9.4.1.6 General residential zone

9.4.1.6.1 Coastal communities precinct

9.4.1.6.1.1 Purpose - General residential zone - Coastal communities precinct

1. The purpose of this part of the Reconfiguring a lot code is to facilitate and manage the outcomes of development for reconfiguring a lot and its associated Operational Works in the General residential zone - Coastal communities precinct, to achieve the Overall Outcomes.
2. The purpose of this part of the code will be achieved through the overall outcomes as identified in Part 9.4.1 - Reconfiguring a lot code and the following additional General residential zone - Coastal communities precinct specific overall outcomes:

a. Reconfiguring a lot maintains the low density character of the Coastal communities precinct by not exceeding a net residential density of 11 lots per hectare unless the resultant lots are consistent with the density and character of the surrounding established neighbourhood.

b. Reconfiguring a lot achieves neighbourhoods that are designed to provide well-connected, safe and convenient movement and open space networks through interconnected streets and active transport linkages that provide high levels of accessibility between residences, open space areas and places of activity.

c. Reconfiguring a lot avoids areas subject to constraint, limitation, or environmental values. Where reconfiguring a lot cannot avoid these identified areas, it responds by:

   i. adopting a 'least risk, least impact' approach when designing, siting and locating development to minimise the potential risk to people, property and the environment;
   ii. ensuring no further instability, erosion or degradation of the land, water or soil resource;
   iii. maintaining environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of environmental offsets, landscaping and facilitating safe wildlife movement through the environment;
   iv. protecting native species and protecting and enhancing native species habitat;
   v. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
   vi. establishing effective separation distances, buffers and mitigation measures associated with major infrastructure to minimise adverse effects on sensitive land uses from noise, dust and other nuisance generating activities;
   vii. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of major infrastructure;
   viii. Ensuring effective and efficient disaster management response and recovery capabilities.

d. The Reconfiguring a lot, Operational works associated with the Reconfiguring a lot, and uses expected to occur as a result of the Reconfiguring a lot:

   i. responds to the risk presented by overland flow and minimises risk to personal safety;
   ii. is resilient to overland flow impacts by ensuring the siting and design accounts for the potential risks to property associated with overland flow;
   iii. does not impact on the conveyance of overland flow up to and including the Overland Flow Defined Flood Event;
   iv. directly, indirectly and cumulatively avoids an increase in the severity of overland flow and potential for damage on the premises or to a surrounding property.

e. Reconfiguring a lot achieves the intent and purpose of the Coastal communities precinct outcomes as identified in Part 6.

9.4.1.6.1.2 Requirement for assessment

To determine if boundary realignment is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part A, Table 9.4.1.6.1.1 Where the development does not meet a requirement for accepted development (RAD) within Part A Table 9.4.1.6.1.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is

against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO23
RAD2	PO24
RAD3	PO25
RAD4	PO45-PO60
RAD5	PO49, PO50
RAD6	PO43

Part I - Requirements for accepted development - General residential zone - Coastal communities precinct

Table 9.4.1.6.1.1 Requirements for accepted development- General residential zone - Coastal communities precinct

Requirements for accepted development	
General requirements	
Boundary realignment	
RAD1	Lots created by boundary realignment: a. contain all service connections to water, sewer, electricity and other infrastructure wholly within the lot they serve; b. have constructed road access; c. do not require additional infrastructure connections or modification to existing connections. d. do not result in the creation of any additional lots;
RAD2	Boundary realignment does not result in existing land uses on site becoming non-complying with planning scheme requirements. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. minimum or maximum required setbacks c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises are approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval. ii. Where a commercial use contains an ancillary office(53), the office(53) cannot be separately titled as it is considered part of the commercial or use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.

<table>
<tr><td>RAD3</td><td>Resulting lots comply with the following minimum lot sizes and dimensions:
<table>
<tr><th>Zone (Precinct)</th><th>Area</th><th>Primary Frontage</th><th>Depth</th></tr>
<tr><td>General residential - Coastal communities precinct</td><td>800m^2</td><td>32 m</td><td>25 m</td></tr>
</table></td></tr>
<tr><td>RAD4</td><td>Boundary realignment does not result in the creation of additional building development opportunity within an area subject to an overlay map.</td></tr>
<tr><td>RAD5</td><td>No new boundaries are located within 2m of High Value Areas as identified in Overlay map - Environmental areas.</td></tr>
<tr><td>RAD6</td><td>Boundary realignment does not result in the clearing of any Habitat trees.</td></tr>
</table>

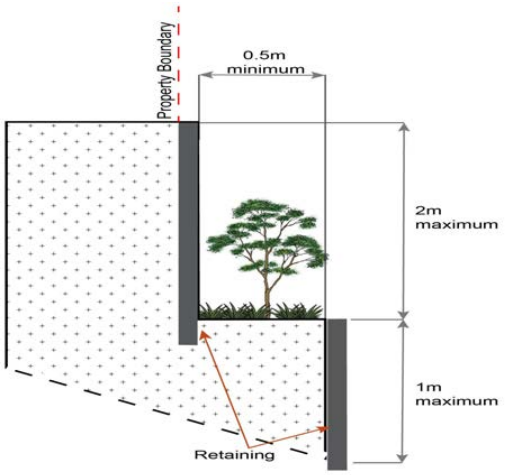
Part J - Criteria for assessable development - General residential zone - Coastal communities precinct

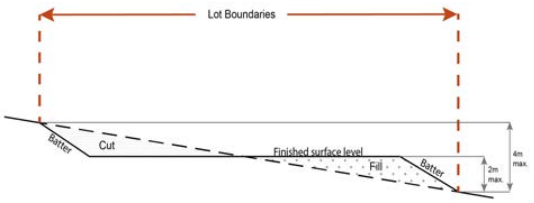
Where development is categorised as assessable development - code assessment in the Table of Assessment, the assessment benchmarks are the criteria set out in Part J, Table 9.4.1.6.1.2 as well as the purpose statement and overall outcomes of this code.

Where development is categorised as assessable development - impact assessable, the assessment benchmarks become the whole of the planning scheme.

Table 9.4.1.6.1.2 Assessable development - General residential zone - Coastal communities precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes
Density	
PO1 Reconfiguring a lot does not exceed a net residential density of 11 lots per hectare unless the resultant lot/s are consistent with the low density and established character of the surrounding neighbourhood.	**E1** Lots have a minimum site area of 600m^2 and a minimum primary frontage of 12.5m.
Lot design, mix and location	
PO2 Lots have an area, shape and dimension sufficient to ensure they can accommodate: a. a Dwelling house**(22)** including all domestic outbuildings and possible on site servicing requirements (e.g. on-site waste disposal); b. areas for car parking, vehicular access and manoeuvring; c. areas for useable and practical private open space.	No example provided.
PO3 Reconfiguring a lot does not create medium or high density development being lots with a frontage of less than 10.0 metres.	No example provided.

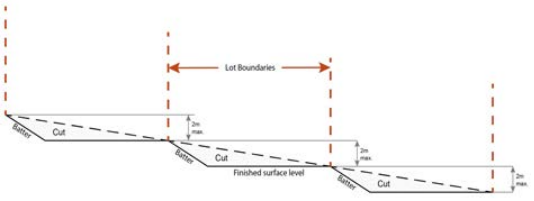
Sloping land	
PO4 Lot layout and design avoids the impacts of cutting, filling and retaining walls on the visual and physical amenity of the streetscape, each lot created and of adjoining lots ensuring, but not limited to, the following: a. The likely location of private open space associated with a Dwelling House on each lot will not be dominated by, or encroached into by built form outcomes such as walls or fences; b. Walls and/or fences are kept to a human scale and do not represent barriers to local environmental outcomes and conditions such as good solar access and access to prevailing breezes; and c. The potential for overlooking from public land into private lots is avoided wherever possible; and d. Lot design is integrated with the opportunities available for Dwelling House design to reduce impacts. Note - Refer to Planning scheme policy - Residential design for guidelines on building design on sloped land.	**E4.1** Lot layout and design ensures that a lot has a maximum average slope of 1:15 along its long axis and 1:10 along its short axis. **E4.2** Retaining walls and benching and associated cutting, filling and other earthworks associated with reconfiguring a lot are limited to: a. a maximum vertical dimension of 1.5m from natural ground for any single retaining structure; or b. where incorporating a retaining structure greater than 1.5m in height, the retaining wall is stepped, terraced and landscaped as follows: i. maximum 1m vertical, minimum 0.5m horizontal, maximum 2m vertical (refer figure below); ii. Maximum overall structure height of 3m; or  c. where incorporating benching along the short axis (from side to side boundary) of a lot: i. The difference between levels at each boundary is no greater than 4m per lot; ii. each bench has a maximum height of 2m (refer Figure below); or



d. Where incorporating benching along the long axis (from front to rear boundary):

   i. each bench has a maximum height of 2m;

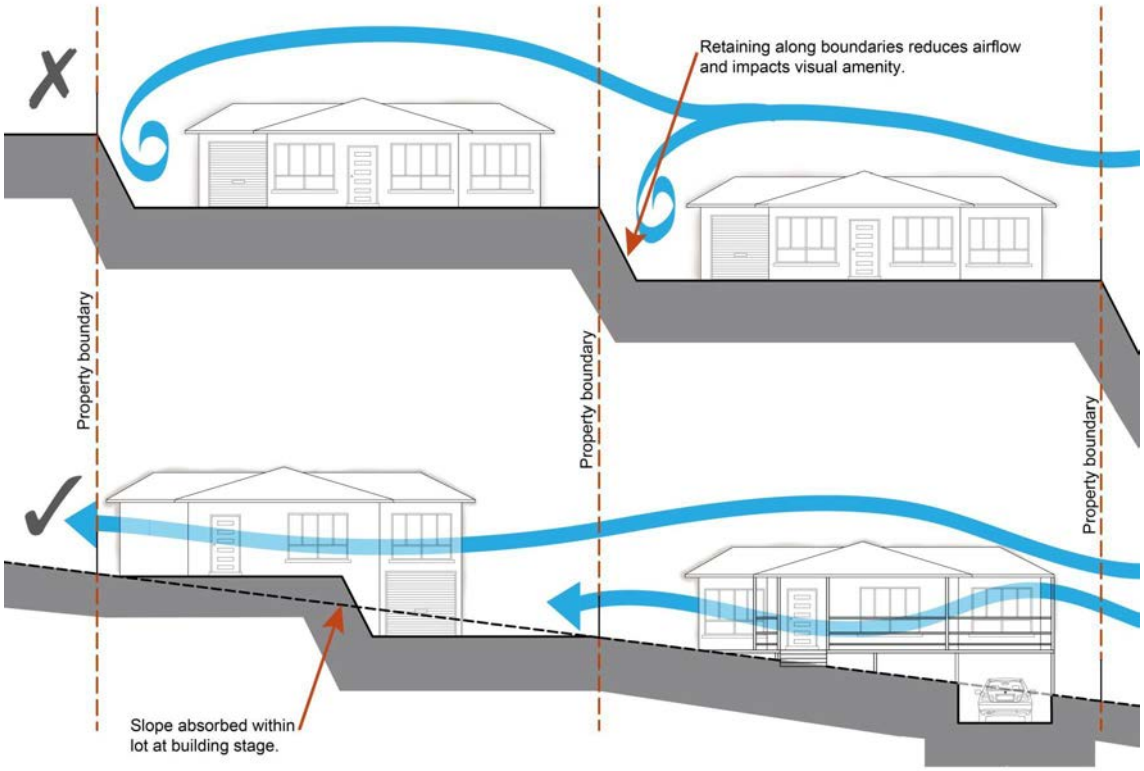
   ii. lots orientate up/down the slope (refer Figure below).



Note - Benching is to incorporate suitable measures to ensure stabilisation and prevent erosion.

Editor's note - Strict cut and fill requirements apply at the Dwelling house[(22)] stage. Deferral of slope solutions until building stage is not an acceptable outcome.

Figure - Sloped lot design



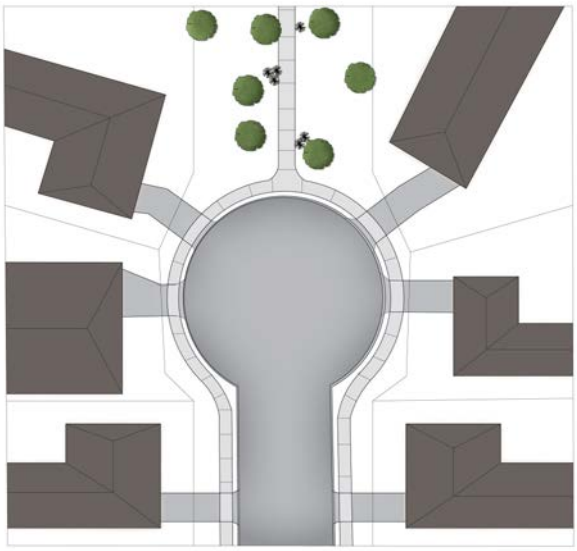
PO5 Lots are of a sufficient grade to accommodate effective stormwater drainage to a lawful point of discharge.	**E5** The surface level of a lot is at a minimum grade of 1:100 and slopes towards the street frontage, or other lawful point of discharge
Rear lots	
PO6 Rear lots: a. contribute to the mix of lot sizes; b. are limited to 1 behind any full frontage lot (i.e. A lot with a street frontage that is not an access handle); c. Provide sufficient area for vehicles to manoeuvre on-site allowing entry and exit to the rear lot in forward gear.	No example provided.
PO7 Access handles for rear lots are: a. a minimum of 5m wide to allow for safe vehicle access and service corridors from the rear lot to the street;	No example provided.

b. are located on 1 side of the full frontage lot; c. limited to no more than 2 directly adjoining each other.	
Street design and layout	
PO8 Street layouts facilitate regular and consistent shaped lots through the use of rectilinear grid patterns, or modified grid patterns where constrained by topographical and other physical barriers. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO9 Street layouts provide an efficient and legible movement network with high levels of connectivity within and external to the site by: a. facilitating increased active transport with a focus on safety and amenity for pedestrians and cyclists; b. providing street blocks with a maximum walkable perimeter of 600m; c. providing a variety of street block sizes to facilitate a range of intensity and scale in built form; d. reducing street block sizes as they approach an activity focus (e.g centre, neighbourhood hub, community activity, public open space); e. facilitating possible future connections to adjoining sites for roads, green linkages and other essential infrastructure. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO10 Street layouts create convenient and highly permeable movement networks between lower and higher order roads, whilst not adversely affecting the safety and function of the higher order road.	No example provided.
PO11 Streets are designed and constructed to cater for: a. safe and convenient pedestrian and cycle movement;	No example provided.

b. on street parking adequate to meet the needs of future residents; c. efficient public transport routes; d. expected traffic speeds and volumes; e. utilities and stormwater drainage; f. lot access, sight lines and public safety; g. emergency access and waste collection; h. waste service vehicles; i. street trees, landscaping and street furniture. Note - Refer to Planning scheme policy - Integrated design for determining design criteria to achieve this outcome.	
PO12 Intersections are designed and constructed to provide for the safe and efficient movement of pedestrians, cyclists, and all forms of light and heavy traffic. Note - Refer to Planning scheme policy - Integrated design for guidance on how to achieve compliance with this outcome.	No example provided.
PO13 Upgrade works (whether trunk or non-trunk) are provided where necessary to: a. ensure the type or volume of traffic generated by the development does not have a negative impact on the external road network; b. ensure the orderly and efficient continuation of the active transport network; c. ensure the site frontage is constructed to a suitable urban standard generally in accordance with Planning scheme policy - Integrated design. Note - An Integrated Transport Assessment (ITA) may be required to demonstrate compliance with this performance outcome refer to Planning scheme policy - Integrated transport assessment for guidance on when an ITA is required. An ITA should be prepared in accordance with Planning scheme policy - Integrated transport assessment. Note - The road network is mapped on Overlay map - Road hierarchy. Note - The primary and secondary active transport network is mapped on Overlay map - Active transport.	No example provided.

Note - To demonstrate compliance with c. of this performance outcome, site frontage works where in existing road reserve (non-trunk) are to be designed and constructed as follows: i. Where the street is partially established to an urban standard, match the alignment of existing kerb and channel and provide carriageway widening and underground drainage where required; or ii. Where the street is not established to an urban standard, prepare a design that demonstrates how the relevant features of the particular road as shown in the Planning scheme policy - Integrated Design can be achieved in the existing reserve. Note - Refer to Planning scheme policy - Integrated design for road network and active transport network design standards.	
PO14 Cul-de-sac or dead end streets are not proposed unless: a. topography or other physical barriers exist to the continuance of the street network or vehicle connection to an existing road is not permitted; and b. there are no appropriate alternative solutions, or c. the cul-de-sac or dead end street will facilitate future connections to adjoining land or development. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO15 Where cul-de-sacs are proposed: a. head must be visible from the entry point; b. are to be no longer than 50 metres in length; c. emergency access can be achieved under circumstances where entry via the carriageway may be compromised.	No example provided.
PO16 Where cul-de-sacs are proposed due to vehicular connection to existing roads not being permitted, they are to be designed to allow a 10m wide pedestrian connection as public land through to the existing road with no lots proposed at the head of the cul-de-sac generally as shown in the figure below.	No example provided.

Figure - Cul-de-sac design



Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve this outcome.

PO17

Streets are designed and oriented to minimise the impact of cut and fill on the amenity of the streetscape and adjoining development.

E17

Street alignment follows ridges or gullies or runs perpendicular to slope.

PO18

Streets are oriented to encourage active transport through a climate responsive and comfortable walking environment whilst also facilitating lots that support subtropical design practices, including:

a. controlled solar access and shade provision;

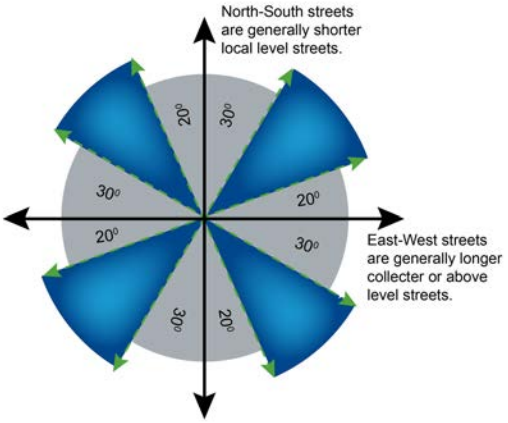
b. cross-ventilation

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve subtropical design solutions.

E18.1

Where not unduly constrained by topography or other physical barrier, streets are primarily oriented within 20 or 30 degrees of North-South or East-West in accordance with Figure - Preferred street orientation below**.**

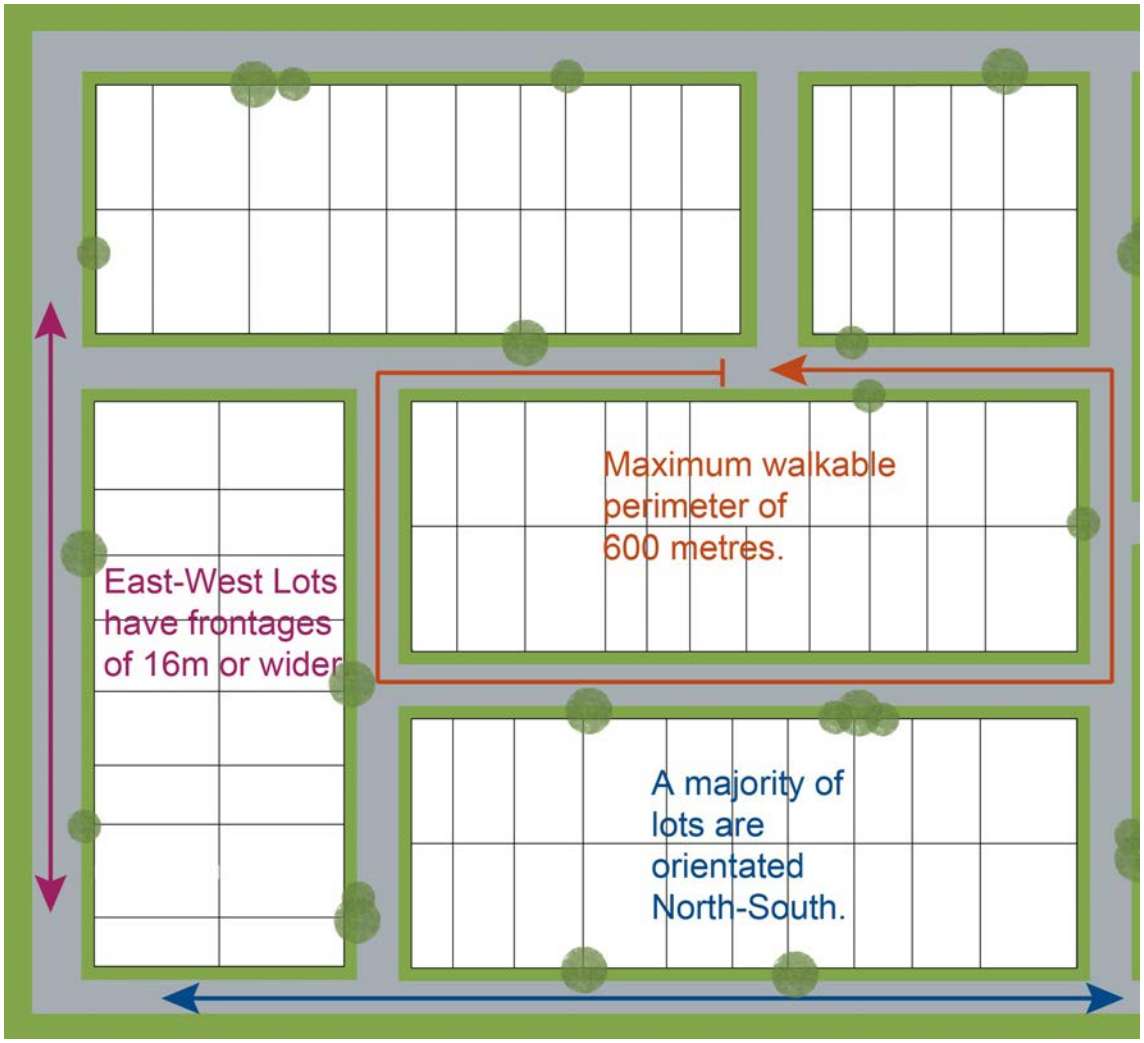
Figure - Preferred street orientation



E18.2

	The long axis of a street block is oriented east-west to facilitate a north-south orientation for a majority of lots as per Figure - Street block design below.
	E18.3 Where lots are oriented east west, they are to have a frontage of 16 metres or wider so as to allow for alternative dwelling design to achieve solar access and cross-ventilation as per Figure - Street block design below.

Figure - Street block design



Park[57] and open space	
PO19 A hierarchy of Parks[57] and open space is provided to meet the recreational needs of the community. Note - To determine the extent of Park[57] and open space required refer to Planning scheme policy - Integrated design.	No example provided.

Note - District level Parks[(57)] or larger may be required in certain locations in accordance with Part 4: Local Government Infrastructure Plan.	
PO20 Park[(57)] is to be provided within walking distance of all new residential lots. Note - To determine maximum walking distances for Park[(57)] types refer to Planning scheme policy - Integrated design.	No example provided.
PO21 Park[(57)] is of a size and design standard to meet the needs of the expected users. Note - To determine the size and design standards for Parks[(57)] refer to Planning scheme policy - Integrated design.	No example provided.
PO22 Parks[(57)] are designed and located to be safe and useable for all members of the community with high levels of surveillance, based on Crime Prevention Through Environmental Design (CPTED) principles, and access.	**E22.1** Local and district Parks[(57)] are bordered by streets and lots orientated to address and front onto Parks and not lots backing onto or not addressing the Park.
	E22.2 Where lots do adjoin local and district Parks[(57)], and fencing is provided along the Park[(57)] boundary, it is located within the lot and at a maximum height of 1m.
	E22.3 The design of fencing and retaining features allows for safe and direct pedestrian access between the Park[(57)] and private allotments through the use of gates and limited retaining features along Park[(57)] boundaries.
Boundary realignment	
PO23 Boundary alignments ensure that infrastructure and services are wholly contained within the lot they serve.	No example provided.
PO24 Boundary realignment does not result in: a. existing land uses on site becoming non-complying with planning scheme criteria;	No example provided.

b. lots being unserviced by infrastructure; c. lots not providing for own private servicing. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. setbacks c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises is approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval. ii. Where a commercial or industrial land use contains an ancillary office(53), the office(53) cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.	
PO25 Boundary realignment results in lots which have appropriate size, dimensions and access to cater for uses consistent with the precinct. Note - Refer to overall outcomes for the General residential zone - Coastal communities precinct for uses consistent in this precinct.	**E25** Lot sizes and dimensions (excluding any access handles) comply with Lot Types D, E or F in accordance with 'Table 9.4.1.6.1.3 - Lot Types' - Lot Types.
Reconfiguring existing development by Community Title	
PO26 Reconfiguring a lot which creates or amends a community title scheme as described in the *Body Corporate and Community Management Act 1997* is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established.	No example provided.

