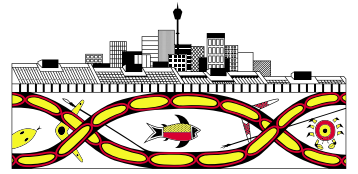


September 2024



Patyegarang Project

Draft Development

Control Plan



Contents

1.0 Introduction	04
1.1 Name and Application of this plan	04
1.2 Adoption and Commencement	04
1.3 Relationship to Other Documents and Instruments	04
2.0 Objectives	06
3.0 Vision for the Precinct	07
4.0 Precinct Structure	08
5.0 Implementation	09
6.0 Designing With Country	10
6.1 Engagement and Ongoing Participation	10
6.2 Heritage and Country	10
6.3 Important Viewpoints	10
6.4 Built Form	10
6.5 Language, Naming and Wayfinding Signage	11
7.0 Environmental Considerations	12
7.1 Bushfire Management	12
7.3 Riparian Corridors	13
7.4 Water Cycle Management and Design	13
8.0 Urban Design Principles	14
8.1 Subdivision	14
8.2 Built Form Siting	14
8.3 Development Types	14
8.4 Vehicle and Pedestrian Connectivity	53
8.5 Public Open Space and Recreation	58
8.6 Social Infrastructure	58
8.7 Servicing, Utilities and Infrastructure	59
8.8 Car Parking	59
8.9 Environmentally Sustainable Design	59
9.0 Built Form	60
9.1 Building Design	60
9.2 Building Facades, Verandas, Porches and Decks	60
9.3 Residential Landscaping	61
9.4 Solar Access	61
9.5 Construction and Waste Management	61

Acknowledgment of Country

"The design of new places, objects and systems can be a purposeful extension of Country and imbue meaning and story into them..." - Design , 2021 (Alison Page & Paul Memmott)

We acknowledge that we stand on Aboriginal land.

We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

1.0 Introduction

1.1 Name and Application of this plan

1.1.1 Name of the Plan

This document is known as the MLALC Patyegarang Project Development Control Plan.

1.1.2 Where and how it applies

This plan applies to subdivision and development for any purpose on land shown within Figure 1.

This section applies to the Patyegarang Project, as outlined in Figure 1 and the lots identified in Figure 2.

This DCP should read in conjunction with the Warringah DCP. In the event of any inconsistency between this section and other sections of the DCP, this section will prevail.

1.2 Adoption and Commencement

This DCP was made on [X] by the Sydney North Regional Planning Panel in conjunction with the MLALC, Morgan Road Belrose Planning Proposal (PP-2022-3802).

1.3 Relationship to Other Documents and Instruments

The provisions of the Environmental Planning and Assessment Act and Regulations (as amended), the National Construction Code, the Local Government Act 1993 or any relevant State Environmental Planning Policy or Regional Environmental Plan, apply irrespective of the provisions of this Plan.



Figure 1 - DCP Application Area

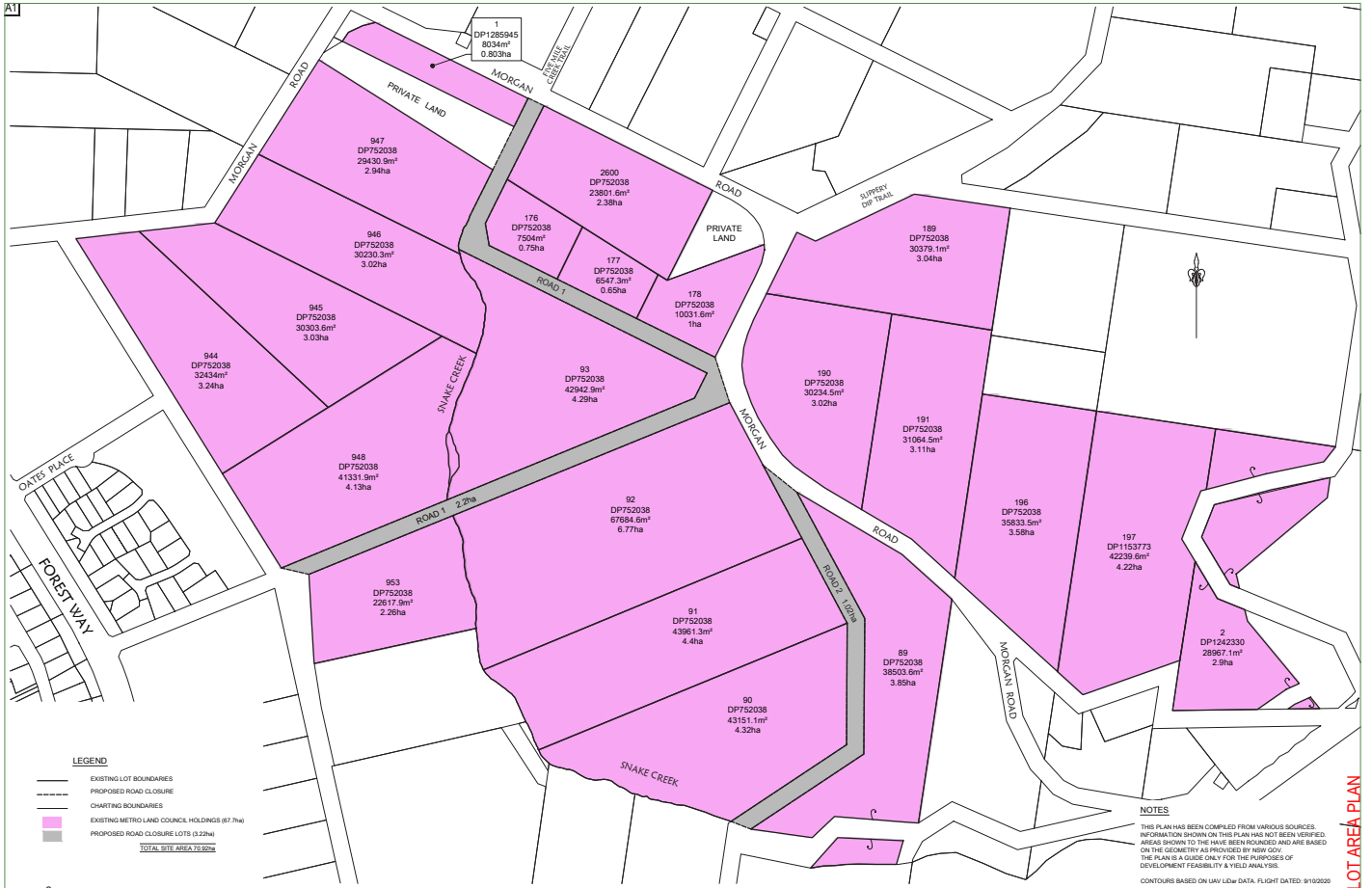


Figure 2: Lots comprising the site



- Existing Lot Boundaries
- - - Proposed Road Closure
- Charting Boundaries
- █ Proposed Road Closure Lots
- █ Existing Metro Land Council Holdings

2.0 Objectives

The objectives of this DCP are:

- To create a landmark development for the Metropolitan Local Aboriginal Land Council land, that facilitates environmentally, economically and socially sustainable development.
- To ensure development respects and responds to the natural environment and its unique characteristics
- To protect, enhance and connect with environmentally sensitive areas, their scenic qualities, as well as the biological and ecological values of those areas, using environmental and cultural conservation practices.
- To ensure new development is a good neighbour, creates a unified landscape, contributes positively to the streetscape, reinforces the importance of pedestrian areas and creates an attractive public domain and built form outcome.
- To promote, protect and celebrate Aboriginal values, culture and heritage.
- To ensure consistency with the Northern Beaches Aboriginal Land Development Delivery Plan.
- To deliver new housing and enhance housing diversity in Belrose.
- To limit the future development of the site to a 450 dwelling cap.
- To take into account detailed consideration of bushfire risk, retention of rocky outcrops, ensuring a harmonious relationship with topography and retention of significant trees.

3.0 Vision for the Precinct

New residential development, natural areas and the public domain at the Patyegarang Project will reflect the Northern Beaches vernacular. Houses will be nestled within the landscape, with retained trees in the public and private domain providing a leafy outlook from residences and public space.

New development will respect and respond to the natural environment and its unique characteristics, protecting and celebrating significant cultural and landscape elements.

Ridgelines and valleys will be retained as green elements that support the retention and enhancement of key flora and fauna areas within larger green spaces and networks. Pedestrian and cycle connectivity to key recreational destinations within the site will be a priority.

The residential, cultural, landscape and environmental elements of the site will work in harmony with the unique sloping topography

of the land, providing design cues that will inform water sensitive urban design responses, alignment of streets and open space, and to reduce the need for cut and fill within lots. Urban design will carefully consider the relationship between residential areas, open space and nature so as to minimise bushfire risk.

The site will provide for a range of lot sizes and built forms that are carefully arranged to enable rocky outcrops, existing significant trees and the topography of the landscapes to be retained and respected. Building heights will sit below the predominant tree canopy to protect scenic amenity and maintain the green leafy character of the site.

Colocation of public open spaces and linear parklands within broader, contiguous green networks will provide areas of high amenity and cultural celebration. Integrated water sensitive urban design will work to improve onsite and downstream water quality in the public and private domain and riparian corridors.



Creek Restoration



Active Transport and Water Detention



Aboriginal Cultural Centre



Neighbourhood Centre



Landscape Responsive Building Typologies



Multipurpose Open Spaces



Community Gardens and Restorative Programmes

4.0 Precinct Structure

Future subdivision of the site is to be designed generally in accordance with the urban design and environmental principles established by Indicative Layout Plan in Figure 3. The applicant may make changes to the indicative layout plan with respect to enhancing the layout to meet superior urban design and environmental outcomes on the condition the subdivision plan is consistent with the principles set forth by the indicative layout plan with respect to such things as bushfire compliance, protection of biodiversity, traffic movements, dwelling caps and retention of conservation zone etc.

The precincts that define the layout and design of future development include:

- Conservation
- Open Space/Recreation
- Built Environment

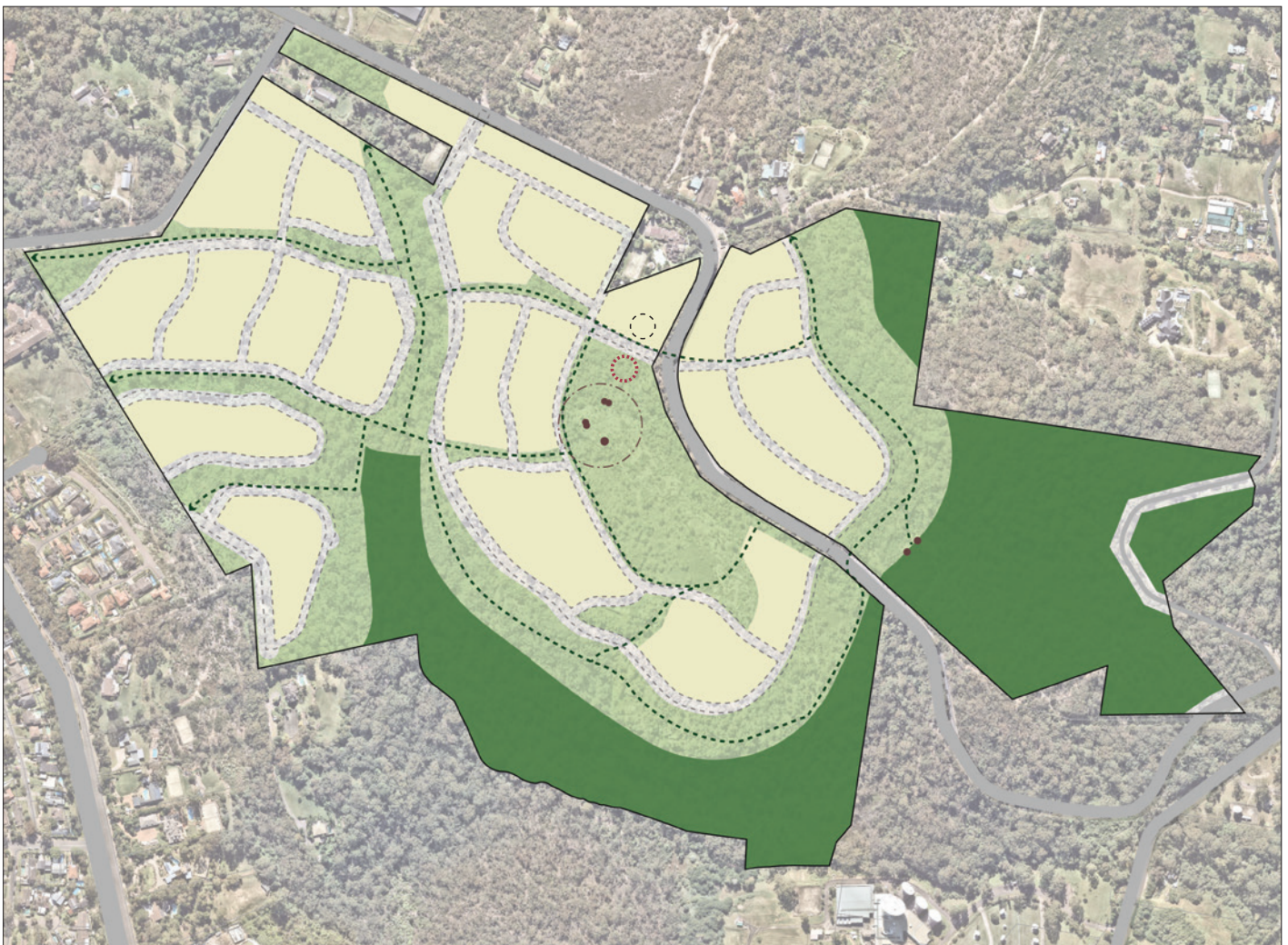


Figure 3: Indicative Layout Plan (Source: COX Architecture)



- | | | |
|--|---|--|
| Conservation area (non-trafficable) | Existing road network | Potential walking trail |
| Publicly accessible green space | Indicative future road network | Potential location of a community centre |
| Potential location of a yarning circle | Archaeological sites: Indigenous significance | Archaeological sites: 50m buffer zone |
| Proposed Residential Area | | |

5.0 Implementation

1. To ensure the orderly development of the land and the coordinated and timely delivery of infrastructure, it is envisaged a concept DA will be submitted.
2. The following documentation is to be provided as part of any future Concept Development Application:
 - a. *Public domain layout* including open space areas, levels, uses, access and circulation.
 - b. *Water Management, Stormwater Drainage and Water Sensitive Urban Design Strategy*
 - c. *Built form design guidelines* which demonstrate place based character responses to the topography and vegetation, local climate and environment, cultural needs and traditions.
 - d. *Staging Plan*.

6.0 Designing With Country

6.1 Engagement and Ongoing Participation

1. Cultural values research is to be undertaken by a qualified Aboriginal heritage consultant (with experience in Aboriginal heritage and cultural values research) and engagement with Traditional Custodians of the land to develop and refine the Concept Subdivision detailed design to facilitate Connection to Country.
2. Engagement with the Traditional Custodians of the land must facilitate co-design, continuous communication and engagement throughout all stages of the project and to establish on-going relationships with the land and community.
3. Provide opportunities for Aboriginal stakeholders to inform and influence design and development outcomes.
4. Ensure that design and development outcomes reflect cultural knowledge and align with the outcomes of cultural values research and consultation.
5. Promote design and development that is sympathetic and responsive to the Patyegarang cultural landscape.

6.2 Heritage and Country

Objectives

- To recognise and revitalise the historical and cultural practices of the site.
- To protect and conserve Aboriginal heritage items.

Controls

1. Identified Aboriginal heritage items located on the site and any other Aboriginal items identified in the future must be protected.
2. Development on any part of the site containing Aboriginal heritage is to provide opportunities for people to engage with heritage and culture. This may include community facilities, heritage or cultural values interpretation, artwork, signage, public access, and the like.
3. Individual development applications for sites containing Aboriginal cultural heritage and cultural values are to be accompanied by a conservation strategy ensuring long-term conservation and restoration (where relevant).
4. Development adjoining Aboriginal heritage sites must include an assessment of any impacts on the heritage site and appropriate impact mitigation measures.
5. Any land with the potential to contain archaeological remains is to be subject to detailed investigations and assessment to determine the level of archaeological intervention required. Intervention may include the following:
 - a. Unexpected finds procedure;
 - b. Monitoring during works; and/or
 - c. Formal salvage excavation.

6.3 Important Viewpoints

Objectives

- To ensure that important viewpoints are recognised and celebrated.
- To maximise access to important viewpoints to support social cohesion and education.

Controls

1. Development should be appropriately sited to ensure the curtilage or setting of the Aboriginal place of cultural value is retained. The development must consider surrounding landscaping, topography, views and connection with other Aboriginal sites.
2. Subdivision design should allow for public access via various travel methods, including walking trails, to viewpoints to create culturally safe places to gather, rest, and learn.
3. Subdivision design and development should consider the wider landscape context so important conservation corridors, links and viewpoints are preserved.

6.4 Built Form

Objectives

- To recognise and revitalise the historical and cultural practices of the site in perpetuity.
- To contribute to local identity and create culturally safe and inclusive places.
- To provide the community with access to Aboriginal culture, knowledge and history that is communicated and shared orally through storytelling and song, as well as visually through dance and art.
- To allow for local Aboriginal cultural practices to reawaken, preserve and grow.

Controls

1. Development should consider principles of culturally responsive design through the incorporation of vernacular architecture that draws its built form character from its response to the topography and vegetation, local climate and environment, cultural needs and traditions, with reference to local resources, materials and construction techniques

6.5 Language, Naming and Wayfinding Signage

Objectives

- To recognise and revitalise the historical and cultural practices of the site in perpetuity.
- To recognise the importance of local Aboriginal people, spaces, and history.
- To reawaken, preserve and grow Aboriginal language in the area.
- To utilise wayfinding and signage for the awareness and understanding of the features, history and culture of the site and locality.
- To recognise both the tangible and intangible cultural values of a place.

Controls

1. Public spaces, places, art, and roads should give preference to the use of local Aboriginal language for naming purposes.
2. The use of Aboriginal language and naming for public spaces, places, art, and roads is to be led by the local community through a process of engagement.
3. Note: For Aboriginal naming and dual naming, the proponent shall consult with the NSW Geographical Names Board and local language subject matter experts and agreed to by relevant Aboriginal stakeholders.
4. Interpretive signage, that provides information on the history and heritage significance of the sites, should be provided within the public domain areas. Where possible, such signage should be provided in close proximity to the site of any identified or future finds including carvings, Aboriginal heritage items or remains.
5. Where an existing geographical feature or public place already has a non-Aboriginal name, dual naming with the Aboriginal name, should be assigned where ever appropriate. *Note: More information can be found within the NSW Geographical Names Board's Dual Naming – Supporting Cultural Recognition factsheet.*
6. Local Aboriginal language, knowledge and art should be integrated into wayfinding signage.
7. Where possible, incorporate wayfinding signage, including typologies such as:
 - a. Identification – Acknowledgement of Country and Aboriginal place naming
 - b. Directional – Indicates direction (and how far) to significant places, sites and landmarks
 - c. Advisory – Indicates cultural protocols of the site or place (i.e. sacred site – no photography)
 - d. Informational – Provides information which could include the history, meaning, function or use of a place or landmark

7.0 Environmental Considerations

7.1 Bushfire Management

Objectives

- To ensure subdivision and built form outcomes manages and mitigates cumulative place-based risks arising from bush fire hazards.
- To ensure an integrated approach to building long-term resilience.
- To facilitate appropriate bushfire hazard management.
- To ensure hazard management is undertaken by the community association in accordance with the fuel management plan.

Controls

1. Subdivision and development of the land must demonstrate compliance with Planning for Bush Fire Protection 2019 (PBP 2019).
2. Development must provide asset protection zones (APZs) in accordance with Table A1.12.1 or Table A1.12.2 of PBP 2019 (as appropriate).
3. Access roads must comply with Section 5.3.2 Access of PBP 2019.
4. The provision of services to development must comply with 5.3.3 Services – Water, electricity and gas of PBP 2019.
5. Subdivision should demonstrate lot layouts, building typologies and building envelopes are capable of meeting bushfire protection requirements and will result in a functional and resilient building form.
6. Asset Protection Zones (APZs) for bushfire protection purposes are to be wholly located outside of conservation areas.

