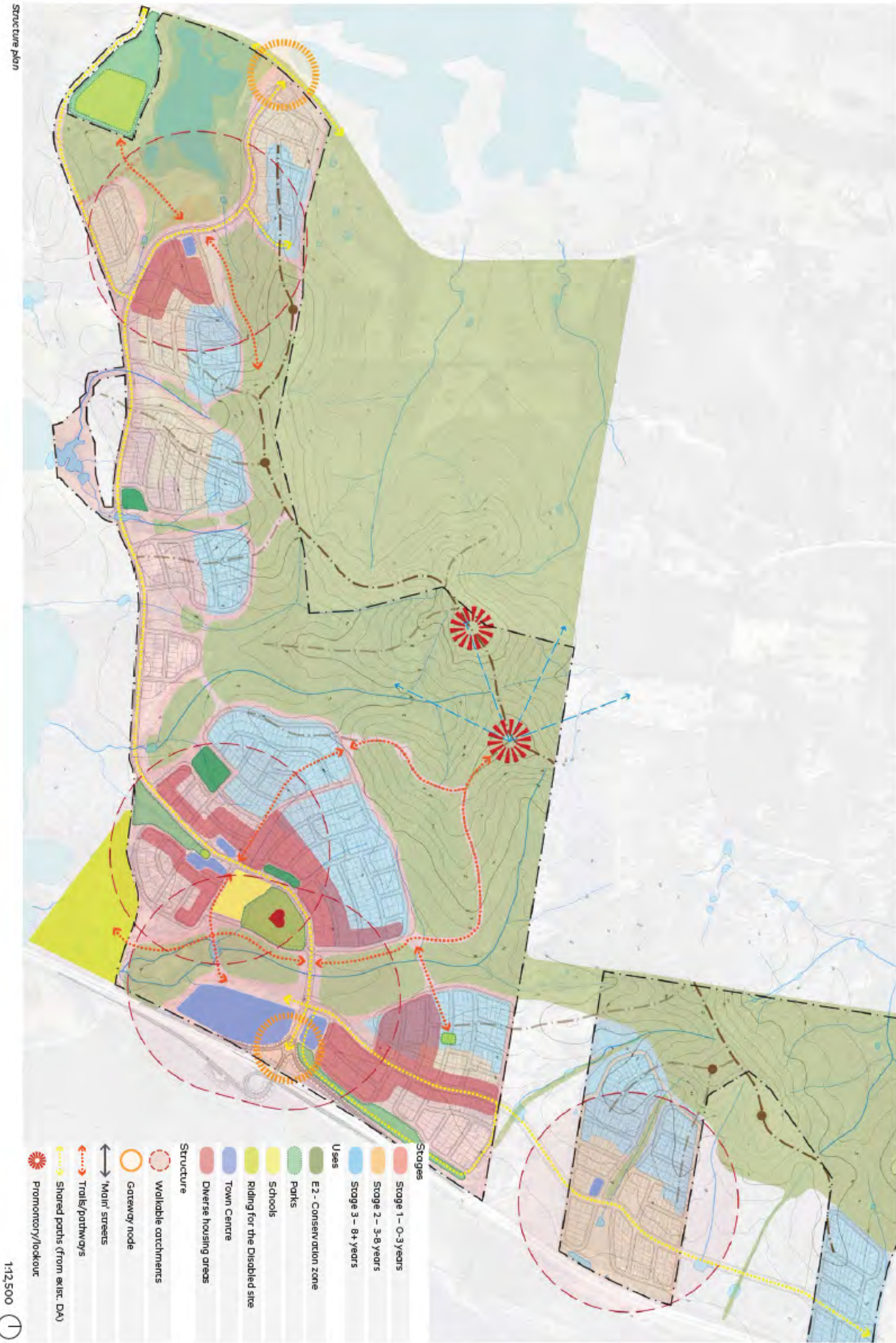
The aspiration and place qualities are overlaid on the structure plan. In general, the current approvals have been respected.

The structure plan describes the following:

- The settlement in relationship to the land form (current approvals)
- The neighbourhood structure with the indicative location and size of mixed-use centre uses, public infrastructure and areas for housing diversity (density)
- Placemaking elements for each village centre and the main town centre.



Kings Hill's collage – indicates a pop-up event within the park in the First Village



Neighbourhoods 'Kings Hill Centre'

The First Village

The village centre is paced between the linear park and the school.

The green linear park connects to the Grahamstown Dam spillway with long views down to the spillway.

A small village green at the top of the park next to the neighbourhood centre acts as a focal place for the emerging community with a civic scaled shade structure.

A widened central median incorporates tall feature trees to mark the village centre.

The school hall can be located at the nexus of the village centre with views to the hall and to enable more community access and use.

Cross streets directly connect the village centre to the ridgelines and hill tops, bushland walkways and cycle paths with the lower riparian corridors and wetlands.

Walkways along the riparian corridors provide opportunities for walking cycling and horse riding.

