6.2 Zone codes

6.2.1 Centre zone code

6.2.1.1 Application - Centre zone

This code applies to undertaking development in the Centre zone, if:

- the development has been categorised as either accepted development subject to requirements or assessable development - code assessment, and this code is identified as applicable to that development in the assessment benchmarks for assessable development and requirements for accepted development column of a table of assessment (Part 5):
- 2. the development has been categorised as assessable development impact assessment (Part 5).

When using this code, reference should be made to section 5.3.2 Determining the category of development and category of assessment and, where applicable, section 5.3.3 Determining and applying the requirements for accepted development and the assessment benchmarks for assessable development located in Part 5. For accepted development subject to requirements or assessable development under this Code:

- 1. Part A of the code applies to accepted development subject to requirements in a higher order, district, local or specialised centre precinct;
- 2. Part B of the code applies to assessable development in the 6.2.1.1 'Caboolture centre precinct';
- 3. Part C of the code applies to assessable development in the 6.2.1.2 6.2.1.2 'Morayfield centre precinct';
- 4. Part D of the code applies to assessable development in the 6.2.1.3 6.2.1.3 'Strathpine centre precinct';
- 5. Part E of the code applies to assessable development in the 6.2.1.4 6.2.1.4 'District centre precinct';
- 6. Part F of the code applies to assessable development in the 6.2.1.5 6.2.1.5 'Local centre precinct';
- 7. Part G of the code applies to assessable development in the 6.2.1.6 (Specialised centre precinct'.

6.2.1.2 Purpose - Centre zone

- 1. The purpose of the Centre zone code is to provide for a mix of uses and activities. These uses include, but are not limited to; business, retail, professional, administrative, community, entertainment, educational, recreational, cultural and residential activities. Centres have a variety of scales based on their location and surrounding activities;
- 2. The purpose of the centre zone code is to recognise, foster and encourage the development of vibrant, multi-functional centres that form a network within the region to:
 - a. provide a foundation for economic growth through the interaction and co-location of a diverse mix of uses, the achievement of clustered economies, and the more efficient concentration of goods and service:
 - b. provide a focus for government and non-government investment in major public transport, health, higher education, cultural, recreational and entertainment facilities;
 - c. provide a focus for community and social interaction;
 - d. manage private travel demand by encouraging multi-purpose trips of lower frequency and reduced duration;

- e. provide enhanced opportunities for land use and transport integration particularly in respect of active (pedestrian, bicycle) and public transport networks;
- f. provide an interesting and diverse mixed-use residential environment.
- 3. The Centre zone code seeks to implement the policy direction set in Part 3, Strategic Framework.
- 4. The Centre zone comprises 6 precincts which have the following purpose:
 - a. Higher order centre precincts:
 - Caboolture, Morayfield and Strathpine centre precincts
 The purpose of these higher order centre precincts is to support the development of the region's higher order centres as the main centres for administration, business, shopping and civic investment in the region. Higher order centres provide the greatest mix of land uses and the highest development densities. Higher order centres have a central, highly accessible core which contains the highest density of development, and accommodates land uses such as major and specialist retail, professional and other specialist services and civic, education, health and cultural facilities that benefit from a highly accessible location. Higher order centres are located around a significant transit node, and at the centre of the transport networks serving the community. These are the largest centres, providing a large number and range of employment opportunities serving the region's population.
 - Each higher order centre has its own precinct. The higher order centre precincts are: Caboolture centre precinct Morayfield centre precinct Strathpine centre precinct

Note - The Mango Hill Infrastructure Development Control Plan applies to development in North Lakes.

b. District centre precinct

The purpose of the District centre precinct is to provide a wide range of services and facilities at a significantly lower scale and lower intensity than higher order centres and serve a smaller catchment population of 20,000 - 50,000 people. District centres provide a focal point for inter-suburban transport networks and for surrounding medium density neighbourhoods. District centres provide health, education and community facilities and a range of Shops⁽⁷⁵⁾ including full-line supermarkets and specialist stores to cater for weekly shopping needs.