7.2 Biodiversity and Vegetation Management in C2 Environmental Conservation Zone

Objectives

- To protect native vegetation, habitat and the ecological values of those parts of the land to which this plan applies that are zoned for Environmental Conservation.
- To avoid any impacts within the Environmental Conservation zone

Controls

1. Biodiversity and native vegetation within the Environmental Conservation zone are to be retained and managed as a regional biodiversity corridor.
2. Detail the monitoring program and reporting framework to assess the adequacy of the adopted management strategies.

3. Asset Protection Zones (APZ) required under the Rural Fires Act and Planning for Bushfire Protection are to be located wholly outside any land zoned C2 Environmental Conservation. Roads adjoining land zoned Environmental Conservation and frontage of residential lots can form part of the APZ if appropriately landscaped. Any land inside the R2 zone can form part of the APZ, this includes parks, front setback of residential lots etc.
4. Roads are to be located to form a perimeter edge to land zoned Environmental Conservation, but are to be located entirely outside the Environmental Conservation zone, except for land required for vegetated road verges, pedestrian or cycle paths in accordance with the Conservation Management Plan prepared for the Environmental Conservation zone.
5. Any community title management scheme should include details on ongoing biodiversity and vegetation management.

7.2.1 Biodiversity and Vegetation Management at residential interface

Objectives

- To provide an appropriate translation between development with the biodiversity values of the site and surrounding natural landscape.
- To minimise impacts on biodiversity values where residential land adjoins a conservation zone.

Controls

1. Dwellings in residential areas immediately adjacent to the C2 Environmental Conservation zone are to be oriented towards the Environmental Conservation zone and provide passive surveillance of the Environmental Conservation zone.
2. Native trees and other significant vegetation are to be retained where possible by subdivision design that incorporates this vegetation into areas such as road reserves and public and private open space areas. The selection of trees and other landscaping plants is to utilise locally indigenous drought tolerant species and include winter flowering trees and shrubs.
3. Any pruning or tree removal works that may impact threatened fauna and ecological communities are to adhere to the best practice guidelines on the following page.
4. No fencing which would prevent movement of ground dwelling mammals, including ground dwelling medium sized mammals, should be erected within the publicly accessible green space on the Indicative Development Plan.

Note:

- **vegetation** means a tree or other vegetation, whether or not it is native vegetation
- **native vegetation** has the same meaning as in Part 5A of the Local Land Services Act 2013.

5. External lighting in public and private domain is to be minimised and managed to ensure nocturnal movement of native species along fauna corridors is not interrupted by lighting.
6. The site should provide for optimal protection outcomes e.g. protecting tree protection zones and native vegetation (canopy level) shall be provided, where appropriate for biodiversity outcomes, within pocket parks, riparian corridors and street verges to create a 'stepping-stone corridor' for terrestrial bio-diversity
7. The site should consider the location of walking tracks within the R2 zoned land and proximity to the C2 zone should be sited to ensure the ongoing preservation and avoidance of impacts on the C2 zoned land.

The following provides an indicative outline of best practice as per Control 7.1.2.3, which may evolve in relation to policy and site context:

For pruning or tree removal works that may impact threatened fauna

Step 1 – An ecologist identifies and tags important habitat and hollow-bearing trees.

Step 2 – All other vegetation is removed during seasons when relevant threatened species would not be at an important life stage (this may vary – generally spring is avoided, and winter in areas where microchiropteran bats or gliders may be hibernating).

Step 3 – Habitat and hollow bearing trees are removed under supervision of an ecologist/wildlife rescuer. Trees are bumped by machinery at 1min intervals over a 5 min period. Then felled in sections with hollow limbs lowered to the ground rather than dropped. Hollow limbs left on the ground for a couple of days before stacking and removal to enable fauna to flee. Removal of hollow trees may be timed for late in the day so nocturnal fauna are evicted into the evening rather than the morning. Any injured fauna transferred to a local vet or into the care of a wildlife agency. Hollow limbs should be placed on the ground in retained areas of vegetation where practicable.

For pruning or tree removal works that may impact threatened ecological communities

The use of clean machinery and tools to avoid spread of diseases and pests. If vegetation is being thinned, then selection of tree removal based on maintaining habitat trees and maintaining species diversity. If vegetation is being thinned, use low impact tree removal by a suitably qualified arborist rather than heavy machinery.

7.3 Riparian Corridors

Objectives

- To conserve and enhance native and riparian vegetation to improve the connectivity, ecological condition, and function of ecosystems.
- To mitigate and manage impacts of development on riparian corridors to protect vegetation, fauna, and water quality.

Controls

1. Riparian corridor management should be consistent with the Water Management Act 2000 and have regard to the following:
 - a. Development shall avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate salinity, and where possible, land should be rehabilitated.
 - b. The impacts of drainage activities on other water users and downstream natural environments should be avoided or minimised.
 - c. The existing and future risk to human life and property arising from occupation of floodplains located within the site must be minimised.

7.4 Water Cycle Management and Design

Objectives

- To ensure development maintains or enhances water quality of receiving waters in the Bantry Bay, Manly Dam and Narrabeen Lagoon catchments
- To improve onsite and downstream water quality through integrated WSUD in the public and private domain

Controls

1. Stormwater drainage systems are to be designed, installed and maintained, as far as is practicable, so as to maintain or enhance water quality and assist in maintaining stream flow in accordance with:
 - a. Northern Beaches Council Engineering Specifications – Water Management for Development Policy & On- Site Stormwater Detention (OSD) Technical Specification
 - b. As set out in Northern Beaches Council Engineering Specifications - Specification for Erosion and Sediment Control – Subdivision / Major Construction Works
 - c. Craig & Rhodes / Storm – Stormwater Management Plan, Morgan Rd Belrose dated 19th September 2022
2. All water management facilities and stormwater infrastructure are to be privately owned and operated.
3. All new development shall be accompanied by a Stormwater Management Plan or Strategy that details the methods for controlling and managing increased stormwater flows on downstream catchment areas and the impacts on private property (where applicable).

8.0 Urban Design Principles

8.1 Subdivision

Objectives

- To provide a diversity of lot sizes to facilitate greater housing choice within the community.
- To design lots that support desired character and respond sensitively to the natural environment and topography.

Controls

1. A range of appropriate lot sizes and orientations to deliver a mix of housing types and sizes that are responsive to the local need.
2. Lots are to be relatively regular in shape where possible. Where possible, irregular shaped allotments with narrow street frontages are to be avoided.
3. Lot design is to facilitate safe and efficient vehicle access and avoid street frontages being dominated by garages and multiple wide driveways.
4. Lots must be orientated and aligned:
 - a. so that future buildings can interface positively with the streets and public spaces to increase visual surveillance and to avoid streetscapes with long blank walls,
 - b. to facilitate solar efficiency, and
 - c. to promote building design that has frontage to landscaped areas and riparian corridors.
5. Corner lots are developed such that no blank walls front onto the secondary street for a minimum of 4 metres along each frontage, which is measured from the corner of the dwelling nearest to the street corner.

8.2 Built Form Siting

Objectives

- To ensure that built form recognises the elements of the locality and the site conditions, opportunities and constraints for a tailored approach that mitigates potential impacts on the surrounding environment.

Controls

1. Built form should be sited having regard to the detailed site analysis (see Concept DA requirements). The Site Analysis Plan should include:
 - a. the location, boundary, site area and north point of the land
 - b. the position and use of the proposed building in relation to site boundaries and any other structures and existing vegetation and trees on the site,
 - c. aspect,
 - d. views,
 - e. topography, including existing levels of the land in relation to buildings and roads,
 - f. biodiversity and proximity to riparian corridors/ environmental zone interface,
 - g. Aboriginal heritage,
 - h. view lines,
 - i. any easements over the land,
 - j. the location, boundary dimensions, site area and North Point of the land, location of existing development and street features adjacent to the site, such as trees, planting, street lights,
 - k. contours and existing levels of the land in relation to buildings and roads, and whether the proposed development will involve any changes to these levels,
 - l. location and uses of buildings on sites adjoining the land, and
 - m. a stormwater concept plan (where required).


8.3 Development Types

Objectives

- To provide for a diverse range of housing forms and lot sizes.
- To ensure development is responsive to topography, environment attributes and biodiversity values.

Controls

1. Built form must consider the interfaces with the environment and infrastructure.
2. Dwellings are to be designed and sited in accordance with the relevant Interface Type illustrated in Section 8.3.1, and corresponding controls and development principles diagrams illustrated in Section 8.3.2. Noting that more than one interface type may apply to individual lots.

A close-up photograph of a branch with green leaves and small, developing green fruits or buds. The branch is dark brown and has several green, cup-shaped buds. The leaves are green with some brown spots and are slightly out of focus. The background is a soft, out-of-focus green.

Section 8.3.1 Interface Types

This section includes provides design guidance specific to each indicative interface condition anticipated to occur throughout the site. The applicability of these controls is dependent on the final design of roads and public spaces, which may evolve in response to more detailed technical and design investigations. Should alternative design outcomes occur, consideration should be given to the underlying principles set out in these diagrams and their corresponding controls.

Type 1 – Typical Unconstrained Lot

Unconstrained lots are to be developed in accordance with the relevant Development Principles Diagram set out in Section 8.3.2.

Type 2 – Riparian Interface

Lots that are identified within the Riparian Corridor Interface Area are to be developed in accordance with Table 1 and the applicable Development Principles Diagram(s) for Riparian Corridor Interfaces.



Figure 12: Identified Riparian Interface (Source: COX Architecture)



- Interface Area
- Proposed Residential Area
- Conservation area (non-trafficable)
- Publicly accessible green space
- Archaeological sites: Indigenous significance
- Archaeological sites: 50m buffer zone

Objectives	<ul style="list-style-type: none"> • Protect, maintain and enhance the ecology and biodiversity of waterways and riparian land. • Encourage development to be located outside waterways and riparian land. • Avoid impacts that will result in an adverse change in watercourse or riparian land condition. • Minimise risk to life and property from stream bank erosion and flooding by incorporating appropriate controls and mitigation measures. • Maintain and improve access, amenity and scenic quality of waterways and riparian lands. • Regeneration and restoration of waterways and riparian lands to return Group B and Group C creeks to a Group A standard (as described in Warringah Creek Management Study, 2004) through appropriate siting and development of development.
Development	<ul style="list-style-type: none"> • Developments shall comply with the requirements of Council's Protection of Waterway and Riparian Land Policy and Water Management Policy. • Overshadowing of riparian corridors should be minimised and for development adjoining a riparian corridor, shadow studies and an analysis must be prepared.
Residential	<ul style="list-style-type: none"> • Buildings are to be located to provide an outlook to public open space, without appearing to privatise that space. • Development is to provide a visual transition between open space, bushland reserves or other public spaces and buildings, including avoiding abutting public open space with back fences. • Development is to protect views to and from public open space. • Development should be designed to maximise opportunities for casual surveillance of the public open space.
Geotech/Cut and Fill	<p>The applicant must demonstrate that the proposed development:</p> <ul style="list-style-type: none"> • has adequately addressed any geotechnical stability engineering requirements; and • will be carried out in accordance with good engineering practice.
Streets, Access, Driveways and Garages	<ul style="list-style-type: none"> • Riparian streets are to be designed generally in accordance with the indicative cross sections at Figure 2 and Figure 3 and Guidelines for Controlled Activities on Waterfront Land—Riparian Corridors Published by NSW Department of Industry in May 2018. • The outer 50% of the riparian zone can accommodate pedestrian and cycle paths (or shared paths) street furniture (including lights and seating), landscaped verges and water sensitive urban design elements that are normally part of the street verge
Infrastructure	<ul style="list-style-type: none"> • Infrastructure such as roads, drainage, stormwater structures, services, etc. should be located outside land identified as Waterways and Riparian Land.
Vegetation	<ul style="list-style-type: none"> • The Asset Protection Zone must not extend into land identified as Waterways and Riparian Land. Refer to NSW Rural Fire Service for site assessment methodology.
Stormwater	<ul style="list-style-type: none"> • Maintenance access for the stormwater drainage manager must be accommodated in the design of riparian streets.

Table 1: Riparian Interface Objectives and Controls







Type 3 – Open Space Interface

Lots that are identified within the Open Space Interface Area are to be developed in accordance with Table 2 and the applicable Development Principles Diagram(s) for Open Space Interfaces.



Figure 13: Identified Open Space Interface (Source: COX Architecture)



- | | | |
|--|---|---|
|  Interface Area |  Proposed Residential Area |  Conservation area (non-trafficable) |
|  Publicly accessible green space |  Archaeological sites: Indigenous significance |  Archaeological sites: 50m buffer zone |

Objectives	<ul style="list-style-type: none"> To protect and preserve bushland adjoining parks, bushland reserves and other public open spaces. To ensure that development responds to its adjacent surroundings to preserve and enhance the natural qualities of the environment. Development on land adjoining open space is to complement the landscape character and public use and enjoyment of the adjoining parks, bushland reserves and other public open spaces.
Development	<ul style="list-style-type: none"> Development on land adjoining public open space is to complement the landscape character and public use and enjoyment of the adjoining parks, bushland reserves and other public open spaces. Public access to public open space is to be maximised. Open spaces must be integrated within the natural landscape and vegetation of the site while minimising man-made visible boundaries between open space and private property. Each recreation and open space areas must be accessible either by roads, fire trails and/or bush tracks and should be made available to residents and visitors including provision for disabled access in appropriate locations. All built form within the open spaces must be representative of the natural setting of the space and should be constructed of reusable materials from onsite activities. Interpretive signage and information to educate and inform the community must be provided within bushland areas. Emergency access locations must be opened to pedestrian and cyclists. Roads should be designed to incorporate pedestrian and bicycle access within the road reserve or immediately adjacent, where required as part of the overall network
Residential	<ul style="list-style-type: none"> Buildings are to be located to provide an outlook to public open space, without appearing to privatise that space. Development is to provide a visual transition between open space, bushland reserves or other public spaces and buildings, including avoiding abutting public open space with back fences. Development is to protect views to and from public open space. Development should be designed to maximise opportunities for casual surveillance of the public open space.
Setbacks	<ul style="list-style-type: none"> Development is to provide buffers for bushfire protection on private land, not on public land. Development is to utilise landscaping or existing landscape elements to screen development
Vegetation	<ul style="list-style-type: none"> If the adjoining parks, bushland reserves or public open space contain bushland, development is not to threaten the protection or preservation of the bushland.

Table 2: Open Space Interface Objectives and Controls








Type 4 – WSUD Interface

Lots that are identified within the WSUD Interface Area are to be developed in accordance with Table 3 and the applicable Development Principles Diagram(s) for WSUD Interfaces.



Figure 14: Identified WSUD Interface (Source: COX Architecture)



-  Interface Area
-  Proposed Residential Area
-  Conservation area (non-trafficable)
-  Publicly accessible green space
-  Archaeological sites: Indigenous significance
-  Archaeological sites: 50m buffer zone
-  Indicative WSUD Areas

Objectives	<ul style="list-style-type: none"> To ensure that WSUD is integrated into the overall character of the development, is not intrusive in the public domain and forms part of the landscape experience
Stormwater	<ul style="list-style-type: none"> No kerbs, upright and rolled kerbs may be used in the development. WSUD devices are to be located within the road reserves where possible

Table 3: WSUD Interface Objectives and Controls

Type 5 – APZ Interface

Lots that are identified within the APZ Interface Area are to be developed in accordance with Table 4 and Figure and the applicable Development Principles Diagram(s) for APZ Interfaces.



Figure 15: Identified APZ Interface (Source: COX Architecture)



- Interface Area
- Proposed Residential Area
- Conservation area (non-trafficable)
- Publicly accessible green space
- Archaeological sites: Indigenous significance
- Archaeological sites: 50m buffer zone
- Indicative Bushfire Asset Protection Zones

Objectives	<ul style="list-style-type: none"> Ensure appropriate fire management regimes and hazard reduction techniques for Asset Protection Zones within private ownerships that ensure safety for all occupants of the dwelling and adjoining dwellings.
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Table 4: APZ Interface Objectives and Controls

Type 6 – Rock Wall/ Outcrop Interface

Lots that are identified within the Rock Wall/ Outcrop Interface Area are to be developed in accordance with Table 5 and the applicable Development Principles Diagram(s) for Rock Wall/ Outcrop Interfaces.



Figure 16: Rock Wall/ Outcrop Interface (Source: COX Architecture)



- Interface Area
- Publicly accessible green space
- Proposed Residential Area
- Archaeological sites: Indigenous significance
- Conservation area (non-trafficable)
- Archaeological sites: 50m buffer zone

Objectives	<ul style="list-style-type: none"> To preserve the natural features of the site that contribute to the unique landscape To minimise cut of rock walls/rocky outcrops to facilitate delivery of streets, driveways and residential development
Residential	<ul style="list-style-type: none"> Where suitable, rock walls and rocky outcrops are to be utilised as boundary walls in place of engineered retaining walls Development is to minimise impact on the rocky outcrops

Table 5: Rockwall/Outcrop Interface Objectives and Controls

Type 7 – Constrained Sites – Significant Trees

Constrained lots with retained significant trees are to be developed in accordance with Table 5 and the applicable Development Principles Diagram(s) for Significant Tree Lots.

Objectives	<ul style="list-style-type: none"> • To protect and enhance the urban forest of the Northern Beaches. • To effectively manage the risks that come with an established urban forest through professional management of trees. • To minimise soil erosion and to improve air quality, water quality, carbon sequestration, storm water retention, energy conservation and noise reduction. • To protect, enhance bushland that provides habitat for locally native plant and animal species, threatened species populations and endangered ecological communities. • To promote the retention and planting of trees which will help enable plant and animal communities to survive in the long-term. • To protect and enhance the scenic value and character that trees and/or bushland vegetation provide
Development	<ul style="list-style-type: none"> • Significant trees with the following characteristics are to be preserved where practicable: <ul style="list-style-type: none"> - A trunk size of >80cm dbh (this is the largest trunk size category that can be assigned within the BAM). - Presence of large tree hollows (>20cm diameter), or multiple medium tree hollows (5-20cm diameter). - Substantial signs of use – such as scratchings on bark, glider chew marks etc). - Large healthy tree with visually balanced and pleasing form. • Structurally sound and suitable for retention in a residential setting (based on Arborist advice). If removal of trees is required for the siting of the dwelling, the same or similar plant species must be planted elsewhere on the lot. • In the area outside of lot specific Development Envelope controls that are identified that they cannot be cleared, no native trees or native understorey vegetation are to be ring barked, cut down, topped, lopped, removed, injured, wilfully destroyed or cleared unless: <ul style="list-style-type: none"> - Native understorey vegetation is required to be removed or lopped as part of an ongoing program of vegetation/ fuel management (if required) contained in an Approved Bushfire Fuel Management Plan for the neighbourhood, or - Individual native trees can be demonstrated to be a clear risk to personnel safety and or property and supported by an arborist report.

Table 6: Significant Tree Lots Objectives and Controls

Type 8 – Constrained Sites – Steep Slope Lots / Landslip risk

Constrained lots with steep slopes and/or landslip risk are to be developed in accordance with Table 7 and the applicable Development Principles Diagram(s) for Steep Slopes / Landslip Risk



Figure 17: Steep Slopes Interface (Source: COX Architecture)



- Interface Area
- Proposed Residential Area
- Conservation area (non-trafficable)
- Publicly accessible green space
- Archaeological sites: Indigenous significance
- Archaeological sites: 50m buffer zone

Objectives	<ul style="list-style-type: none"> To ensure development is geotechnically stable. To ensure good engineering practice. To ensure there is no adverse impact on existing subsurface flow conditions. To ensure there is no adverse impact resulting from stormwater discharge.
Development	<ul style="list-style-type: none"> A preliminary assessment of site conditions prepared in accordance with the Checklist for Council's assessment of site conditions must be carried out for development. The preliminary assessment must be prepared by a suitably qualified geotechnical engineer/ engineering geologist and must be submitted with the development application. If the preliminary assessment determines that a geotechnical report is required a report must be prepared by a suitably qualified geotechnical engineer / engineering geologist and must be submitted with the development application.
Residential	<ul style="list-style-type: none"> Building design must respond to the natural landscape and topography of the site. This includes the use of elevated building forms using bearer and joist construction and split level housing design following the contours of the site. Buildings should be sited with their long axis parallel to the contours if the building envelope allows, to reduce the need for earthworks. Where proposed on slopes less than 1:10 (10%), slab on ground construction should incorporate split level design conforming to the slope of the land and be undertaken as outlined below in control 7. Where required to accommodate natural ground levels, dropped edge beam slab construction must be employed to contain fill. Cut or fill is to be limited to earthworks within the proposed building footprint(s) only, with a maximum cut of 1m and fill of 1m. On sites with slopes greater than 1:10 (10%), earthworks external to the building footprint will be permitted for vehicular access only, with maximum cut of 1m and fill of 1m. Earthworks for vehicular access includes garage/carport slabs, and associated driveway only. Cut or fill for pedestrian access around the perimeter of the dwelling, and for alfresco/courtyard/clothes drying areas, must not extend beyond the footprint of the building.
Geotech/Cut and Fill	<ul style="list-style-type: none"> Where steep slopes coincide with rocky outcrops, the slope must not be resolved by removal or significant modification to the rocky outcrop where no more than the equivalent of 10% of the residential lot size in cubic metres (m³) of rocky outcrops and walls is to be augmented or cut on site
Stormwater	<ul style="list-style-type: none"> Development must not cause detrimental impacts because of stormwater discharge from the land. Development must not cause detrimental impact on the existing subsurface flow conditions including those of other properties. Also, if the preliminary assessment determines that a geotechnical report is required a hydrological assessment of stormwater discharge and subsurface flow conditions, prepared by a suitably qualified geotechnical/ hydrological engineer, must be submitted with the development application.