Note -Examples of land uses becoming unlawful include, but are not limited to the following: a. Land on which a Dual occupancy(21) has been established is reconfigured in a way that results in both dwellings no longer being on the one lot. The reconfiguring has the effect of transforming the development from a Dual occupancy(21) to two separate Dwelling(22) houses, at least one of which does not satisfy the requirements for accepted development applying to Dwelling houses. b. Land on which a Multiple dwelling(49) has been established is reconfigured in a way that precludes lawful access to required communal facilities by either incorporating some of those facilities into private lots or otherwise obstructing the normal access routes to those facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval. Editor's note - To satisfy this performance outcome, the development application may need to be a combined application for reconfiguring a lot and a material change of use or otherwise be supported by details that confirm that the land use still satisfies all relevant land use requirements.	
Reconfiguring by Lease	
PO27 Reconfiguring a lot which divides land or buildings by lease in a way that allows separate occupation or use of those facilities is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note - An example of a land use becoming unlawful is a Multiple dwelling(49) over which one or more leases have been created in a way that precludes lawful access to some of the required communal facilities. Some of the communal car parking facilities have been incorporated into lease areas while other leases are located in a way that obstructs the normal access routes to other communal facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval, but they are no longer freely available to all occupants of the Multiple dwelling(49). Editor's note -To satisfy this performance outcome, the development application may need to be supported by details that confirm that the land use still satisfies all relevant land use requirements. Editor's note – Under the definition in Schedule 2 of the Act, the following do not constitute reconfiguring a lot and are not subject to this performance outcome:	No example provided.

a. a lease for a term, including renewal options, not exceeding 10 years; and b. an agreement for the exclusive use of part of the common property for a community titles scheme under the *Body Corporate and Community Management Act 1997*.	
Volumetric subdivision	
PO28 The reconfiguring of the space above or below the surface of the land ensures appropriate area, dimensions and access arrangements to cater for uses consistent with the precinct and does not result in existing land uses on site becoming non-complying with the planning scheme criteria. Note - Examples may include but are not limited to: a. Where a Dwelling house[(22)] includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house[(22)] use.	No example provided.
Reticulated supply	
PO29 Each lot is provided with an appropriate level of service and infrastructure, including water supply, stormwater management, sewage disposal, stormwater drainage, electricity,telecommunications and gas (if available) in a manner that: a. is efficient in delivery of service; b. is effective in delivery of service; c. is conveniently accessible in the event of maintenance or repair; d. minimises whole of life cycle costs for that infrastructure; e. minimises risk of potential adverse impacts on the natural and built environment; f. minimises risk of potential adverse impact on amenity and character values; g. recognises and promotes Councils Total Water Cycle Management policy and the efficient use of water resources.	**E29** Lots are provided with: a. a connection to the reticulated water supply infrastructure network; b. a connection to the sewerage infrastructure network; c. a connection to the reticulated electricity infrastructure network; and d. a physical connection to the telecommunication network, that where available to the land is part of the high speed broadband network.
Stormwater location and design	
PO30	No example provided.

The development is planned and designed considering the land use constraints of the site and incorporates water sensitive urban design principles.	
PO31 Stormwater drainage pipes and structures through or within private land are protected by easements in favour of Council with sufficient area for practical access for maintenance. Note - To determine sufficient areas for easements refer to Planning scheme policy - Integrated design.	No example provided.
PO32 Stormwater management facilities are located outside of riparian areas and prevent increased channel bed and bank erosion.	No example provided.
PO33 Natural streams and riparian vegetation are retained and enhanced through revegetation.	No example provided.
PO34 Areas constructed as detention basins are adaptable for passive recreation.	No example provided.
PO35 Development maintains the environmental values of waterway ecosystems.	No example provided.
PO36 Constructed water bodies are not dedicated as public assets.	No example provided.
Stormwater management system	
PO37 The major drainage system has the capacity to safely convey stormwater flows for the defined flood event.	**E37** The roads, drainage pathways, drainage features and waterways safely convey the stormwater flows for the defined flood event without allowing flows to encroach upon private lots.
PO38 Overland flow paths (for any storm event) from roads and public open space areas do not pass through private lots.	**E38** Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

PO39 Where located within the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the greater pollutant removal of: a. 100% reductions in mean annual loads from unmitigated development for total suspended solids, total phosphorus, total nitrogen and gross pollutants >5mm; b. the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Table A and B in Appendix 3 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning scheme policy – Stormwater management, planning scheme policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	No example provided.
PO40 Where located outside the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Tables A and B in Appendix 2 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	No example provided.
PO41 The stormwater management system is designed to: a. protect the environmental values in downstream waterways; b. maintain ground water recharge areas; c. preserve existing natural wetlands and associated vegetation buffers; d. avoid disturbing soils or sediments;	No example provided.

e. avoid altering the natural hydrologic regime in acid sulphate soil and nutrient hazardous areas; f. maintain and improve receiving water quality; g. protect natural waterway configuration; h. protect natural wetlands and vegetation; i. protect downstream and adjacent properties; j. protect and enhance riparian areas.	
PO42 Design and construction of the stormwater management system: a. utilise methods and materials to minimise the whole of lifecycle costs of the stormwater management system; and b. are coordinated with civil and other landscaping works. Note - To determine the standards for stormwater management system construction refer to Planning scheme policy - Integrated design.	No example provided.
Native vegetation where not located in the Environmental areas overlay	
PO43 Reconfiguring a lot facilitates the retention of native vegetation by: a. incorporating native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; b. ensuring habitat trees are located outside a development footprint. Where habitat trees are to be cleared, replacement fauna nesting boxes are provided at the rate of 1 nest box for every hollow removed. Where hollows have not yet formed in trees > 80cm in diameter at 1.3m height, 3 nest boxes are required for every habitat tree removed. c. providing safe, unimpeded, convenient and ongoing wildlife movement; d. avoiding creating fragmented and isolated patches of native vegetation. e. ensuring that biodiversity quality and integrity of habitats is not adversely impacted upon but are maintained and protected;	No example provided

f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies.	
Noise	
PO44 Noise attenuation structure (e.g. walls, barriers or fences): a. contribute to safe and usable public spaces, through maintaining high levels of surveillance of parks, streets and roads that serve active transport purposes (e.g. existing or future pedestrian paths or cycle lanes etc); b. maintain the amenity of the streetscape. Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures.	**E44** Noise attenuation structures (e.g. walls, barriers or fences): a. are not visible from an adjoining road or public area unless; i. adjoining a motorway or rail line; or ii. adjoining part of an arterial road that does not serve an existing or future active transport purpose (e.g. pedestrian paths or cycle lanes) or where attenuation through building location and materials is not possible. b. do not remove existing or prevent future active transport routes or connections to the street network; c. are located, constructed and landscaped in accordance with Planning scheme policy - Integrated design. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures. Note - Refer to Overlay map – Active transport for future active transport routes.
Values and constraints criteria Note - The relevant values and constraints criteria do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.	
Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following assessment criteria apply) Note -The preparation of a bushfire management plan in accordance with Planning scheme policy – Bushfire prone areas can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO45 Lots are designed to: a. minimise the risk from bushfire hazard to each lot and provide the safest possible siting for buildings and structures; b. limit the possible spread paths of bushfire within the reconfiguring;	**E45** Reconfiguring a lot ensures that all new lots are of an appropriate size, shape and layout to allow for the siting of future buildings being located: a. within an appropriate development footprint; b. within the lowest hazard locations on a lot;

c. achieve sufficient separation distance between development and hazardous vegetation to minimise the risk to future buildings and structures during bushfire events; d. maintain the required level of functionality for emergency services and uses during and immediately after a natural hazard event.	c. to achieve minimum separation between development or development footprint and any source of bushfire hazard of 20m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; d. to achieve a minimum separation between development or development footprint and any retained vegetation strips or small areas of vegetation of 10m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; e. away from ridgelines and hilltops; f. on land with a slope of less than 15%; g. away from north to west facing slopes.
PO46 Lots provide adequate water supply and infrastructure to support fire-fighting.	**E46** For water supply purposes, reconfiguring a lot ensures that: a. lots have access to a reticulated water supply provided by a distributer retailer for the area; or b. where no reticulated water supply is available, on-site fire fighting water storage containing not less than 10000 litres and located within a development footprint.
PO47 Lots are designed to achieve: a. safe site access by avoiding potential entrapment situations; b. accessibility and manoeuvring for fire-fighting during bushfire.	**E47** Reconfiguring a lot ensures a new lot is provided with: a. direct road access and egress to public roads; b. an alternative access where the private driveway is longer than 100m to reach a public road; c. driveway access to a public road that has a gradient no greater than 12.5%; d. minimum width of 3.5m.
PO48 The road layout and design supports: a. safe and efficient emergency services access to all lots; and manoeuvring within the subdivision; b. availability and maintenance of access routes for the purpose of safe evacuation.	**E48** Reconfiguring a lot provides a road layout which: a. includes a perimeter road that separating the new lots from hazardous vegetation on adjacent lots incorporating by: i. a cleared width of 20m; ii. road gradients not exceeding 12.5%;

	iii. pavement and surface treatment capable of being used by emergency vehicles; iv. Turning areas for fire fighting appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines. b. Or if the above is not practicable, a fire maintenance trail separates the lots from hazardous vegetation on adjacent lots incorporating: i. a minimum cleared width of 6m and minimum formed width of 4m; ii. gradient not exceeding 12.5%; iii. cross slope not exceeding 10%; iv. a formed width and erosion control devices to the standards specified in Planning scheme policy - Integrated design; v. a turning circle or turnaround area at the end of the trail to allow fire fighting vehicles to manoeuvre; vi. passing bays and turning/reversing bays every 200m; vii. an access easement that is granted in favour of the Council and the Queensland Fire and Rescue Service or located on public land. c. excludes cul-de-sacs, except where a perimeter road with a cleared width of 20m isolates the lots from hazardous vegetation on adjacent lots; and d. excludes dead-end roads.
Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria. Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.	
PO49 No new boundaries are located within 2m of High Value Areas.	No example provided.
PO50	**E50**

Lots are designed to: a. minimise the extent of encroachment into the MLES waterway buffer or a MLES wetland buffer; b. ensure quality and integrity of biodiversity and ecological values is not adversely impacted upon but are maintained and protected; c. incorporate native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; d. provide safe, unimpeded, convenient and ongoing wildlife movement; e. avoid creating fragmented and isolated patches of native vegetation; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies. AND Where development results in the unavoidable loss of native vegetation within a MLES waterway buffer or a MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.	Reconfiguring a lot ensures that no additional lots are created within a Value Offset Area.
Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO51 Lots do not: a. reduce public access to a heritage place, building, item or object; b. create the potential to adversely affect views to and from the heritage place, building, item or object; c. obscure or destroy any pattern of historic subdivision, historical context, landscape setting or the scale and consistency of the urban fabric relating to the local heritage place.	No example provided.
PO52 Reconfiguring a lot retains significant trees and incorporates them into the subdivision design, development layout and provision of infrastructure.	No example provided.

Overland flow path (refer Overlay map - Overland flow path to determine if the following assessment criteria apply) Note - The applicable river and creek flood planning levels associated with defined flood event (DFE) within the inundation area can be obtained by requesting a flood check property report from Council.	
PO53 Development: a. minimises the risk to persons from overland flow; b. does not increase the potential for damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure.	No example provided.
PO54 Development: a. maintains the conveyance of overland flow predominantly unimpeded through the premises for any event up to and including the 1% AEP for the fully developed upstream catchment; b. does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow..	**E54** Development ensures that any buildings are not located in an Overland flow path area. Note: A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding property.
PO55 Development does not: a. directly, indirectly or cumulatively cause any increase in overland flow velocity or level; b. increase the potential for flood damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure. Note - Open concrete drains greater than 1m in width are not an acceptable outcome, nor are any other design options that may increase scouring. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	No example provided.
PO56	**E56**

Development ensures that overland flow is not conveyed from a road or public open space onto a private lot, unless the development is in a Rural zone.	Development ensures that overland flow paths and drainage infrastructure is provided to convey overland flow from a road or public open space area away from a private lot, unless the development is in the Rural zone.
PO57 Development ensures that Council and inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment flows and are able to be easily maintained. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	**E57.1** Development ensures that roof and allotment drainage infrastructure is provided in accordance with the following relevant level as identified in QUDM: a. Urban area – Level III; b. Rural area – N/A; c. Industrial area – Level V; d. Commercial area – Level V. **E57.2** Development ensures that all Council and allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.
PO58 Development protects the conveyance of overland flow such that easements for drainage purposes are provided over: a. a stormwater pipe if the nominal pipe diameter exceeds 300mm; b. an overland flow path where it crosses more than one property; and c. inter-allotment drainage infrastructure. Note - Refer to Planning scheme policy - Integrated design for details and examples. Note - Stormwater drainage easement dimensions are provided in accordance with Section 3.8.5 of QUDM.	No example provided.
Additional criteria for development for a Park(57)	
PO59 Development for a Park(57) ensures that the design and layout responds to the nature of the overland flow affecting the premises such that: a. public benefit and enjoyment is maximised;	**E59** Development for a Park(57) ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated Design.

b. impacts on the asset life and integrity of park structures is minimised; c. maintenance and replacement costs are minimised.	
Riparian and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the following assessment criteria apply) Note - - W1, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.	
PO60 Lots are designed to: a. minimise the extent of encroachment into the riparian and wetland setback; b. ensure the protection of wildlife corridors and connectivity; c. reduce the impact on fauna habitats; d. minimise edge effects; e. ensure an appropriate extent of public access to waterways and wetlands.	**E60** Reconfiguring a lot ensures that: a. no new lots are created within a riparian and wetland setback; b. new public roads are located between the riparian and wetland setback and the proposed new lots. Note - Riparian and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.

Table 9.4.1.6.1.3 - Lot Types

Lot Type	A	B	C	D	E	F
Primary Frontage *(metres)*	7.5	>7.5 - 10	>10 - 12.5	>12.5 - 18	>18 - 32	32+
Lot Depth *(metres)*	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35
Built to Boundary	*Mandatory built to boundary both sides.*	*Mandatory built to boundary one side.*	*Mandatory built to boundary one side.*			

9.4.1.6.2 Suburban neighbourhood precinct

9.4.1.6.2.1 Purpose - General residential zone - Suburban neighbourhood precinct

1. The purpose of this part of the Reconfiguring a lot code is to facilitate and manage the outcomes of development for reconfiguring a lot and its associated Operational Works in the General residential zone - Suburban neighbourhood precinct, to achieve the Overall Outcomes.
2. The purpose of this part of the code will be achieved through the overall outcomes as identified in Part 9.4.1 - Reconfiguring a lot code and the following additional General residential zone - Suburban neighbourhood precinct specific overall outcomes:

a. Reconfiguring a lot maintains the low density character of the Suburban neighbourhood precinct by not exceeding a net residential density of 11 lots per hectare unless the resultant lots are consistent with the density and character of the surrounding established neighbourhood.

b. Reconfiguring a lot achieves neighbourhoods that are designed to provide well-connected, safe and convenient movement and open space networks through interconnected streets and active transport linkages that provide high levels of accessibility between residences, open space areas and places of activity.

c. Reconfiguring a lot avoids areas subject to constraint, limitation, or environmental values. Where reconfiguring a lot cannot avoid these identified areas, it responds by:

   i. adopting a 'least risk, least impact' approach when designing, siting and locating development to minimise the potential risk to people, property and the environment;
   ii. ensuring no further instability, erosion or degradation of the land, water or soil resource;
   iii. maintaining environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of environmental offsets, landscaping and facilitating safe wildlife movement through the environment;
   iv. protecting native species and protecting and enhancing native species habitat;
   v. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
   vi. establishing effective separation distances, buffers and mitigation measures associated with major infrastructure to minimise adverse effects on sensitive land uses from noise, dust and other nuisance generating activities;
   vii. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of major infrastructure;
   viii. Ensuring effective and efficient disaster management response and recovery capabilities.

d. The Reconfiguring a lot, Operational works associated with the Reconfiguring a lot, and uses expected to occur as a result of the Reconfiguring a lot:

   i. responds to the risk presented by overland flow and minimises risk to personal safety;
   ii. is resilient to overland flow impacts by ensuring the siting and design accounts for the potential risks to property associated with overland flow;
   iii. does not impact on the conveyance of overland flow up to and including the Overland Flow Defined Flood Event;
   iv. directly, indirectly and cumulatively avoids an increase in the severity of overland flow and potential for damage on the premises or to a surrounding property.

e. Subdivision achieves the intent and purpose of the Suburban neighbourhood precinct outcomes as identified in Part 6.

9.4.1.6.2.2 Requirements for assessment

To determine if boundary realignment is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part K, Table 9.4.1.6.2.1 Where the development does not meet a requirement for accepted development (RAD) within Part K Table 9.4.6.2.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is

against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO26
RAD2	PO27
RAD2	PO28
RAD2	PO48-PO80
RAD2	PO52-PO53
RAD2	PO46

Part K - Requirements for accepted development - General residential zone - Suburban neighbourhood precinct

Table 9.4.1.6.2.1 Requirements for accepted development - General residential zone - Suburban neighbourhood precinct

Requirements for accepted development	
General requirements	
Boundary realignment	
RAD1	Lots created by boundary realignment: a. contain all service connections to water, sewer, electricity and other infrastructure wholly within the lot they serve; b. have constructed road access; c. do not require additional infrastructure connections or modification to existing connections. d. do not result in the creation of any additional lots;
RAD2	Boundary realignment does not result in existing land uses on-site becoming non-complying with planning scheme criteria. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. minimum or maximum required setbacks c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises are approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval. ii. Where a commercial use contains an ancillary office, the office cannot be separately titled as it is considered part of the commercial or use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.

<table>
<tr><td>RAD3</td><td>Lots comply with the following minimum lot sizes and dimensions:
<table>
<tr><th>Zone (Precinct)</th><th>Area</th><th>Primary Frontage</th><th>Depth</th></tr>
<tr><td>General residential - Suburban neighbourhood precinct</td><td>600m^2</td><td>12.5 m</td><td>25 m</td></tr>
</table>
Editor's note - Lots containing built to boundary walls should also include an appropriate easement to facilitate the maintenance of any wall within 600mm of a boundary. For boundaries with built to boundary walls on adjacent lots a 'High Density Development Easement' is recommended; or for all other built to boundary walls and 'easement for maintenance purposes' is recommended.</td></tr>
<tr><td>RAD4</td><td>Boundary realignment does not result in the creation of additional building development opportunity within an area subject to an overlay map.</td></tr>
<tr><td>RAD5</td><td>No new boundaries are located within 2m of High Value Areas as identified in Overlay map - Environmental areas.</td></tr>
<tr><td>RAD6</td><td>Boundary realignment does not result in the clearing of any Habitat trees.</td></tr>
</table>

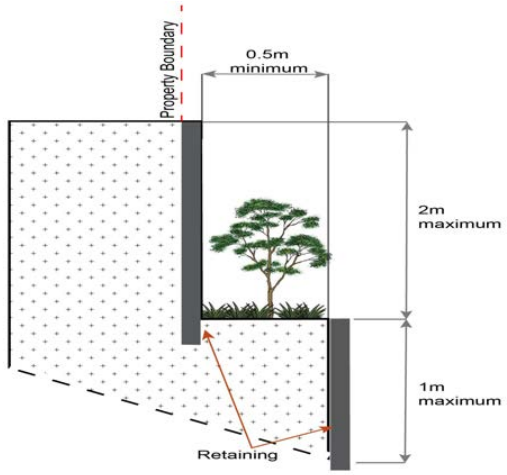
Part L - Criteria for assessable development - General residential zone - Suburban neighbourhood precinct

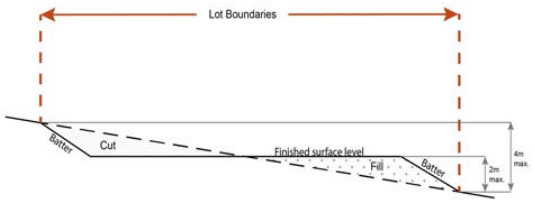
Where development is categorised as assessable development - code assessment in the Table of Assessment, the assessment benchmarks are the criteria set out in Part L, Table 9.4.1.6.2.2 as well as the purpose statement and overall outcomes of this code.

Where development is categorised as assessable development - impact assessable, the assessment benchmarks become the whole of the planning scheme.

Table 9.4.1.6.2.2 Assessable development - General residential zone - Suburban neighbourhood precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes
Density	
PO1 Reconfiguring a lot does not exceed a net residential density of 11 lots per hectare unless the resultant lot/s are consistent with the low density and established character of the surrounding neighbourhood.	**E1** Lots have a minimum site area of 600m^2 and a minimum primary frontage of 12.5m.
Lot design, mix and location	
PO2 Lots have an area, shape and dimension sufficient to ensure they can accommodate: a. a Dwelling house**(22)** including all domestic outbuildings and possible on site servicing requirements b. areas for car parking, access and manoeuvring; c. areas for private open space.	No example provided.
PO3	No example provided.

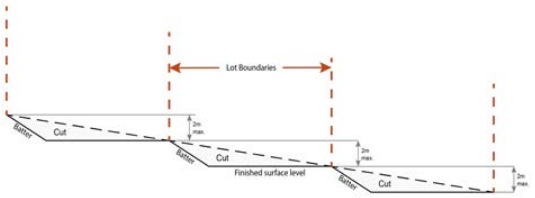
Reconfiguring a lot does not create the opportunity for medium and high density development through the provision of lots with frontages of less than 10m.	
Sloping land	
PO4 Lot layout and design avoids the impacts of cutting, filling and retaining walls on the visual and physical amenity of the streetscape, each lot created and of adjoining lots ensuring, but not limited to, the following: a. The likely location of private open space associated with a Dwelling House on each lot will not be dominated by, or encroached into by built form outcomes such as walls or fences; b. Walls and/or fences are kept to a human scale and do not represent barriers to local environmental outcomes and conditions such as good solar access and access to prevailing breezes; and c. The potential for overlooking from public land into private lots is avoided wherever possible; and d. Lot design is integrated with the opportunities available for Dwelling House design to reduce impacts. Note - Refer to Planning scheme policy - Residential design for guidelines on building design on sloped land.	**E4.1** Lot layout and design ensures that a lot has a maximum average slope of 1:15 along its long axis and 1:10 along its short axis. **E4.2** Retaining walls and benching and associated cutting, filling and other earthworks associated with reconfiguring a lot are limited to: a. a maximum vertical dimension of 1.5m from natural ground for any single retaining structure; or b. where incorporating a retaining structure greater than 1.5m in height, the retaining wall is stepped, terraced and landscaped as follows: i. maximum 1m vertical, minimum 0.5m horizontal, maximum 2m vertical (refer figure below); ii. Maximum overall structure height of 3m; or  c. where incorporating benching along the short axis (from side to side boundary) of a lot: i. The difference between levels at each boundary is no greater than 4m per lot; ii. each bench has a maximum height of 2m (refer Figure below); or



d. Where incorporating benching along the long axis (from front to rear boundary):

   i. each bench has a maximum height of 2m;

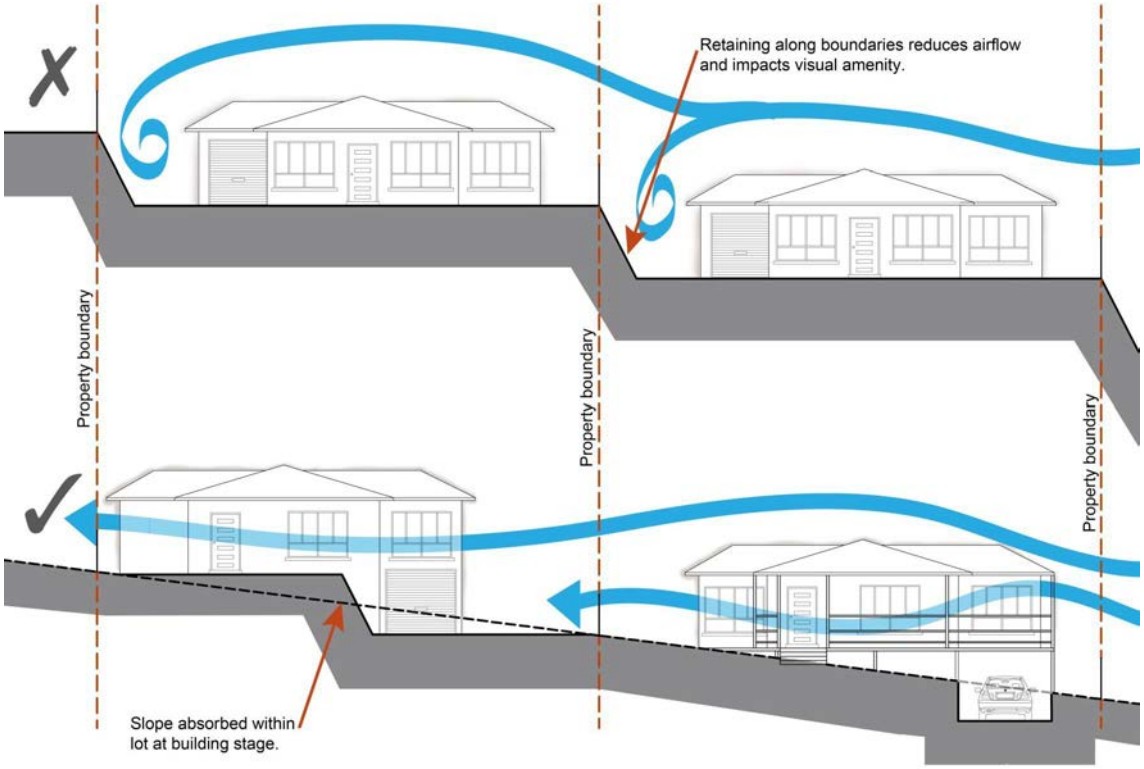
   ii. lots orientate up/down the slope (refer Figure below).



Note - Benching is to incorporate suitable measures to ensure stabilisation and prevent erosion.

Editor's note - Strict cut and fill requirements apply at the Dwelling house(22) stage. Deferral of slope solutions until building stage is not an acceptable outcome.