The District centre precincts are:

Bellara / Bongaree

Burpengary

Deception Bay

Margate

Kallangur

Petrie

Warner Albany Creek

Arana Hills

Rothwell

Note - The Mill at Moreton Bay Priority Development Area Development Scheme applies to development in the Petrie District Centre, and development is not administered by the Planning Scheme. Refer to Part 10 of the Planning Scheme for further information on the Mill at Moreton Bay Priority Development Area Development Scheme.

c. Local centre precinct

The purpose of the Local centre precinct is to provide a limited range of services, including convenience retail, to a cluster of local neighbourhoods. They have good local accessibility, particularly active transport and act as a focal point and meeting place for the local community. Local centres generally serve a catchment of 10,000- 15,000 people and are generally defined by the presence of a full-line supermarket or a fully functioning main street that caters for a catchment of the same size.

The Local centre precincts are:

Albany Creek - Old North Road

Banksia Beach, Banksia Beach Shopping Centre - Sunderland Drive

Bongaree, First Avenue Strip

Bray Park, Kensington Village Shopping Centre - Sovereign Avenue

Beachmere, Beachmere Road

Caboolture, Central Lakes - Pettigrew Street

Clontarf, Elizabeth Avenue

Kallangur, Lilly Brook Shopping Village - Brickworks Road

Kippa-Ring, Dolphins Central - Ashmole Road

Lawnton, Gympie Road

Murrumba Downs, Murrumba Downs Shopping Centre - Dohles Rocks Road West

Narangba, Young Road and Golden Wattle Drive

d. Specialised centre precinct

The purpose of the Specialised centre precinct is to provide for the establishment of retail uses which have specific locational or land requirements that are difficult to achieve within higher order, district or local centres. Bulky goods premises often needing a large area for the handling, display or storage of goods or direct vehicular access by members of the public to the site to load or unload goods. These uses service a regional catchment of 40,000 - 80,000 people, are clustered together forming individual precincts rather than being located at the periphery of a higher order, district or local centre.

The Specialised centre precincts are:

Mango Hill, Anzac Avenue

Morayfield, Morayfield Road south

Rothwell, Deception Bay Road

Rothwell, Anzac Avenue

Strathpine, Gympie Road South

Lawnton, Gympie Road

Note - In addition to centres a neighbourhood can contain small groups of Shops⁽⁷⁵⁾, Offices⁽⁵³⁾ and community activities known as Neighbourhood Hubs. These are small scale developments rather than centres and are guided by the zone or pr⁽⁵³⁾ ecinct they are located within (e.g. General residential zone) and are not addressed in this code.

- 5. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development is consistent with the role and function of the centre, as identified on the Moreton Bay centres network table below (refer Table 6.2.1.1).

Table 6.2.1.1 Moreton Bay centres network

		Moreton Bay centres netw	vork	
	Higher Order - Caboolture, Morayfield and Strathpine	District	Local	Specialised
Role/Function	- Key centre within the SEQ Region. - Most intense concentration of retail, commercial and civic development.	- Focus for retail and commercial development within the planning area.	- Focus for retail and commercial activity within the local area.	- Focus for large (bulky goods) Showrooms ⁽⁷⁸⁾ .
Catchment	Regional	District	Local	Sub-Regional
Transport connectivity	Important focus for passenger rail and high frequency bus networks in the region.	Key focal point within the regional public transport system.	Stopping or transfer point for bus or train network.	Reliant on direct vehicular access due to the need to load and unload goods
Scale of Retail activities	>40,000m² GFA	15,000m² - 25,000m² GFA	5,000m² - 7,000m² GFA	Not specified
Retail	Including:	Including:	Including:	Including:
activities Scale of commercial	- Department stores (including discount department stores) - Showrooms ⁽⁷⁸⁾ - Personal Services - Full-line supermarkets - Full range of specialty stores Excludes: N/A Effectively no GFA limit	- Discount department stores) - Full-line supermarkets - Personal Services - Specialty stores Excludes: N/A >5,000m² GFA	- A full-line supermarket - Convenience stores - Personal services - Specialty stores Excludes: - Department stores (including discount department stores) - Showrooms (78) - Multiple full-line supermarkets	- Bulky goods retailing Excludes: - Department stores (including discount department stores) - Supermarkets - Specialty stores - Convenience stores - Personal services
activities	La abada a	In the state of	La alcadia a	Les des d
Commercial activities	Includes:	Includes:	Including:	Includes:
	- Key administration centre	- Intermediate level offices	- Local professional offices	N/A
	- State and local government offices	- Local professional offices	Excludes: - District level and above	Excludes: - All commercial
	- Professional and service businesses	Excludes:	professional and government offices	activities
	Excludes:	IN/A		
	N/A			