Table 7: Steep Slope Lots / Landslip risk objectives and controls

Type 9 – Morgan Road Interface

Lots identified that interface with Morgan Road are to be developed in accordance with and the applicable Development Principles Diagram(s) for the Morgan Road Interface.



Figure 18. Identified Morgan Road Interface (Source: COX Architecture)



- Interface Area
- Publicly accessible green space
- Proposed Residential Area
- Archaeological sites: Indigenous significance
- Conservation area (non-trafficable)
- Archaeological sites: 50m buffer zone

Objectives	<ul style="list-style-type: none"> To ensure that an appropriate interface is provided to the local street of Morgan Road. To reduce individual access and/or driveways from being provided to Morgan Road
Development	<ul style="list-style-type: none"> Lots are to be designed so that they do not present to Morgan Road as rear-fences.

Table 8: Morgan Road Interface Objectives and Controls

Type 10 – Community Centre Interface

Lots identified that interface with a potential community centre are to be developed in accordance with Table 9 and the applicable Development Principles Diagram(s) for the Community Centre Interface.

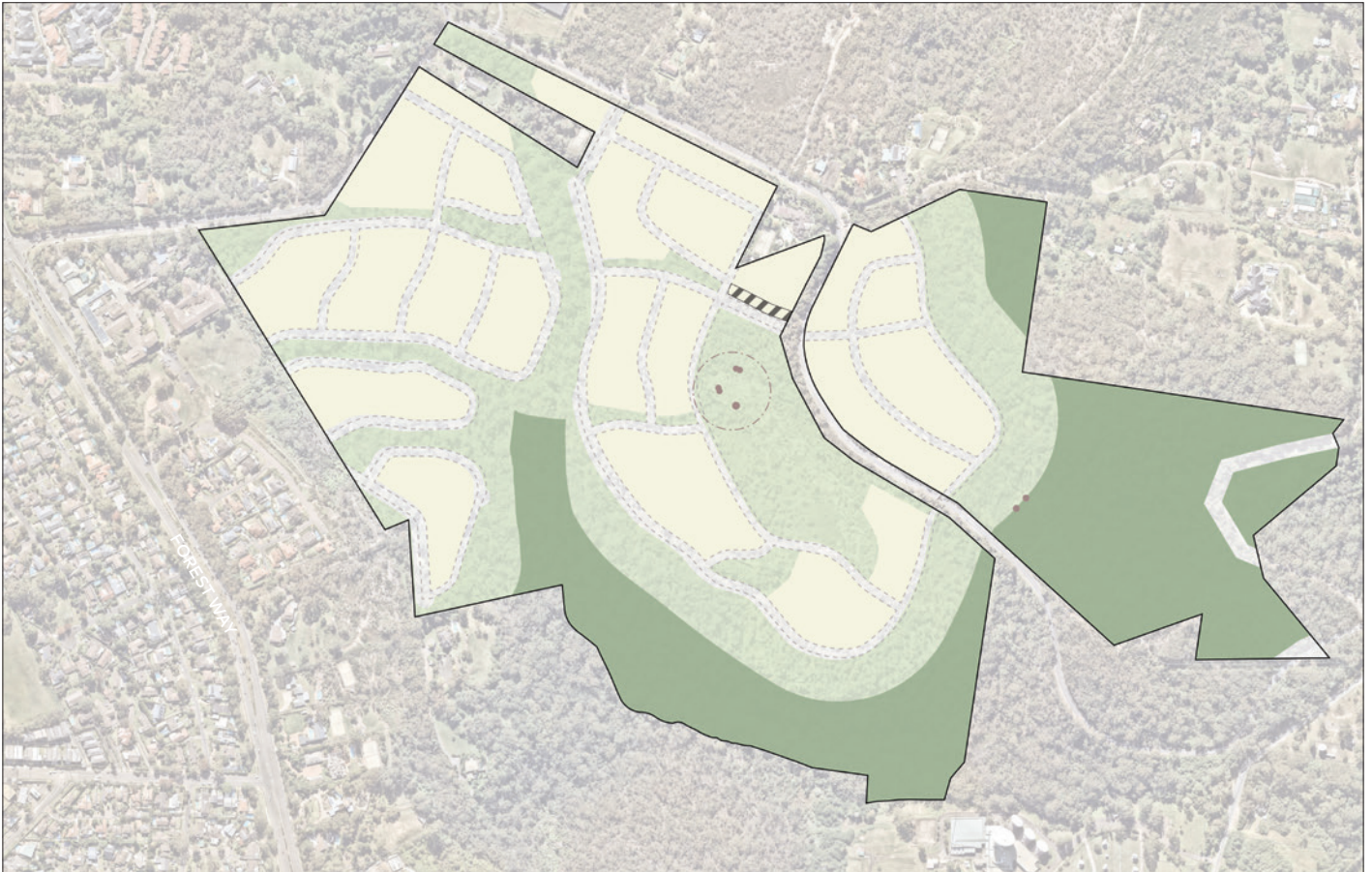


Figure 19: Identified Community Centre Interface (Source: COX Architecture)Architecture



- | | | |
|---------------------------------|---|---------------------------------------|
| Interface Area | Proposed Residential Area | Conservation area (non-trafficable) |
| Publicly accessible green space | Archaeological sites: Indigenous significance | Archaeological sites: 50m buffer zone |

Objectives	<ul style="list-style-type: none"> To ensure that an appropriate interface is provided to address the location of any community facilities and/or gathering spaces within the plan
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Table 9: Community Centre Interface Objectives and Controls



Section 8.3.2 Development Principles Diagrams

This section includes provides design guidance specific to each indicative interface condition anticipated to occur throughout the site. The applicability of these controls is dependent on the final design of roads and public spaces, which may evolve in response to more detailed technical and design investigations. Should alternative design outcomes occur, consideration should be given to the underlying principles set out in these diagrams.

Definition of Development Principles

Retained Significant Trees/ Or Planted tree in Rear Yard: Where retained, significant trees are accommodated in setback zones to conserve local flora and fauna. Where no significant or retained trees exist within a lot, new trees should be provided in setback areas to increase tree canopy and appropriately manage solar gain throughout the year.

Garage Setback: Garages are set back from the main building façade to minimise visual impact and garage dominance from the street as per the minimum prescribed in diagrams below.

Articulation Zone: the area between the minimum and maximum front setback to establish visual interest from the street and adjacent public space.

Minimum Private Open Space (POS) at rear or side of house: to integrate with internal living spaces and optimise solar orientation.

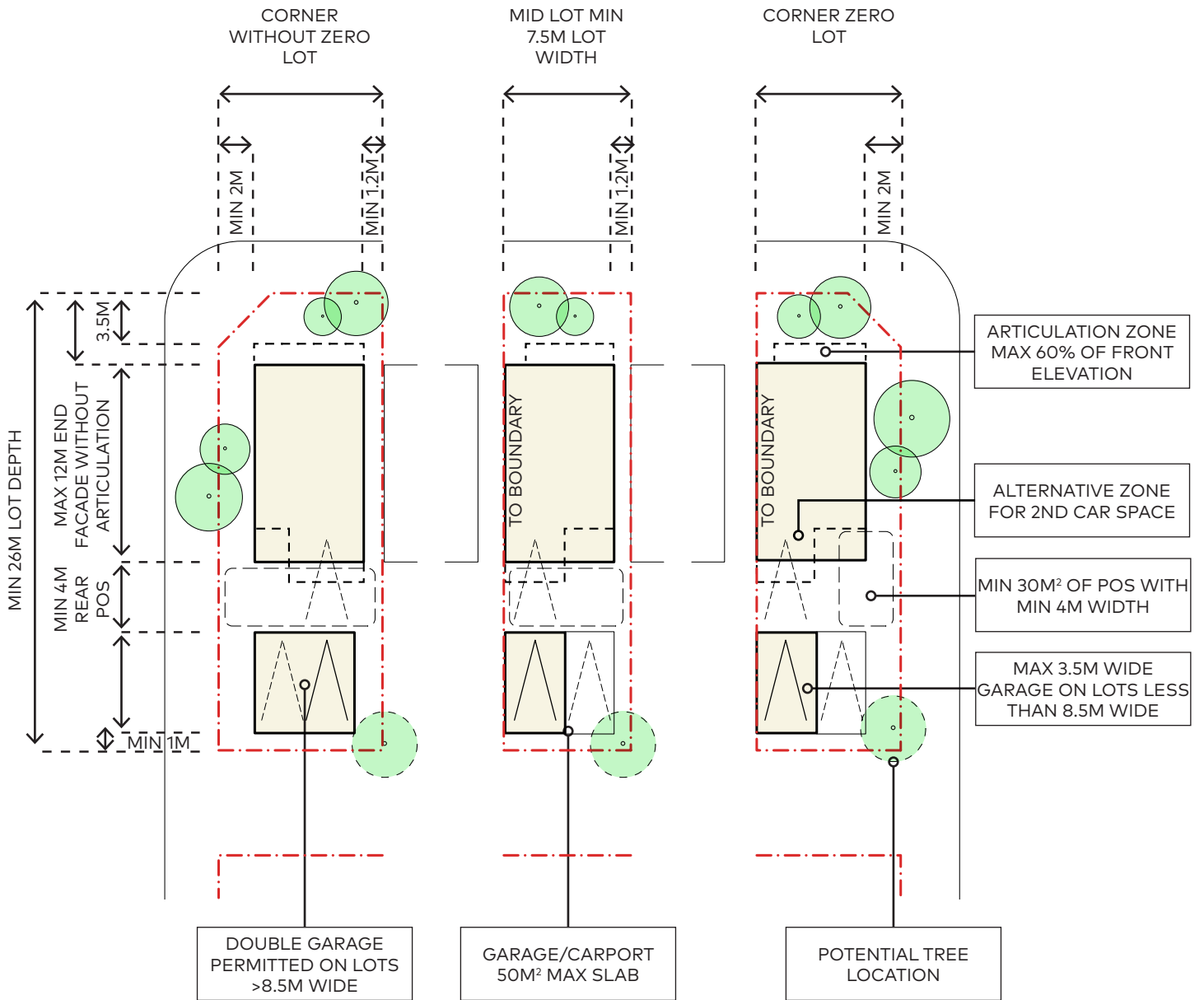
Retained Rocky Walls/ Outcrops: Retained natural features to preserve the natural landscape integrity and topographical characteristics of the land

Landscape as per APZ Management: Fire management and hazard reduction measures to be incorporated in Asset Protection Zones (APZs) to ensure safety of occupants and neighbouring dwellings.

Typical 200m² to 250m² Rear Loaded Small Lot

Interfaces

- Nil

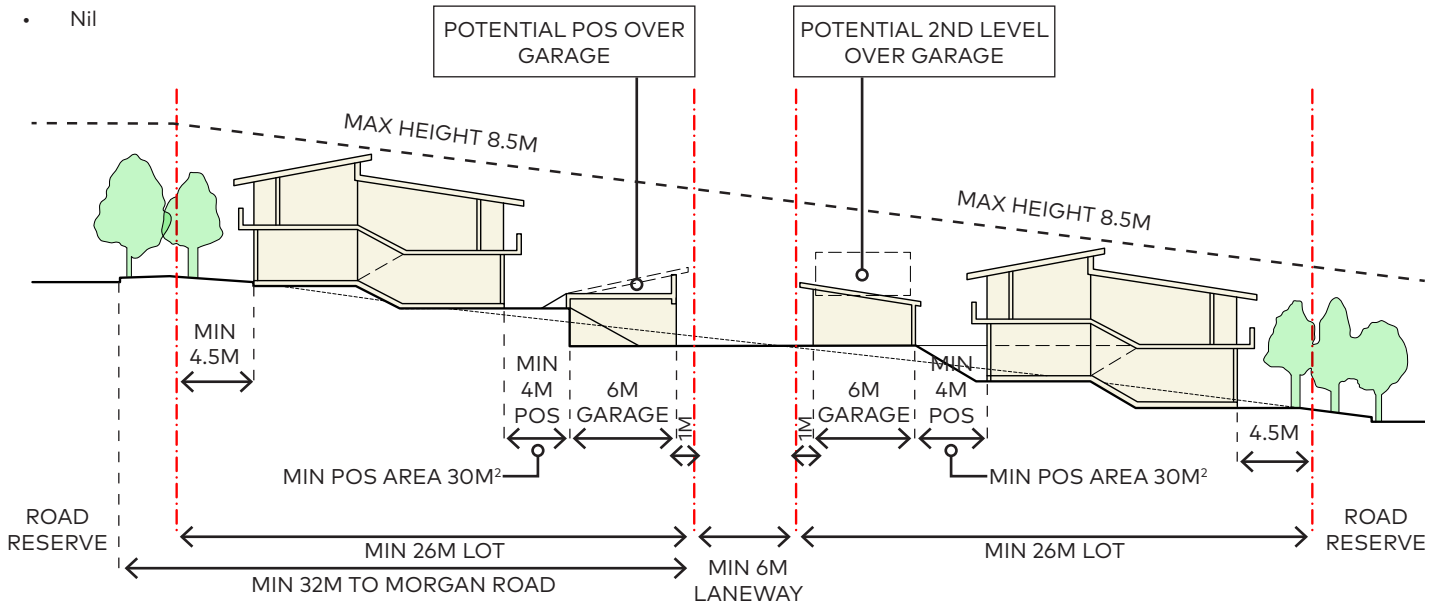


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Section of Typical 200m² Lots Small Lot Housing with Rear Lane Vehicle Access

Interfaces

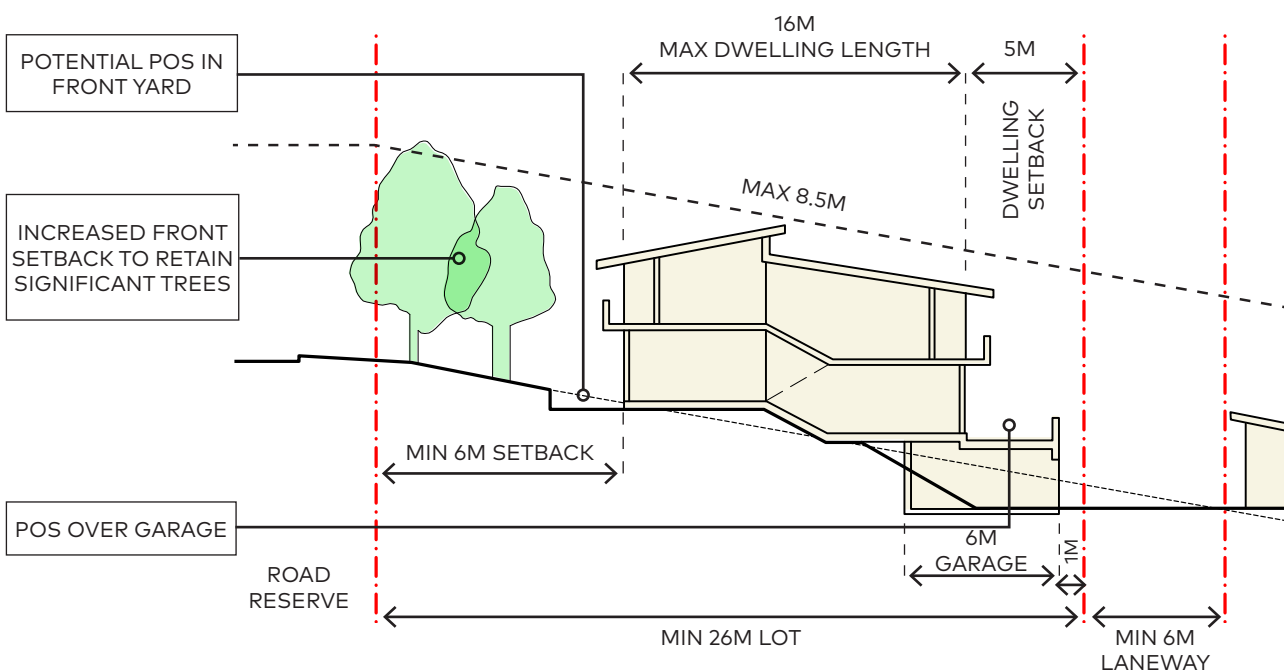
- Nil



Section of Min 200m² Constrained Lots

Interfaces

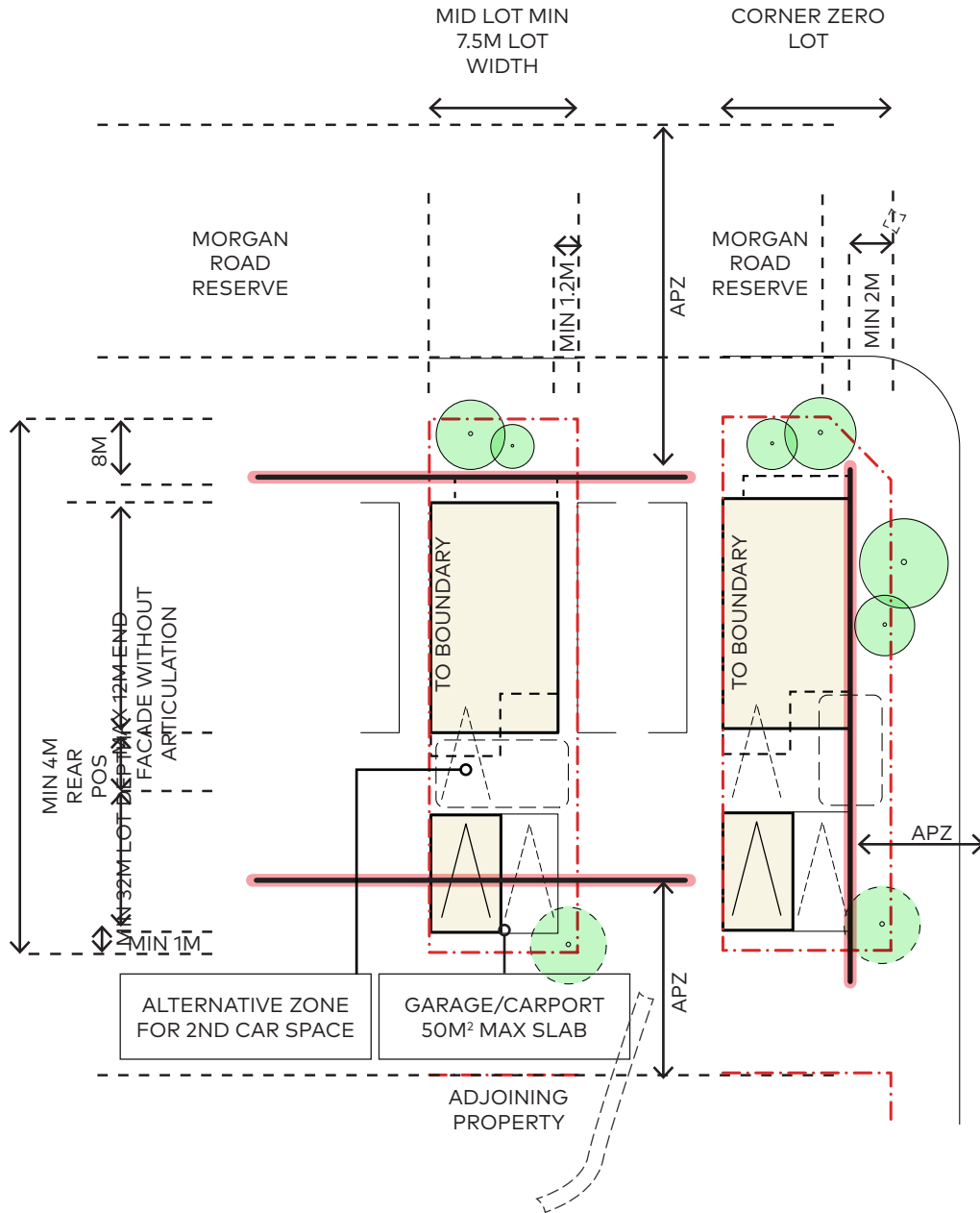
- Significant Trees
- Morgan Road
- Topography