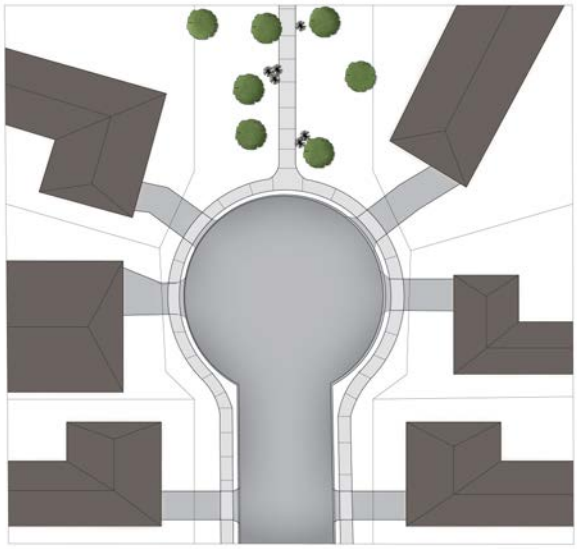
Figure - Sloped lot design



PO5 Lots are of a sufficient grade to accommodate effective stormwater drainage to a lawful point of discharge.	**E5** The surface level of a lot is at a minimum grade of 1:100 and slopes towards the street frontage, or other lawful point of discharge.
Rear lots	
PO6 Rear lots: a. contribute to the mix of lot sizes; b. are limited to 1 behind any full frontage lot (i.e. A lot with a street frontage that is not an access handle); c. Provide sufficient area for vehicles to manoeuvre on-site allowing entry and exit to the rear lot in forward gear.	No example provided.
PO7 Access handles for rear lots are:	No example provided.

a. a minimum of 5m wide to allow for safe vehicle access and service corridors from the rear lot to the street; b. are located on 1 side of the full frontage lot; c. limited to no more than 2 directly adjoining each other.	
Street design and layout	
PO8 Street layouts facilitate regular and consistent shaped lots through the use of rectilinear grid patterns, or modified grid patterns where constrained by topographical and other physical barriers. Note - Refer to Planning scheme policy Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO9 Street layouts provide an efficient and legible movement network with high levels of connectivity within and external to the site by; a. facilitating increased active transport with a focus on safety and amenity for pedestrians and cyclists; b. providing street blocks with a maximum walkable perimeter of 600m; c. providing a variety of street block sizes; d. reducing street block sizes as they approach an activity focus. (e.g. centre, neighbourhood hub, community activity, public open space); e. facilitating possible future connections to adjoining sites for roads, green linkages and other essential infrastructure. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO10 Street layouts create convenient and highly permeable movement networks between lower and higher order roads, whilst not adversely affecting the safety and function of the higher order road.	No example provided.
PO11 Streets are designed and constructed to cater for:	No example provided.

a. safe and convenient pedestrian and cycle movement; b. on street parking adequate to meet the needs of future residents; c. efficient public transport routes; d. expected traffic speeds and volumes; e. utilities and stormwater drainage; f. lot access, sight lines and public safety; g. emergency access and waste collection; h. waste service vehicles; i. required street trees, landscaping and street furniture. Note - Refer to Planning scheme policy - Integrated design for determining design criteria to achieve this outcome.	
PO12 Intersections are designed and constructed to provide for the safe and efficient movement of pedestrians, cyclists, and all forms of light and heavy vehicles. Note - Refer to Planning scheme policy - Integrated design for guidance on how to achieve compliance with this outcome.	No example provided.
PO13 Cul-de-sacs or dead end streets are not proposed unless: a. topography or other physical barriers exist to the continuance of the street network or vehicle connection to an existing road is not permitted; b. there are no appropriate alternative solutions; c. the cul-de-sac or dead end street will facilitate future connections to adjoining land or development. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO14 Where cul-de-sacs are proposed: a. head must be visible from the entry point;	No example provided.

b. are to be no longer than 50 metres in length; c. emergency access can be achieved under circumstances where entry via the carriageway may be compromised.	
PO15 Where cul-de-sacs are proposed due to vehicluar connection to existing roads not being permitted, they are to be designed to allow a 10m wide pedestrian connection through to the existing road with no lots proposed at the head of the cul-de-sac generally as shown in the figure below. **Example Cul-de-sac design**  Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve this outcome.	No example provided.
PO16 Streets are designed and oriented to minimise the impact of cut and fill on the amenity of the streetscape and adjoining development.	**E16** Street alignment follows ridges or gullies or runs perpendicular to slope.
PO17 Streets are oriented to encourage active transport through a climate responsive and comfortable walking environment whilst also facilitating lots that support subtropical design practices, including:	**E17.1** Where not unduly constrained by topography or other physical barrier, streets are primarily oriented within 20 or 30 degrees of North-South or East-West in accordance with Figure - Preferred street orientation below.

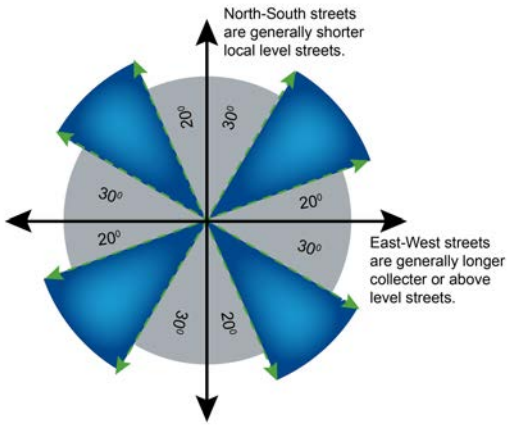
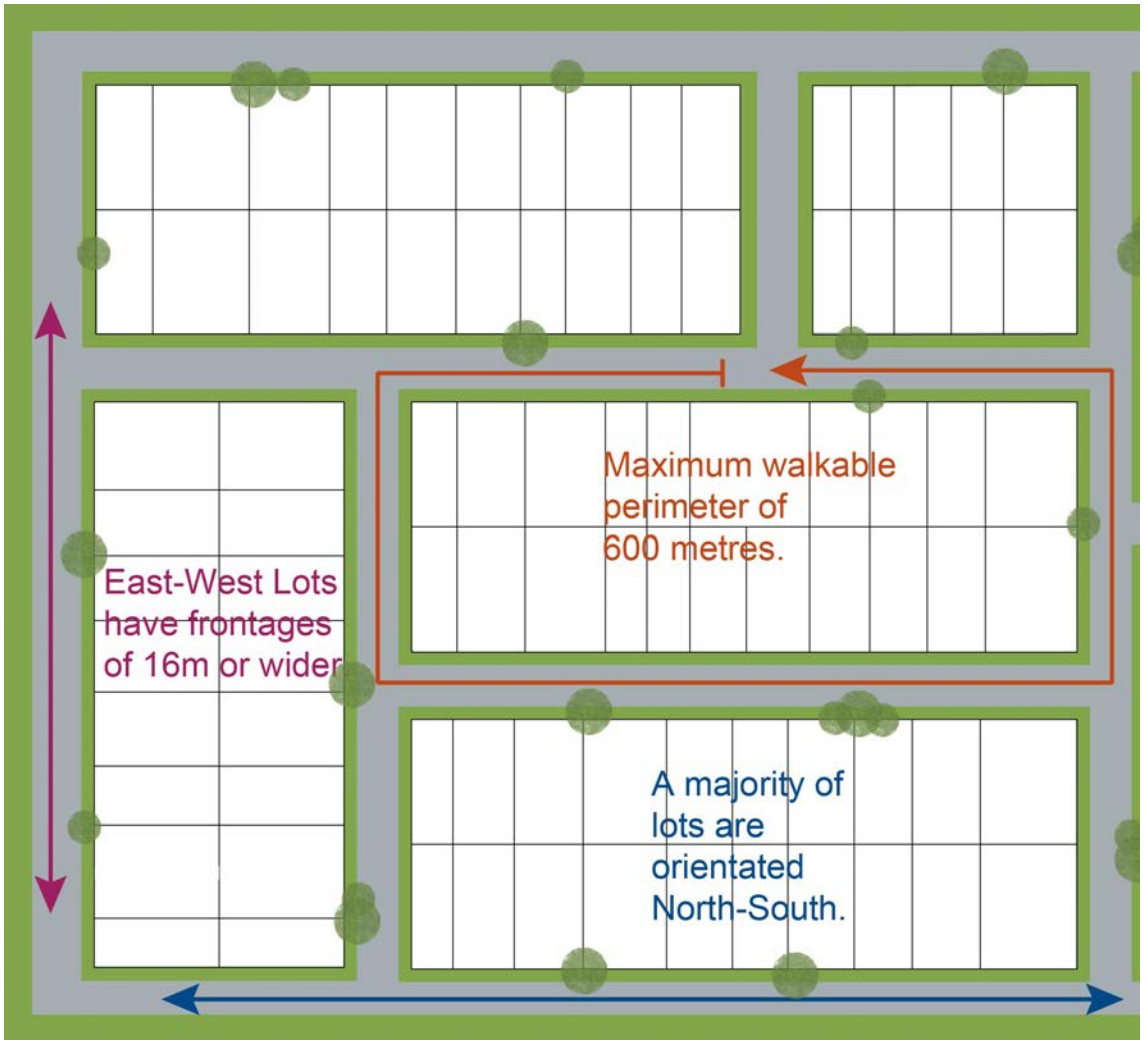
a. controlled solar access & shade provision; b. cross-ventilation Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve subtropical design solutions.	**Figure - Preferred street orientation**  **E17.2** The long axis of a street block is oriented east-west to facilitate a north-south orientation for a majority of lots as per Figure - Street block design below. **E17.3** Where lots are oriented east west, they are to have a frontage of 16 metres or wider so as to allow for alternative dwelling design to achieve solar access and cross-ventilation as per Figure - Street block design below.

Figure - Street block design



Movement network	
PO18 The street network creates convenient access to arterial and sub-arterial roads for heavy vehicles and commercial traffic without introducing through traffic to residential streets.	No example provided.
PO19 The road network has sufficient reserve and pavement widths to cater for the current and intended function of the road in accordance with the road type in accordance with Planning scheme policy - Integrated design.	No example provided.
PO20 Movement networks encourage walking and cycling and a safe environment for pedestrians and cyclists.	**E20** Pedestrian paths, bikeways and on-road bicycle facilities are provided for the street type in accordance with Planning scheme policy - Integrated design.

PO21 Upgrade works (whether trunk or non-trunk) are provided where necessary to: a. ensure the type or volume of traffic generated by the development does not have a negative impact on the external road network; b. ensure the orderly and efficient continuation of the active transport network; c. ensure the site frontage is constructed to a suitable urban standard generally in accordance with Planning scheme policy - Integrated design. Note - An Integrated Transport Assessment (ITA) may be required to demonstrate compliance with this performance outcome refer to Planning scheme policy - Integrated transport assessment for guidance on when an ITA is required. An ITA should be prepared in accordance with Planning scheme policy - Integrated transport assessment. Note - The road network is mapped on Overlay map - Road hierarchy. Note - The primary and secondary active transport network is mapped on Overlay map - Active transport. Note - To demonstrate compliance with c. of this performance outcome, site frontage works where in existing road reserve (non-trunk) are to be designed and constructed as follows: i. Where the street is partially established to an urban standard, match the alignment of existing kerb and channel and provide carriageway widening and underground drainage where required; or ii. Where the street is not established to an urban standard, prepare a design that demonstrates how the relevant features of the particular road as shown in the Planning scheme policy - Integrated Design can be achieved in the existing reserve. Note - Refer to Planning scheme policy - Integrated design for road network and active transport network design standards.	No example provided.
Park(57) and open space	
PO22 A hierarchy of Parks(57) and open space is provided to meet the recreational needs of the community. Note - To determine the extent of Park(57) and open space required refer to Planning scheme policy - Integrated design. Note - District level Parks(57) or larger may be required in certain locations in accordance with Part 4: Local Government Infrastructure Plan.	No example provided.
PO23	No example provided.

Park[57] is to be provided within walking distance of all new residential lots. Note - To determine maximum walking distances for Park [57]types refer to Planning scheme policy - Integrated design.	
PO24 Park[57] is of a size and design standard to meet the needs of the expected users. Note - To determine the size and design standards for Parks[57] refer to Planning scheme policy - Integrated design.	No example provided.
PO25 Parks[57] are designed and located to be safe and useable for all members of the community with high levels of surveillance, based on Crime Prevention Through Environmental Design (CPTED) principles, and access.	**E25.1** Local and district Parks[57] are bordered by streets and lots orientated to address and front onto Parks and not lots backing onto or not addressing the Park.
	E25.2 Where lots do adjoin local and district Parks[57], and fencing is provided along the Park[57] boundary, it is located within the lot and at a maximum height of 1m.
	E25.3 The design of fencing and retaining features allows for safe and direct pedestrian access between the Park[57] and private allotments through the use of gates and limited retaining features along Park[57] boundaries.
Boundary realignment	
PO26 Boundary alignments ensure that infrastructure and services are wholly contained within the lot they serve.	No example provided.
PO27 Boundary realignment does not result in: a. existing land uses on-site becoming non-complying with planning scheme criteria; b. lots being unserviced by infrastructure; Note - Examples of a. above may include but are not limited to: a. minimum lot size requirements; b. setbacks c. parking and access requirements;	No example provided.

d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises is approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval. ii. Where a commercial or industrial land use contains an ancillary office(53), the office(53) cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.	
PO28 Boundary realignment results in lots which have appropriate size, dimensions and access to cater for uses consistent with the precinct. Note - Refer to overall outcomes for the General residential zone - Suburban neighbourhood precinct for uses consistent in this precinct.	**E28** Lot sizes and dimensions comply (excluding any access handles) with Lot Types D, E or F in accordance with Table 9.4.1.6.2.3: Lot Types.
Reconfiguring existing development by Community Title	
PO29 Reconfiguring a lot which creates or amends a community title scheme as described in the *Body Corporate and Community Management Act 1997* is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note -Examples of land uses becoming unlawful include, but are not limited to the following: a. Land on which a Dual occupancy(21) has been established is reconfigured in a way that results in both dwellings no longer being on the one lot. The reconfiguring has the effect of transforming the development from a Dual occupancy(21) to two separate Dwelling(22) houses, at least one of which does not satisfy the requirements for accepted development applying to Dwelling houses. b. Land on which a Multiple dwelling(49) has been established is reconfigured in a way that precludes lawful access to required communal facilities by either incorporating some of those facilities into private lots or otherwise obstructing the	No example provided.

normal access routes to those facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval. Editor's note - To satisfy this performance outcome, the development application may need to be a combined application for reconfiguring a lot and a material change of use or otherwise be supported by details that confirm that the land use still satisfies all relevant land use requirements.	
Reconfiguring by Lease	
PO30 Reconfiguring a lot which divides land or buildings by lease in a way that allows separate occupation or use of those facilities is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note - An example of a land use becoming unlawful is a Multiple dwelling**(49)** over which one or more leases have been created in a way that precludes lawful access to some of the required communal facilities. Some of the communal car parking facilities have been incorporated into lease areas while other leases are located in a way that obstructs the normal access routes to other communal facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval, but they are no longer freely available to all occupants of the Multiple dwelling**(49)**. Editor's note -To satisfy this performance outcome, the development application may need to be supported by details that confirm that the land use still satisfies all relevant land use requirements. Editor's note – Under the definition in Schedule 2 of the Act, the following do not constitute reconfiguring a lot and are not subject to this performance outcome: a. a lease for a term, including renewal options, not exceeding 10 years; and b. an agreement for the exclusive use of part of the common property for a community titles scheme under the *Body Corporate and Community Management Act 1997*.	No example provided.
Volumetric subdivision	
PO31 The reconfiguring of the space above or below the surface of the land ensures appropriate area, dimensions and access arrangements to cater for uses consistent	No example provided.

with the precinct and does not result in existing land uses on-site becoming non-complying with planning scheme criteria. Note - An example may include but are not limited to: a. where a Dwelling house[22] includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house[22] use.	
Reticulated supply	
PO32 Each lot is provided with an appropriate level of service and infrastructure , including water supply, stormwater management, sewage disposal, stormwater drainage, electricity, telecommunications and gas (if available) in a manner that: a. is efficient in delivery of service; b. is effective in delivery of service; c. is conveniently accessible in the event of maintenance or repair; d. minimises whole of life cycle costs for that infrastructure; e. minimises risk of potential adverse impacts on the natural and built environment; f. minimises risk of potential adverse impact on amenity and character values; g. recognises and promotes Councils Total Water Cycle Management policy and the efficient use of water resources.	**E32** Lots are provided with: a. a connection to the reticulated water supply infrastructure network; b. a connection to the sewerage infrastructure network; c. a connection to the reticulated electricity infrastructure network; and d. a physical connection to the telecommunication network, that where available to the land is part of the high speed broadband network.
Stormwater location and design	
PO33 The development is planned and designed considering the land use constraints of the site and incorporates water sensitive urban design principles.	No example provided.
PO34 Stormwater drainage pipes and structures through or within private land are protected by easements in favour of Council with sufficient area for practical access for maintenance. Note - To determine sufficient areas for easements refer to Planning scheme policy - Integrated design.	No example provided.

PO35 Stormwater management facilities are located outside of riparian areas and prevent increased channel bed and bank erosion.	No example provided.
PO36 Natural streams and riparian vegetation are retained and enhanced through revegetation.	No example provided.
PO37 Areas constructed as detention basins are adaptable for passive recreation.	No example provided.
PO38 Development maintains the environmental values of waterway ecosystems.	No example provided.
PO39 Constructed water bodies are not dedicated as public assets.	No example provided.
Stormwater management system	
PO40 The major drainage system has the capacity to safely convey stormwater flows for the defined flood event.	**E40** The roads, drainage pathways, drainage features and waterways safely convey the stormwater flows for the defined flood event without allowing flows to encroach upon private lots.
PO41 Overland flow paths (for any storm event) from roads and public open space areas do not pass through private lots.	**E41** Drainage pathways are provided to accommodate overland flows from roads and public open space areas.
PO42 Where located within the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the greater pollutant removal of: a. 100% reductions in mean annual loads from unmitigated development for total suspended solids, total phosphorus, total nitrogen and gross pollutants >5mm; b. the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Table A and B in Appendix 3 of the SPP.	No example provided.

Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	
PO43 Where located outside the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Tables A and B in Appendix 2 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	No example provided.
PO44 The stormwater management system is designed to: a. protect the environmental values in downstream waterways; b. maintain ground water recharge areas; c. preserve existing natural wetlands and associated vegetation buffers; d. avoid disturbing soils or sediments; e. avoid altering the natural hydrologic regime in acid sulphate soil and nutrient hazardous areas; f. maintain and improve receiving water quality; g. protect natural waterway configuration; h. protect downstream and adjacent properties; i. protect and enhance riparian areas.	No example provided.
PO45 Design and construction of the stormwater management system:	No example provided.

a. utilise methods and materials to minimise the whole of lifecycle costs of the stormwater management system; b. are coordinated with civil and other landscaping works. Note - To determine the standards for stormwater management system construction refer to Planning scheme policy - Integrated design.	
Native vegetation where not located in the Environmental areas overlay	
PO46 Reconfiguring a lot facilitates the retention of native vegetation by: a. incorporating native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; b. ensuring habitat trees are located outside a development footprint. Where habitat trees are to be cleared, replacement fauna nesting boxes are provided at the rate of 1 nest box for every hollow removed. Where hollows have not yet formed in trees > 80cm in diameter at 1.3m height, 3 nest boxes are required for every habitat tree removed. c. providing safe, unimpeded, convenient and ongoing wildlife movement; d. avoiding creating fragmented and isolated patches of native vegetation. e. ensuring that biodiversity quality and integrity of habitats is not adversely impacted upon but are maintained and protected; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies.	No example provided.
Noise	
PO47 Noise attenuation structure (e.g. walls, barriers or fences): a. contribute to safe and usable public spaces, through maintaining high levels of surveillance of parks, streets and roads that serve active transport purposes (e.g. existing or future pedestrian paths or cycle lanes etc); b. maintain the amenity of the streetscape.	**E47** Noise attenuation structures (e.g. walls, barriers or fences): a. are not visible from an adjoining road or public area unless; i. adjoining a motorway or rail line; or ii. adjoining part of an arterial road that does not serve an existing or future active transport purpose (e.g. pedestrian paths or cycle lanes) or where

Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures.	attenuation through building location and materials is not possible. b. do not remove existing or prevent future active transport routes or connections to the street network; c. are located, constructed and landscaped in accordance with Planning scheme policy - Integrated design. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures. Note - Refer to Overlay map – Active transport for future active transport routes.
Values and constraints criteria Note - The relevant values and constraints criteria do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.	
Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following assessment criteria apply) Note - The preparation of a bushfire management plan in accordance with Planning scheme policy – Bushfire prone areas can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO48 Lots are designed to: a. minimise the risk from bushfire hazard to each lot and provide the safest possible siting for buildings and structures; b. limit the possible spread paths of bushfire within the reconfiguring; c. achieve sufficient separation distance between development and hazardous vegetation to minimise the risk to future buildings and structures during bushfire events; d. maintain the required level of functionality for emergency services and uses during and immediately after a natural hazard event.	**E48** Reconfiguring a lot ensures that all new lots are of an appropriate size, shape and layout to allow for the siting of future buildings being located: a. within an appropriate development footprint; b. within the lowest hazard locations on a lot; c. to achieve minimum separation between development or development footprint and any source of bushfire hazard of 20m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; d. to achieve a minimum separation between development or development footprint and any retained vegetation strips or small areas of vegetation of 10m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; e. away from ridgelines and hilltops; f. on land with a slope of less than 15%; g. away from north to west facing slopes.

PO49 Lots provide adequate water supply and infrastructure to support fire-fighting.	**E49** For water supply purposes, reconfiguring a lot ensures that: a. lots have access to a reticulated water supply provided by a distributer retailer for the area; or b. where no reticulated water supply is available, on-site fire fighting water storage containing not less than 10000 litres and located within a development footprint.
PO50 Lots are designed to achieve: a. safe site access by avoiding potential entrapment situations; b. accessibility and manoeuvring for fire-fighting during bushfire.	**E50** Reconfiguring a lot ensures a new lot is provided with: a. direct road access and egress to public roads; b. an alternative access where the private driveway is longer than 100m to reach a public road; c. driveway access to a public road that has a gradient no greater than 12.5%; d. minimum width of 3.5m.
PO51 The road layout and design supports: a. safe and efficient emergency services access to all lots; and manoeuvring within the subdivision; b. availability and maintenance of access routes for the purpose of safe evacuation.	**E51** Reconfiguring a lot provides a road layout which: a. includes a perimeter road that separating the new lots from hazardous vegetation on adjacent lots incorporating by: i. a cleared width of 20m; ii. road gradients not exceeding 12.5%; iii. pavement and surface treatment capable of being used by emergency vehicles; iv. Turning areas for fire fighting appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines. b. Or if the above is not practicable, a fire maintenance trail separates the lots from hazardous vegetation on adjacent lots incorporating: i. a minimum cleared width of 6m and minimum formed width of 4m; ii. gradient not exceeding 12.5%; iii. cross slope not exceeding 10%;

	iv. a formed width and erosion control devices to the standards specified in Planning scheme policy - Integrated design; v. a turning circle or turnaround area at the end of the trail to allow fire fighting vehicles to manoeuvre; vi. passing bays and turning/reversing bays every 200m; vii. an access easement that is granted in favour of the Council and the Queensland Fire and Rescue Service or located on public land. c. excludes cul-de-sacs, except where a perimeter road with a cleared width of 20m isolates the lots from hazardous vegetation on adjacent lots; and d. excludes dead-end roads.
Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria. Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.	
PO52 No new boundaries are located within 2m of High Value Areas.	No example provided
PO53 Lots are designed to: a. minimise the extent of encroachment into the MLES waterway buffer or a MLES wetland buffer; b. ensure quality and integrity of biodiversity and ecological values is not adversely impacted upon but are maintained and protected; c. incorporate native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; d. provide safe, unimpeded, convenient and ongoing wildlife movement; e. avoid creating fragmented and isolated patches of native vegetation;	**E53** Reconfiguring a lot ensures that no additional lots are created within a Value Offset Area.

f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies. AND Where development results in the unavoidable loss of native vegetation within a MLES waterway buffer or a MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.	
Extractive resources transport route buffer (refer Overlay map - Extractive resources to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO54 Lots provide a development footprint outside of the buffer.	No example provided.
PO55 Access to a new lot is not from an identified extractive industry transportation route, but to an alternative public road.	No example provided.
Extractive resources separation area (refer Overlay map - Extractive resources to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO56 Lots provide a development footprint outside of the separation area.	No example provided.
Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO57 Lots do not: a. reduce public access to a heritage place, building, item or object;	No example provided.

b. create the potential to adversely affect views to and from the heritage place, building, item or object; c. obscure or destroy any pattern of historic subdivision, historical context, landscape setting or the scale and consistency of the urban fabric relating to the local heritage place.	
PO58 Reconfiguring a lot retains significant trees and incorporates them into the subdivision design, development layout and provision of infrastructure.	No example provided.
Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
Bulk water supply infrastructure	
PO59 Reconfiguration of lots does not compromise or adversely impact upon the efficiency and integrity of Bulk water supply infrastructure.	No example provided.
PO60 Reconfiguring of lots ensures that access requirements of Bulk water supply infrastructure are maintained.	**E60** Bulk water supply infrastructure traversing or within private land are protected by easement in favour of the service provider for access and maintenance.
PO61 Development within a Bulk water supply infrastructure buffer: a. is located, designed and constructed to protect the integrity of the water supply pipeline; b. maintains adequate access for any required maintenance or upgrading work to the water supply pipeline.	**E61** New lots provide a development footprint outside the Bulk water supply infrastructure buffer.
PO62 Boundary realignments: i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
High voltage electricity line buffer	

PO63 New lots provide a development footprint outside of the buffer.	No example provided.
PO64 The creation of lots does not compromise or adversely impact upon the efficiency and integrity of supply.	**E64** No new lots are created within the buffer area.
PO65 The creation of new lots does not compromise or adversely impact upon access to the supply line for any required maintenance or upgrading work.	**E65** No new lots are created within the buffer area.
PO66 Boundary realignments: i. do not result in the creation of additional building development within the buffer; ii. result in the reduction of building development opportunities within the buffer.	No example provided.
Landfill buffer	
PO67 Lots provide a development footprint outside of the buffer.	No example provided.
PO68 Boundary realignments: i. do not result in the creation of additional building development within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
Wastewater treatment site buffer	
PO69 New lots provide a development footprint outside of the buffer.	No example provided.
PO70 Boundary realignments:	No example provided.

i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	
Landslide hazard (refer Overlay map - Landslide hazard to determine if the following assessment criteria apply) Note -The preparation of a site-specific geotechnical assessment report in accordance with Planning scheme policy – Landslide hazard can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint on will assist in demonstrating compliance with the following performance criteria.	
PO71 Lots ensure that: a. future building location is located in part of a site not subject to landslide risk; b. the need for excessive on-site works, change to finished landform, or excessive vegetation clearance to provide for future development is avoided; c. there is minimal disturbance to natural drainage patterns; and d. earthworks do not: i. involve cut and filling having a height greater than 1.5m; ii. involve any retaining wall having a height greater than 1.5m; iii. involve earthworks exceeding $50m^3$, iv. redirect or alter the existing flows of surface or groundwater.	**E71.1** Lots provides a development footprint free from risk of landslide. **E71.2** Development footprints and driveways for lots does not exceed 15% slope.
Overland flow path (refer Overlay map - Overland flow path to determine if the following assessment criteria apply) Note - The applicable river and creek flood planning levels associated with defined flood event (DFE) within the inundation area can be obtained by requesting a flood check property report from Council.	
PO72 Development: a. minimises the risk to persons from overland flow; b. does not increase the potential for damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure.	No example provided.