		Moreton Bay centres netw	vork	
Residential activities	- High density, multi-storey	- Medium density, multi-storey	- Medium - low density, low-rise	- No residential activity other than caretakers
Community activities	- Artistic, social or cultural facilities	- Artistic, social or cultural facilities	- Artistic, social or cultural facilities	- No community activities
	- Child care	- Child care	- Child care	
	- Education	- Education	- Education	
	- Emergency services ⁽²⁵⁾	- Emergency services ⁽²⁵⁾	- Emergency services ⁽²⁵⁾	
	- Health services	- Health services	- Health services	
	- Religious activities	- Religious activities	- Religious activities	
	- Social interaction or entertainment	- Social interaction or entertainment	- Social interaction or entertainment	
	- Support services	- Support services	- Support services	
Other activities	Regional focus for health, education, cultural and entertainment facilities Regional civic park	- Entertainment facilities - District civic park	Small scale entertainment activities Local civic park	- No other activities
	,			

6.2.1.2 Accepted development subject to requirements

If development 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 6.2.1.2. Where the development does not meet a requirement for accepted development (RAD) within Part A Table 6.2.1.2, 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	Corresponding performance outcomes (PO)					
development (RAD)	Caboolture centre precinct	Morayfield centre precinct	Strathpine centre precinct	District centre precinct	Local centre precinct	Specialised centre precinct
RAD1	PO1, PO2	PO1, PO2	PO1, PO2	PO1	PO1	PO1
RAD2	PO5	PO3, PO4	PO3	PO2	PO2	PO2
RAD3	PO10	P07	PO7	PO5	PO5	PO5
RAD4	PO17	PO11	PO11	PO13	PO13	PO10
RAD5	PO18-PO20	PO12-PO14	PO12-PO14	PO14-PO16	PO14-PO16	PO11-PO13
RAD6	PO23	PO17	PO20	PO20	PO20	PO16
RAD7	PO24	PO18	PO21	PO21	PO21	PO17
RAD8	PO28	PO22	PO26	PO23	PO23	PO19
RAD9	PO36	PO30	PO34	PO31	PO31	PO27

6 Zones

RAD10	PO37	PO31	PO35	PO32	PO32	PO28
RAD11	PO47	PO41	PO45	PO42	PO42	PO38
RAD12	PO41	PO35	PO39	PO36	PO36	PO32
RAD13	PO41	PO35	PO39	PO36	PO36	PO32
RAD14	PO41	PO35	PO39	PO36	PO36	PO32
RAD15	PO51	PO45	PO49	PO46	PO46	PO42
RAD16	PO53	PO47	PO51	PO48	PO48	PO44
RAD17	PO50	PO44	PO48	PO45	PO45	PO41
RAD18	PO50	PO44	PO48	PO45	PO45	PO41
RAD19	PO54	PO48	PO52	PO49	PO49	PO45
RAD20	PO57	PO51	PO55	PO52	PO52	PO47
RAD21	PO58	PO52	PO56	PO53	PO53	PO48
RAD22	PO59	PO53	PO57	PO54	PO54	PO49
RAD23	PO58	PO52	PO56	PO53	PO53	PO48
RAD24	PO65	PO59	PO63	PO60	PO60	PO55
RAD25	PO60	PO54	PO58	PO55	PO55	PO50
RAD26	PO60	PO54	PO58	PO55	PO55	PO50
RAD27	PO63	PO57	PO61	PO58	PO58	PO53
RAD28	PO63	PO57	PO61	PO58	PO58	PO53
RAD29	PO64	PO58	PO62	PO59	PO59	PO54
RAD30	PO66-PO70, PO72	PO60-PO64, PO66	PO64-PO68, PO70	PO61-PO65, PO67	PO61-PO65, PO67	PO56-PO60, PO62
RAD31	PO69	PO63	PO67	PO64	PO64	PO59
RAD32	PO66	PO60	PO64	PO61	PO61	PO56
RAD33	PO66	PO60	PO64	PO61	PO61	PO56
RAD34	PO66	PO60	PO64	PO61	PO61	PO56
RAD35	PO71	PO65	PO69	PO66	PO66	PO61
RAD36	PO66	PO60	PO64	PO61	PO61	PO56
RAD37	PO66	PO60	PO64	PO61	PO61	PO56
RAD38	PO68	PO62	PO66	PO63	PO63	PO58
RAD39	PO68	PO62	PO66	PO63	PO63	PO58
RAD40	PO73	PO67	PO71	PO68	PO68	PO63
RAD41	PO73	PO67	PO71	PO68	PO68	PO63
RAD42	PO73	PO67	P071	PO68	PO68	PO63