Higher density housing is placed within 150 metres of the centre and along the primary through street within 400 metres of the centre

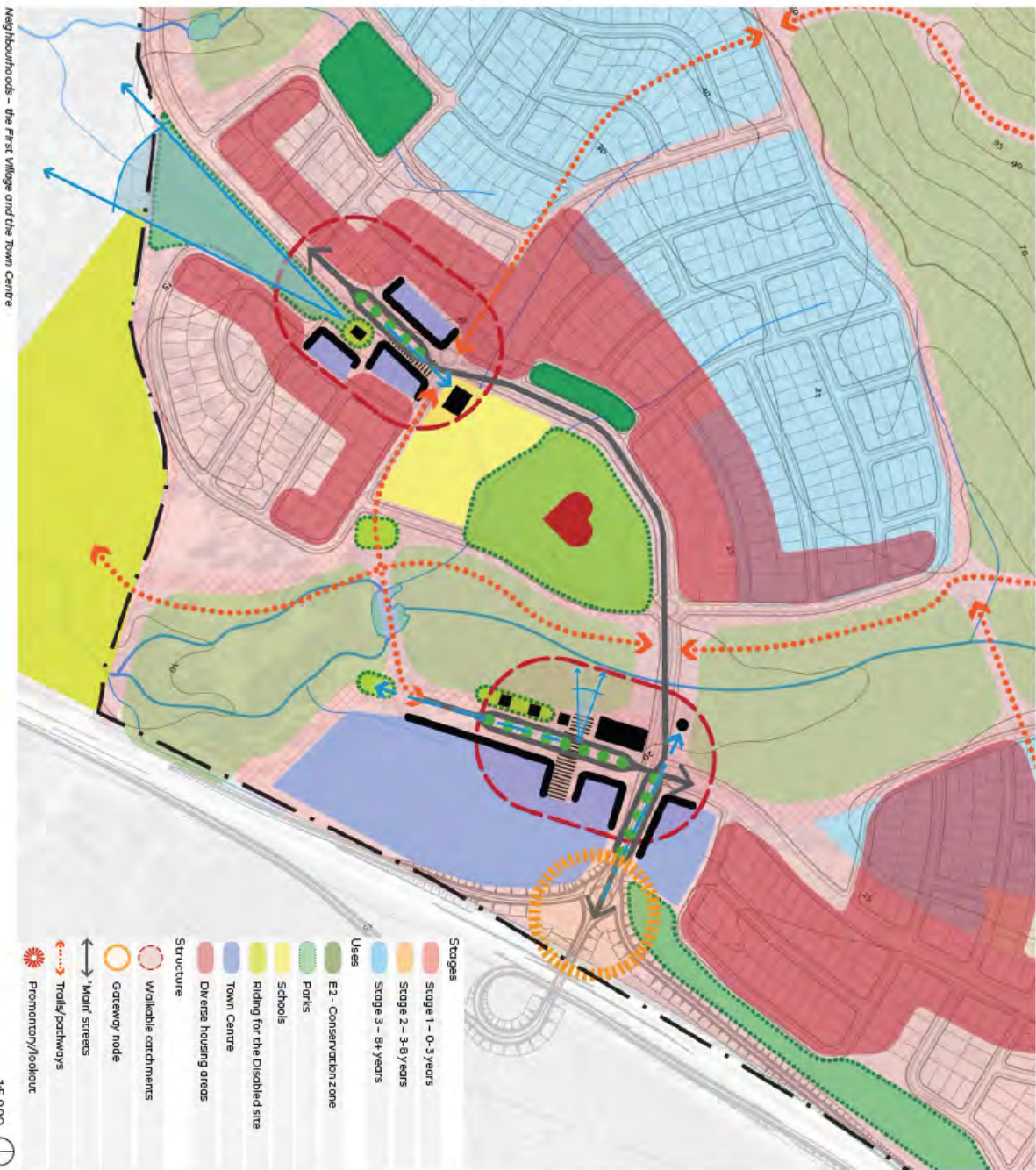
The Town Centre

The entry street from the interchange has a widened central median to mark the Town Centre.

The Main Street is a one sided street running down to the south along the riparian corridor, with the community hall and library at the intersection of these streets.

The street connects to the riparian corridor and the footbridge over the green corridor adjacent to the existing wetlands.

A civic gateway – like in Maitland – marks the entry to the hall at a plaza and provides outlook to the riparian corridor. This plaza can extend across the main street and connect the retail uses to the green corridor.



Neighbourhoods
'West Hill Village'

The West Hill Village capitalises on its connection to the extensive wetlands and the active recreation of the mountain biking (Pump Track) on the landfill site.

The small centre runs up the street against the riparian corridor. It contains uses that support the recreation uses, such as bike sales and repair.

An environment centre and cafe are placed on the wetland side of the through street.

Boardwalks and bird watching hides provide a closer connection to the wetland and the fauna of the wetland.

A cycleway connects the Pump Track to the hill top tracks.