PO73 Development: a. maintains the conveyance of overland flow predominantly unimpeded through the premises for any event up to and including the 1% AEP for the fully developed upstream catchment; b. does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow..	**E73** Development ensures that any buildings are not located in an Overland flow path area. Note: A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding property.
PO74 Development does not: a. directly, indirectly or cumulatively cause any increase in overland flow velocity or level; b. increase the potential for flood damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure. Note - Open concrete drains greater than 1m in width are not an acceptable outcome, nor are any other design options that may increase scouring. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	No example provided.
PO75 Development ensures that overland flow is not conveyed from a road or public open space onto a private lot, unless the development is in a Rural zone.	**E75** Development ensures that overland flow paths and drainage infrastructure is provided to convey overland flow from a road or public open space area away from a private lot, unless the development is in the Rural zone.
PO76 Development ensures that Council and inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment flows and are able to be easily maintained. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development	**E76.1** Development ensures that roof and allotment drainage infrastructure is provided in accordance with the following relevant level as identified in QUDM: a. Urban area – Level III; b. Rural area – N/A; c. Industrial area – Level V; d. Commercial area – Level V.

does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	**E76.2** Development ensures that all Council and allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.
PO77 Development protects the conveyance of overland flow such that easements for drainage purposes are provided over: a. a stormwater pipe if the nominal pipe diameter exceeds 300mm; b. an overland flow path where it crosses more than one property; and c. inter-allotment drainage infrastructure. Note - Refer to Planning scheme policy - Integrated design for details and examples. Note - Stormwater drainage easement dimensions are provided in accordance with Section 3.8.5 of QUDM.	No example provided
Additional criteria for development for a Park(57)	
PO78 Development for a Park(57) ensures that the design and layout responds to the nature of the overland flow affecting the premises such that: a. public benefit and enjoyment is maximised; b. impacts on the asset life and integrity of park structures is minimised; c. maintenance and replacement costs are minimised.	**E78** Development for a Park(57) ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated Design.
Riparian and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the following assessment criteria apply) Note - - W1, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.	
PO79 Lots are designed to:	**E79** Reconfiguring a lot ensures that:

a. minimise the extent of encroachment into the riparian and wetland setback; b. ensure the protection of wildlife corridors and connectivity; c. reduce the impact on fauna habitats; d. minimise edge effects; e. ensure an appropriate extent of public access to waterways and wetlands.	a. no new lots are created within a riparian and wetland setback; b. new public roads are located between the riparian and wetland setback and the proposed new lots. Note - Riparian and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.
Scenic amenity (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO80 Lots are sited, designed and oriented to: a. maximise the retention of existing trees and land cover including the preservation of ridgeline vegetation and coastal trees; b. maximise the retention of highly natural and vegetated areas and natural landforms by minimising the use of cut and fill; c. ensure that buildings and structures are not located on a hill top or ridgeline; d. ensure that roads, driveways and accessways go across land contours, and do not cut straight up slopes and follow natural contours, not resulting in batters or retaining walls being greater than 1.5m in height.	No example provided.

9.4.1.6.3 Next generation neighbourhood precinct

9.4.1.6.3.1 Purpose - General residential zone - Next generation neighbourhood precinct

1. The purpose of this part of the Reconfiguring a lot code is to facilitate and manage the outcomes of development for reconfiguring a lot and its associated Operational Works in the General residential zone - Next generation neighbourhood precinct, to achieve the Overall Outcomes.
2. The purpose of this part of the code will be achieved through the overall outcomes as identified in Part 9.4.1 - Reconfiguring a lot code and the following additional General residential zone - Next generation neighbourhood precinct specific overall outcomes:

a. Reconfiguring a lot achieves a variety of lot sizes and net residential density of between 11-25 lots per hectare.

b. Reconfiguring a lot achieves neighbourhoods that are designed to provide well-connected, safe and convenient movement and open space networks through interconnected streets and active transport linkages that provide high levels of accessibility between residences, open space areas and places of activity.

c. Reconfiguring a lot avoids areas subject to constraint, limitation, or environmental values. Where reconfiguring a lot cannot avoid these identified areas, it responds by:

   i. adopting a 'least risk, least impact' approach when designing, siting and locating development to minimise the potential risk to people, property and the environment;
   ii. ensuring no further instability, erosion or degradation of the land, water or soil resource;
   iii. maintaining environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of environmental offsets, landscaping and facilitating safe wildlife movement through the environment;
   iv. protecting native species and protecting and enhancing native species habitat;
   v. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
   vi. establishing effective separation distances, buffers and mitigation measures associated with major infrastructure to minimise adverse effects on sensitive land uses from noise, dust and other nuisance generating activities;
   vii. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of major infrastructure;
   viii. Ensuring effective and efficient disaster management response and recovery capabilities.

d. The Reconfiguring a lot, Operational works associated with the Reconfiguring a lot, and uses expected to occur as a result of the Reconfiguring a lot:

   i. responds to the risk presented by overland flow and minimises risk to personal safety;
   ii. is resilient to overland flow impacts by ensuring the siting and design accounts for the potential risks to property associated with overland flow;
   iii. does not impact on the conveyance of overland flow up to and including the Overland Flow Defined Flood Event;
   iv. directly, indirectly and cumulatively avoids an increase in the severity of overland flow and potential for damage on the premises or to a surrounding property.

e. Reconfiguring a lot achieves the intent and purpose of the Next generation neighbourhood precinct outcomes as identified in Part 6.

9.4.1.6.3.2 Requirement for assessment

To determine if boundary realignment is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part M, Table 9.4.1.6.3.1. Where the development does not meet a requirement for accepted development (RAD) within Part A Table 9.4.1.6.3.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO34
RAD2	PO35
RAD3	PO36
RAD4	PO4
RAD5	PO56-PO88
RAD6	PO60-PO61
RAD7	PO54

Part M - Requirements for accepted development - General residential zone - Next generation neighbourhood precinct

Table 9.4.1.6.3.1 Requirements for accepted development - General residential zone - Next generation neighbourhood precinct

Requirements for accepted development	
General requirements	
Boundary realignment	
RAD1	Lots created by boundary realignment: a. contain all service connections to water, sewer, electricity and other infrastructure wholly within the lot they serve; b. have constructed road access; c. do not require additional infrastructure connections or modification to existing connections. d. do not result in the creation of any additional lots;
RAD2	Boundary realignment does not result in existing land uses on-site becoming non-compliant with planning scheme requirements. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. minimum or maximum required setbacks c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises are approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval. ii. Where a commercial or industrial land use contains an ancillary office(53), the office(53) cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.

<table>
<tr><td>RAD3</td><td>Lots comply with the following minimum lot sizes and dimensions:
<table>
<tr><th>Zone (Precinct)</th><th>Area</th><th>Frontage</th><th>Depth</th></tr>
<tr><td>General Residential - Next generation neighbourhood precinct</td><td>-</td><td>7.5 m</td><td>25 m</td></tr>
</table>
Editor's note - Lots containing built to boundary walls should also include an appropriate easement to facilitate the maintenance of any wall within 600mm of a boundary. For boundaries with built to boundary walls on adjacent lots a 'High Density Development Easement' is recommended; or for all other built to boundary walls a 'easement for maintenance purposes' is recommended.</td></tr>
<tr><td>RAD4</td><td>Boundary realignment in the precinct does not result in more than 4 adjoining lots of the same lot type, as defined in 'Table 9.4.1.6.3.3 - Lot Types' - Lot Types.</td></tr>
<tr><td>RAD5</td><td>Boundary realignment does not result in the creation of additional building development opportunity within an area subject to an overlay map.</td></tr>
<tr><td>RAD6</td><td>No new boundaries are located within 2m of High Value Areas as identified in Overlay map - Environmental areas.</td></tr>
<tr><td>RAD7</td><td>Boundary realignment does not result in the clearing of any Habitat trees.</td></tr>
</table>

Part N - Criteria for assessable development - General residential zone - Next generation neighbourhood precinct

Where development is categorised as assessable development - code assessment in the Table of Assessment, the assessment benchmarks are the criteria set out in Part B, Table 9.4.1.6.3.2 as well as the purpose statement and overall outcomes of this code.

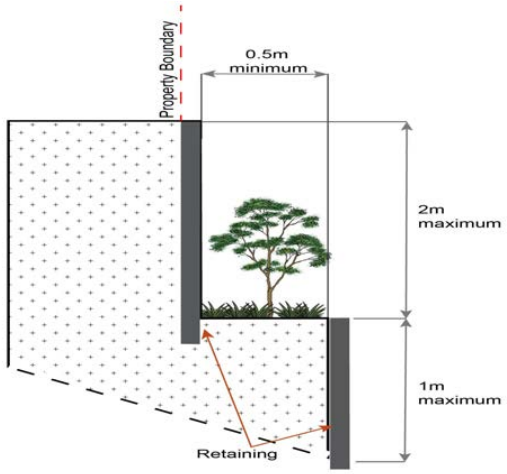
Where development is categorised as assessable development - impact assessable, the assessment benchmarks become the whole of the planning scheme.

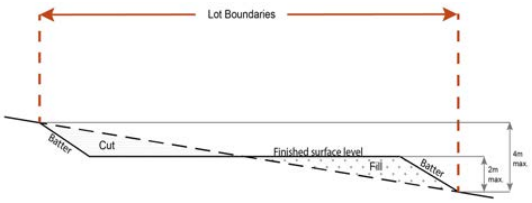
Table 9.4.1.6.3.2 Assessable development - General residential zone - Next generation neighbourhood precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes
Density	
PO1 Reconfiguring of a lot achieves a minimum net residential density of 11 lots per hectare, whilst not exceeding 25 lots per hectare, maintaining a diverse medium density neighbourhood character.	No example provided.
Lot design, mix and location	
PO2 Lots have an area, shape and dimension sufficient to ensure they can accommodate: a. a Dwelling house including all domestic outbuildings and possible on site servicing requirements (e.g. on-site waste disposal);	**E2** Lot sizes and dimensions (excluding any access handles) comply with Lot Types A, B, C, D, E or F in accordance with 'Table 9.4.1.6.3.3 - Lot Types' - Lot Types. Note - For the purpose of rear lots, frontage is the average width of the lot (excluding any access handle or easement)

b. areas for car parking, vehicular access and manoeuvring; c. areas for useable and practical private open space.	
PO3 Reconfiguring a lot provides for a variety of housing options, by way of a mix of lot sizes and dimensions consistent with the medium density character of the precinct, whilst facilitating delivery of diversity within the streetscape.	**E3.1** For reconfiguring a lot which creates in excess of 5 new lots, a mix of lot types in accordance with 'Table 9.4.1.6.3.3 - Lot Types' are to be incorporated into the development as follows: • 5 - 10 lots - 2 lot types • 11 - 20 lots - 3 lot types • 21 - 50 lots - 4 lot types (must include lot type A) • >50 lots - 5 lot types (must include lot type A) Editor's note - Lots containing built to boundary walls should also include an appropriate easement to facilitate the maintenance of any wall within 600mm of a boundary. For boundaries with built to boundary walls on adjacent lots a 'High Density Development Easement' is recommended; or for all other built to boundary walls a 'easement for maintenance purposes' is recommended.
	E3.2 For reconfiguring a lot which creates in excess of 20 new lots, the following minimum percentages of lot types in accordance with 'Table 9.4.1.6.3.3 - Lot Types' apply: • Lot Type A - 10% of new lots and Lot Type F - 5% of new lots; or • Lot Type A - 15% of new lots and Lot Type F - 2% of new lots; or • Lot Type A - 15% of new lots and Lot Type B - 15% of new lots. Editor's note - Lots containing built to boundary walls should also include an appropriate easement to facilitate the maintenance of any wall within 600mm of a boundary. For boundaries with built to boundary walls on adjacent lots a 'High Density Development Easement' is recommended; or for all other built to boundary walls and 'easement for maintenance purposes' is recommended.
PO4 A range of different lots are distributed throughout the development with no one lot type concentrated within a single location, to create diversity within the streetscape and minimise conflicts between vehicle access and on street parking.	**E4.1** Where not accessed via a laneway, a maximum of 4 adjoining lots of the same type in accordance with 'Table 9.4.1.6.3.3 - Lot Types' are proposed where fronting the same street.

Note - Built to boundary walls and driveway locations for lots with frontages of 12.5 metres or less are to be shown on a plan of development in accordance with the requirements of section 9.3.1 - Dwelling house code.	**E4.2** Where accessed via a laneway, a maximum of 8 adjoining lots of the same type in accordance with 'Table 9.4.1.6.3.3 - Lot Types' are proposed where fronting the same street.
PO5 Lots that facilitate medium to high density residential uses (freehold or community titles) are located in proximity to recreational opportunities, commercial and community facilities and public transport nodes.	**E5.1** Lots with frontages of 7.5 metres or less are located within 200 metres of: • a park; or • a public transport stop or station; or • a higher order centre, district centre, local centre or neighbourhood hub (refer Overlay map - Community activities and neighbourhood hubs).
	E5.2 Lots with frontages of 32 metres or greater are predominately located on corner lots or lots with dual road frontages, and within 200 metres of: • a park; or • a public transport stop or station; or • a higher order centre, district centre, local centre or neighbourhood hub (refer Overlay map - Community activities and neighbourhood hubs).
PO6 Narrow lots do not adversely affect the character and amenity of the precinct. Residential uses establish in a manner which facilitates an integrated streetscape, maximises the efficient use of land and achieves a safe and efficient street network. Note - Built to boundary walls and driveway locations for lots with frontages of 12.5 metres or less are to be shown on a plan of development in accordance with the requirements of section 9.3.1 - Dwelling house code	No example provided.
PO7 Group construction and integrated streetscape solutions are encouraged through the location and grouping of lots suitable for terrace and row housing.	**E7.1** Any lot sharing a boundary with a Lot Type A must contain a mandatory built to boundary wall on the shared boundary. Note - Built to boundary walls for lots with frontages of 12.5 metres or less are to be shown on a plan of development in accordance with the requirements of section 9.3.1 - Dwelling house code
	E7.2

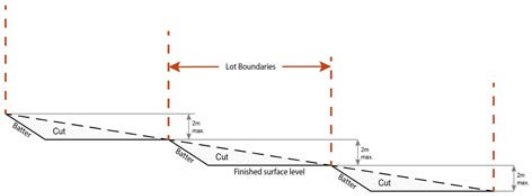
	Driveway crossovers for lots with frontages of less than 10m are paired up to facilitate on-street parking. Note - Driveway locations for lots with frontages of 8.5 metres or less are to be shown on a plan of development in accordance with Planning Scheme Policy - Residential Design.
Sloping land	
PO8 Lot layout and design avoids the impacts of cutting, filling and retaining walls on the visual and physical amenity of the streetscape, each lot created and of adjoining lots ensuring, but not limited to, the following: a. The likely location of private open space associated with a Dwelling House on each lot will not be dominated by, or encroached into by built form outcomes such as walls or fences; b. Walls and/or fences are kept to a human scale and do not represent barriers to local environmental outcomes and conditions such as good solar access and access to prevailing breezes; and c. The potential for overlooking from public land into private lots is avoided wherever possible; and d. Lot design is integrated with the opportunities available for Dwelling House design to reduce impacts. Note - Refer to Planning scheme policy - Residential design for guidelines on building design on sloped land.	**E8.1** Lot layout and design ensures that a lot has a maximum average slope of 1:15 along its long axis and 1:10 along its short axis. **E8.2** Retaining walls and benching and associated cutting, filling and other earthworks associated with reconfiguring a lot are limited to: a. a maximum vertical dimension of 1.5m from natural ground for any single retaining structure; or b. where incorporating a retaining structure greater than 1.5m in height, the retaining wall is stepped, terraced and landscaped as follows: i. maximum 1m vertical, minimum 0.5m horizontal, maximum 2m vertical (refer figure below); ii. Maximum overall structure height of 3m; or  c. where incorporating benching along the short axis (from side to side boundary) of a lot: i. The difference between levels at each boundary is no greater than 4m per lot ii. each bench has a maximum height of 2m (refer Figure below); or



d. Where incorporating benching along the long axis (from front to rear boundary):

   i. each bench has a maximum height of 2m;

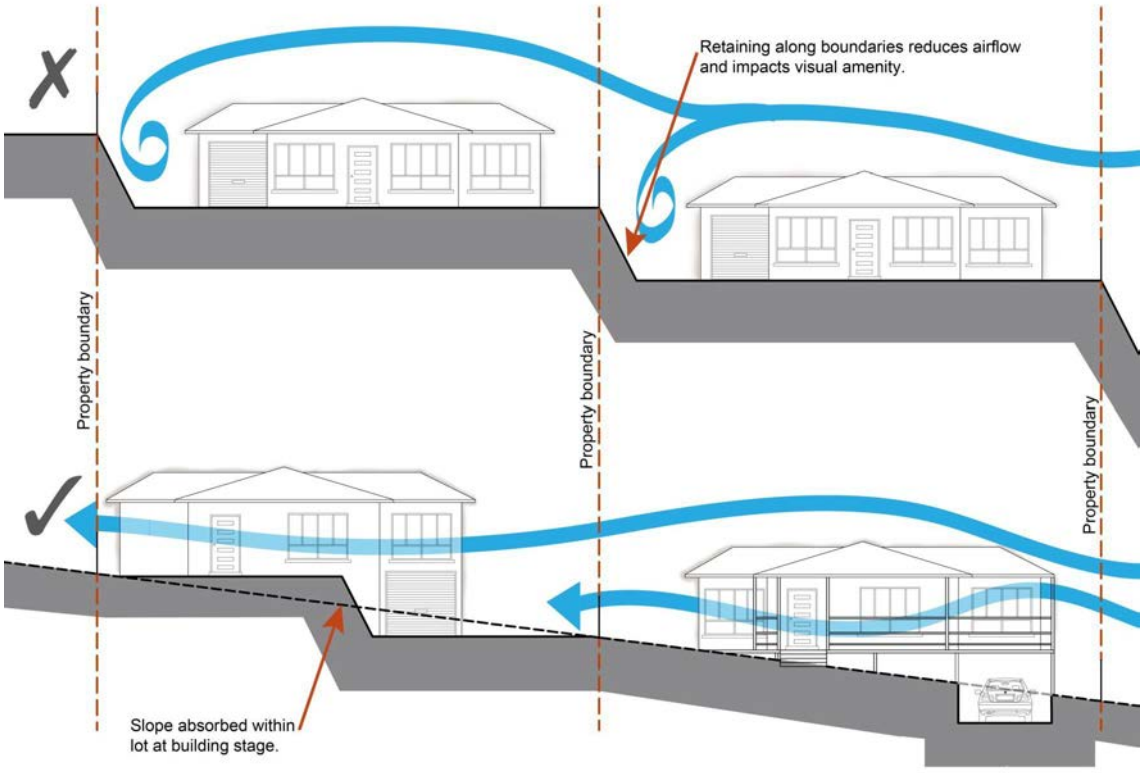
   ii. lots orientate up/down the slope.



Note - Benching is to incorporate suitable measures to ensure stabilisation and prevent erosion.

Editor's note - Strict cut and fill requirements apply at the Dwelling house[(22)] stage. Deferral of slope solutions until building stage is not an acceptable outcome.

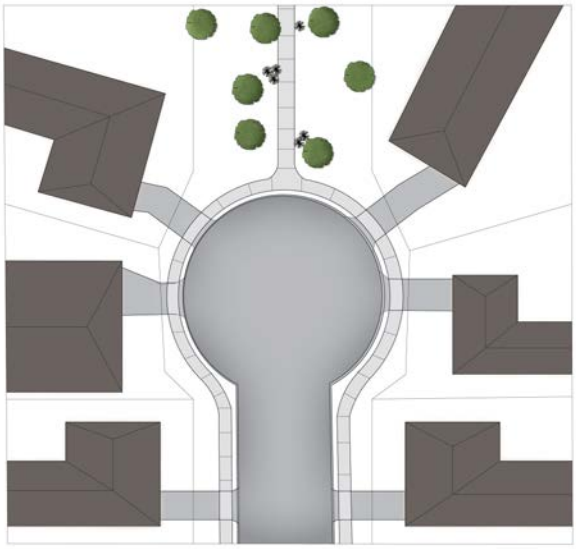
Figure - Sloped lot design



PO9 Lots are of a sufficient grade to accommodate effective stormwater drainage to a lawful point of discharge.	**E9** The surface level of a lot is at a minimum grade of 1:100 and slopes towards the street frontage, or other lawful point of discharge.
Rear lots	
PO10 Rear lots: a. contribute to the mix of lot sizes; b. are limited to 1 behind any full frontage lot (i.e. A lot with a street frontage that is not an access handle); c. Provide sufficient area for vehicles to manoeuvre on-site allowing entry and exit to the rear lot in forward gear	No example provided.
PO11 Access handles for rear lots are: a. a minimum of 5m wide to allow for safe vehicle access and service corridors from the rear lot to the street; b. are located on 1 side of the full frontage lot; c. limited to no more than 2 directly adjoining each other.	No example provided.
Street design and layout	
PO12 Street layouts facilitate regular and consistent shaped lots through the use of rectilinear grid patterns, or modified grid patterns where constrained by topographical and other physical barriers. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO13 Street layouts are designed to connect to surrounding neighbourhoods by providing an interconnected street, pedestrian and cyclist networks that connects nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space to residential areas for access and emergency management purposes. The layout ensures that new development is provided with multiple points of access. The timing	**E13.1** Development provides and maintains the connections shown on: a. 'Figure 1 - Dakabin' - Dakabin; b. 'Figure 2 - Griffin' - Griffin; c. 'Figure 3 - Mango Hill East' - Mango Hill East;

of transport works ensures that multiple points of access are provided during early stages of a development. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on when alternative access points should be provided for emergency management purposes.	d. 'Figure 4 - Murrumba Downs' - Murrumba Downs; e. 'Figure 5 - Narangba east' - Narangba East; f. 'Figure 6 - Rothwell' - Rothwell.
	E13.2 All other areas, no example provided. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on when alternative access points should be provided for emergency management purposes.
PO14 Street layouts provide an efficient and legible movement network with high levels of connectivity within and external to the site by: a. facilitating increased active transport with a focus on safety and amenity for pedestrians and cyclists; b. providing street blocks with a maximum walkable perimeter of 500m (refer Figure - Street block design); c. providing a variety of street block sizes; d. reducing street block sizes as they approach an activity focus (e.g. centre, neighbourhood hub, community activity, public open space); e. facilitating possible future connections to adjoining sites for roads, green linkages and other essential infrastructure. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO15 Street layouts create convenient and highly permeable movement networks between lower and higher order roads, whilst not adversely affecting the safety and function of the higher order road. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO16 Streets are designed and constructed to cater for:	No example provided.

a. safe and convenient pedestrian and cycle movement; b. on street parking adequate to meet the needs of future residents; c. efficient public transport routes; d. expected traffic speeds and volumes; e. utilities and stormwater drainage; f. lot access, sight lines and public safety; g. emergency access and waste collection; h. waste service vehicles; i. required street trees, landscaping and street furniture. Note - Refer to Planning scheme policy - Integrated design for determining design criteria to achieve this outcome.	
PO17 Intersections are designed and constructed to provide for the safe and efficient movement of pedestrians, cyclists, and all forms of light and heavy vehicles. Note - Refer to Planning scheme policy - Integrated design for guidance on how to achieve compliance with this outcome.	No example provided.
PO18 Cul-de-sac or dead end streets are not proposed unless: a. topography or other physical barriers exist to the continuance of the street network or vehicle connection to an existing road is not permitted; b. there are no appropriate alternative solutions; c. the cul-de-sac or dead end street will facilitate future connections to adjoining land or development. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO19 Where cul-de-sacs are proposed: a. head must be visible from the entry point;	No example provided.

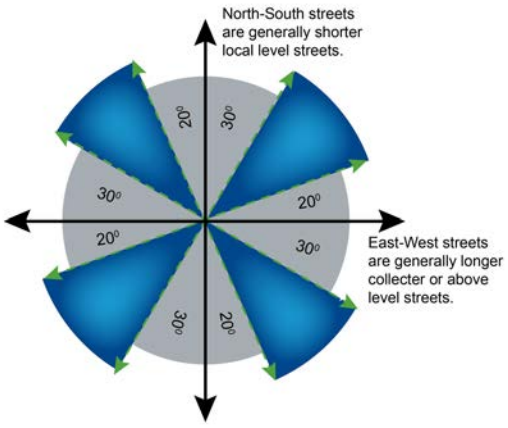
b. are to be no longer than 50 metres in length; c. emergency access can be achieved under circumstances where entry via the carriageway may be compromised.	
PO20 Where cul-de-sacs are proposed due to connection to existing roads not being permitted, they are to be designed to allow a 10m wide pedestrian connection as public land through to the existing road with no lots proposed at the head of the cul-de-sac generally as shown in the figure below. **Example Cul-de-sac design**  Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve this outcome.	No example provided.
PO21 Streets are designed and oriented to minimise the impact of cut and fill on the amenity of the streetscape and adjoining development.	**E21** Street alignment follows ridges or gullies or runs perpendicular to slope.
PO22 Streets are oriented to encourage active transport through a climate responsive and comfortable walking environment whilst also facilitating lots that support subtropical design practices, including:	**E22.1** Where not unduly constrained by topography or other physical barrier, streets are primarily oriented within 20 or 30 degrees of North-South or East-West in accordance with Figure - Preferred street orientation below**.**

a. controlled solar access & shade provision

b. cross-ventilation.

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve subtropical design solution.