Typical 200m²+ - Constrained Rear Loaded Small Lot

Interfaces

- Morgan Road
- APZ



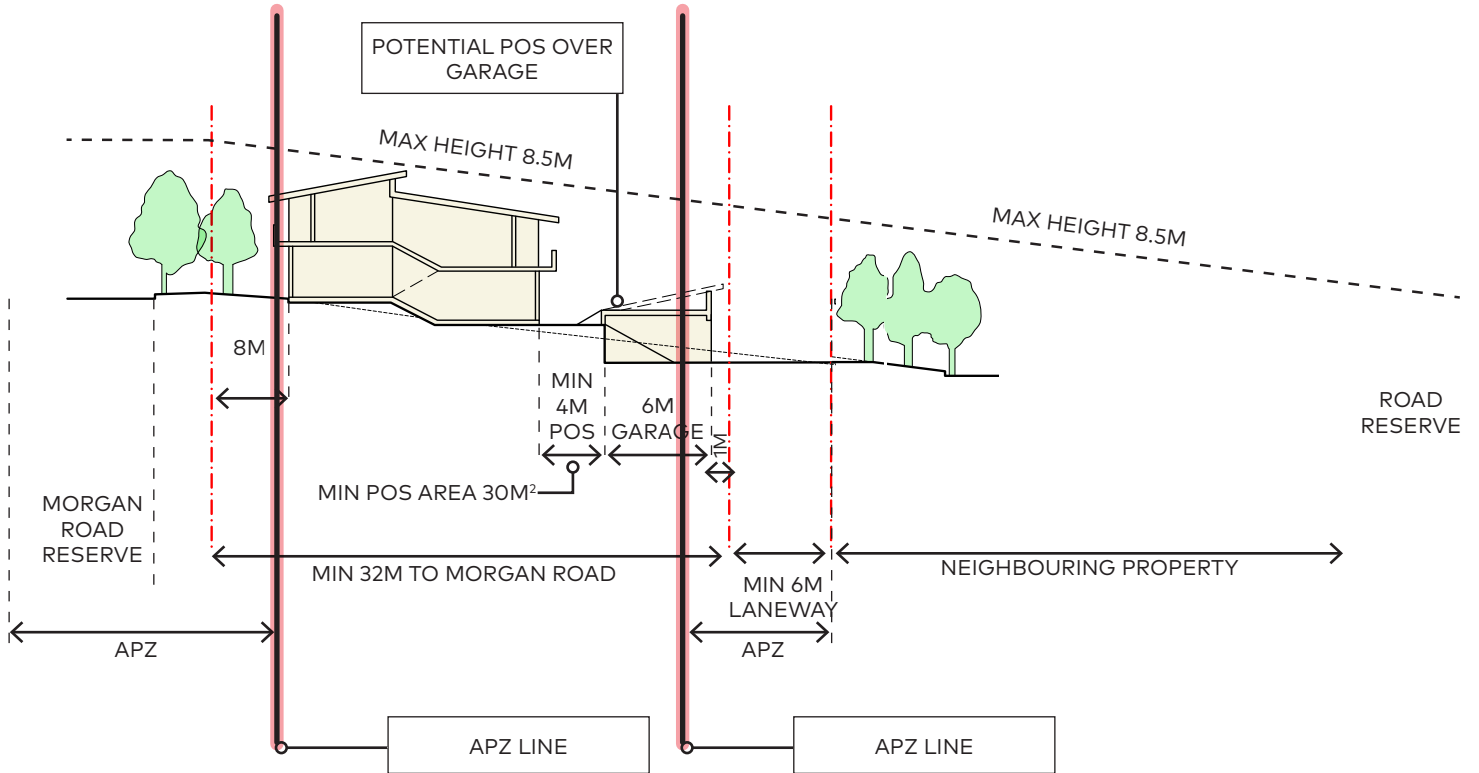
Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Section of Constrained 200m²+ Lots

Small Lot Housing with Rear Lane Vehicle Access

Interfaces

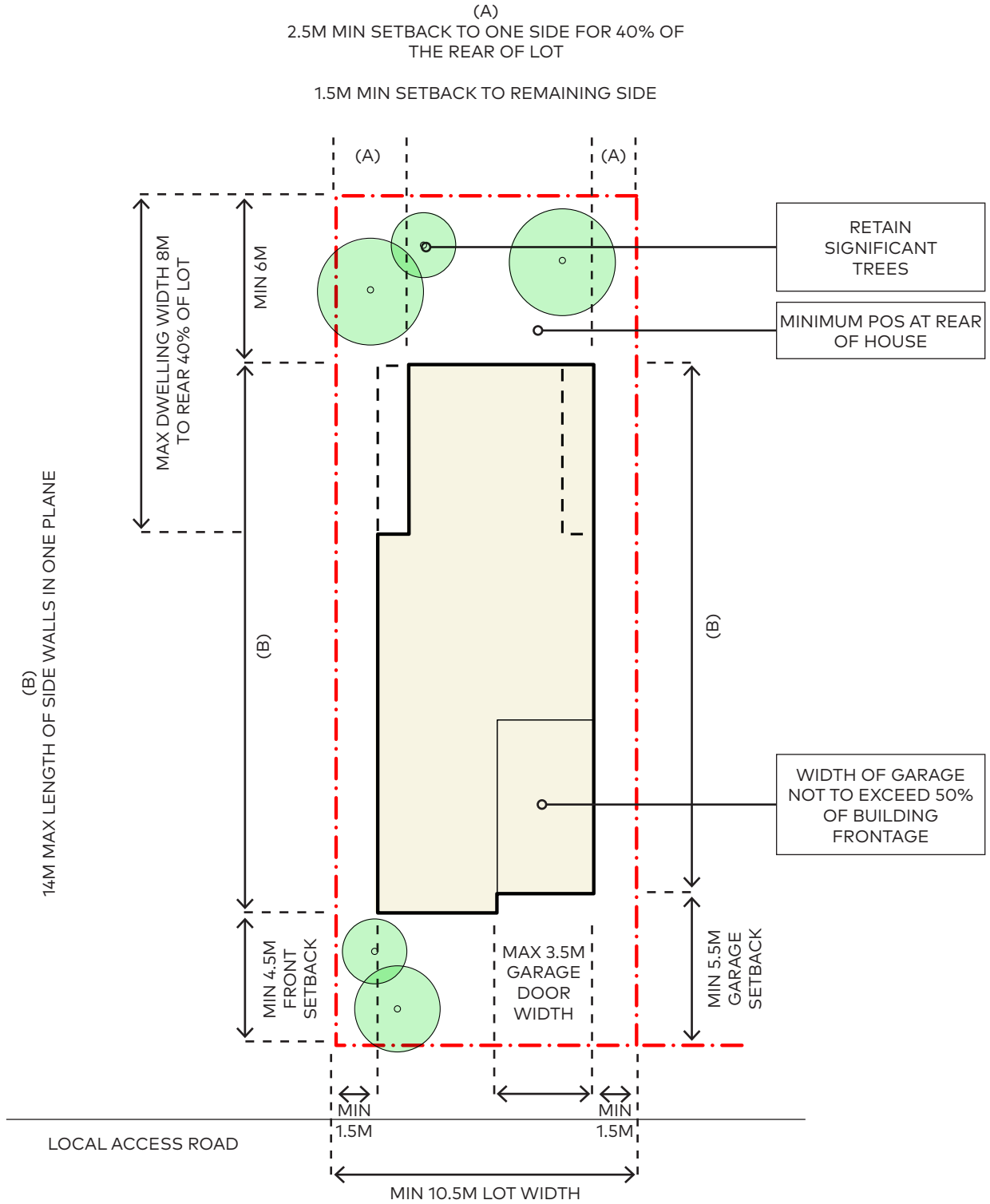
- Morgan Road
- APZ



Typical 300 to 350m²+ - Unconstrained Lot

Interfaces

- Nil

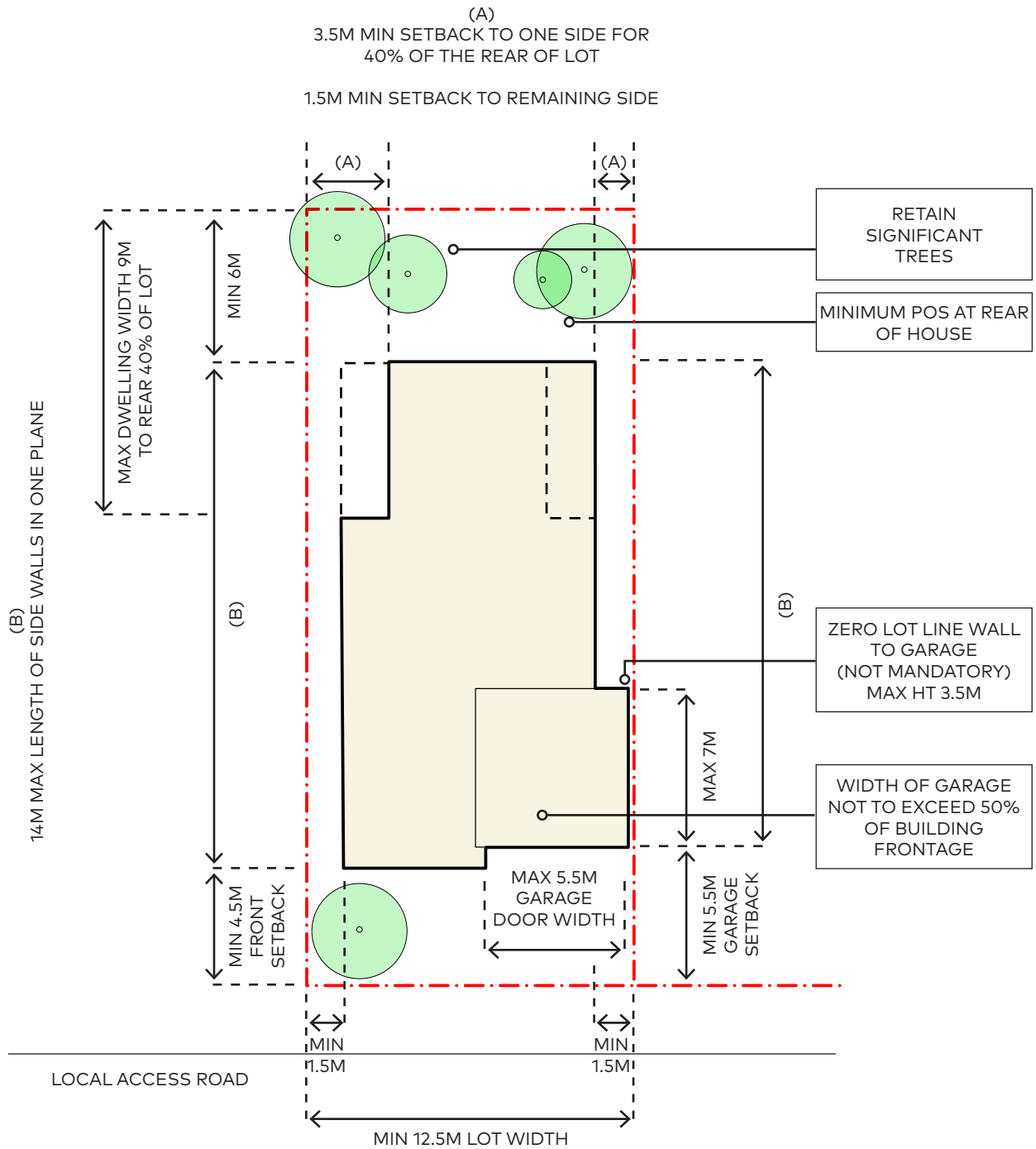


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 350 to 450m²+ - Unconstrained Lot

Interfaces

- Nil

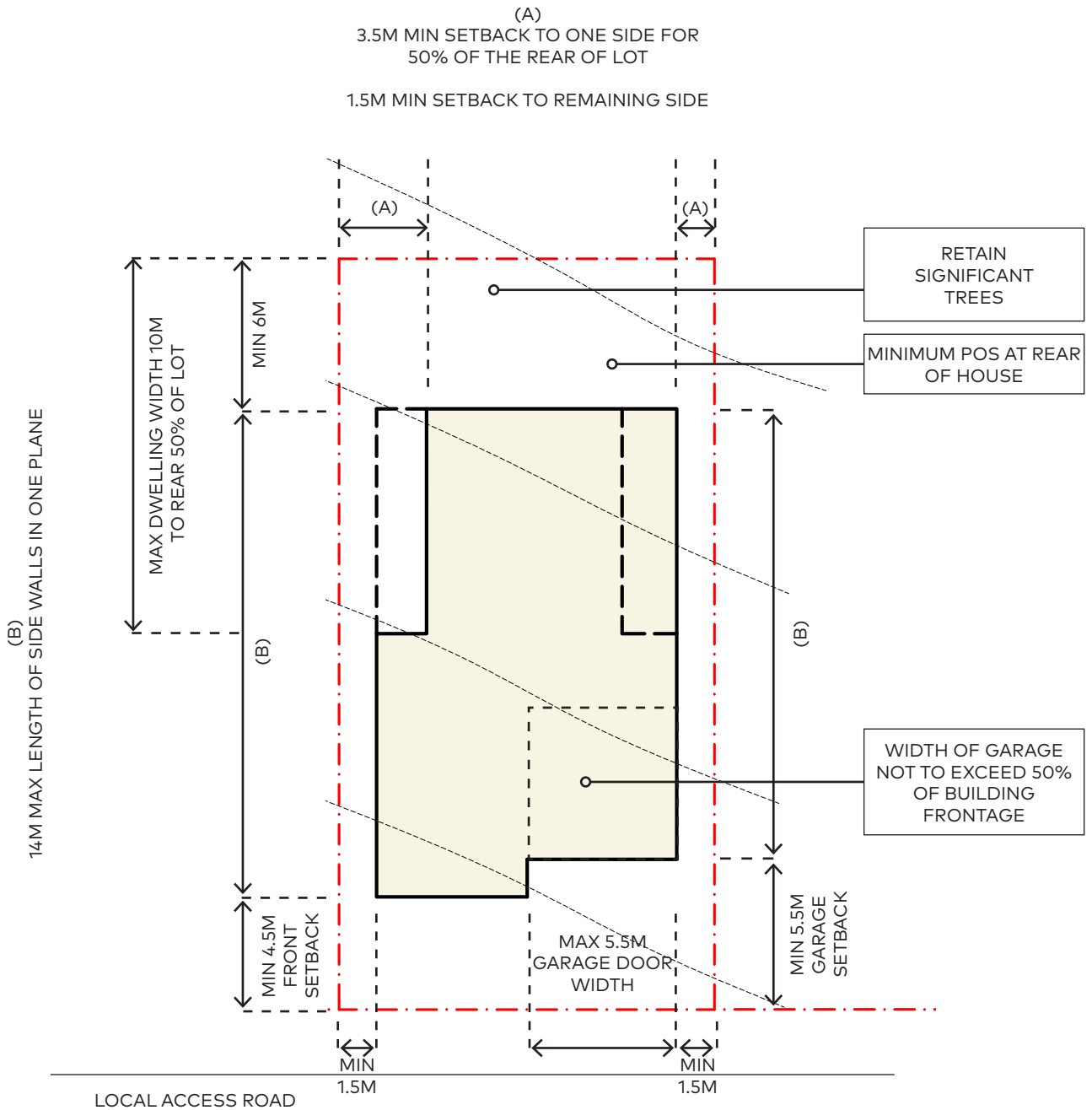


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 450m²+ - Unconstrained Lot

Interfaces

- Nil

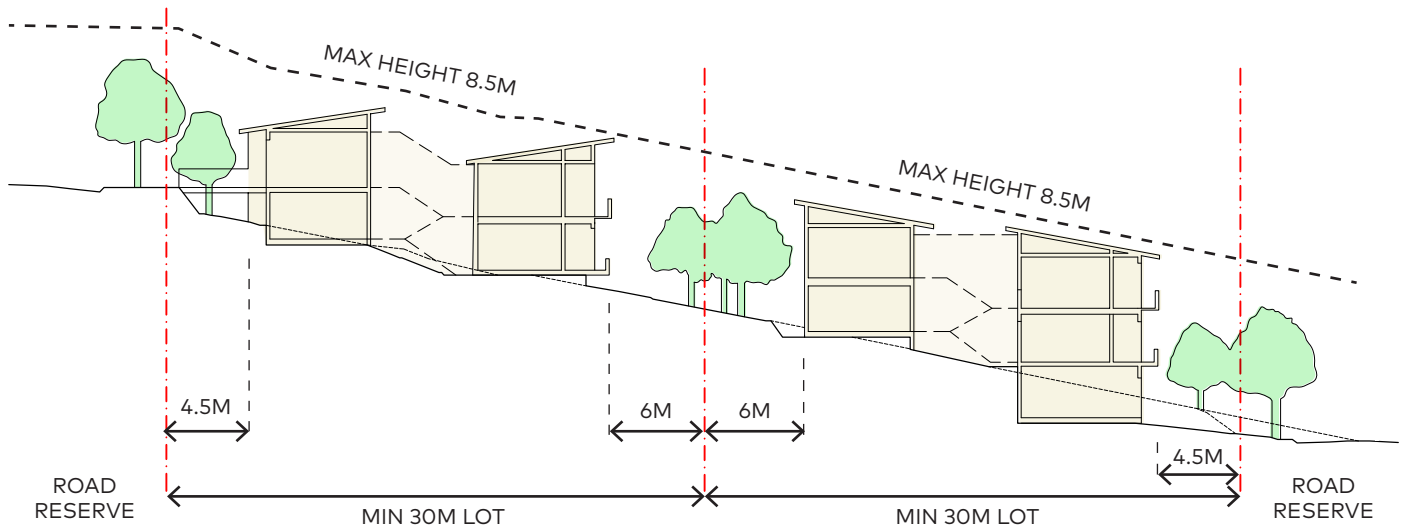


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Section of Typical 450m² Lots