RAD43	PO74	PO68	PO72	PO69	PO69	PO64
RAD44	PO75	PO69	PO73	PO70	PO70	PO65
RAD45	PO82	PO75	PO80	PO76	PO76	PO71
RAD46	PO82	PO75	PO80	PO76	PO76	PO71
RAD47	PO81	PO74	PO79	PO75	PO75	PO70
RAD48	PO82	PO75	PO80	PO76	PO76	PO71
RAD49	PO76	PO70	PO74	PO71	PO71	PO66
RAD50	PO76	PO70	PO74	PO71	PO71	PO66
RAD51	PO87	PO78	PO85	PO79	PO79	PO74
RAD52	PO88	PO79	PO86	PO80	PO80	PO75
RAD53	PO89	PO80	PO87	PO81	PO81	PO76
RAD54	PO89	PO80	PO87	PO81	PO81	PO76
RAD55	PO89	PO80	PO87	PO81	PO81	PO76
RAD56	PO89	PO80	PO87	PO81	PO81	PO76
RAD57	PO91	PO82	PO89	PO83	PO83	PO78
RAD58	PO95	PO84	PO97	PO84	PO84	PO79
RAD59	PO96-PO107	PO85-PO96	PO98-PO109	PO85-PO96	PO85-PO96	PO80-PO91
RAD60	PO96-PO107	PO85-PO96	PO98-PO109	PO85-PO96	PO85-PO96	PO80-PO91
RAD61	N/A	N/A	PO110	N/A	N/A	N/A
RAD62	N/A	N/A	PO111	N/A	N/A	N/A
RAD63	N/A	N/A	PO112	N/A	N/A	N/A
RAD64	N/A	N/A	PO113	N/A	N/A	N/A
RAD65	N/A	N/A	N/A	N/A	N/A	PO92
RAD66	N/A	N/A	N/A	N/A	N/A	PO93
RAD67	N/A	N/A	N/A	N/A	N/A	PO93
RAD68	PO108, PO109	PO97-PO99	PO114-PO116	PO97-PO99	PO97-PO99	PO94-PO96
RAD69	PO108, PO109	PO97-PO99	PO114-PO116	PO97-PO99	PO97-PO99	PO94-PO96
RAD70	PO111	PO100	PO117	PO100	PO100	PO97
RAD71	PO111	PO100	PO117	PO100	PO100	PO97
RAD72	PO111	PO100	PO117	PO100	PO100	PO97
RAD73	N/A	N/A	N/A	N/A	N/A	N/A
RAD74	N/A	N/A	PO118	N/A	N/A	N/A
RAD75	N/A	N/A	N/A	N/A	N/A	N/A
RAD76	N/A	N/A	N/A	PO101, PO102	N/A	N/A

RAD77	PO112-PO114, PO116-PO118	PO103-PO105, PO107-PO109	PO120-PO122, PO124-PO126	PO104-PO106, PO108-PO110	PO102-PO104, PO106-PO109	PO98-PO100, PO102-PO104
RAD78	PO112-PO114, PO116-PO118	PO103-PO105, PO107-PO109	PO120-PO122, PO124-PO126	PO104-PO106, PO108-PO110	PO102-PO104, PO106-PO109	PO98-PO100, PO102-PO104
RAD79	PO112-PO114	PO103-PO105	PO120-PO122	PO104-PO106	PO102-PO104	PO98-PO100
RAD80	PO115	PO106	PO123	PO107	PO105	PO101
RAD81	PO119	PO110	PO127	PO111	PO110	PO105
RAD82	N/A	N/A	N/A	PO113	N/A	N/A
RAD83	PO120	PO111	PO128	PO112	PO111	PO106

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are set out in: Part B, Table 6.2.1.1.1 Caboolture centre precinct; Part C, Table 6.2.1.2.1 Morayfield centre precinct; Part D, Table 6.2.1.3.1 Strathpine centre precinct; Part E, Table 6.2.1.4.1 District centre precinct; Part F, Table 6.2.1.5.1 Local centre precinct; and Part G, Table 6.2.1.6.1 Specialised centre precinct respectively; as well as the relevant purpose statement and overall outcomes of this code.