Figure - Preferred street orientation



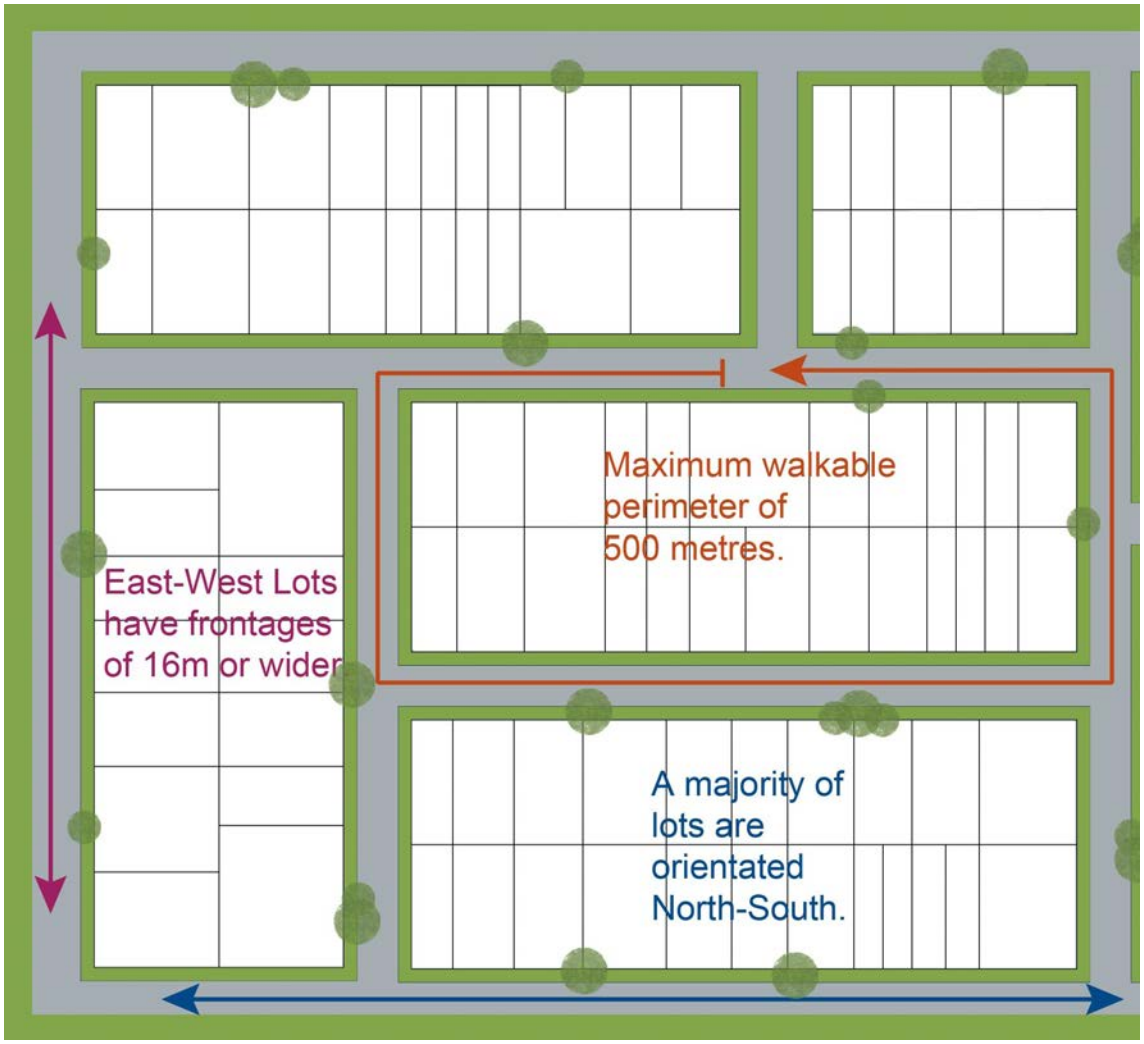
E22.2

The long axis of a street block is oriented east-west to facilitate a north-south orientation for a majority of lots as per Figure - Street block design.

E22.3

Where lots are oriented east west, they are 16m or wider so as to allow for alternative dwelling design to achieve solar access and cross-ventilation as per Figure - Street block design.

Figure - Street block design



Movement network	
PO23 The street network creates convenient access to arterial and sub-arterial roads for heavy vehicles and commercial traffic without introducing through traffic to residential streets.	No example provided.
PO24 The road network has sufficient reserve and pavement widths to cater for the current and intended function of the road in accordance with the road type in accordance with Planning scheme policy - Integrated design.	No example provided.
PO25 Movement networks encourage walking and cycling and a safe environment for pedestrians and cyclists.	**E25** Pedestrian paths, bikeways and on-road bicycle facilities are provided for the street type in accordance with Planning scheme policy - Integrated design.

PO26 Upgrade works (whether trunk or non-trunk) are provided where necessary to: a. ensure the type or volume of traffic generated by the development does not have a negative impact on the external road network; b. ensure the orderly and efficient continuation of the active transport network; c. ensure the site frontage is constructed to a suitable urban standard generally in accordance with Planning scheme policy - Integrated design. Note - An Integrated Transport Assessment (ITA) may be required to demonstrate compliance with this performance outcome refer to Planning scheme policy - Integrated transport assessment for guidance on when an ITA is required. An ITA should be prepared in accordance with Planning scheme policy - Integrated transport assessment. Note - The road network is mapped on Overlay map - Road hierarchy. Note - The primary and secondary active transport network is mapped on Overlay map - Active transport. Note - To demonstrate compliance with c. of this performance outcome, site frontage works where in existing road reserve (non-trunk) are to be designed and constructed as follows: i. Where the street is partially established to an urban standard, match the alignment of existing kerb and channel and provide carriageway widening and underground drainage where required; or ii. Where the street is not established to an urban standard, prepare a design that demonstrates how the relevant features of the particular road as shown in the Planning scheme policy - Integrated Design can be achieved in the existing reserve. Note - Refer to Planning scheme policy - Integrated design for road network and active transport network design standards.	No example provided.
Laneway design and location	
PO27 Laneway location contributes to a high standard of amenity for adjoining lots and the streetscape. Note - Refer to Planning scheme policy - Neighbourhood design for determining locational criteria for laneways.	**E27** Laneways are primarily used where: a. vehicle access is not permitted from the primary street frontage; or b. limiting vehicle access from the primary street frontage results in a positive streetscape outcome;or c. where lots directly adjoin a local, district or regional Park(57).
PO28	**E28.1** Laneways are limited to 130m in length.

Laneways service a limited number of allotments, creating a sense of place and enclosed feeling for the pedestrian environment whilst contributing to the high level of connectivity of the street network. Note - Refer to Planning scheme policy - Integrated design and Planning scheme policy - Neighbourhood design for determining design criteria for Laneways.	**E28.2** Laneways are not designed as dead ends or cul-de-sacs, and are to have vehicle connections to an access street at both ends.
	E28.3 Where laneways exceed 100m in length, a mid lane pedestrian connection is to be provided between the adjacent access streets and the laneway.
PO29 Laneway design ensures the safety of pedestrians, cyclists and motorists by way of site lines, and sufficient road reserve for vehicle movements and the provision of street lighting. Note - Refer to Planning scheme policy - Integrated design and Planning scheme policy - Neighbourhood design for determining design criteria for Laneways.	**E29.1** Laneways are designed with minor meanders only, and maintain direct lines of sight from one end of the laneway to the other.
	E29.2 Laneways provide road dedication at strategic locations along the laneway to allow the construction of street lighting and any electrical pillars associated with the street lighting in accordance with current Australian Standards. Note - The dedication must allow for street lights to be provided on Council's standard alignment
Park(57) and open space	
PO30 A hierarchy of Park(57) and open space is provided to meet the recreational needs of the community. Note - To determine the extent and location of Park(57) and open space required refer to Planning scheme policy - Integrated design. Note - District level Parks(57) or larger may be required in certain locations in accordance with Part 4: Local Government Infrastructure Plan.	No example provided.
PO31 Park(57) is to be provided within walking distance of all new residential lots. Note - To determine maximum walking distances for Park(57) types refer to Planning scheme policy - Integrated design.	No example provided.
PO32 Park(57) is of a size and design standard to meet the needs of the expected users.	No example provided.

Note - To determine the size and design standards for Parks[57] refer to Planning scheme policy - Integrated design.	
PO33 Parks[57] are designed and located to be safe and useable for all members of the community with high levels of surveillance, based on Crime Prevention Through Environmental Design principles, and access.	**E33.1** Local and district Parks[57] are bordered by streets and lots orientated to address and front onto Parks and not lots backing onto or not addressing the Park wherever possible.
	E33.2 Where lots do adjoin local and district Parks[57], and fencing is provided along the Park[57] boundary, it is located within the lot and at a maximum height of 1m
	E33.3 The design of fencing and retaining features allows for safe and direct pedestrian access between the Park[57] and private allotment through the use of private gates and limited retaining features along Park[57] boundaries.
Boundary realignment	
PO34 Boundary alignments ensure that infrastructure and services are wholly contained within the lot they serve.	No example provided.
PO35 Boundary realignment does not result in: a. existing land uses on-site becoming non-complying with planning scheme criteria; b. lots being unserviced by infrastructure; c. lots not providing for own private servicing. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. setbacks; c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises is approved as Multiple dwelling[49] with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling[49] approval.	No example provided.

ii. Where a commercial or industrial land use contains an ancillary office[53], the office[53] cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house[22] includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house[22] use.	
PO36 Boundary realignment results in lots which have appropriate size, dimensions and access to cater for uses consistent with the precinct. Note - Refer to overall outcomes for the General residential zone - Next generation neighbourhood precinct for uses consistent in this precinct.	**E36** Lot sizes and dimensions (excluding an access handles) comply with Lot Types A, B, C, D, E or F in accordance with 'Table 9.4.1.6.3.3 - Lot Types' - Lot Types.
Reconfiguring existing development by Community Title	
PO37 Reconfiguring a lot which creates or amends a community title scheme as described in the *Body Corporate and Community Management Act 1997* is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note -Examples of land uses becoming unlawful include, but are not limited to the following: a. Land on which a Dual occupancy[21] has been established is reconfigured in a way that results in both dwellings no longer being on the one lot. The reconfiguring has the effect of transforming the development from a Dual occupancy[21] to two separate Dwelling[22] houses, at least one of which does not satisfy the requirements for accepted development applying to Dwelling houses. b. Land on which a Multiple dwelling[49] has been established is reconfigured in a way that precludes lawful access to required communal facilities by either incorporating some of those facilities into private lots or otherwise obstructing the normal access routes to those facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval. Editor's note - To satisfy this performance outcome, the development application may need to be a combined application for reconfiguring a lot and a material change of use or otherwise be supported by details that confirm that the land use still satisfies all relevant land use requirements.	No example provided.

Reconfiguring by Lease	
PO38 Reconfiguring a lot which divides land or buildings by lease in a way that allows separate occupation or use of those facilities is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note - An example of a land use becoming unlawful is a Multiple dwelling(49) over which one or more leases have been created in a way that precludes lawful access to some of the required communal facilities. Some of the communal car parking facilities have been incorporated into lease areas while other leases are located in a way that obstructs the normal access routes to other communal facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval, but they are no longer freely available to all occupants of the Multiple dwelling(49). Editor's note -To satisfy this performance outcome, the development application may need to be supported by details that confirm that the land use still satisfies all relevant land use requirements. Editor's note – Under the definition in Schedule 2 of the Act, the following do not constitute reconfiguring a lot and are not subject to this performance outcome: a. a lease for a term, including renewal options, not exceeding 10 years; and b. an agreement for the exclusive use of part of the common property for a community titles scheme under the *Body Corporate and Community Management Act 1997*.	No example provided.
Volumetric subdivision	
PO39 The reconfiguring of the space above or below the surface of the land ensures appropriate area, dimensions and access arrangements to cater for uses consistent with the precinct and does not result in existing land uses on-site becoming non-complying with planning scheme criteria. Note - Examples may include but are not limited to: a. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.	No example provided.
Reticulated supply	

PO40 Each lot is provided with an appropriate level of service and infrastructure commensurate with the precinct. All services, including water supply, stormwater management, sewage disposal, stormwater disposal, drainage, electricity, telecommunications and gas (if available) are provided in a manner that: a. is efficient in delivery of service; b. is effective in delivery of service; c. is conveniently accessible in the event of maintenance or repair; d. minimises whole of life cycle costs for that infrastructure; e. minimises risk of potential adverse impacts on the natural and built environment; f. minimises risk of potential adverse impact on amenity and character values; g. recognises and promotes Councils Total Water Cycle Management policy and the efficient use of water resources.	**E40** Lots are provided with: a. a connection to the reticulated water supply infrastructure network; b. a connection to the sewerage infrastructure network; c. a connection to the reticulated electricity infrastructure network; and d. a physical connection to the telecommunication network, that where available to the land is part of the high speed broadband network.
Stormwater location and design	
PO41 The development is planned and designed considering the land use constraints of the site and incorporates water sensitive urban design principles.	No example provided.
PO42 Stormwater drainage pipes and structures through or within private land are protected by easements in favour of Council with sufficient area for practical access for maintenance. Note - Refer to Planning scheme policy - Integrated design for guidance on how to demonstrate achievement of this performance outcome.	No example provided.
PO43 Stormwater management facilities are located outside of riparian areas and prevent increased channel bed and bank erosion.	No example provided.
PO44 Natural streams and riparian vegetation are retained and enhanced through revegetation.	No example provided.

PO45 Areas constructed as detention basins are adaptable for passive recreation.	No example provided.
PO46 Development maintains the environmental values of waterway ecosystems.	No example provided.
PO47 Constructed water bodies are not dedicated as public assets.	No example provided.
Stormwater management system	
PO48 The major drainage system has the capacity to safely convey stormwater flows for the defined flood event.	**E48** The roads, drainage pathways, drainage features and waterways safely convey the stormwater flows for the defined flood event without allowing flows to encroach upon private lots.
PO49 Overland flow paths (for any storm event) from newly constructed roads and public open space areas do not pass through private lots.	**E49** Drainage pathways are provided to accommodate overland flows from roads and public open space areas.
PO50 Where located within the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the greater pollutant removal of: a. 100% reductions in mean annual loads from unmitigated development for total suspended solids, total phosphorus, total nitrogen and gross pollutants >5mm; b. the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Table A and B in Appendix 3 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	No example provided.
PO51	No example provided.

Where located outside the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Tables A and B in Appendix 2 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	
PO52 The stormwater management system is designed to: a. protect the environmental values in downstream waterways; b. maintain ground water recharge areas; c. preserve existing natural wetlands and associated vegetation buffers; d. avoid disturbing soils or sediments; e. avoid altering the natural hydrologic regime in acid sulphate soil and nutrient hazardous areas; f. maintain and improve receiving water quality; g. protect natural waterway configuration; h. protect downstream and adjacent properties; i. protect and enhance riparian areas.	No example provided.
PO53 Design and construction of the stormwater management system: a. utilise methods and materials to minimise the whole of lifecycle costs of the stormwater management system; b. are coordinated with civil and other landscaping works. Note - Refer to Planning scheme policy - Integrated design for guidance on how to demonstrate achievement of this performance outcome.	No example provided.

Native vegetation where not located in the Environmental areas overlay	
PO54 Reconfiguring a lot facilitates the retention of native vegetation by: a. incorporating native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; b. ensuring habitat trees are located outside a development footprint. Where habitat trees are to be cleared, replacement fauna nesting boxes are provided at the rate of 1 nest box for every hollow removed. Where hollows have not yet formed in trees > 80cm in diameter at 1.3m height, 3 nest boxes are required for every habitat tree removed. c. providing safe, unimpeded, convenient and ongoing wildlife movement; d. avoiding creating fragmented and isolated patches of native vegetation. e. ensuring that biodiversity quality and integrity of habitats is not adversely impacted upon but are maintained and protected; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies.	No example provided
Noise	
PO55 Noise attenuation structure (e.g. walls, barriers or fences): a. contribute to safe and usable public spaces, through maintaining high levels of surveillance of parks, streets and roads that serve active transport purposes (e.g. existing or future pedestrian paths or cycle lanes etc); b. maintain the amenity of the streetscape. Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures.	**E55** Noise attenuation structures (e.g. walls, barriers or fences): a. are not visible from an adjoining road or public area unless; i. adjoining a motorway or rail line; or ii. adjoining part of an arterial road that does not serve an existing or future active transport purpose (e.g. pedestrian paths or cycle lanes) or where attenuation through building location and materials is not possible. b. do not remove existing or prevent future active transport routes or connections to the street network; c. are located, constructed and landscaped in accordance with Planning scheme policy - Integrated design. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures. Note - Refer to Overlay map – Active transport for future active transport routes.

Values and constraints criteria	
Note - The relevant values and constraints criteria do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.	
Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following assessment criteria apply) Note - The preparation of a bushfire management plan in accordance with Planning scheme policy - Bushfire prone areas can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO56 Lots are designed to: a. minimise the risk from bushfire hazard to each lot and provide the safest possible siting for buildings and structures; b. limit the possible spread paths of bushfire within the reconfiguring; c. achieve sufficient separation distance between development and hazardous vegetation to minimise the risk to future buildings and structures during bushfire events; d. maintain the required level of functionality for emergency services and uses during and immediately after a natural hazard event.	**E56** Reconfiguring a lot ensures that all new lots are of an appropriate size, shape and layout to allow for the siting of future buildings being located: a. within an appropriate development footprint; b. within the lowest hazard locations on a lot; c. to achieve minimum separation between development or development footprint and any source of bushfire hazard of 20m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; d. to achieve a minimum separation between development or development footprint and any retained vegetation strips or small areas of vegetation of 10m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; e. away from ridgelines and hilltops; f. on land with a slope of less than 15%; g. away from north to west facing slopes.
PO57 Lots provide adequate water supply and infrastructure to support fire-fighting.	**E57** For water supply purposes, reconfiguring a lot ensures that: a. lots have access to a reticulated water supply provided by a distributer retailer for the area; or b. where no reticulated water supply is available, on-site fire fighting water storage containing not less than 10000 litres and located within a development footprint.
PO58 Lots are designed to achieve:	**E58** Reconfiguring a lot ensures a new lot is provided with:

a. safe site access by avoiding potential entrapment situations; b. accessibility and manoeuvring for fire-fighting during bushfire.	a. direct road access and egress to public roads; b. an alternative access where the private driveway is longer than 100m to reach a public road; c. driveway access to a public road that has a gradient no greater than 12.5%; d. minimum width of 3.5m.
PO59 The road layout and design supports: a. safe and efficient emergency services access to all lots; and manoeuvring within the subdivision; b. availability and maintenance of access routes for the purpose of safe evacuation.	**E59** Reconfiguring a lot provides a road layout which: a. includes a perimeter road that separating the new lots from hazardous vegetation on adjacent lots incorporating by: i. a cleared width of 20m; ii. road gradients not exceeding 12.5%; iii. pavement and surface treatment capable of being used by emergency vehicles; iv. Turning areas for fire fighting appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines. b. Or if the above is not practicable, a fire maintenance trail separates the lots from hazardous vegetation on adjacent lots incorporating: i. a minimum cleared width of 6m and minimum formed width of 4m; ii. gradient not exceeding 12.5%; iii. cross slope not exceeding 10%; iv. a formed width and erosion control devices to the standards specified in Planning scheme policy - Integrated design; v. a turning circle or turnaround area at the end of the trail to allow fire fighting vehicles to manoeuvre; vi. passing bays and turning/reversing bays every 200m; vii. an access easement that is granted in favour of the Council and the Queensland Fire and Rescue Service or located on public land.

	c. excludes cul-de-sacs, except where a perimeter road with a cleared width of 20m isolates the lots from hazardous vegetation on adjacent lots; and d. excludes dead-end roads.
Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria. Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.	
PO60 No new boundaries are located within 2m of High Value Areas.	No example provided
PO61 Lots are designed to: a. minimise the extent of encroachment into the MLES waterway buffer or a MLES wetland buffer; b. ensure quality and integrity of biodiversity and ecological values is not adversely impacted upon but are maintained and protected; c. incorporate native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; d. provide safe, unimpeded, convenient and ongoing wildlife movement; e. avoid creating fragmented and isolated patches of native vegetation; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies. AND Where development results in the unavoidable loss of native vegetation within a MLES waterway buffer or a MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.	**E61** Reconfiguring a lot ensures that no additional lots are created within a Value Offset Area.
Extractive resources transport route buffer (refer Overlay map - Extractive resources to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	

PO62 Lots provide a development footprint outside of the buffer.	No example provided.
PO63 Access to a lot is not from an identified extractive industry transportation route, but to an alternative public road.	No example provided.
Extractive resources separation area (refer Overlay map - Extractive resources to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO64 Lots provide a development footprint outside of the separation area.	No example provided.
Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO65 Lots do not: a. reduce public access to a heritage place, building, item or object; b. create the potential to adversely affect views to and from the heritage place, building, item or object; c. obscure or destroy any pattern of historic subdivision, historical context, landscape setting or the scale and consistency of the urban fabric relating to the local heritage place.	No example provided.
PO66 Reconfiguring a lot retains significant trees and incorporates them into the subdivision design, development layout and provision of infrastructure.	No example provided.
Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	

Bulk water supply infrastructure	
PO67 Reconfiguration of lots does not compromise or adversely impact upon the efficiency and integrity of Bulk water supply infrastructure.	No example provided.
PO68 Reconfiguring of lots ensures that access requirements of Bulk water supply infrastructure are maintained.	**E68** Bulk water supply infrastructure traversing or within private land are protected by easement in favour of the service provider for access and maintenance.
PO69 Development within a Bulk water supply infrastructure buffer: a. is located, designed and constructed to protect the integrity of the water supply pipeline; b. maintains adequate access for any required maintenance or upgrading work to the water supply pipeline.	**E69** New lots provide a development footprint outside the Bulk water supply infrastructure buffer.
PO70 Boundary realignments: i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
High voltage electricity line buffer	
PO71 New lots provide a development footprint outside of the buffer.	No example provided.
PO72 The creation of new lots does not compromise or adversely impact upon the efficiency and integrity of supply.	**E72** No new lots are created within the buffer area.
PO73 The creation of new lots does not compromise or adversely impact upon access to the supply line for any required maintenance or upgrading work.	**E73** No new lots are created within the buffer area.
PO74 Boundary realignments:	No example provided.

i. do not result in the creation of additional building development within the buffer; ii. result in the reduction of building development opportunities within the buffer.	
Landfill buffer	
PO75 Lots provide a development footprint outside of the buffer.	No example provided.
PO76 Boundary realignments: i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
Wastewater treatment site buffer	
PO77 New lots provide a development footprint outside of the buffer.	No example provided.
PO78 Boundary realignments: i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
Landslide hazard (refer Overlay map - Landslide hazard to determine if the following assessment criteria apply) Note - The preparation of a site-specific geotechnical assessment report in accordance with Planning scheme policy - Landslide hazard can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint on will assist in demonstrating compliance with the following performance criteria.	
PO79 Lots ensure that: a. future building location is located in part of a site not subject to landslide risk;	**E79.1** Lots provides development footprint for all lots free from risk of landslide.
	E79.2

b. the need for excessive on-site works, change to finished landform, or excessive vegetation clearance to provide for future development is avoided; c. there is minimal disturbance to natural drainage patterns; and d. earthworks does not: i. involve cut and filling having a height greater than 1.5m; ii. involve any retaining wall having a height greater than 1.5m; iii. involve earthworks exceeding $50m^3$, and iv. redirect or alter the existing flows of surface or groundwater.	Development footprints and driveways for a lot does not exceed 15% slope.
Overland flow path (refer Overlay map - Overland flow path to determine if the following assessment criteria apply) Note - The applicable river and creek flood planning levels associated with defined flood event (DFE) within the inundation area can be obtained by requesting a flood check property report from Council.	
PO80 Development: a. minimises the risk to persons from overland flow; b. does not increase the potential for damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure.	No example provided.
PO81 Development: a. maintains the conveyance of overland flow predominantly unimpeded through the premises for any event up to and including the 1% AEP for the fully developed upstream catchment; b. does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow..	**E81** Development ensures that any buildings are not located in an Overland flow path area. Note: A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding property.
PO82 Development does not:	No example provided.

a. directly, indirectly or cumulatively cause any increase in overland flow velocity or level; b. increase the potential for flood damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure. Note - Open concrete drains greater than 1m in width are not an acceptable outcome, nor are any other design options that may increase scouring. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	
PO83 Development ensures that overland flow is not conveyed from a road or public open space onto a private lot, unless the development is in a Rural zone.	**E83** Development ensures that overland flow paths and drainage infrastructure is provided to convey overland flow from a road or public open space area away from a private lot, unless the development is in the Rural zone.
PO84 Development ensures that Council and inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment flows and are able to be easily maintained. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	**E84.1** Development ensures that roof and allotment drainage infrastructure is provided in accordance with the following relevant level as identified in QUDM: a. Urban area – Level III; b. Rural area – N/A; c. Industrial area – Level V; d. Commercial area – Level V. **E84.2** Development ensures that all Council and allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.
PO85 Development protects the conveyance of overland flow such that easements for drainage purposes are provided over: a. a stormwater pipe if the nominal pipe diameter exceeds 300mm; b. an overland flow path where it crosses more than one property; and c. inter-allotment drainage infrastructure.	No example provided

Note - Refer to Planning scheme policy - Integrated design for details and examples. Note - Stormwater drainage easement dimensions are provided in accordance with Section 3.8.5 of QUDM.	
Additional criteria for development for a Park[57]	
PO86 Development for a Park[57] ensures that the design and layout responds to the nature of the overland flow affecting the premises such that: a. public benefit and enjoyment is maximised; b. impacts on the asset life and integrity of park structures is minimised; c. maintenance and replacement costs are minimised.	**E86** Development for a Park[57] ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated Design.
Riparian and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the following assessment criteria apply) Note - - W1, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.	
PO87 Lots are designed to: a. minimise the extent of encroachment into the riparian and wetland setback; b. ensure the protection of wildlife corridors and connectivity; c. reduce the impact on fauna habitats; d. minimise edge effects; e. ensure an appropriate extent of public access to waterways and wetlands.	**E87** Reconfiguring a lot ensures that: a. no new lots are created within a riparian and wetland setback; b. new public roads are located between the riparian and wetland setback and the proposed new lots. Note - Riparian and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.
Scenic amenity (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO88 Lots are sited, designed and oriented to:	No example provided.

a. maximise the retention of existing trees and land cover including the preservation of coastal trees; b. maximise the retention of highly natural and vegetated areas and natural landforms by minimising the use of cut and fill.	