Interfaces

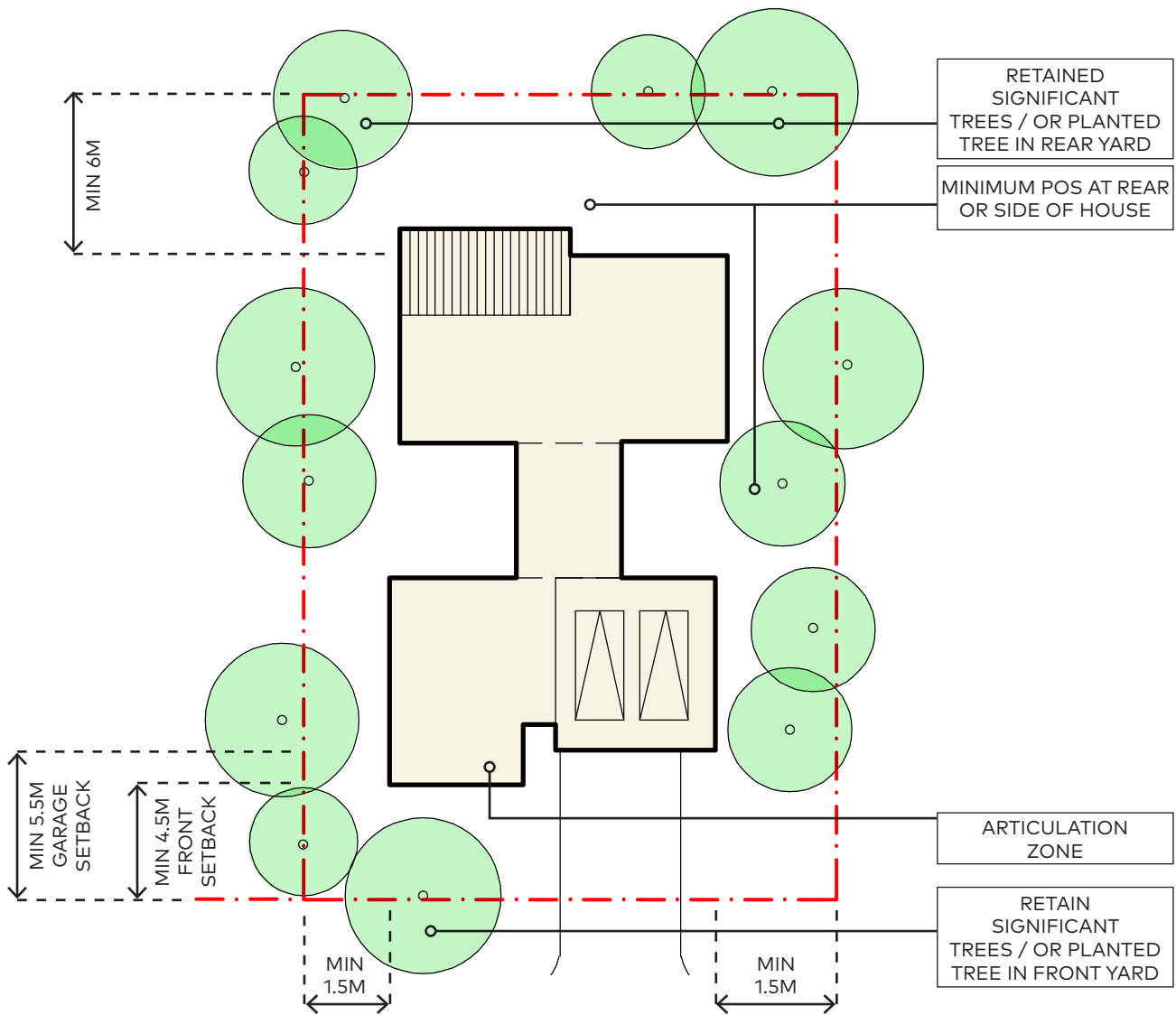
- Nil



Typical 600m²+ - Constrained Lot (Dwelling in the Centre of Lot)

Interfaces

- Significant Trees

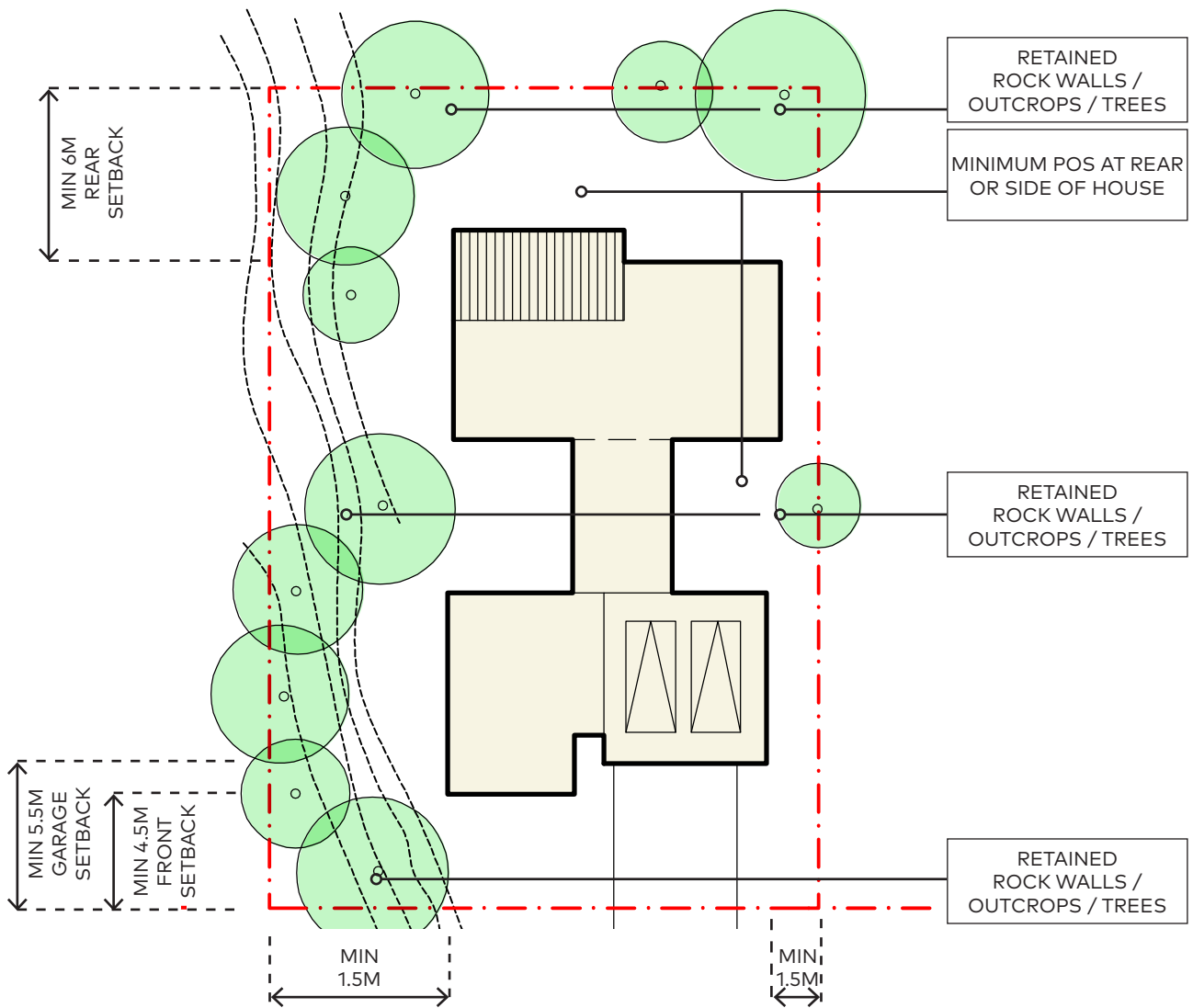


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Dwelling on the Side of Lot)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

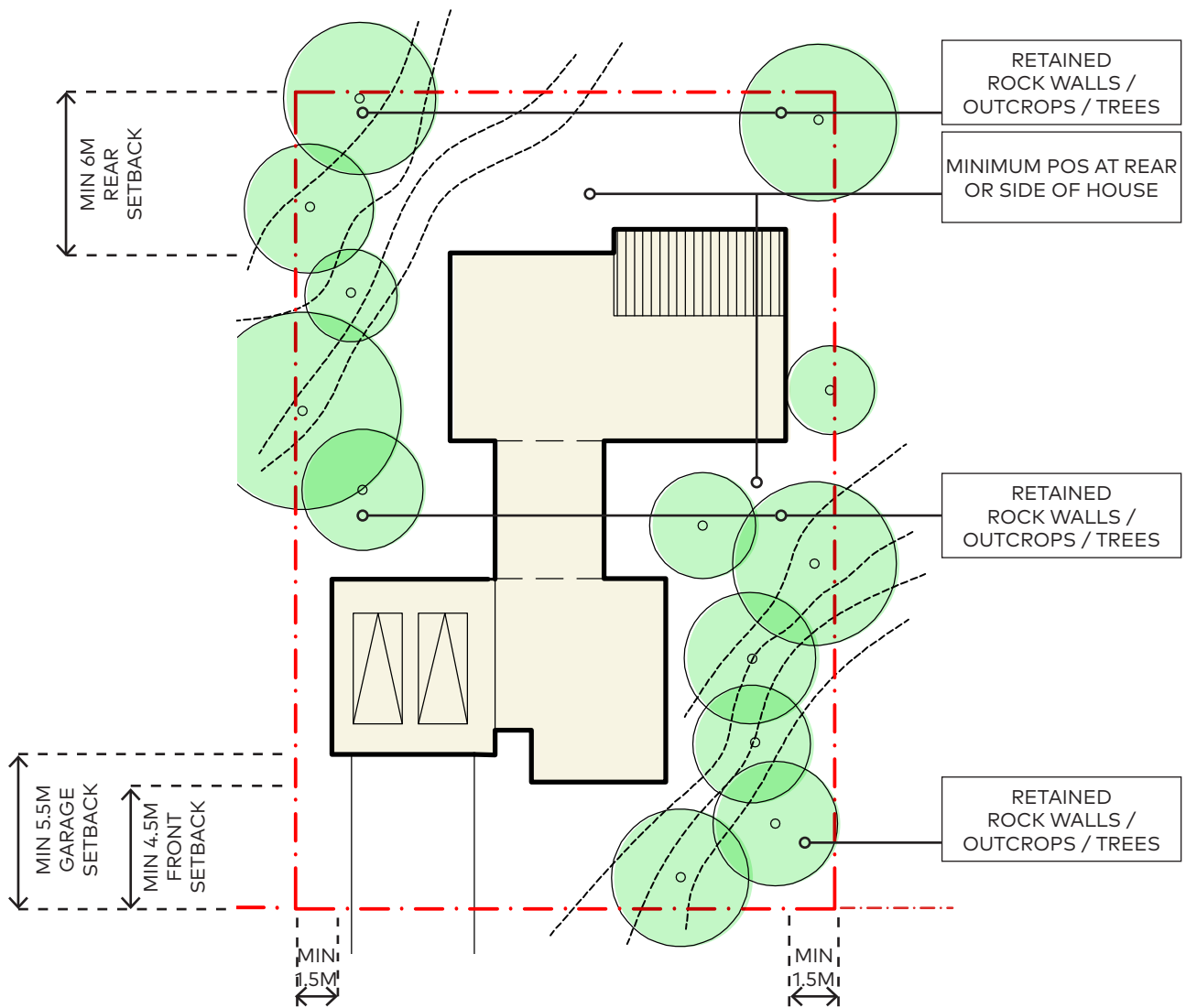


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Dwelling Footprint Varies to Avoid Constraints)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

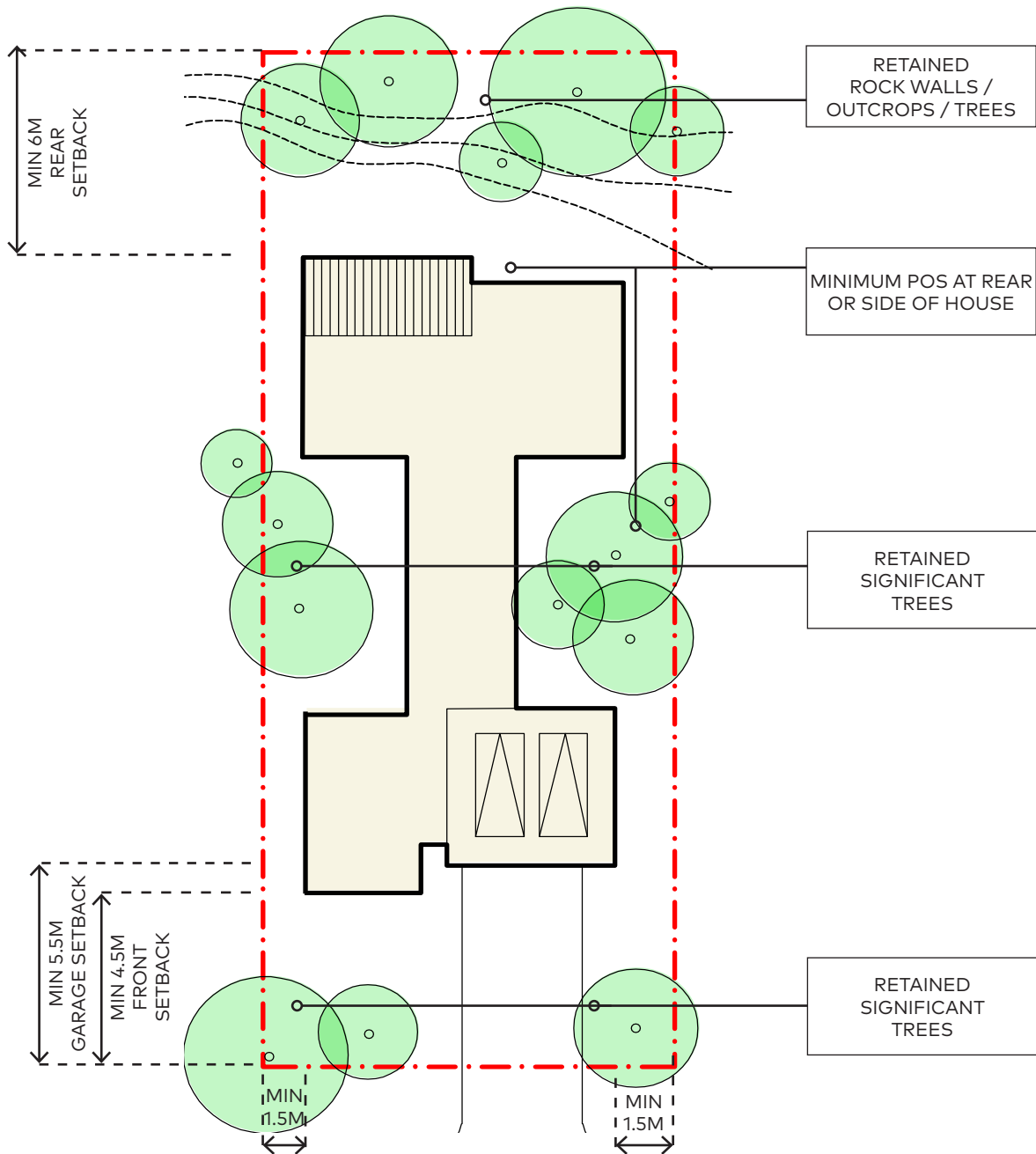


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Dwelling Footprint Varies to Avoid Constraints)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

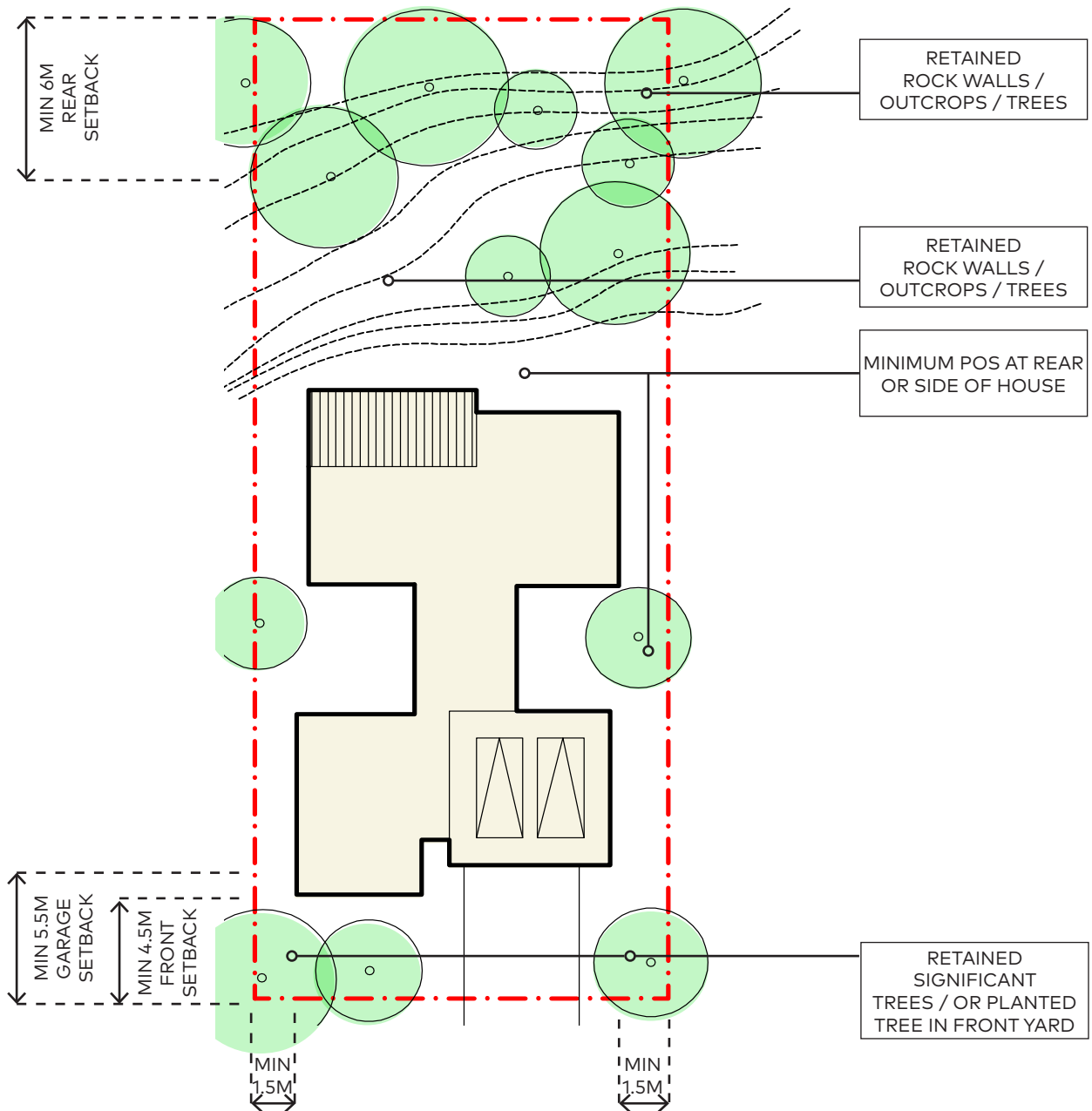


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Dwelling to the Front of Lot)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

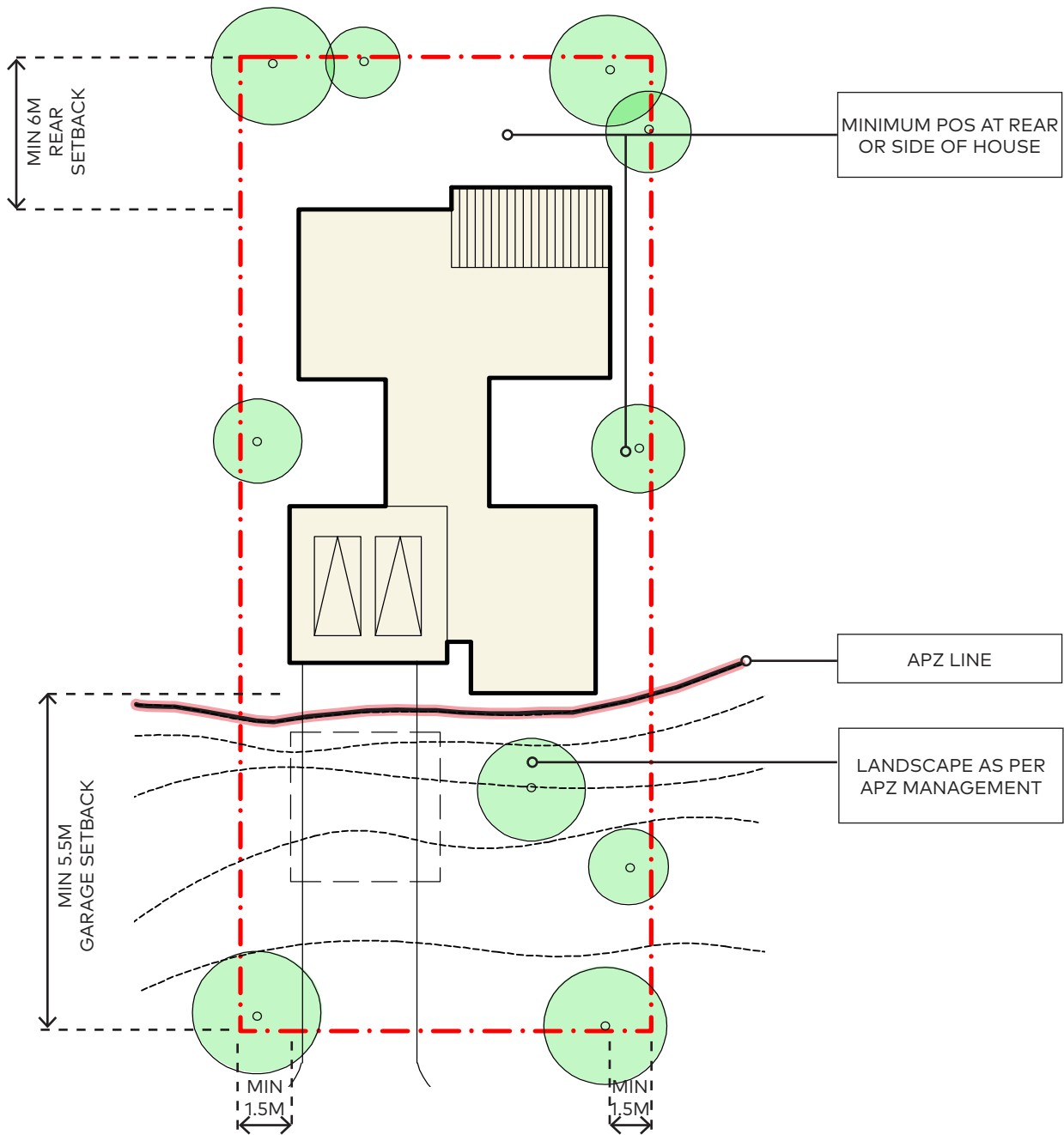


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Dwelling to the Rear of Lot)