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

Part A - Requirements for accepted development - Higher order, District, Local or Specialised centre precinct

Table 6.2.1.2 Requirements for accepted development - Higher order, District, Local or Specialised centre precincts

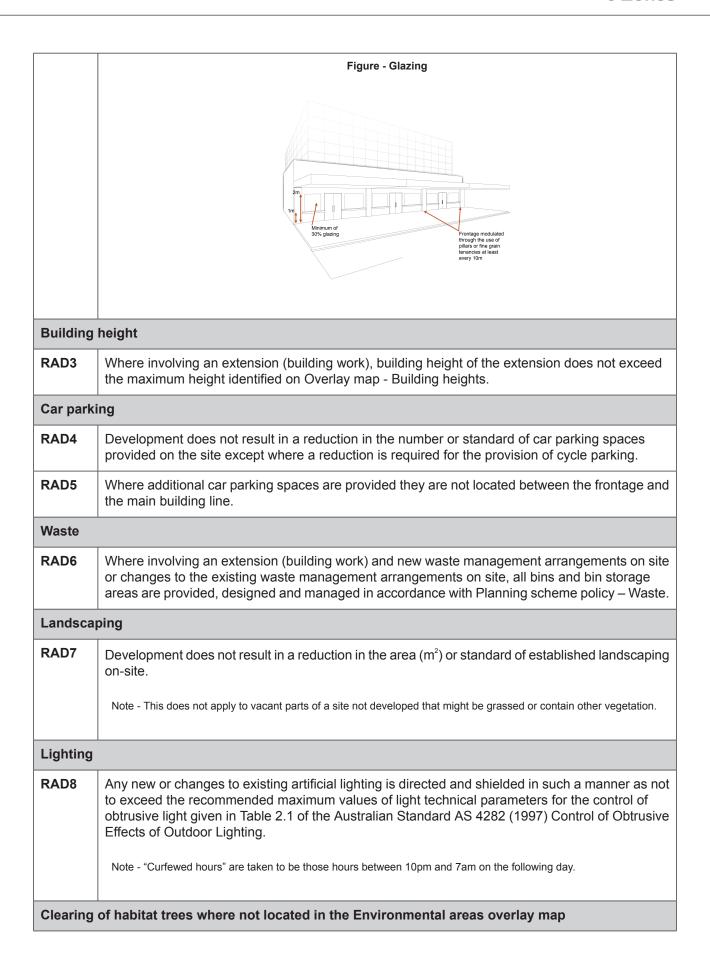
Requirements for accepted development **General requirements Extensions to existing buildings** RAD1 Extensions to an existing building do not exceed 80m² GFA on-site. Note -The increase in GFA as stated above, includes any previous increases in gross floor area undertaken as accepted development, building work or accepted development subject to requirements under this planning scheme. **Active frontage**

Where involving an extension (building work) in front of the main building line:

RAD2

a minimum of 50% of the front facade of the extension to the building is made up of windows or glazing between a height of 1m and 2m; the minimum area of window or glazing remains uncovered (e.g. is transparent and not

covered by screens, curtains, furniture, internal fixtures, objects or the like) and free of signage.



RAD9

Development does not result in the damaging, destroyed or clearing of a habitat tree. This does not apply to:

- a. Clearing of a habitat tree located within an approved development footprint;
- b. Clearing of a habitat tree within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of a habitat tree reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of a habitat tree reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental management and conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of a habitat tree reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of a habitat tree in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of a habitat tree associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Editor's note - A native tree measuring greater than 80cm in diameter when measured at 1.3m from the ground is recognised as a 'habitat tree'. For further information on habitat trees, refer to Planning scheme policy – Environmental areas and corridors. Information detailing how this measurement is undertaken is provided in Australian Standard AS 4970 2009 Protection of Trees on Development Sites - Appendix A.