Table 9.4.1.6.3.3 - Lot Types

Lot Type	A	B	C	D	E	F
Primary Frontage *(metres)*	7.5	>7.5 - 10	>10 - 12.5	>12.5 - 18	>18 - 32	32+
Lot Depth *(metres)*	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35
Built to Boundary	*Mandatory built to boundary both sides.*	*Mandatory built to boundary one side.*	*Mandatory built to boundary one side.*			

Figure 1 - Dakabin

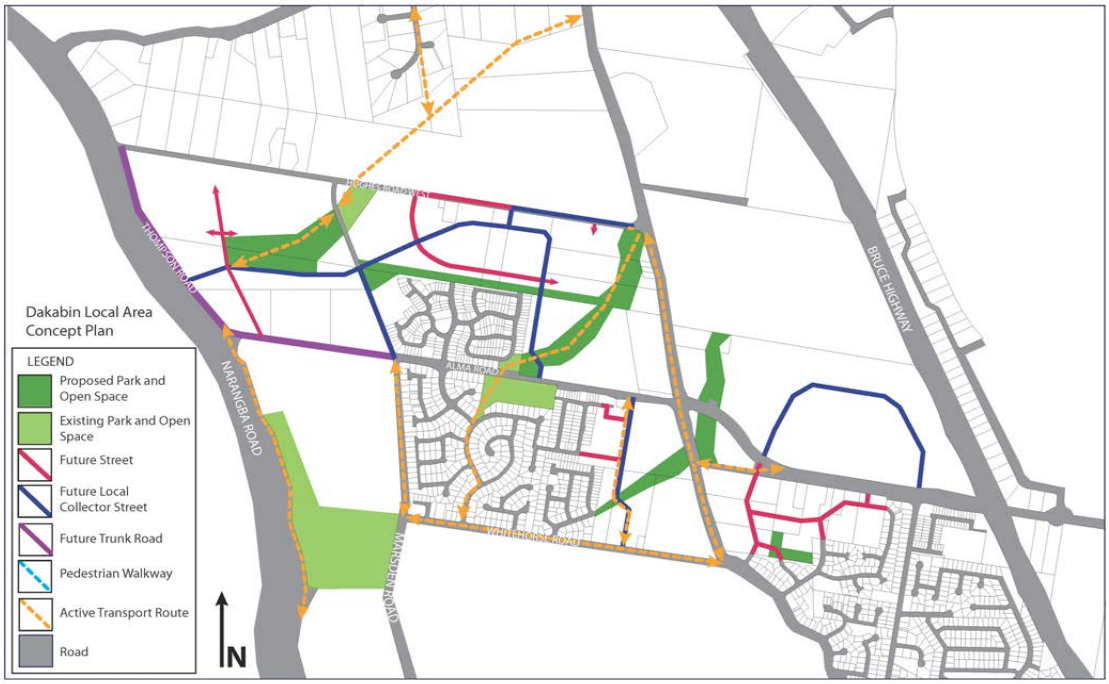


Figure 2 - Griffin

Figure 3 - Mango Hill East

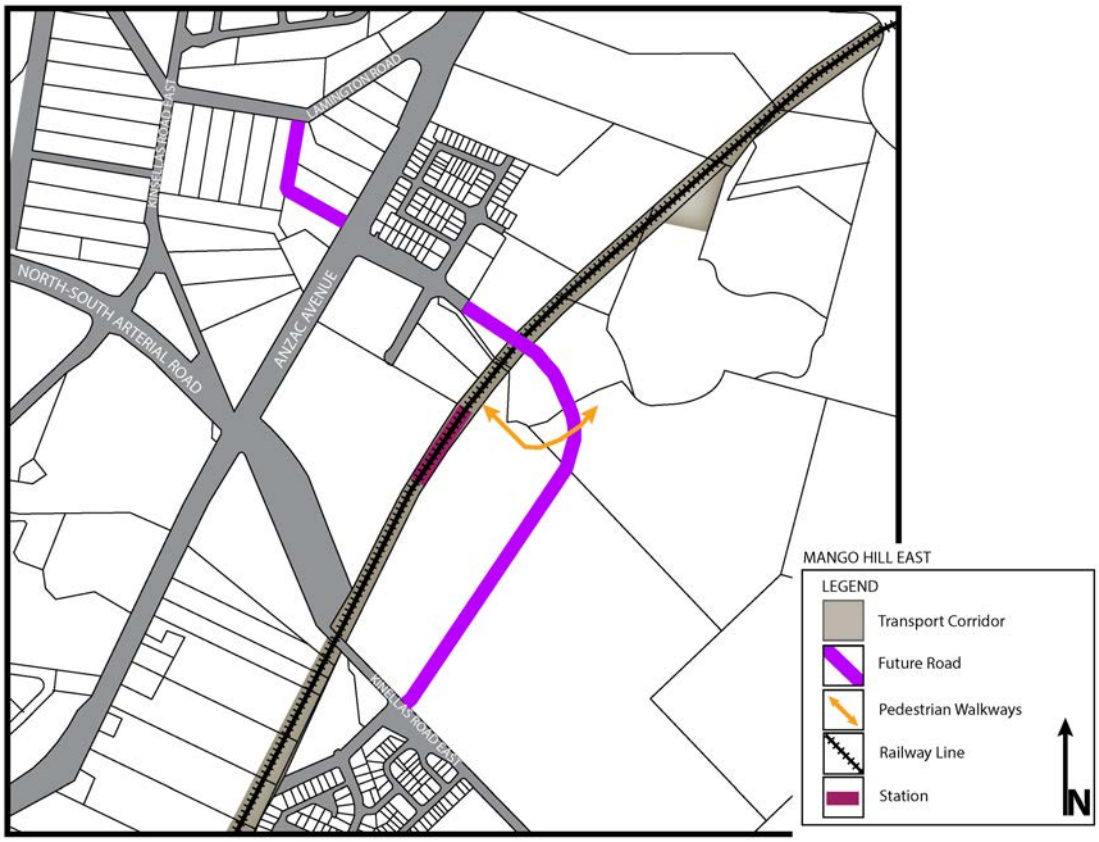


Figure 4 - Murrumba Downs

Figure 5 - Narangba east

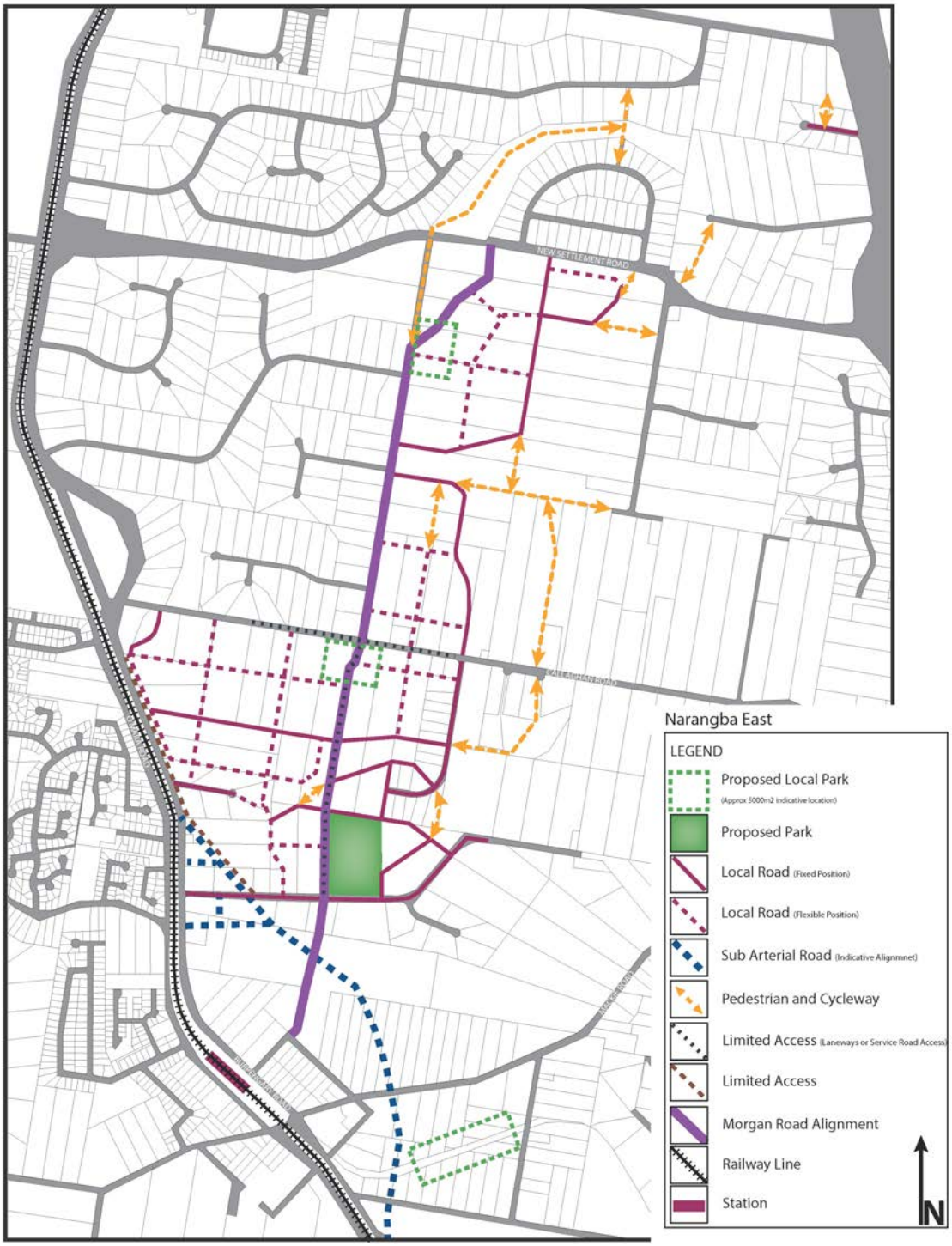
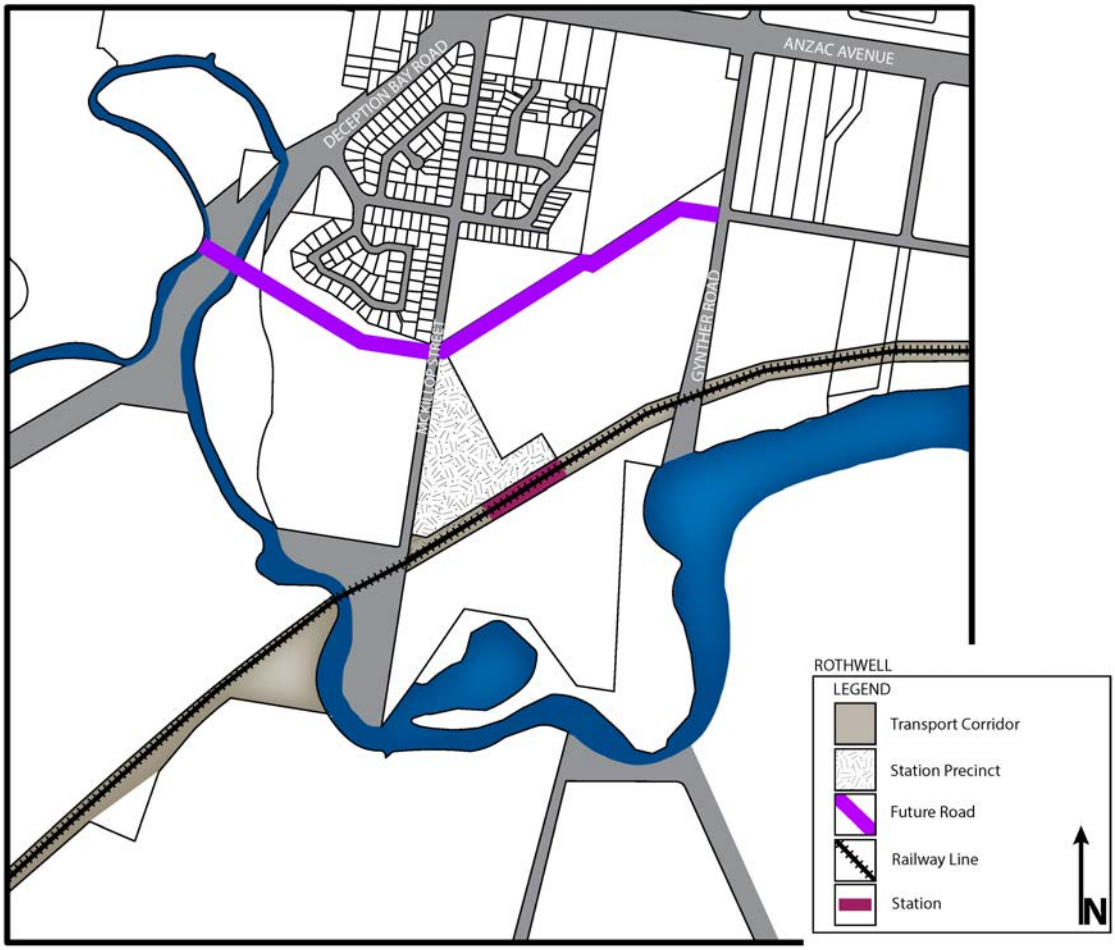


Figure 6 - Rothwell



9.4.1.6.4 Urban neighbourhood precinct

9.4.1.6.4.1 Purpose - General residential zone - Urban neighbourhood precinct

1. The purpose of this part of the Reconfiguring a lot code is to facilitate and manage the outcomes of development for reconfiguring a lot and its associated Operational Works in the General residential zone - Urban neighbourhood precinct, to achieve the Overall Outcomes.

2. The purpose of this part of the code will be achieved through the overall outcomes as identified in Part 9.4.1 - Reconfiguring a lot code and the following additional General residential zone - Urban neighbourhood precinct specific overall outcomes:

a. Reconfiguring a lot achieves a variety of lot sizes and does not compromise the precincts future ability to achieve a minimum site density of 45 dwellings per hectare.

b. Reconfiguring a lot creates lots of a size and dimension to accommodate medium - high density development.

c. Reconfiguring a lot achieves neighbourhoods that are designed to provide well-connected, safe and convenient movement and open space networks through interconnected streets and active transport linkages that provide high levels of accessibility between residences, open space areas and places of activity.

d. Reconfiguring a lot avoids areas subject to constraint, limitation, or environmental values. Where reconfiguring a lot cannot avoid these identified areas, it responds by:

   i. adopting a ‘least risk, least impact’ approach when designing, siting and locating development to minimise the potential risk to people, property and the environment;
   ii. ensuring no further instability, erosion or degradation of the land, water or soil resource;
   iii. maintaining environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of environmental offsets, landscaping and facilitating safe wildlife movement through the environment;
   iv. protecting native species and protecting and enhancing native species habitat;
   v. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
   vi. establishing effective separation distances, buffers and mitigation measures associated with major infrastructure to minimise adverse effects on sensitive land uses from noise, dust and other nuisance generating activities;
   vii. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of major infrastructure;
   viii. Ensuring effective and efficient disaster management response and recovery capabilities.

e. The Reconfiguring a lot, Operational works associated with the Reconfiguring a lot, and uses expected to occur as a result of the Reconfiguring a lot:

   i. responds to the risk presented by overland flow and minimises risk to personal safety;
   ii. is resilient to overland flow impacts by ensuring the siting and design accounts for the potential risks to property associated with overland flow;
   iii. does not impact on the conveyance of overland flow up to and including the Overland Flow Defined Flood Event;
   iv. directly, indirectly and cumulatively avoids an increase in the severity of overland flow and potential for damage on the premises or to a surrounding property.

f. Reconfiguring a lot achieves the intent and purpose of the Urban neighbourhood precinct outcomes as identified in Part 6.

9.4.1.6.4.2 Requirement for assessment

To determine if boundary realignment is to be categorised as accepted development subject to requirements it must comply with the requirements for accepted development set out in Part O, Table 9.4.1.6.4.1. Where the development does not meet a requirement for accepted development (RAD) within Part O Table 9.4.1.6.4.1, the category of

development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development (RAD)	Corresponding performance outcomes
RAD1	PO31
RAD2	PO32
RAD3	PO33
RAD4	PO5
RAD5	PO53-PO76
RAD6	PO57-PO58
RAD7	PO51

Part O - Requirements for accepted development - General residential zone - Urban neighbourhood precinct

Table 9.4.1.6.4.1 Requirements for accepted development - General residential zone - Urban neighbourhood precinct

Requirements for accepted development	
General requirements	
Boundary realignment	
RAD1	Lots created by boundary realignment: a. contain all service connections to water, sewer, electricity and other infrastructure wholly within the lot they serve; b. have constructed road access; c. do not require additional infrastructure connections or modification to existing connections. d. do not result in the creation of any additional lots;
RAD2	Boundary realignment does not result in existing land uses on-site becoming non-complying with planning scheme requirements. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. minimum or maximum required setbacks c. parking and access requirements; d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises are approved as Multiple dwelling(49) with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple dwelling(49) approval.

	ii. Where a commercial or industrial land use contains an ancillary office(53), the office(53) cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house(22) includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house(22) use.
RAD3	Resulting lots comply with the following minimum lot sizes and dimensions: **Zone (Precinct)** / **Area** / **Frontage** / **Depth** General residential - Urban neighbourhood precinct / - / 32 m / 25 m
RAD4	Boundary realignment in the precinct does not result in more than 4 adjoining lots of the same lot type, as defined in 'Table 9.4.1.6.4.3: Lot Types' - Lot Types.
RAD5	Boundary realignment does not result in the creation of additional building development opportunity within an area subject to an overlay map.
RAD6	No new boundaries are located within 2m of High Value Areas as identified in Overlay map - Environmental areas.
RAD7	Boundary realignment does not result in the clearing of any Habitat trees.

Part P - Criteria for assessable development - General residential zone - Urban neighbourhood precinct

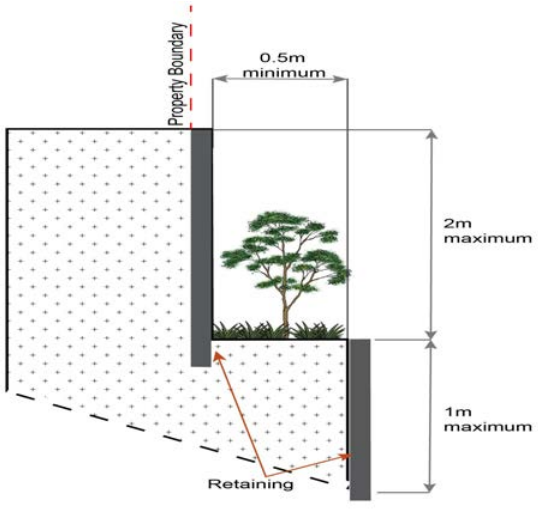
Where development is categorised as assessable development - code assessment in the Table of Assessment, the assessment benchmarks are the criteria set out in Part B, Table 9.4.1.6.4.2 as well as the purpose statement and overall outcomes of this code.

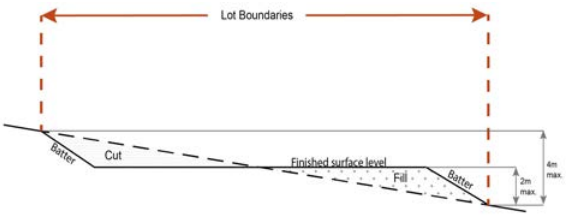
Where development is categorised as assessable development - impact assessable, the assessment benchmarks become the whole of the planning scheme.

Table 9.4.1.6.4.2 Assessable development - General residential zone - Urban neighbourhood precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes
Density	
PO1 Reconfiguring a lot does not compromise future developments ability to achieve a minimum residential site density of 45 dwellings per hectare to ensure efficient use of the land and infrastructure which facilitates feasible public transport patronage and creates a diverse medium density neighbourhood character.	**E1** Residential uses have a minimum site density of: a. 75 dwellings per ha for sites shown on: i. 'Figure 1 - Kallangur' - Kallangur; ii. 'Figure 2 - Mango Hill' - Mango Hill; iii. 'Figure 3 - Mango Hill East' - Mango Hill East; iv. 'Figure 4 - Murrumba Downs' - Murrumba Downs; or v. 'Figure 5 Kippa-Ring ' - Kippa-Ring b. 45 dwellings per hectare for all other areas.

Lot design, mix and location	
PO2 Reconfiguring a lot facilitates the provision of varied housing options, a mix of lot sizes and encourages diversity within the streetscape whilst maintaining the medium to high density character of the precinct.	**E2** Lot sizes comply with Lot Types A, B or F in accordance with 'Table 9.4.1.6.4.3: Lot Types' - Lot Types. Editor's note - Lots containing built to boundary walls should also include an appropriate easement to facilitate the maintenance of any wall within 600mm of a boundary. For boundaries with built to boundary walls on adjacent lots a 'High Density Development Easement' is recommended; or for all other built to boundary walls and 'easement for maintenance purposes' is recommended.
PO3 Narrow lots do not adversely affect the character and amenity of the precinct. Residential uses establish in a manner which facilitates an integrated streetscape, maximises the efficient use of land and achieves a safe and efficient street network. Note - Built to boundary walls and driveway locations for lots with frontages of 12.5 metres or less are to be shown on a plan of development in accordance with the requirements of section 9.3.1 - Dwelling house code	No example provided.
PO4 Group construction and integrated streetscape solutions are facilitated through the location and grouping of lots suitable for terrace and row housing.	**E4.1** Any lot sharing a boundary with a Lot Type A must contain a mandatory built to boundary wall on the shared boundary. Note - Built to boundary walls for lots with frontages of 12.5 metres or less are to be shown on a plan of development in accordance with the requirements of section 9.3.1 - Dwelling house code.
	E4.2 Driveway crossovers for lots with frontages of less than 10m are paired up to facilitate on-street parking. Note - Driveway locations for lots with frontages of less than 10 metres are to be shown on a plan of development in accordance with Planning Scheme Policy - Residential Design.
PO5 A range of different lots are distributed throughout the development with no one lot type concentrated within a single location, to create diversity within the streetscape and minimise conflicts between vehicle access and on street parking.	**E5.1** Where not accessed via a laneway, a maximum of 4 adjoining lots of the same type in accordance with 'Table 9.4.1.6.4.3: Lot Types' - Lot Types are proposed where fronting the same street.
	E5.2 Where accessed via a laneway, a maximum of 8 adjoining lots of the same type in accordance with 'Table 9.4.1.6.4.3: Lot Types' are proposed where fronting the same street.

PO6 Rear lots do not establish in the Urban neighbourhood precinct.	No example provided.
Sloping land	
PO7 Lot layout and design minimises the impacts of cutting, filling and retaining walls on the visual and physical amenity of the streetscape and of adjoining lots. Note - Refer to Planning scheme policy - Residential design for guidelines on building design on sloped land.	**E7.1** Lot layout and design ensures that a lot has a maximum average slope of 1:15 along its long axis and 1:10 along its short axis.
	E7.2 Retaining walls and benching and associated cutting, filling and other earthworks associated with reconfiguring a lot are limited to: a. a maximum vertical dimension of 1.5m from natural ground for any single retaining structure; or b. where incorporating a retaining structure greater than 1.5m in height, the retaining wall is stepped, terraced and landscaped as follows: i. maximum 1m vertical, minimum 0.5m horizontal, maximum 2m vertical (refer figure below); or  c. where incorporating benching along the short axis (from side to side boundary) of a lot: i. benching has a maximum total height of 4m per lot ii. each bench has a maximum height of 2m (refer Figure below); or



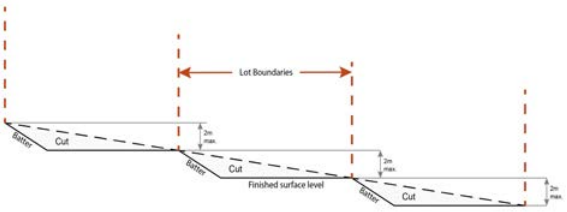
d. Where incorporating benching along the long axis (from front to rear boundary):

   i. benching does not exceed 2m in height;

   ii. lots include mandatory built to boundary walls

   iii. lots consist of lot type A (7.5m – 8.5m frontage) only;

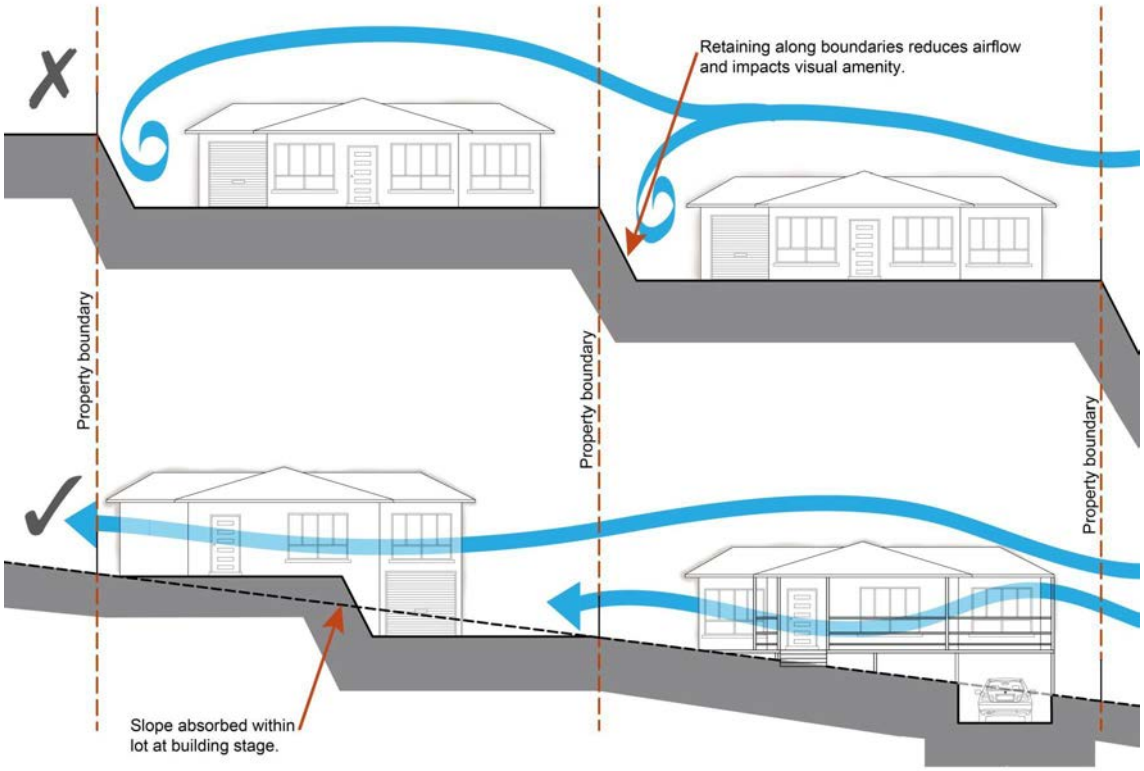
   iv. lots orientate up/down the slope.



Note - Benching is to incorporate suitable measures to ensure stabilisation and prevent erosion.

Editor's note - Strict cut and fill requirements apply at the Dwelling house[22] stage. Deferral of slope solutions until building stage is not an acceptable outcome.