Interfaces

- APZ



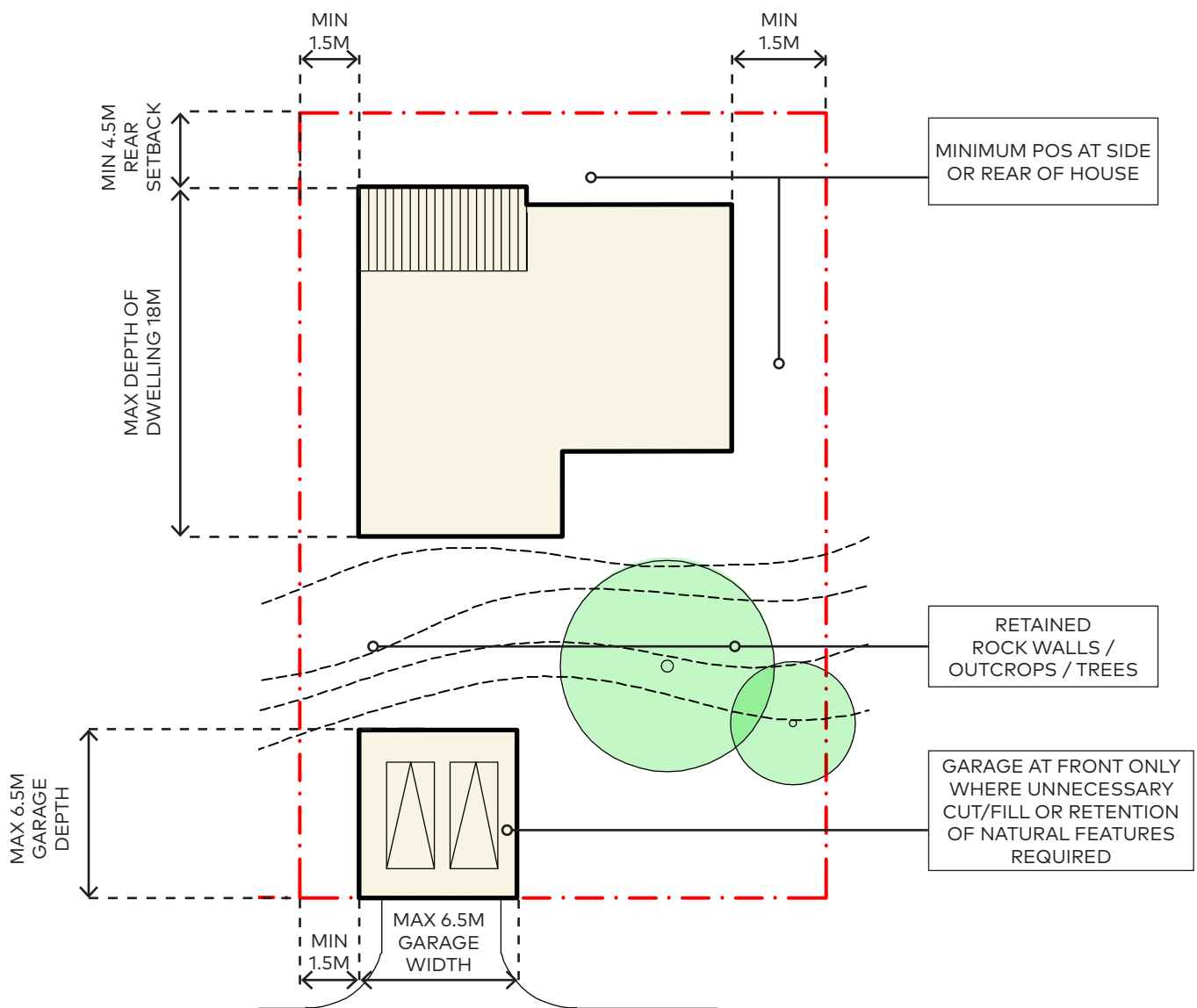
Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Garage Footprint Varies to Avoid Constraints)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

*Note only when the topography of a site would result in unnecessary cut or fill to deliver a garage or; retention of significant trees and/or rock formations prevail over the requirement for the garage to be set back from the boundary

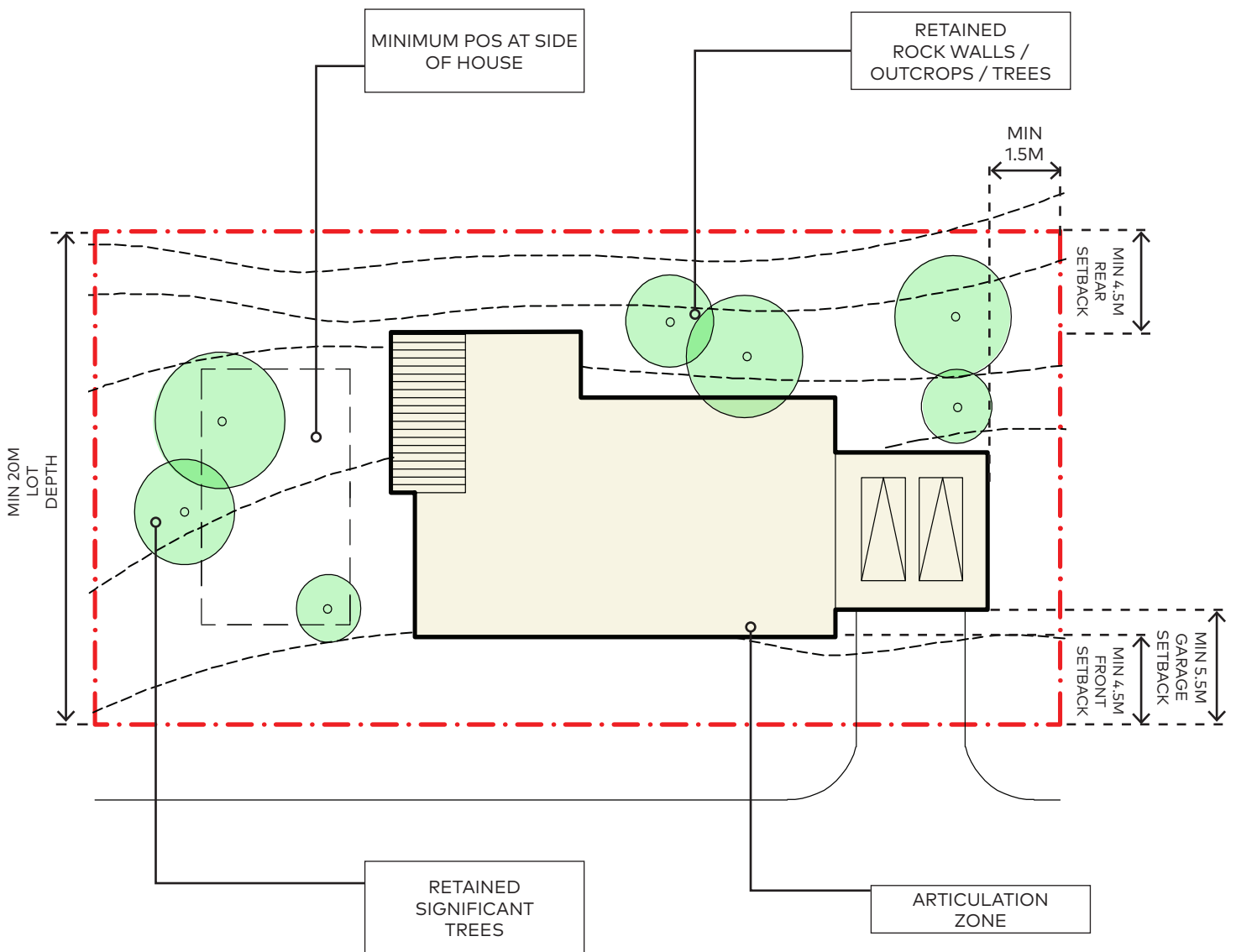


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 600m²+ - Constrained Lot (Lot wider than is deep and runs with topography)

Interfaces

- Significant Trees
- Rocky Walls/Outcrops

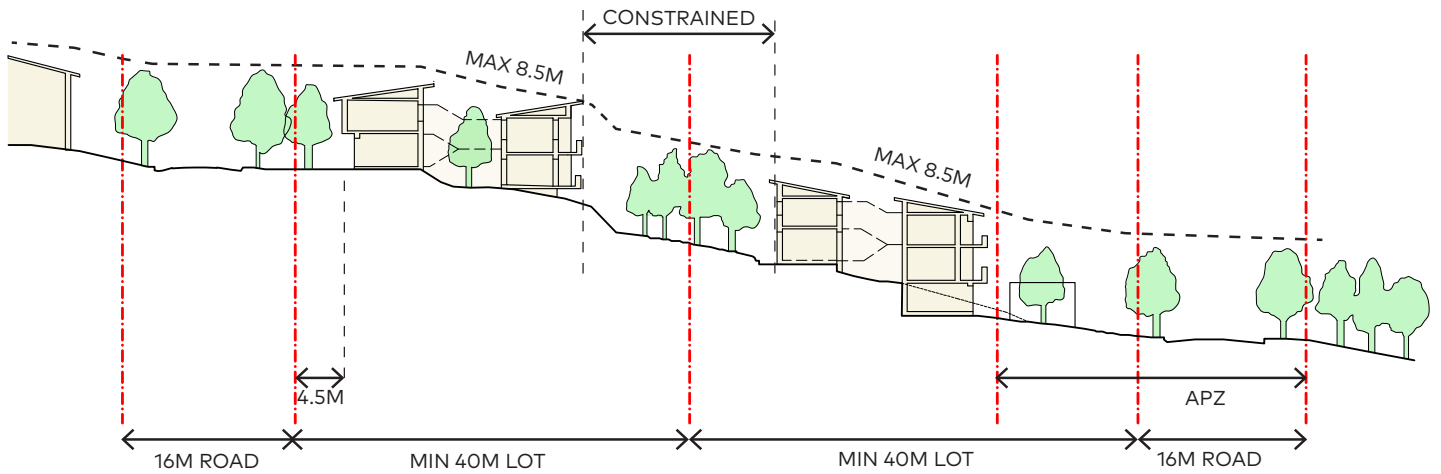


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Section of Typical 600m² Constrained Lots

Interfaces

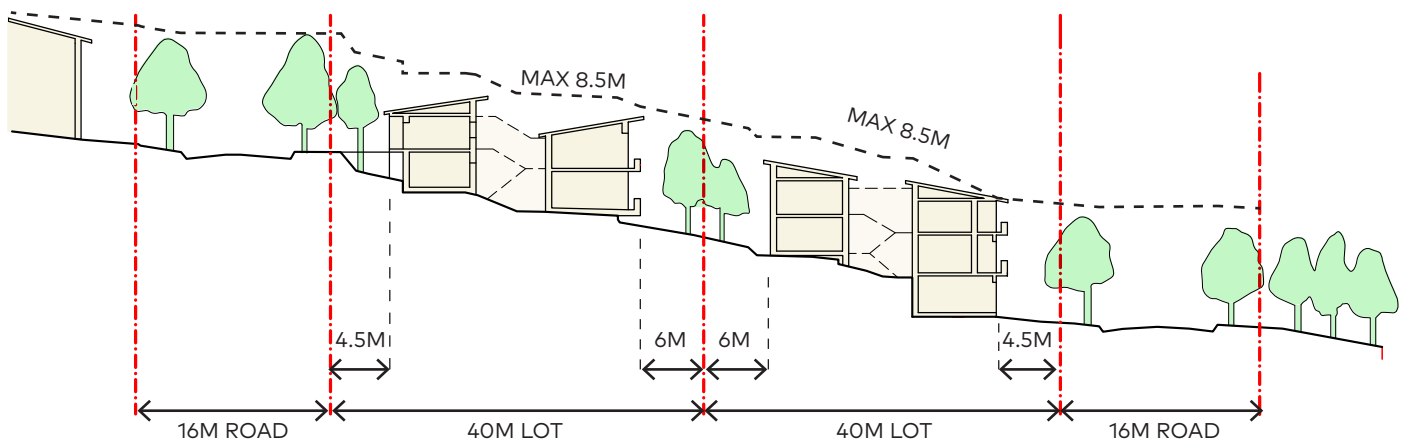
- APZ
- Significant Trees
- Rocky Walls/Outcrops



Section of Typical 600m² Constrained Lots

Interfaces

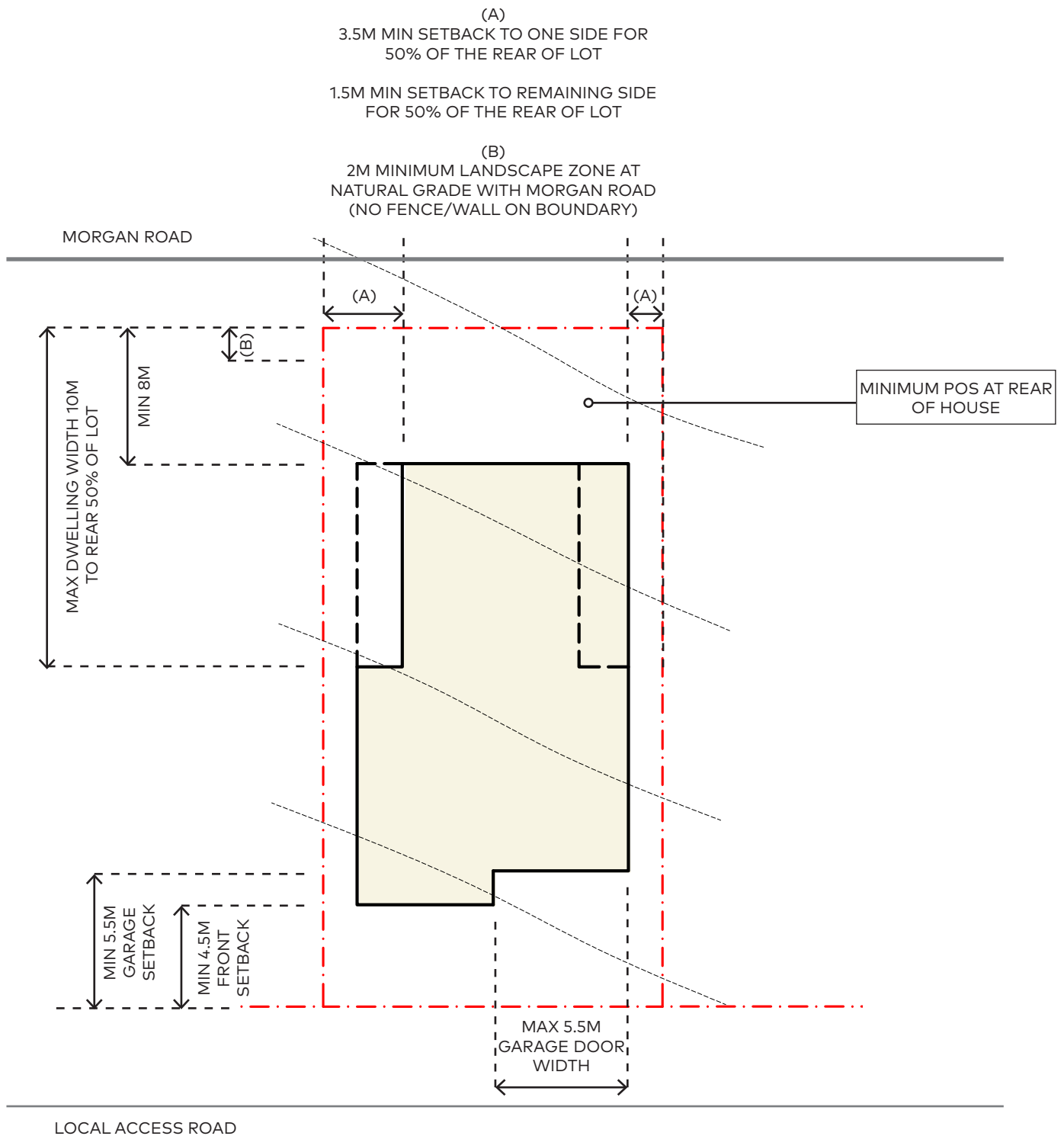
- Significant Trees
- Rocky Walls/Outcrops