Works requirements

Utilities

RAD10

Development is provided with an appropriate level of service and infrastructure in accordance with Planning scheme policy - Integrated design (Appendix A).

Access

RAD11

The frontage road is fully constructed to Council's standards.

Note - Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - Frontage roads include streets where no direct lot access is provided.

RAD12

Any new or changes to existing crossovers and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
 - i. AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
 - ii. AS/NZS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities;
 - iii. Planning scheme policy Integrated design;
 - iv. Schedule 8 Service vehicle requirements;
- c. where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

RAD13

Any new or changes to existing internal driveways and access ways are designed and constructed in accordance with AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking and the relevant standards in Planning scheme policy - Integrated design.

RAD14

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

Stormwater

RAD15

Any new or changes to existing stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises in accordance with Planning scheme policy – Integrated design.

Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure.

RAD16

Development incorporates a 'deemed to comply solution' to manage stormwater quality where the development:

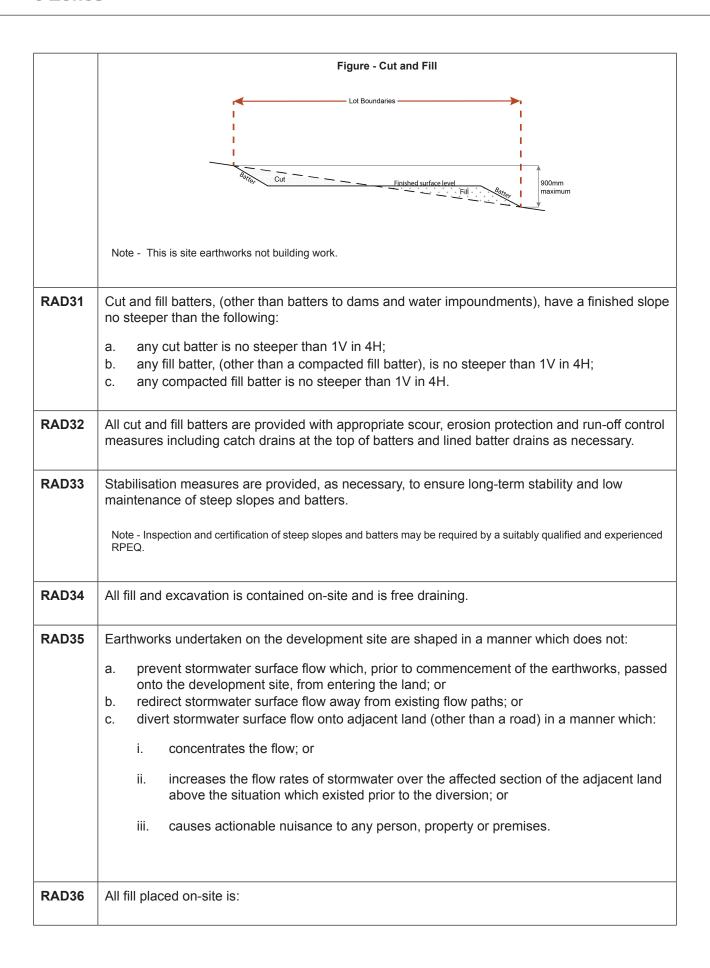
- a. is for an urban purpose that involves a land area of 2500m² or greater; and
- b. will result in:
 - i. 6 or more dwellings; or
 - ii. an impervious area greater than 25% of the net developable area.

		onstructed, established and maintained in accordance with Solutions - Stormwater Quality Management for South East ign.
RAD17	Development ensures that surface flows enterin blocked, diverted or concentrated.	g the premises from adjacent properties are not
	Note - A report from a suitably qualified Registered Profess the development does not increase the potential for signific surrounding premises.	sional Engineer Queensland may be required certifying that cant adverse impacts on an upstream, downstream or
RAD18	Development ensures that works (e.g. fences at flow of stormwater to adjoining properties.	nd walls) do not block, divert or concentrate the
	Note - A report from a suitably qualified Registered Profess the development does not increase the potential for signific surrounding premises.	sional Engineer Queensland may be required certifying that cant adverse impacts on an upstream, downstream or
RAD19	Stormwater drainage infrastructure (excluding d within private land is protected by easements in fa easement widths are as follows:	etention and bio-retention systems) through or avour of Council (at no cost to Council). Minimum
	Pipe Diameter	Minimum Easement Width (excluding access requirements)
	Stormwater Pipe up to 825mm diameter	3.0m
	Stormwater Pipe up to 825mm diameter with Sewer pipe up to 225m diameter	4.0m
	Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the pipe and clear of all pits.
	Note - Additional easement width may be required in certa to the stormwater system.	in circumstances in order to facilitate maintenance access
	Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