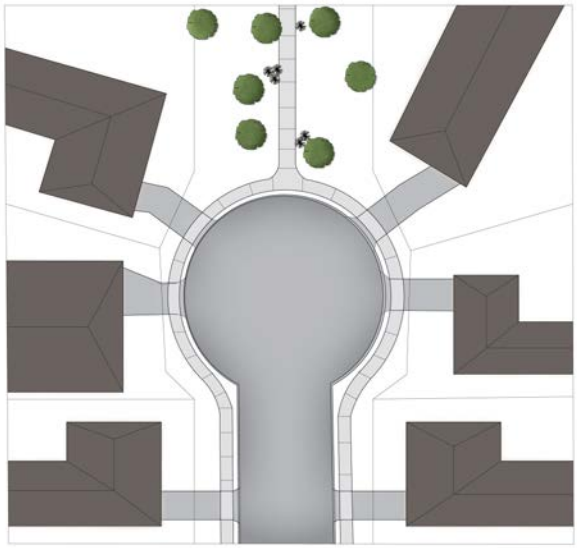
Figure - Sloped lot design



PO8 Lots are of a sufficient grade to accommodate effective stormwater drainage to a lawful point of discharge.	**E8** The surface level of a lot is at a minimum grade of 1:100 and slopes towards the street frontage, or other lawful point of discharge.
Street design and layout	
PO9 Street layouts facilitate regular and consistent shaped lots through the use of rectilinear grid patterns, or modified grid patterns where constrained by topographical and other physical barriers. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO10 Street layouts are designed to connect to surrounding neighbourhoods by providing an interconnected street, pedestrian and cyclist networks that connects nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space to residential areas for access and emergency management purposes. The layout ensures that new development is provided with multiple points of access. The timing	**E10.1** Development provides and maintains the connections shown on: a. 'Figure 6 - Dakabin' - Dakabin; b. 'Figure 7 - Kallangur' - Kallangur; c. 'Figure 8 - Mango Hill' - Mango Hill;

of transport works ensures that multiple points of access are provided during early stages of a development. Note - Refer to Planning Scheme Policy - Neighbourhood design for guidance on when alternative access points should be provided for emergency management purposes.	d. 'Figure 9 - Mango Hill East ' - Mango Hill East; e. 'Figure 10 - Murrumba Downs' - Murrumba Downs; f. 'Figure 11 - Narangba East ' - Narangba East; g. 'Figure 12 - Petrie' - Petrie.
	E10.2 All other areas, no example provided. Note - Refer to Planning Scheme Policy - Neighbourhood design for guidance on when alternative access points should be provided for emergency management purposes.
PO11 Street layouts provide an efficient and legible movement network with high levels of connectivity within and external to the site by: a. facilitating increased active transport with a focus on safety and amenity for pedestrians and cyclists; b. providing street blocks with a maximum walkable perimeter of 400m (refer to Figure - Street block design); c. providing a variety of street block sizes to facilitate a range of intensity and scale in built form; d. reducing street block sizes as they approach an activity focus (e.g. centre, neighbourhood hub, community activity, public open space); e. facilitating possible future connections to adjoining sites for roads, green linkages and other essential infrastructure. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve compliance with this outcome.	No example provided.
PO12 Street layouts create convenient and highly permeable movement networks between lower and higher order roads, whilst not adversely affecting the safety and function of the higher order road.	No example provided.
PO13 Streets are designed and constructed to cater for:	No example provided.

a. safe and convenient pedestrian and cycle movement; b. on street parking adequate to meet the needs of future residents; c. efficient public transport routes; d. expected traffic speeds and volumes; e. utilities and stormwater drainage; f. lot access, sight lines and public safety; g. emergency access and waste collection; h. waste service vehicles; i. required street trees, landscaping and street furniture. Note - Refer to Planning scheme policy - Integrated design for determining design criteria to achieve this outcome.	
PO14 Intersections are designed and constructed to provide for the safe and efficient movement of pedestrians, cyclists, and all forms of light and heavy vehicles. Note - Refer to Planning scheme policy - Integrated design for guidance on how to achieve compliance with this outcome.	No example provided.
PO15 Cul-de-sacs or dead end streets are not proposed unless: a. topography or other physical barriers exist to the continuance of the street network or vehicle connection to an existing road is not permitted; and b. there are no appropriate alternative solutions; or c. the cul-de-sac or dead end street will facilitate future connections to adjoining land or development. Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving this outcome.	No example provided.
PO16 Where cul-de-sacs are proposed:	No example provided.

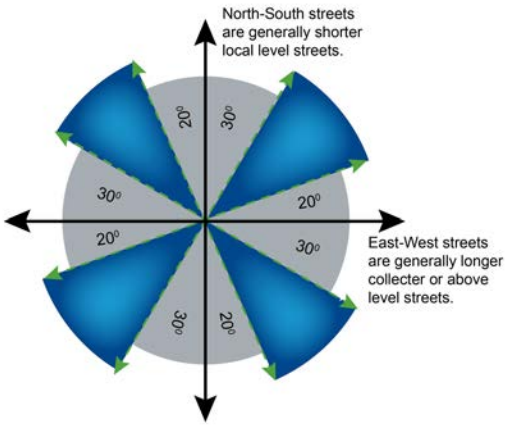
a. head must be visible from the entry point; b. are to be no longer than 50 metres in length; c. emergency access can be achieved under circumstances where entry via the carriageway may be compromised.	
PO17 Where cul-de-sacs are proposed due to connection to existing roads not being permitted, they are to be designed to allow a 10m wide pedestrian connection as public land through to the existing road with no lots proposed at the head of the cul-de-sac generally as shown in the figure below. **Figure - Cul-de-sac design**  Note - Refer to Planning scheme policy - Neighbourhood design for guidance on how to achieve this outcome.	No example provided.
PO18 Streets are designed and oriented to minimise the impact of cut and fill on the amenity of the streetscape and adjoining development.	**E18** Street alignment follows ridges or gullies or runs perpendicular to slope.
PO19 Streets are oriented to encourage active transport through a climate responsive and comfortable walking environment whilst also facilitating lots that support subtropical design practices, including:	**E19.1** Where not unduly constrained by topography or other physical barrier, streets are primarily oriented within 20 or 30 degrees of North-South or East-West.

a. controlled solar access & shade provision

b. cross-ventilation.

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve subtropical design outcomes through dwelling design.

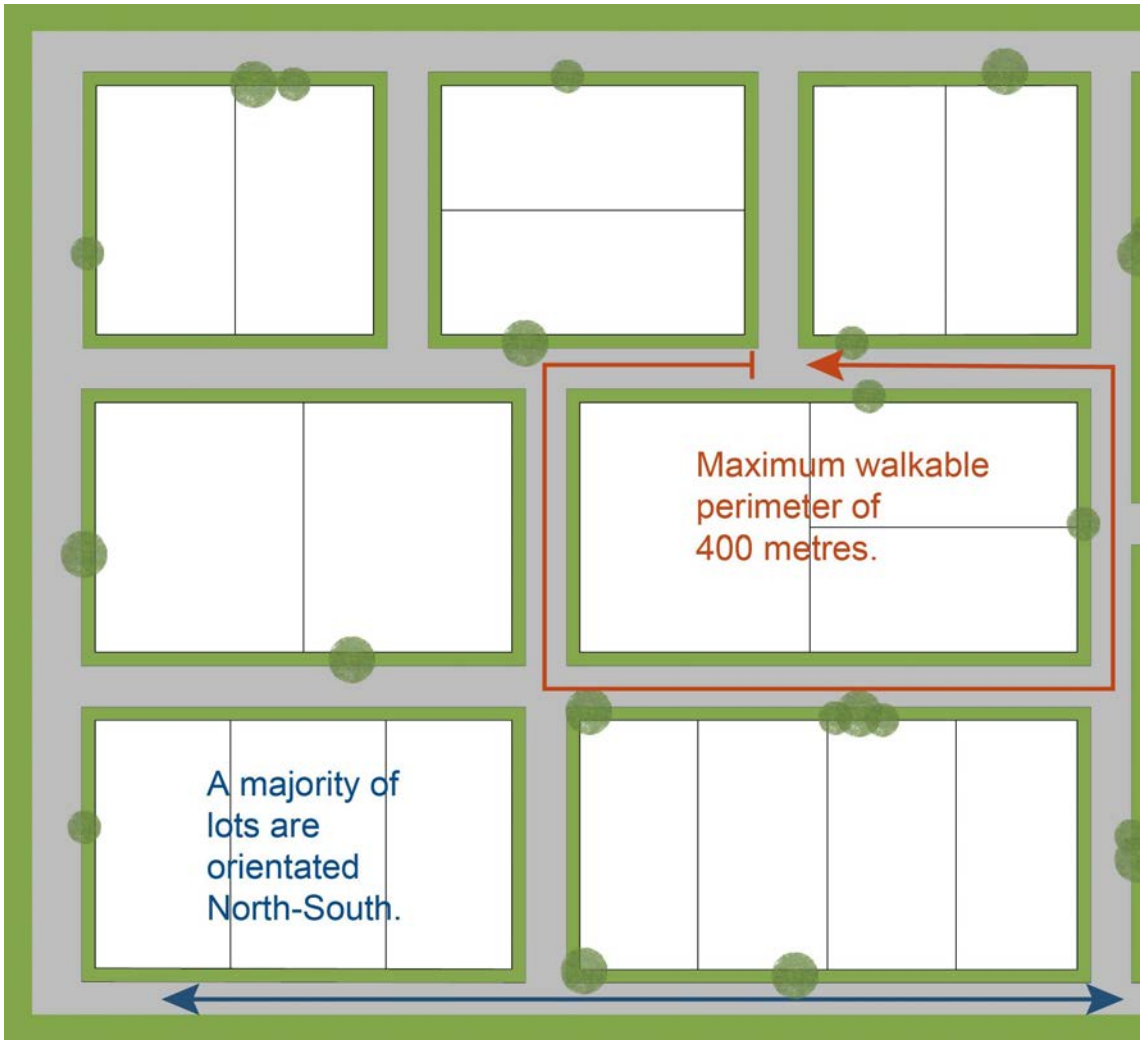
Figure - Preferred street orientation



E19.2

The long axis of a street block is oriented east-west to facilitate a north-south orientation for a majority of lots as per Figure - Street block design.

Figure - Street block design



Movement network	
PO20 The road network creates convenient access to arterial and sub-arterial roads for heavy vehicles and commercial traffic without introducing through traffic to residential streets.	No example provided.
PO21 The road network has sufficient reserve and pavement widths to cater for the current and intended function of the road in accordance with the road type in accordance with Planning scheme policy - Integrated design.	No example provided.
PO22 Movement networks encourage walking and cycling and a safe environment for pedestrians and cyclists.	**E22** Pedestrian paths, bikeways and on-road bicycle facilities are provided for the street type in accordance with Planning scheme policy - Integrated design.

PO23 Upgrade works (whether trunk or non-trunk) are provided where necessary to: a. ensure the type or volume of traffic generated by the development does not have a negative impact on the external road network; b. ensure the orderly and efficient continuation of the active transport network; c. ensure the site frontage is constructed to a suitable urban standard generally in accordance with Planning scheme policy - Integrated design. Note - An Integrated Transport Assessment (ITA) may be required to demonstrate compliance with this performance outcome refer to Planning scheme policy - Integrated transport assessment for guidance on when an ITA is required. An ITA should be prepared in accordance with Planning scheme policy - Integrated transport assessment. Note - The road network is mapped on Overlay map - Road hierarchy. Note - The primary and secondary active transport network is mapped on Overlay map - Active transport. Note - To demonstrate compliance with c. of this performance outcome, site frontage works where in existing road reserve (non-trunk) are to be designed and constructed as follows: i. Where the street is partially established to an urban standard, match the alignment of existing kerb and channel and provide carriageway widening and underground drainage where required; or ii. Where the street is not established to an urban standard, prepare a design that demonstrates how the relevant features of the particular road as shown in the Planning scheme policy - Integrated Design can be achieved in the existing reserve. Note - Refer to Planning scheme policy - Integrated design for road network and active transport network design standards.	No example provided.
Laneway design and location	
PO24 Laneway location contributes to a high standard of amenity for adjoining lots and the streetscape. Note - Refer to Planning scheme policy - Neighbourhood design for determining locational criteria for Laneways.	**E24** Laneways are primarily used where: a. vehicle access is not permitted from the primary street frontage; or b. limiting vehicle access from the primary street frontage results in a positive streetscape outcome;or c. where lots directly adjoin a local, district or regional Park(57).
PO25	**E25.1** Laneways are limited to 130m in length.

Laneways service a limited number of allotments, creating a sense of place and enclosed feeling for the pedestrian environment at the non-laneway frontage of the lots whilst contributing to a high level of connectivity of the street network. Note - Refer to Planning scheme policy - Integrated design and Planning scheme policy - Neighbourhood design for determining design criteria for Laneways.	**E25.2** Laneways are not designed as dead ends or cul-de-sacs, and are to have vehicle connections to an access street at both ends.
	E25.3 Where laneways exceed 100m in length, a mid lane pedestrian connection is to be provided between the adjacent access streets and the laneway.
PO26 Laneway design ensures the safety of pedestrians, cyclists and motorists by way of site lines, and sufficient road reserve for vehicle movements and the provision of street lighting. Note - Refer to Planning scheme policy - Integrated design and Planning scheme policy - Neighbourhood design for determining design criteria for Laneways.	**E26.1** Laneways are designed with minor meanders only, and maintain direct lines of sight from one end of the laneway to the other.
	E26.2 Laneways provide road dedication at strategic locations along the laneway to allow the construction of street lighting and any electrical pillars associated with the street lighting in accordance with current Australian Standards. Note - The dedication must allow for street lights on to be provided on Council's standard alignment
Park(57) and open space	
PO27 A hierarchy of Park(57) and open space is provided to meet the recreational needs of the community. Note - To determine the extent and location of Park(57) and open space required refer to Planning scheme policy - Integrated design. Note - District level Parks(57) or larger may also be required in certain locations in accordance with Part 4: Local Government Infrastructure Plan.	No example provided.
PO28 Park(57) is to be provided within walking distance of all new residential lots. Note - To determine maximum walking distances for Park(57) types refer to Planning scheme policy - Integrated design.	No example provided.
PO29 Park(57) is of a size and design standard to meet the needs of the expected users.	No example provided.

Note - To determine the size and design standards for Parks[57] refer to Planning scheme policy - Integrated design.	
PO30 Parks[57] are designed and located to be safe and useable for all members of the community with high levels of surveillance, based on Crime Prevention Through Environmental Design principles, and access.	**E30.1** Local and district Parks[57] are bordered by streets and lots orientated to address and front onto Parks and not lots backing onto or not addressing the Park wherever possible.
	E30.2 Where lots do adjoin local and district Parks[57], and fencing is provided along the Park[57] boundary, it is located within the lot and at a maximum height of 1m.
	E30.3 The design of fencing and retaining features allows for safe and direct pedestrian access between the Park[57] and private allotment through the use of private gates and limited retaining features along Park[57] boundaries.
Boundary realignment	
PO31 Boundary alignments ensure that infrastructure and services are wholly contained within the lot they serve.	No example provided.
PO32 Boundary realignment does not result in a. existing land uses on-site becoming non-complying with planning scheme criteria; b. lots being unserviced by infrastructure. Note - Examples may include but are not limited to: a. minimum lot size requirements; b. setbacks; c. parking and access requirements;s d. servicing and Infrastructure requirements; e. dependant elements of an existing or approved land use being separately titled, including but not limited to: i. Where premises are approved as Multiple Dwelling[49] Units with a communal open space area, the communal open space cannot be separately titled as it is required by the Multiple Dwelling[49] approval.	No example provided.

ii. Where a commercial or industrial land use contains an ancillary office[53], the office[53] cannot be separately titled as it is considered part of the commercial or industrial use. iii. Where a Dwelling house[22] includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house[22] use.	
PO33 Boundary realignment results in lots which have appropriate size, dimensions and access to cater for uses consistent with the precinct. Note - Refer to overall outcomes for the General residential zone - Urban neighbourhood precinct for uses consistent in this precinct.	**E33** Lot sizes and dimensions (excluding an access handles) comply with Lot Types A, B or F in accordance with 'Table 9.4.1.6.4.3: Lot Types' - Lot Types.
Reconfiguring existing development by Community Title	
PO34 Reconfiguring a lot which creates or amends a community title scheme as described in the *Body Corporate and Community Management Act 1997* is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note -Examples of land uses becoming unlawful include, but are not limited to the following: a. Land on which a Dual occupancy[21] has been established is reconfigured in a way that results in both dwellings no longer being on the one lot. The reconfiguring has the effect of transforming the development from a Dual occupancy[21] to two separate Dwelling[22] houses, at least one of which does not satisfy the requirements for accepted development applying to Dwelling houses. b. Land on which a Multiple dwelling[49] has been established is reconfigured in a way that precludes lawful access to required communal facilities by either incorporating some of those facilities into private lots or otherwise obstructing the normal access routes to those facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval. Editor's note - To satisfy this performance outcome, the development application may need to be a combined application for reconfiguring a lot and a material change of use or otherwise	No example provided.

be supported by details that confirm that the land use still satisfies all relevant land use requirements.	
Reconfiguring by Lease	
PO35 Reconfiguring a lot which divides land or buildings by lease in a way that allows separate occupation or use of those facilities is undertaken in a way that does not result in existing uses on the land becoming unlawful or otherwise operating in a manner that is: a. inconsistent with any approvals on which those uses rely; or b. inconsistent with the requirements for accepted development applying to those uses at the time that they were established. Note - An example of a land use becoming unlawful is a Multiple dwelling**(49)** over which one or more leases have been created in a way that precludes lawful access to some of the required communal facilities. Some of the communal car parking facilities have been incorporated into lease areas while other leases are located in a way that obstructs the normal access routes to other communal facilities. Those communal facilities may have been required under the requirements for accepted development for the use or conditions of development approval, but they are no longer freely available to all occupants of the Multiple dwelling**(49)**. Editor's note -To satisfy this performance outcome, the development application may need to be supported by details that confirm that the land use still satisfies all relevant land use requirements. Editor's note – Under the definition in Schedule 2 of the Act, the following do not constitute reconfiguring a lot and are not subject to this performance outcome: a. a lease for a term, including renewal options, not exceeding 10 years; and b. an agreement for the exclusive use of part of the common property for a community titles scheme under the *Body Corporate and Community Management Act 1997*.	No example provided.
Volumetric subdivision	
PO36 The reconfiguring of the space above or below the surface of the land ensures appropriate area, dimensions and access arrangements to cater for uses consistent with the precinct and does not result in existing land uses on-site becoming non-complying with planning scheme criteria. Note - Examples may include but are not limited to:	No example provided.

a. Where a Dwelling house[22] includes a secondary dwelling or associated outbuildings, they cannot be separately titled as they are dependent on the Dwelling house[22] use.	
Reticulated supply	
PO37 Each lot is provided with an appropriate level of service and infrastructure commensurate with the precinct. All services, including water supply, stormwater management, sewage disposal, stormwater disposal, drainage, electricity, telecommunications and gas (if available) are provided in a manner that: a. is efficient in delivery of service; b. is effective in delivery of service; c. is conveniently accessible in the event of maintenance or repair; d. minimises whole of life cycle costs for that infrastructure; e. minimises risk of potential adverse impacts on the natural and built environment; f. minimises risk of potential adverse impact on amenity and character values; g. recognises and promotes Councils Total Water Cycle Management policy and the efficient use of water resources.	**E37** Where available, new lots are provided with: a. a connection to the reticulated water supply infrastructure network; b. a connection to the sewerage infrastructure network; c. a connection to the reticulated electricity infrastructure network; d. A physical connection to the telecommunication network, that where available to the land is part of the high speed broadband network.
Stormwater location and design	
PO38 The development is planned and designed considering the land use constraints of the site and incorporates water sensitive urban design principles.	No example provided.
PO39 All inter-allotment stormwater drainage infrastructure located within private land and burdening another lot is protected by easements in favour of Council with sufficient area for practical access for maintenance. Note - Refer to Planning scheme policy - Integrated design for guidance on how to demonstrate achievement of this performance outcome.	No example provided.
PO40	No example provided.

Stormwater management facilities are located outside of riparian areas and prevent increased channel bed and bank erosion.	
PO41 Natural streams and riparian vegetation are retained and enhanced through revegetation.	No example provided.
PO42 Areas constructed as detention basins are adaptable for passive recreation.	No example provided.
PO43 Development maintains the environmental values of waterway ecosystems.	No example provided.
PO44 Constructed water bodies are not dedicated as public assets.	No example provided.
Stormwater management system	
PO45 The major drainage system has the capacity to safely convey stormwater flows for the defined flood event.	**E45** The roads, drainage pathways, drainage features and waterways safely convey the stormwater flows for the defined flood event without allowing flows to encroach upon private lots.
PO46 Overland flow paths (for any storm event) from newly constructed roads and public open space areas do not pass through private lots.	**E46** Drainage pathways are provided to accommodate overland flows from roads and public open space areas.
PO47 Where located within the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the greater pollutant removal of: a. 100% reductions in mean annual loads from unmitigated development for total suspended solids, total phosphorus, total nitrogen and gross pollutants >5mm; b. the stormwater management design objectives relevant for Moreton Bay Regional Council identified in Table A and B in Appendix 3 of the SPP.	No example provided.

Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	
PO48 Where located outside the Upper Pine, Hays Inlet and Burpengary Creek catchments, development achieves the design objectives in Tables A and B in Appendix 2 of the SPP. Note - To demonstrate compliance with this PO a stormwater quality management plan is to be prepared by a suitable qualified person demonstrating compliance with the Urban Stormwater Planning Guideline 2010, Planning Scheme Policy – Stormwater Management, Planning Scheme Policy - Integrated Design and considering any local area stormwater management planning prepared by Council. Note - Refer to Overlay map - Stormwater catchments for catchment boundaries.	No example provided.
PO49 The stormwater management system is designed to: a. protect the environmental values in downstream waterways; b. maintain ground water recharge areas; c. preserve existing natural wetlands and associated buffers; d. avoid disturbing soils or sediments; e. avoid altering the natural hydrologic regime in acid sulphate soil and nutrient hazardous areas. f. maintain and improve receiving water quality; g. protect natural waterway configuration; h. protect natural wetlands and vegetation; i. protect downstream and adjacent properties; j. protect and enhance riparian areas.	No example provided.
PO50	No example provided.

Design and construction of the stormwater management system: a. utilise methods and materials to minimise the whole of lifecycle costs of the stormwater management system; b. are coordinated with civil and other landscaping works. Note - Refer to Planning scheme policy - Integrated design for guidance on how to demonstrate achievement of this performance outcome.	
Native vegetation where not located in the Environmental areas overlay	
PO51 Reconfiguring a lot facilitates the retention of native vegetation by: a. incorporating native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; b. ensuring habitat trees are located outside a development footprint. Where habitat trees are to be cleared, replacement fauna nesting boxes are provided at the rate of 1 nest box for every hollow removed. Where hollows have not yet formed in trees > 80cm in diameter at 1.3m height, 3 nest boxes are required for every habitat tree removed. c. providing safe, unimpeded, convenient and ongoing wildlife movement; d. avoiding creating fragmented and isolated patches of native vegetation. e. ensuring that biodiversity quality and integrity of habitats is not adversely impacted upon but are maintained and protected; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies.	No example provided
Noise	
PO52 Noise attenuation structure (e.g. walls, barriers or fences): a. contribute to safe and usable public spaces, through maintaining high levels of surveillance of parks, streets and roads that serve active	**E52** Noise attenuation structures (e.g. walls, barriers or fences): a. are not visible from an adjoining road or public area unless; i. adjoining a motorway or rail line; or ii. adjoining part of an arterial road that does not serve an existing or future active transport purpose (e.g.

transport purposes (e.g. existing or future pedestrian paths or cycle lanes etc); b. maintain the amenity of the streetscape. Note - A noise impact assessment may be required to demonstrate compliance with this PO. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures.	pedestrian paths or cycle lanes) or where attenuation through building location and materials is not possible. b. do not remove existing or prevent future active transport routes or connections to the street network; c. are located, constructed and landscaped in accordance with Planning scheme policy - Integrated design. Note - Refer to Planning Scheme Policy – Integrated design for details and examples of noise attenuation structures. Note - Refer to Overlay map – Active transport for future active transport routes.
Values and constraints criteria Note - The relevant values and constraints criteria do not apply where the development is consistent with a current Development permit for Reconfiguring a lot or Material change of use or Operational work, where that approval has considered and addressed (e.g. through a development footprint plan (or similar in the case of Landslide hazard) or conditions of approval) the identified value or constraint under this planning scheme.	
Bushfire hazard (refer Overlay map - Bushfire hazard to determine if the following assessment criteria apply) Note - The preparation of a bushfire management plan in accordance with Planning scheme policy - Bushfire prone areas can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO53 Lots are designed to: a. minimise the risk from bushfire hazard to each lot and provide the safest possible siting for buildings and structures; b. limit the possible spread paths of bushfire within the reconfiguring; c. achieve sufficient separation distance between development and hazardous vegetation to minimise the risk to future buildings and structures during bushfire events; d. maintain the required level of functionality for emergency services and uses during and immediately after a natural hazard event.	**E53** Reconfiguring a lot ensures that all new lots are of an appropriate size, shape and layout to allow for the siting of future buildings being located: a. within an appropriate development footprint; b. within the lowest hazard locations on a lot; c. to achieve minimum separation between development or development footprint and any source of bushfire hazard of 20m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; d. to achieve a minimum separation between development or development footprint and any retained vegetation strips or small areas of vegetation of 10m or the distance required to achieve a Bushfire Attack Level BAL (as identified under AS3959-2009), whichever is the greater; e. away from ridgelines and hilltops; f. on land with a slope of less than 15%; g. away from north to west facing slopes.
PO54	**E54**

Lots provide adequate water supply and infrastructure to support fire-fighting.	For water supply purposes, reconfiguring a lot ensures that: a. lots have access to a reticulated water supply provided by a distributer retailer for the area; or b. where no reticulated water supply is available, on-site fire fighting water storage containing not less than 10000 litres and located within a development footprint.
PO55 Lots are designed to achieve: a. safe site access by avoiding potential entrapment situations; b. accessibility and manoeuvring for fire-fighting during bushfire.	**E55** Reconfiguring a lot ensures a new lot is provided with: a. direct road access and egress to public roads; b. an alternative access where the private driveway is longer than 100m to reach a public road; c. driveway access to a public road that has a gradient no greater than 12.5%; d. minimum width of 3.5m.
PO56 The road layout and design supports: a. safe and efficient emergency services access to all lots; and manoeuvring within the subdivision; b. availability and maintenance of access routes for the purpose of safe evacuation.	**E56** Reconfiguring a lot provides a road layout which: a. includes a perimeter road that separating the new lots from hazardous vegetation on adjacent lots incorporating by: i. a cleared width of 20m; ii. road gradients not exceeding 12.5%; iii. pavement and surface treatment capable of being used by emergency vehicles; iv. Turning areas for fire fighting appliances in accordance with Qld Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines. b. Or if the above is not practicable, a fire maintenance trail separates the lots from hazardous vegetation on adjacent lots incorporating: i. a minimum cleared width of 6m and minimum formed width of 4m; ii. gradient not exceeding 12.5%; iii. cross slope not exceeding 10%; iv. a formed width and erosion control devices to the standards specified in Planning scheme policy - Integrated design;

	v. a turning circle or turnaround area at the end of the trail to allow fire fighting vehicles to manoeuvre; vi. passing bays and turning/reversing bays every 200m; vii. an access easement that is granted in favour of the Council and the Queensland Fire and Rescue Service or located on public land. c. excludes cul-de-sacs, except where a perimeter road with a cleared width of 20m isolates the lots from hazardous vegetation on adjacent lots; and d. excludes dead-end roads.
Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria. Editors' Note - The accuracy of overlay mapping can be challenged through the development application process (code assessable development) or by way of a planning scheme amendment. See Council's website for details.	
PO57 No new boundaries are located within 2m of High Value Areas.	No example provided
PO58 Lots are designed to: a. minimise the extent of encroachment into the MLES waterway buffer or a MLES wetland buffer; b. ensure quality and integrity of biodiversity and ecological values is not adversely impacted upon but are maintained and protected; c. incorporate native vegetation and habitat trees into the overall subdivision design, development layout, on-street amenity and landscaping where practicable; d. provide safe, unimpeded, convenient and ongoing wildlife movement; e. avoid creating fragmented and isolated patches of native vegetation; f. ensuring that soil erosion and land degradation does not occur; g. ensuring that quality of surface water is not adversely impacted upon by providing effective vegetated buffers to water bodies. AND	**E58** Reconfiguring a lot ensures that no additional lots are created within a Value Offset Area.