Typical 600m²+ - Morgan Road Interface Lot

Interfaces

- Morgan Road

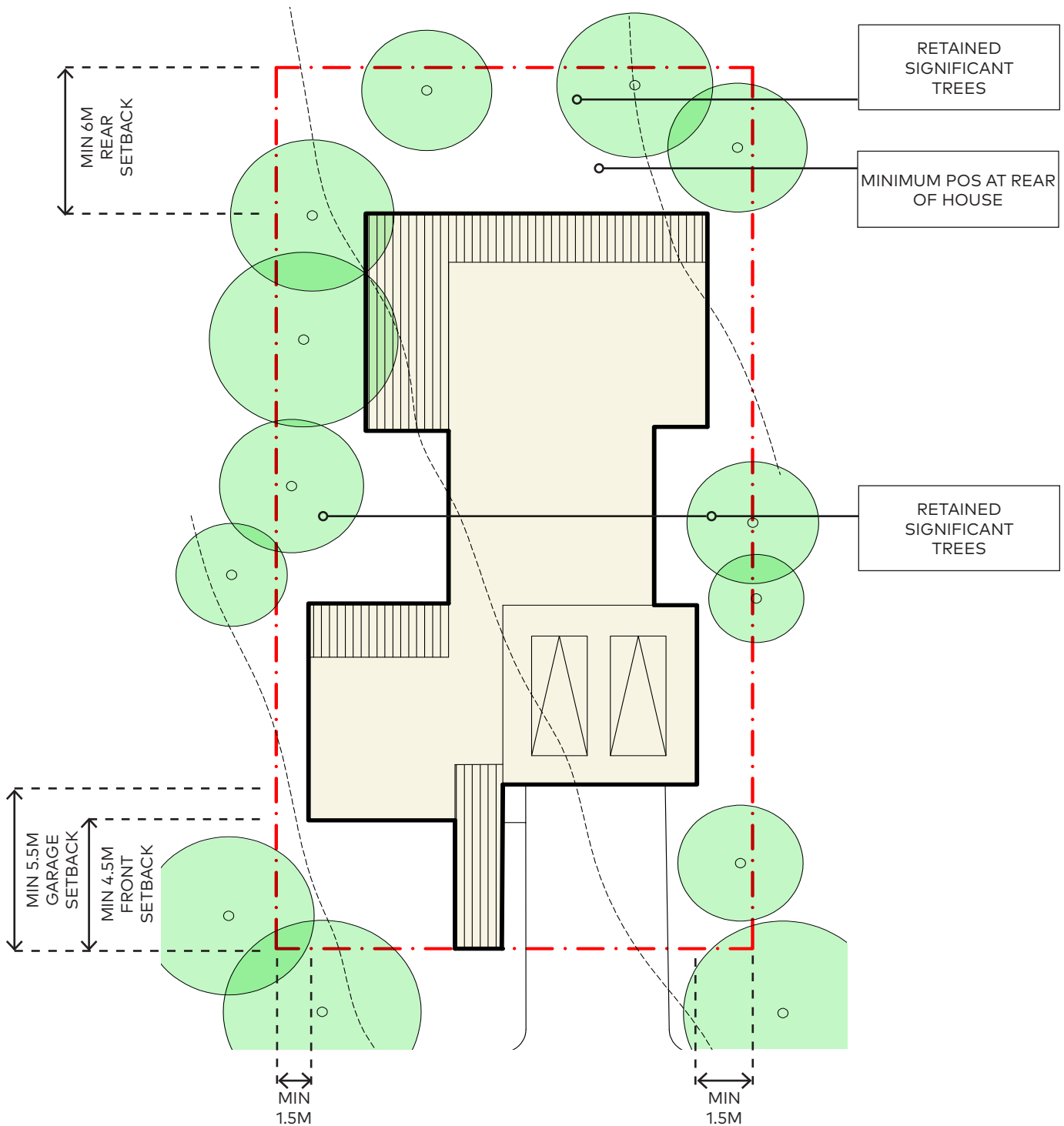


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

Typical 450m² Significant Tree Lots

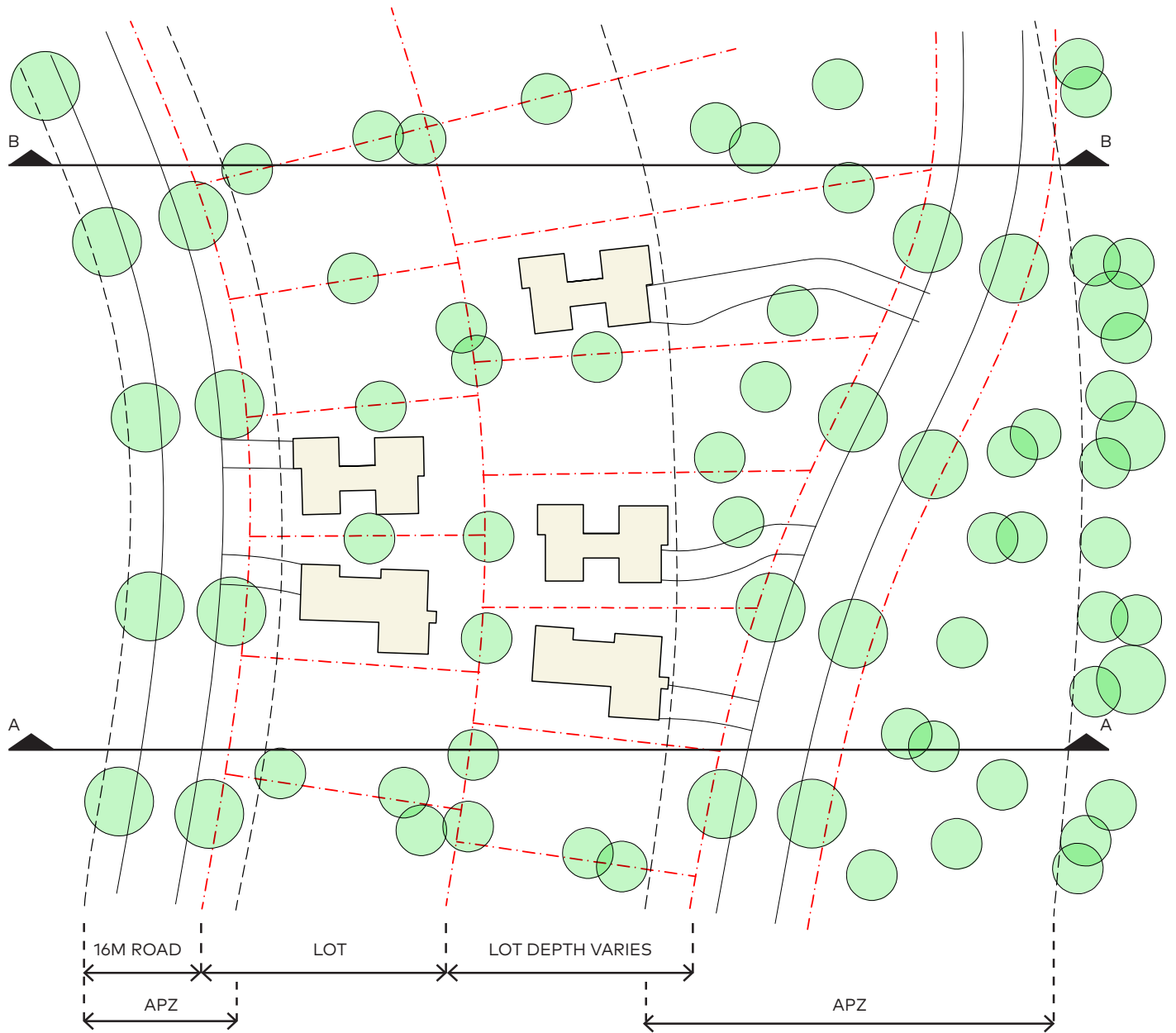
Interfaces

- Significant Trees

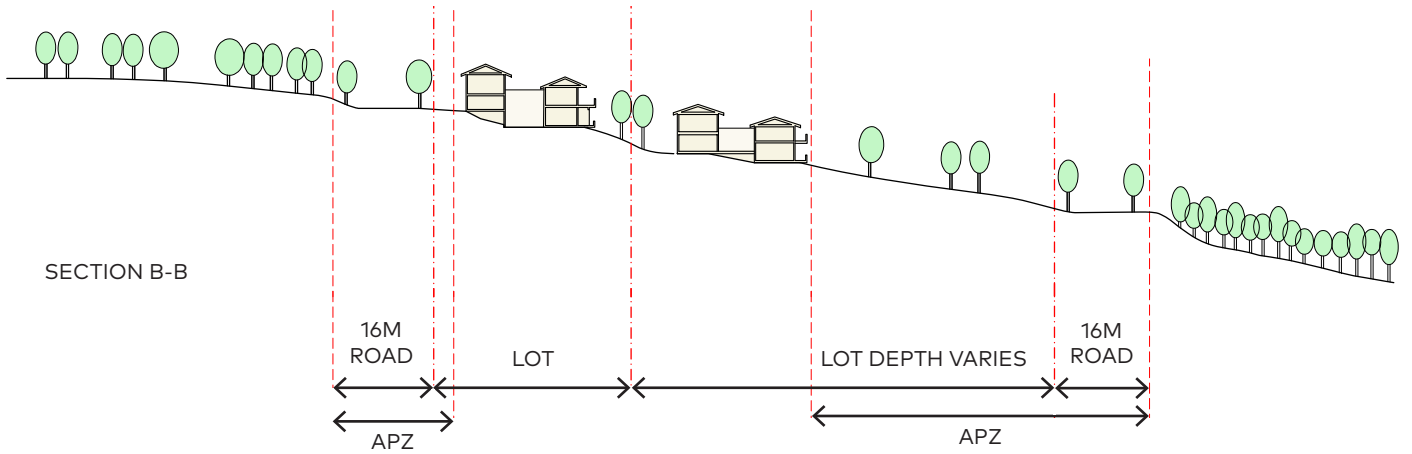
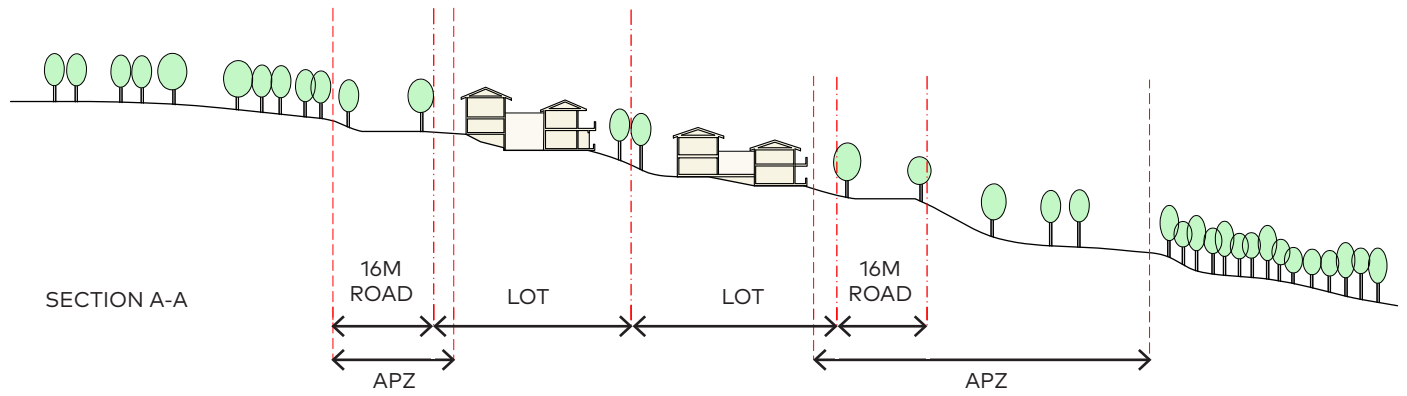


Building footprints are indicative and that the layout would be subject to the lot specific setback controls/constraints

APZ Interface - Indicative Lot Layout



APZ Interface - Sections



8.4 Vehicle & Pedestrian Connectivity

Objectives

- To establish a hierarchy of street typologies which maximises convenience, amenity and safety for vehicles, pedestrians and cyclists.
- To ensure streets adjoining the biodiversity corridors and the public open space area minimise the risk of vehicle strike to wildlife and increases pedestrian amenity.
- To reduce car dependency and support healthy and active lifestyles.
- To create comfortable streets that are visually pleasing and designed to encourage social interaction.
- To provide for street tree canopy in road design.

Controls

1. Road networks are to be provided in accordance with the following street typologies. Figure 4 outlines where higher order typologies may be provided:
 - a. Boulevards - Main roads accommodate the needs of pedestrians, vehicles and cyclists where appropriate in a shared environment. A high level of vegetation retention and 'soft' native grass swales, where appropriate, will characterise the forest roads. Road pavements will provide for the adequate movement of vehicles. Roads will include a combination of grass swales, where appropriate, and habitat linkages. Refer to Figure 5 for the typical section.
 - b. Local Streets - Shared roads for pedestrians, cyclists and vehicles. Walking tracks are to be sealed or paved for permeability. Drainage is provided via a combination of native grass swales, where appropriate, and concentric edge strips. On-road parking allowed within parking bays. Tree canopies are linked to assist in habitat connections. Walking trails generally follow contours to minimise steep grades to make walking and cycling easier. Refer to Figure 6 for the typical section. Refer to Figure 7 and Figure 8 for sections adjacent to Riparian and APZ buffers.
 - c. Laneways (where possible / required) - Pedestrian only routes through bushland, open space, or road reserves. Walking trails are part of the public access network and may also be used in bushfire management.
2. Appropriate signage should provide guidance to the users of roads and road reserve areas.
3. Roads should be designed to incorporate safe pedestrian and bicycle access within the road reserve or immediately adjacent, where required as part of the overall network.
4. Existing natural vegetation should provide the framework for landscape and design treatment.
5. Street trees are required for all streets. Street tree planting is to:
 - a. be consistently used to distinguish between public and private spaces and between different classes of street within the street hierarchy,
 - b. minimise risk to utilities and services,
 - c. be durable and suited to the street environment and, wherever appropriate, include endemic species,
 - d. maintain adequate lines of sight for vehicles and pedestrians, especially around driveways and street corners,
 - e. provide appropriate shade, and
 - f. provide an attractive and interesting landscape character and clearly define public and private areas, without blocking the potential for street surveillance.
 - g. prioritising the retention and protection of existing tree canopy over removal and replacement of trees to achieve canopy cover.
 - h. providing supportive conditions for vegetation and tree canopy to thrive, including contiguous deep soil and water-sensitive urban design.
6. The swales should be designed in relation to the Figures 9, 10 and 11.
7. Provide a safer street environment by ensuring appropriate lighting and using crime prevention through environmental design principles.
8. Incorporate benches as rest points at appropriate locations, such as every 100 m along the key pedestrian routes.
9. Signage, street furniture and lighting is to be:
 - a. designed to reinforce the distinct identity of the development,
 - b. coordinated in design and style,
 - c. located so as to minimise visual clutter and obstruction of the public domain,
 - d. maximise opportunities for incidental surveillance of the street from adjacent land uses, and
10. Except where otherwise provided for in this DCP, all streets and intersections are to be designed and constructed in accordance with Austroads Guide to Traffic Management and Australian Standards AS 1742, 1743 and 2890.

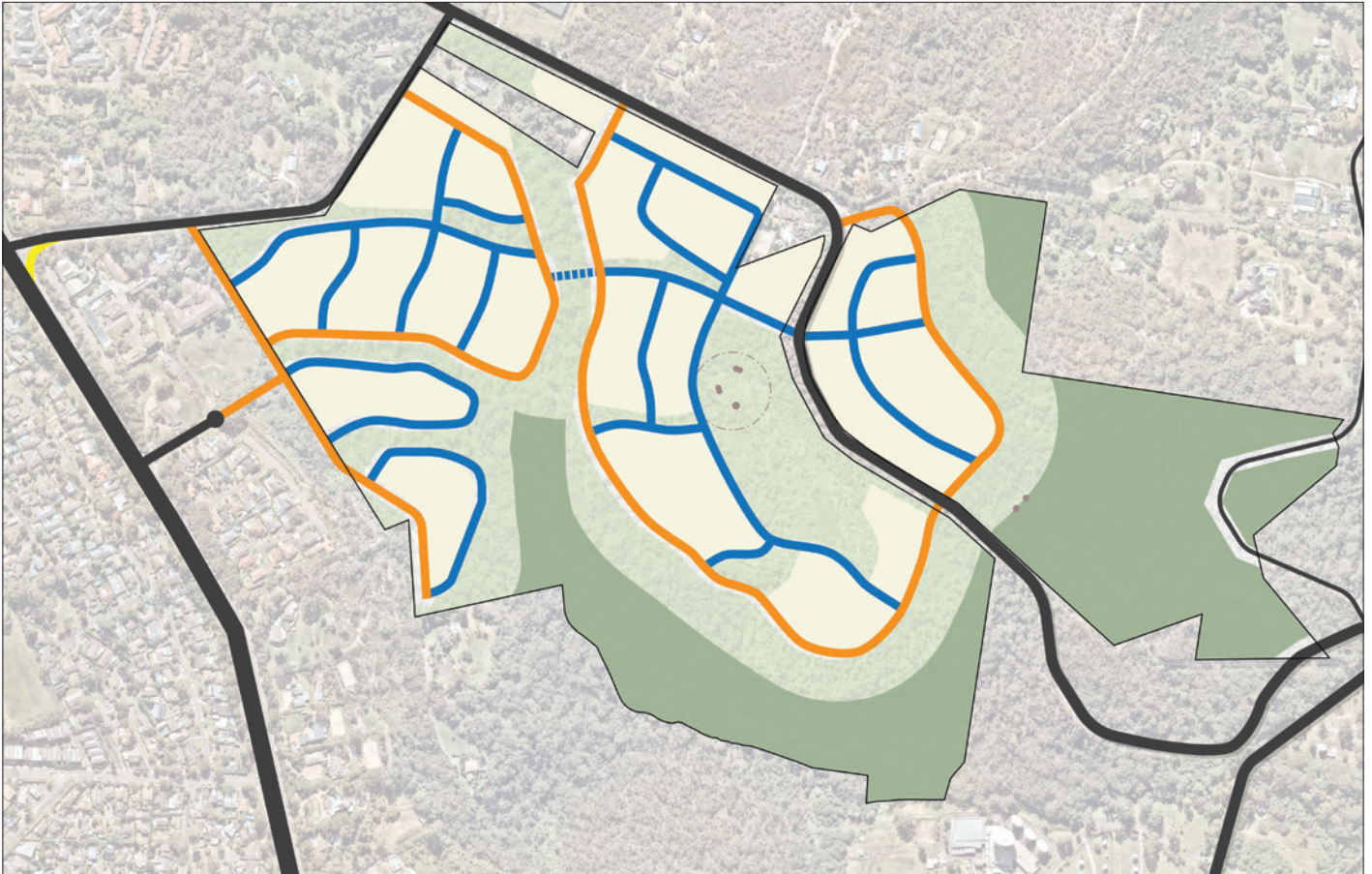
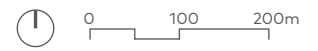


Figure 4: Road Hierarchy Plan (Source: COX Architecture)



- Existing
- Perimeter/fire access
- Conservation area (non-trafficable)
- Archaeological sites: 50m buffer zone
- Local road
- Bridge connection
- Publicly accessible green space
- Proposed slip road
- Proposed Residential Area
- Archaeological sites: Indigenous significance

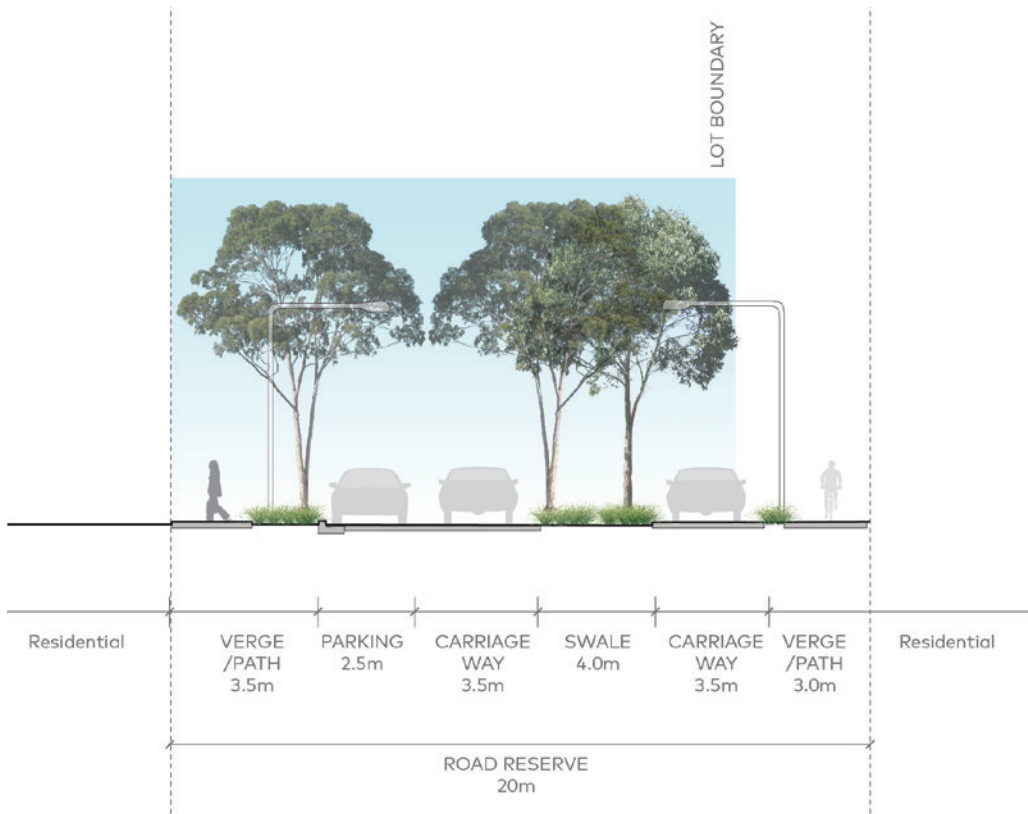


Figure 5. Typical 20m Boulevard Section (Source: COX Architecture)

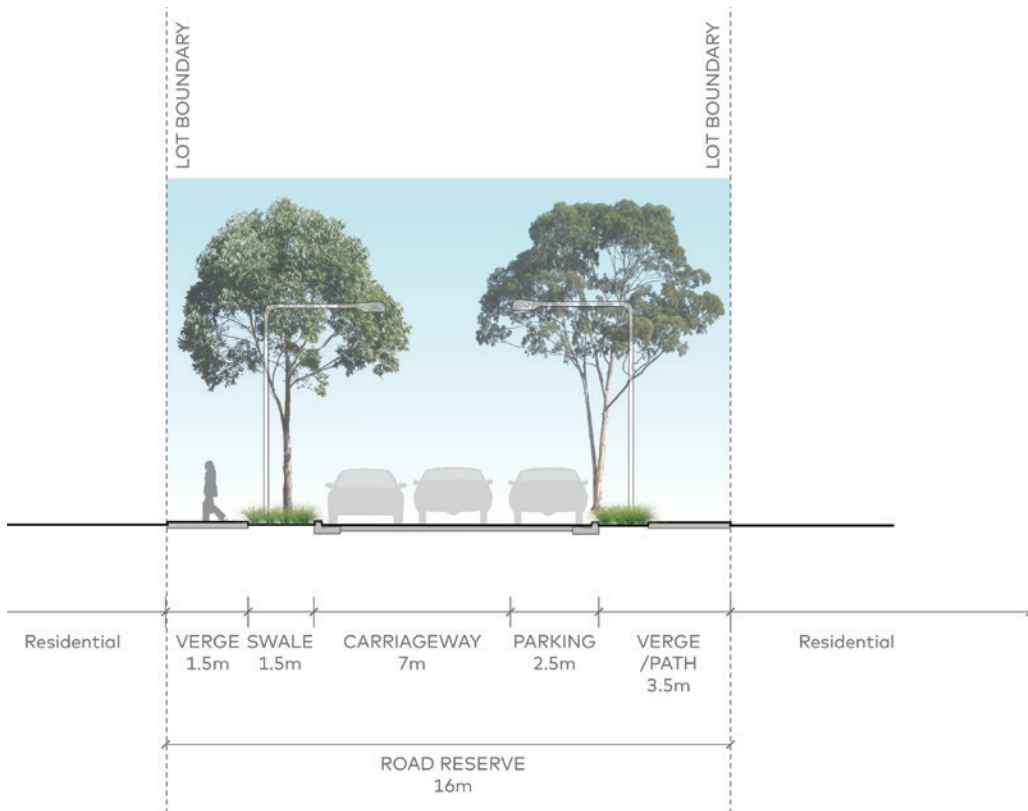


Figure 6. Typical 16m Local Street Section (COX Architecture)

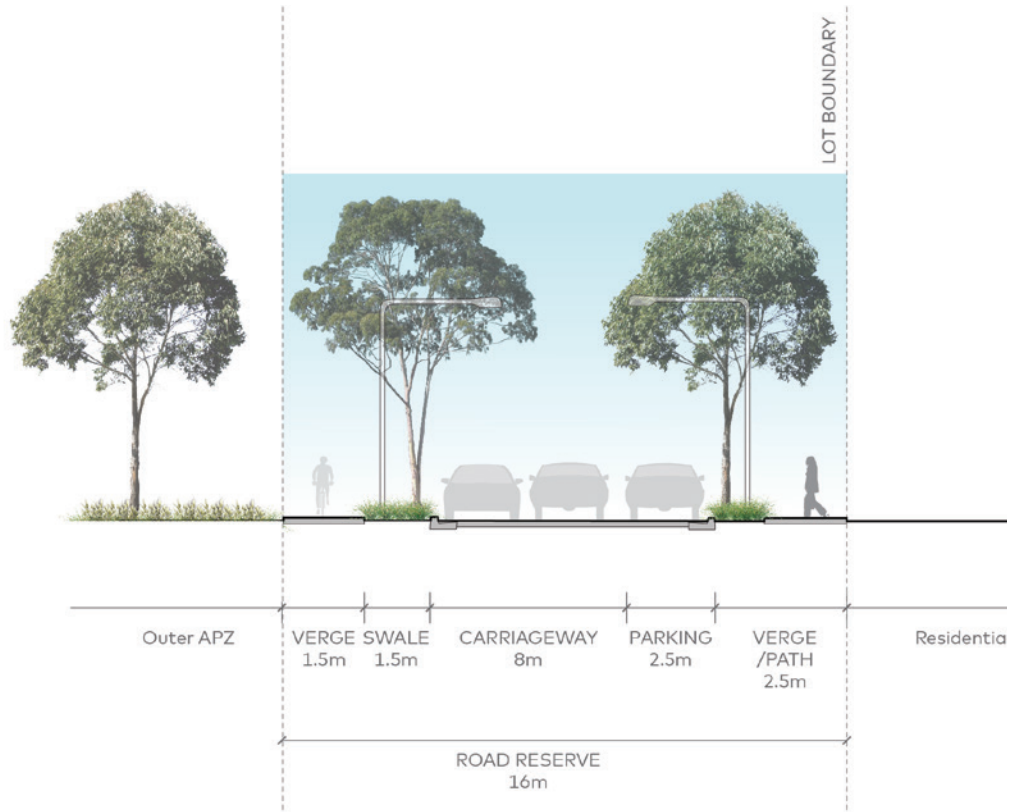


Figure 7. Typical 16m Local Street Section with an Interface to an APZ Buffer (Source: COX Architecture)

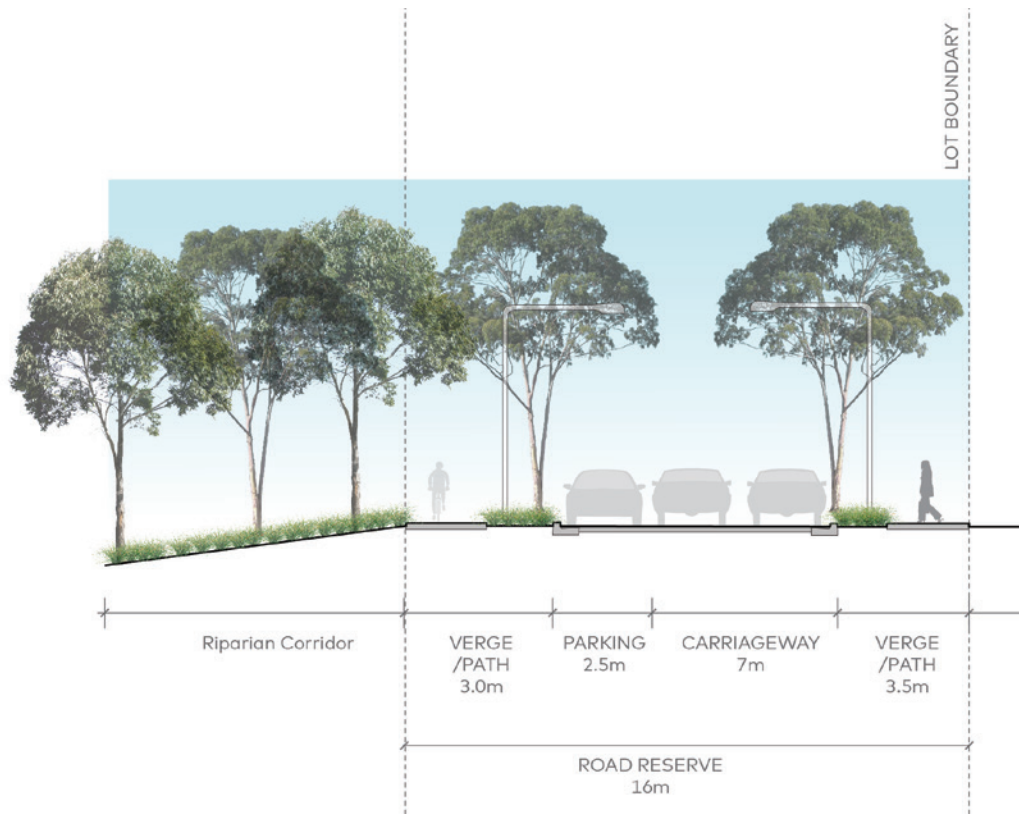


Figure 8. Typical 16m Local Street Section with an Interface to a Riparian Buffer (Source: COX Architecture)

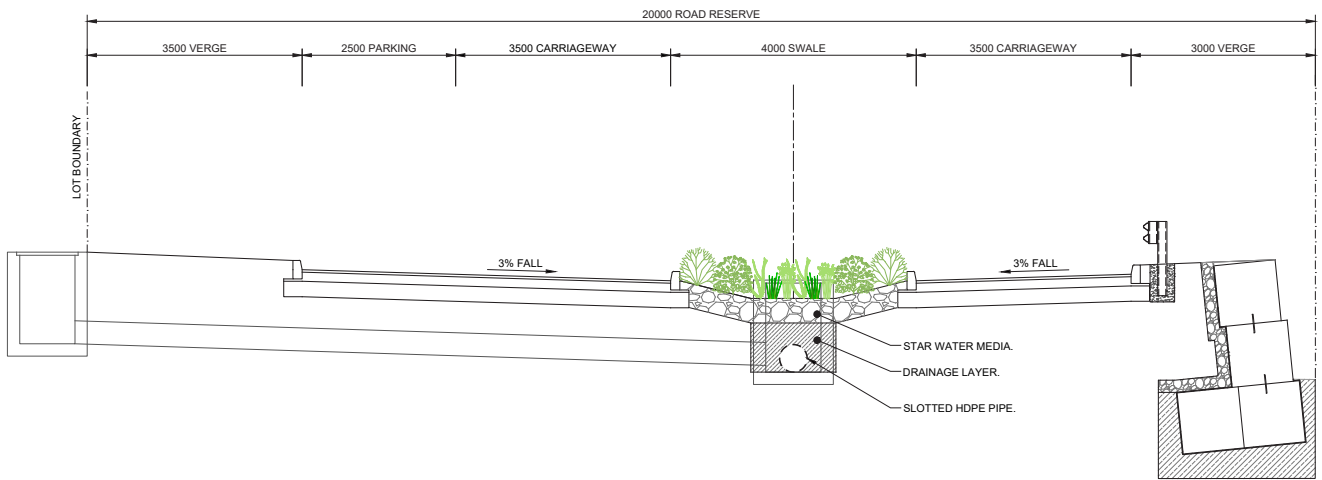


Figure 9. Boulevard Retention Swale - Typical Drainage Section (Source: Craig & Rhodes)

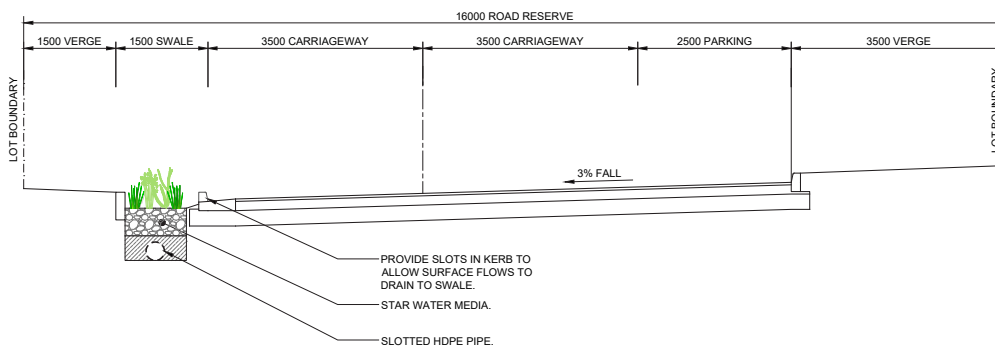


Figure 10. Road Scale Retention Swale Cross Street - Typical Section (Source: Craig & Rhodes)

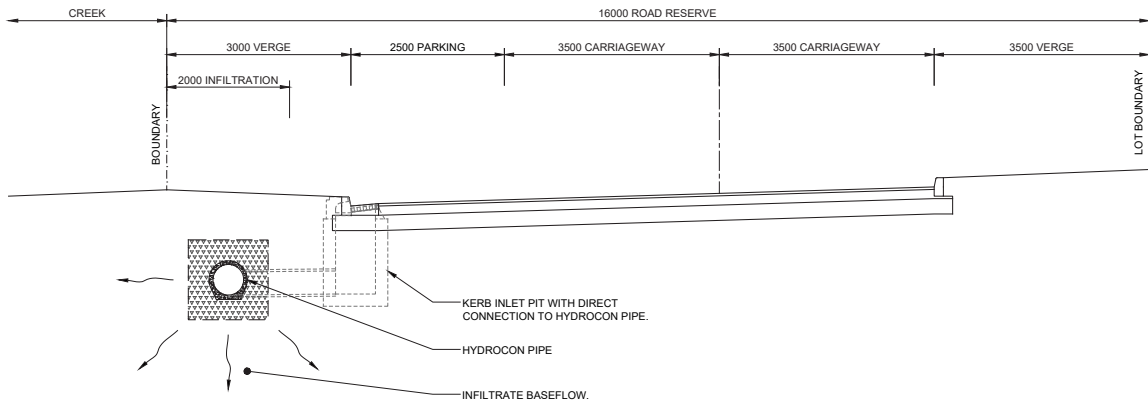


Figure 11. Road Scale Retention Adjacent to Riparian Zone - Typical Section (sub-surface flows into hydrocon pipes) (Source: Craig & Rhodes)

8.5 Public Open Space and Recreation

Objectives

- To enhance the appearance and amenity of urban development through integrated open space and landscape design.
- To ensure inclusive and equitable provision of public open space.
- To support the enrichment and vitality of the local Aboriginal culture and heritage of the area in perpetuity.
- To create a sense of community and to encourage interaction and social cohesion.

Controls

1. Public / community facilities should be designed:
 - a. to include people of all cultures and abilities;
 - b. with flexibility to cater for multiple uses and activities and for adaptability over time; and
 - c. to contribute to local character and sense of place.
2. Landscaping should:
 - a. prioritise repair, restoration and regeneration for ecological systems and green infrastructure corridors
 - b. utilise flora endemic to the local area and flora species with biodiversity value in the specified area.
3. Recreation and open space areas should be accessible either by roads, fire trails and/or bush tracks and should be made available to residents and visitors including provision for disabled access in appropriate locations.
4. Built form within the open spaces must be representative of the natural setting of the space and should be constructed of reusable materials from onsite activities.
5. Open spaces must be integrated within the natural landscape and vegetation of the site while minimising man-made visible boundaries between open space and private property.
6. Hard surface landscaping pathways and paved areas must be designed and constructed of materials that facilitate water infiltration into the subsoil.
7. All open spaces must compliment the sites characteristics and consider characteristics including but not limited to APZ, Biodiversity values, solar access, and water sensitive urban design.

8.6 Social Infrastructure

Objectives

- To deliver a community centre that acts as a key cultural hub and learning centre, by meaningfully implementing Designing with Country principles
- To design social infrastructure to harmonise with the natural environment

Controls

1. The bulk, massing and articulation of social infrastructure should reflect and respond to the human scale.
2. Siting and design of social infrastructure should optimise the relationship with the adjacent public domain and encourage passive engagement with the space
3. The design of social infrastructure must appropriately respect and consider the relationship with the adjacent cultural site
4. Interpretive signage is to be included to enhance knowledge and understanding of Aboriginal culture and heritage.

8.7 Servicing, Utilities and Infrastructure

Objectives

- To ensure the construction of utility services/infrastructure provision occurs in a logical and staged manner, and in sequence with development.
- To encourage innovative and sustainable utility and servicing to promote effective and efficient delivery of services.
- To design and provide utility infrastructure to integrate with, and not negatively impact, use of the public realm, liveability, and the environment.

Controls

1. All lots must have access to reticulated water and sewer, electricity, and telecommunications.
2. Where an equal or superior service can be provided using alternative technology and this service meets all the requirements of the relevant service provider, this alternative may be considered. – This provides an option for increased energy and ecological sustainability.
3. Infrastructure is designed and located to:
 - a. Integrate with building design and the public domain;
 - b. Not be visible from the public domain;
 - c. Make a positive contribution to the public domain; and
 - d. Utilise landscaping to screen where required.
4. Integrate utilities within the street reservation, with services located underground and in a manner that facilitates tree planting and consistent with the Indicative Layout Plan.
5. Where services must be located on a street, they do not dominate the pedestrian experience and are designed as an integrated component of the landscape.
6. Infrastructure such as roads, drainage, stormwater structures, services, etc. should be located outside land identified as Waterways and Riparian Land.
7. Provisions for electric vehicle charging points is to be made throughout the site.

8.8 Car Parking

Objectives

- To provide adequate off street carparking.
- To site and design parking facilities (including garages) to have minimal visual impact on the street frontage or other public place.

Controls

1. Refer to the controls within Section C3 of the Warringah Development Control Plan.

8.9 Environmentally Sustainable Design

Objectives

Development applications shall demonstrate Ecological Sustainable Design (ESD) measures have been incorporated into the design, including a consideration of where possible:

- Building and window orientation;
- Window size;
- Insulation;
- Natural ventilation and light with generous, all weather openings;
- Utilise extensive roof areas for energy and water collection;
- Orientation of sub-division lots to maximise solar access to future dwellings
- Retention of trees to provide shade
- Air flow, ventilation and building form to support cooling

Public domain and buildings shall be designed where possible to reduce localised heat created by the urban heat island affect by:

- Maximising canopy cover on all streets
- Maximising the use of vegetation on buildings, including above ground parking facilities through vegetation, green roofs, green walls and materials with a high solar reflectance index. The western and northern building façades should be particular areas of focus.
- Use of material such as sandstone, mulch or timber which are recycled from the site

9.0 Built Form

9.1 Building Design

This section provides high level guidance to inform the preparation of Built Form Design Guidelines required under [Section X](#).

Objectives

- To ensure development responds to site topography and minimise excavation of the natural landform.
- To minimise the visual impact of development when viewed from adjoining properties, streets, waterways and land zoned for public recreation purposes.
- To ensure development is generally beneath the existing tree canopy level.
- To ensure a reasonable level of amenity is provided and maintained to adjoining and nearby properties.
- To encourage good design and innovative architecture to complement the urban environment.

Controls

1. Building design must respond to the natural landscape and topography of the site. This includes the use of elevated building forms using bearer and joist construction and split-level housing design following the contours of the site.
2. Buildings must be oriented to address the street.
3. Buildings must be sited with their long axis parallel to the contours, if the building envelope allows, to reduce the need for earthworks. Excavations with long axis running perpendicular to natural contours will not be supported.
4. The underside of an elevated home must be either concealed or lined and presentable from public view and integrated with the overall dwelling design.
5. On sloping land, the height and bulk of development (particularly on the downhill side) is to be minimised, and the need for cut and fill reduced by designs which minimise the building footprint and allow the building mass to step down the slope.
6. Large areas of continuous wall planes are to be avoided by varying building setbacks and using appropriate techniques to provide visual relief.

Please note that further details on roof design, materials and fencing controls will be detailed in the built form guidelines and lodged with the DA

9.2 Building Facades, Verandas, Porches and Decks

Objectives

- To encourage innovative and contemporary building designs which result in a high quality and attractive residential environment.

Controls

1. A clear defined entry way must be visible from the street.
2. Verandas, porches or decks must be integrated into the building design.
3. The facades of buildings presenting to any public place must address these public places, provide visual interest, have a street presence and incorporate design elements (such as roof forms, textures, materials, arrangement of windows, modulation, spatial separation, landscaping etc.) that are compatible with any design themes existing in the immediate vicinity. Blank facades that front public places are not supported.
4. The façade should be articulated and should incorporate sun shades, windows, doors, openings and stepped articulation of the building façade.
5. Building function is to be expressed by the facade. Any building facade and front setback to a public place must incorporate design features for pedestrian entry, awnings, front entry features etc.
6. For dwellings above ground, private open space is to be provided by balconies. For ground floor dwellings, private open space is to be provided as a terrace or garden.
7. The primary orientation of balconies must be to the street or rear boundary. Balconies are not to be fully recessed into the building form. Balconies should not form the dominant architectural expression of the building.
8. In the provision of outdoor entertaining areas, preference is given to timber decks rather than cut/fill, retaining walls and/or terracing.

9.3 Residential Landscaping

Objectives

- To ensure existing vegetation is maintained.
- To contribute to effective management of stormwater and energy efficiency.
- To encourage the use of native species.

Controls

1. Landscaped areas must have a "bushland" character displaying a range of local flora.
2. Front setback areas are to contain landscaping. The landscape treatment in these areas is to provide a clear delineation between the private and public domain.
3. The use of turf should be minimised in favour of planting of native landscape species.
4. Hard surface landscaping pathways and paved areas must be designed and constructed of materials that facilitate water infiltration into the subsoil.
5. A Landscape Plan is to be submitted with each development application involving public domain works or a residential dwelling.

9.4 Solar Access

Objectives

- To maximise and protect solar access for each dwelling.

Controls

1. Site layout and structures are to allow for reasonable solar access for the purposes of water heating and electricity generation and maintain reasonable solar access to adjoining properties.

9.5 Construction and Waste Management

Objectives

- To ensure measures are implemented as part of the development to prevent any degradation or pollution to the site, surrounding sites and local ecology.

Controls

1. A Construction Management Plan is to be submitted with each development application.
2. An Ongoing Management Plan is to be submitted with each development application.