Where development results in the unavoidable loss of native vegetation within a MLES waterway buffer or a MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.	
Extractive resources transport route buffer (refer Overlay map - Extractive resources to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO59 Lots provide a development footprint outside of the buffer.	No example provided.
PO60 Access to a new lot is not from an identified extractive industry transportation route, but to an alternative public road.	No example provided.
Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO61 Lots do not: a. reduce public access to a heritage place, building, item or object; b. create the potential to adversely affect views to and from the heritage place, building, item or object; c. obscure or destroy any pattern of historic subdivision, historical context, landscape setting or the scale and consistency of the urban fabric relating to the local heritage place.	No example provided.
PO62 Reconfiguring a lot retains significant trees and incorporates them into the subdivision design, development layout and provision of infrastructure.	No example provided.
Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	

Bulk water supply infrastructure	
PO63 Reconfiguration of lots does not compromise or adversely impact upon the efficiency and integrity of Bulk water supply infrastructure.	No example provided.
PO64 Reconfiguring of lots ensures that access requirements of Bulk water supply infrastructure are maintained.	**E64** Bulk water supply infrastructure traversing or within private land are protected by easement in favour of the service provider for access and maintenance.
PO65 Development within a Bulk water supply infrastructure buffer: a. is located, designed and constructed to protect the integrity of the water supply pipeline; b. maintains adequate access for any required maintenance or upgrading work to the water supply pipeline.	**E65** New lots provide a development footprint outside the Bulk water supply infrastructure buffer.
PO66 Boundary realignments: i. do not result in the creation of additional building development opportunities within the buffer; ii. results in the reduction of building development opportunities within the buffer.	No example provided.
Landslide hazard (refer Overlay map - Landslide hazard to determine if the following assessment criteria apply) Note - The preparation of a site-specific geotechnical assessment report in accordance with Planning scheme policy - Landslide hazard can assist in demonstrating compliance with the following performance criteria. The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO67 Lots ensure that: a. future development is located in part of a site not subject to landslide risk; b. the need for excessive on-site works, change to finished landform, or excessive vegetation clearance to provide for future development is avoided; c. there is minimal disturbance to natural drainage patterns; d. earthworks does not:	**E67.1** Lot provides development footprint for all lots free from risk of landslide. **E67.2** Development footprints for lots does not exceed 15% slope.

i. involve cut and filling having a height greater than 1.5m; ii. involve any retaining wall having a height greater than 1.5m; iii. involve earthworks exceeding $50m^3$; iv. redirect or alter the existing flows of surface or groundwater.	
Overland flow path (refer Overlay map - Overland flow path to determine if the following assessment criteria apply) Note - The applicable river and creek flood planning levels associated with defined flood event (DFE) within the inundation area can be obtained by requesting a flood check property report from Council.	
PO68 Development: a. minimises the risk to persons from overland flow; b. does not increase the potential for damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure.	No example provided.
PO69 Development: a. maintains the conveyance of overland flow predominantly unimpeded through the premises for any event up to and including the 1% AEP for the fully developed upstream catchment; b. does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow..	**E69** Development ensures that any buildings are not located in an Overland flow path area. Note: A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding property.
PO70 Development does not: a. directly, indirectly or cumulatively cause any increase in overland flow velocity or level; b. increase the potential for flood damage from overland flow either on the premises or on a surrounding property, public land, road or infrastructure.	No example provided.

Note - Open concrete drains greater than 1m in width are not an acceptable outcome, nor are any other design options that may increase scouring. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	
PO71 Development ensures that overland flow is not conveyed from a road or public open space onto a private lot, unless the development is in a Rural zone.	**E71** Development ensures that overland flow paths and drainage infrastructure is provided to convey overland flow from a road or public open space area away from a private lot, unless the development is in the Rural zone.
PO72 Development ensures that Council and inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment flows and are able to be easily maintained. Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow	**E72.1** Development ensures that roof and allotment drainage infrastructure is provided in accordance with the following relevant level as identified in QUDM: a. Urban area – Level III; b. Rural area – N/A; c. Industrial area – Level V; d. Commercial area – Level V. **E72.2** Development ensures that all Council and allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.
PO73 Development protects the conveyance of overland flow such that easements for drainage purposes are provided over: a. a stormwater pipe if the nominal pipe diameter exceeds 300mm; b. an overland flow path where it crosses more than one property; and c. inter-allotment drainage infrastructure. Note - Refer to Planning scheme policy - Integrated design for details and examples. Note - Stormwater drainage easement dimensions are provided in accordance with Section 3.8.5 of QUDM.	No example provided

Additional criteria for development for a Park[57]	
PO74 Development for a Park[57] ensures that the design and layout responds to the nature of the overland flow affecting the premises such that: a. public benefit and enjoyment is maximised; b. impacts on the asset life and integrity of park structures is minimised; c. maintenance and replacement costs are minimised.	**E74** Development for a Park[57] ensures works are provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated Design.
Riparian and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the following assessment criteria apply) Note - - W1, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.	
PO75 Lots are designed to: a. minimise the extent of encroachment into the riparian and wetland setback; b. ensure the protection of wildlife corridors and connectivity; c. reduce the impact on fauna habitats; d. minimise edge effects; e. ensure an appropriate extent of public access to waterways and wetlands.	**E75** Reconfiguring a lot ensures that: a. no new lots are created within a riparian and wetland setback; b. new public roads are located between the riparian and wetland setback and the proposed new lots. Note - Riparian and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.
Scenic amenity (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply) Note - The identification of a development footprint will assist in demonstrating compliance with the following performance criteria.	
PO76 New lots are sited, designed and oriented to: a. maximise the retention of existing trees and land cover including the preservation of coastal trees; b. maximise the retention of highly natural and vegetated areas and natural landforms by minimising the use of cut and fill.	No example provided.

Table 9.4.1.6.4.3: Lot Types

Lot Type	A	B	C	D	E	F
Primary Frontage *(metres)*	7.5	>7.5 - 10	>10 - 12.5	>12.5 - 18	>18 - 32	32+
Lot Depth *(metres)*	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35	25 - 35
Built to Boundary	*Mandatory built to boundary both sides.*	*Mandatory built to boundary one side.*	*Mandatory built to boundary one side.*			

Density Figures

Figure 1 - Kallangur

Figure 2 - Mango Hill

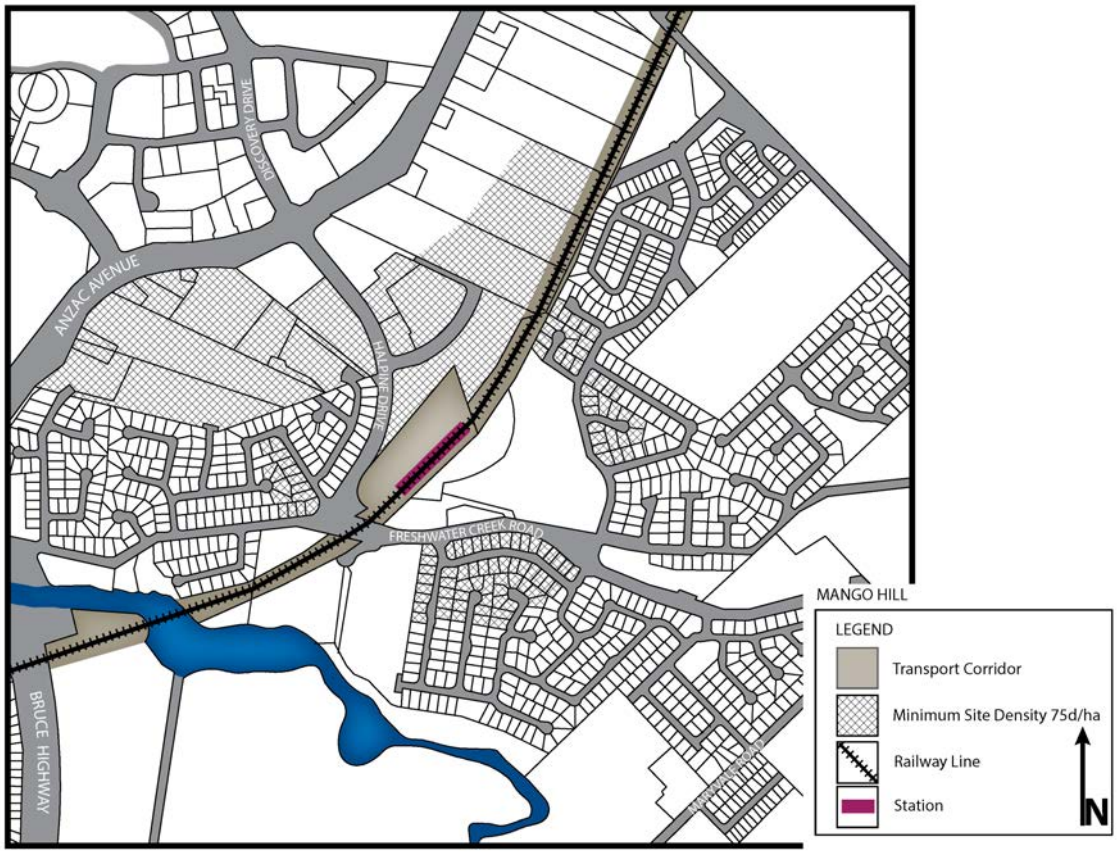


Figure 3 - Mango Hill East

Figure 4 - Murrumba Downs

Figure 5 Kippa-Ring

Movement Figures

Figure 6 - Dakabin

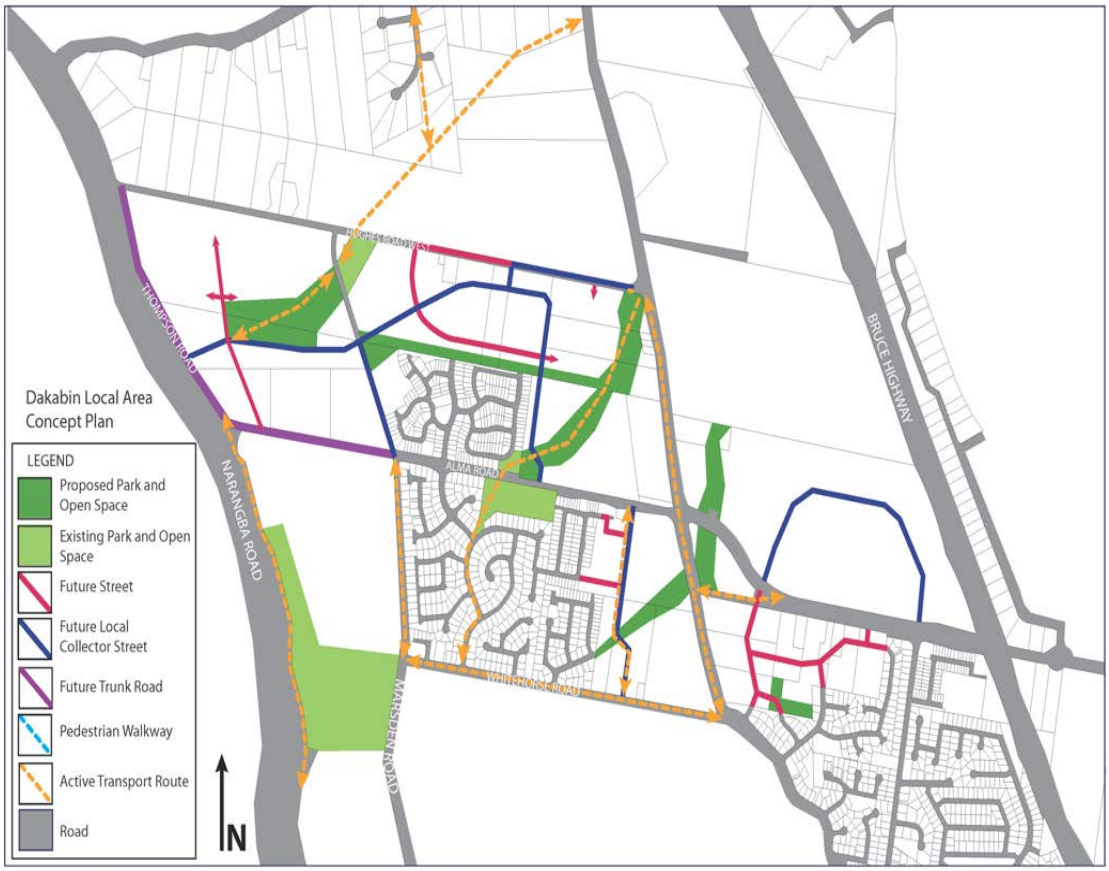


Figure 7 - Kallangur

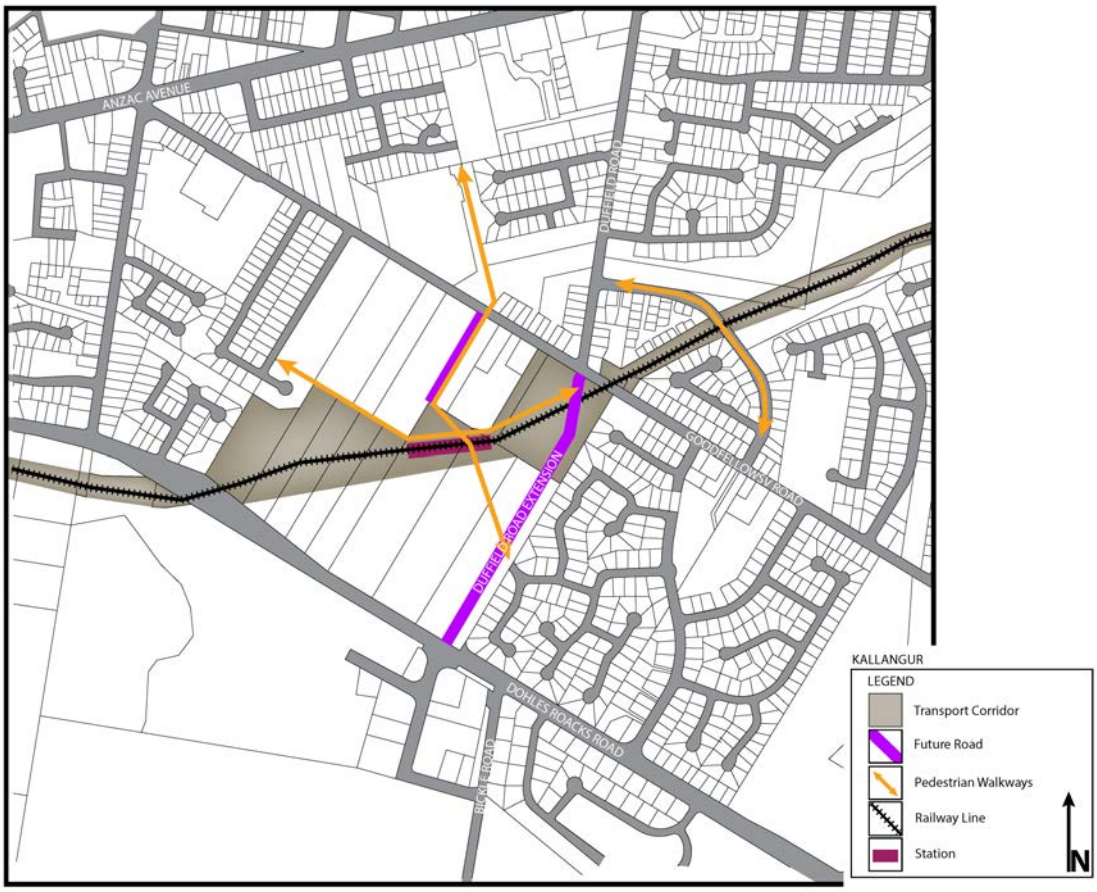


Figure 8 - Mango Hill

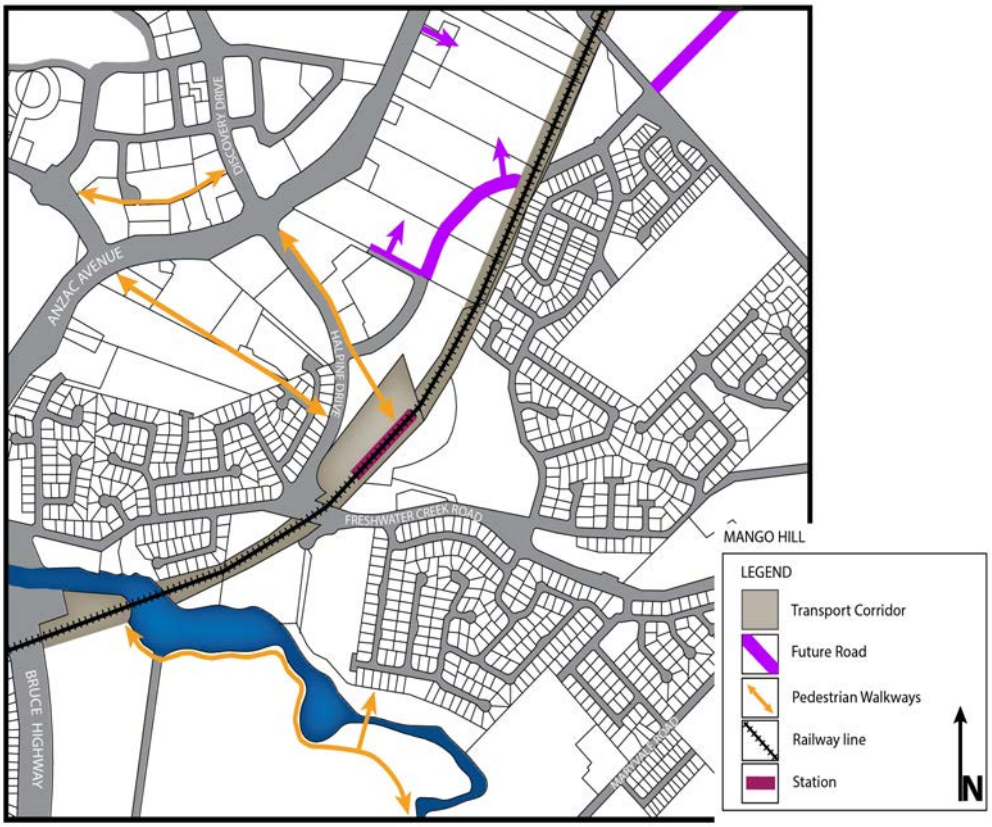


Figure 9 - Mango Hill East

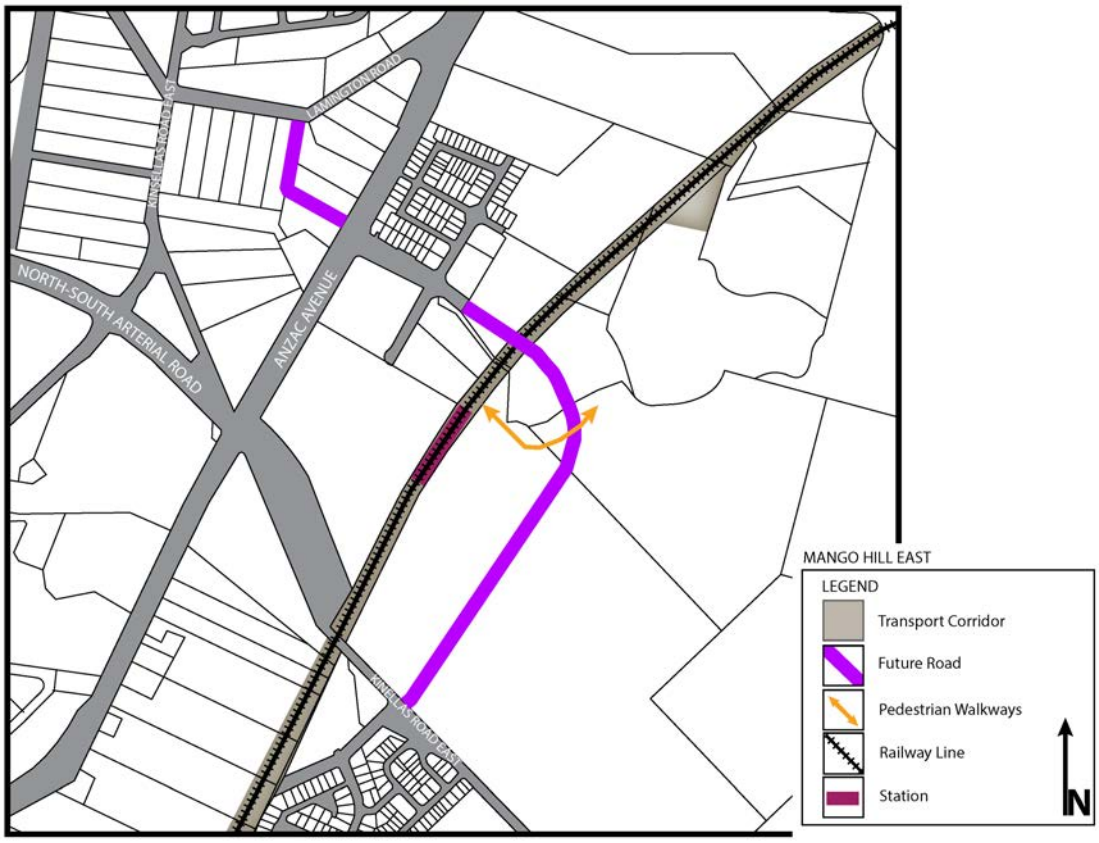


Figure 10 - Murrumba Downs

Figure 11 - Narangba East

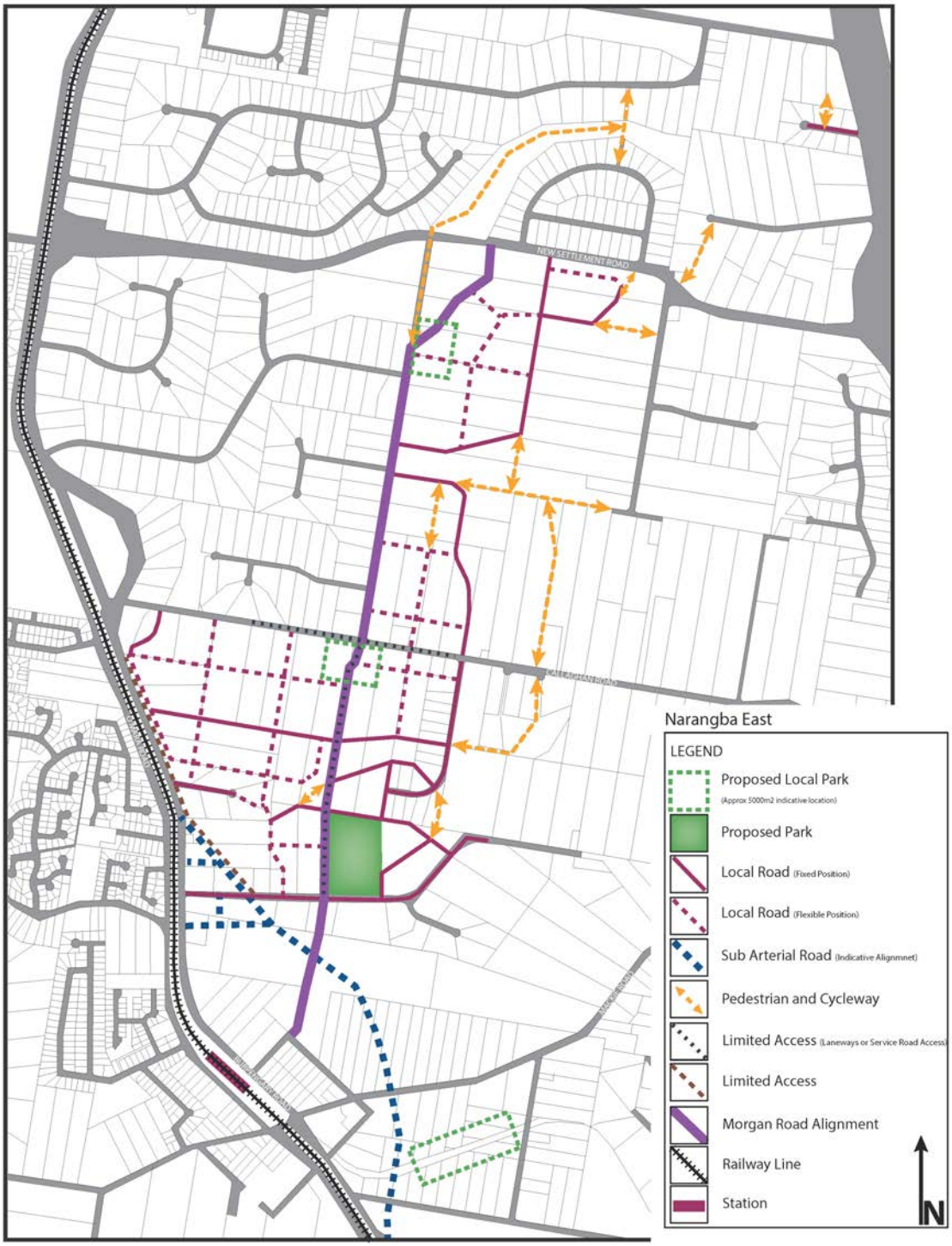


Figure 12 - Petrie