Site worl	ks and construction management
RAD20	The site and any existing structures are to be maintained in a tidy and safe condition.
RAD21	Development does not cause erosion or allow sediment to leave the site.
	Note - The International Erosion Control Association (Australasia) Best Practice Erosion and Sediment Control provides guidance on strategies and techniques for managing erosion and sedimentation.

RAD22	No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.
RAD23	Existing street trees are protected and not damaged during works.
	Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on developments sites are adopted and implemented.
RAD24	Any damage to Council land or infrastructure is repaired or replaced with the same materials, prior to plan sealing, or final building classification.
RAD25	Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.
RAD26	Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.
RAD27	All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.
	Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works
RAD28	Disposal of materials is managed in one or more of the following ways:
	a. all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
	b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.
	Note - No burning of cleared vegetation is permitted.
	Note - The chipped vegetation must be stored in an approved location.
RAD29	All development works are carried out within the following times:
	a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
	b. no work is to be carried out on Sundays or public holidays.

Earthwor	Earthworks	
RAD30	The total of all cut and fill on-site does not exceed 900mm in height.	



	a. limited to that necessary for the approved use;
	b. clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).
RAD37	The site is prepared and the fill placed on-site in accordance with Australian Standard AS3798.
	Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures
RAD38	No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.
	Note - Public sector entity is defined in Schedule 2 of the Act.
RAD39	Filling or excavation that would result in any of the following is not carried out on site:
	a. a reduction in cover over any Council or public sector entity infrastructure to less than 600mm;
	 an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the filling or excavation works being undertaken;
	c. prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes.
	Note - Public sector entity is defined in Schedule 2 of the Act.
	Note - All building work covered by QDC MP1.4 is excluded from this provision.

Fire services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme;
 - iii. material change of use for a Tourist park (84) with accommodation in the form of caravans or tents; or
 - iv. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials.

AND

b. none of the following exceptions apply:

- i. the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
- ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

RAD40

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations*.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005):

- a. in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks⁽⁸⁴⁾ or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- b. in regard to the general locational requirements for fire hydrants Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- c. in regard to the proximity of hydrants to buildings and other facilities Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - ii. for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
 - iii. for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities; and
- d. in regard to fire hydrant accessibility and clearance requirements Part 3.5 and where applicable, Part 3.6.

RAD41

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;
- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

RAD42

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in *Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.*

RAD43

For development that contains on-site fire hydrants external to buildings:

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:

- i. the overall layout of the development (to scale);
- ii. internal road names (where used);
- iii. all communal facilities (where provided);
- iv. the reception area and on-site manager's office (where provided);
- v. external hydrants and hydrant booster points;
- vi. physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form:
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

RAD44

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavements markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific requirements

Residential uses (Dwelling units⁽²³⁾ and Caretaker's accommodation⁽¹⁰⁾)

RAD45 The dwelling is provided with a separate pedestrian entrance to that of the non-residential use on-site.

RAD46 Dwellings are located behind or above the non-residential use on-site.

RAD47 Dwellings are provided with a private open space area that:

- a. is directly accessible from a living area within the dwelling;
- b. is screened for privacy;
- ground floor dwellings include a minimum private open spaces area of 16m² with a minimum dimension of 4m that is not located in front of the main building line; or
- d. above ground floor dwellings include a minimum private open space area of 8m² with a minimum dimension of 2.5m.

RAD48

The street number is clearly displayed at the entrance to the dwelling, and at the front of the site to enable identification by emergency services $^{(25)}$.

	used business ⁽³⁵⁾
RAD49	A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.
RAD50	The Home based business ⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m ² gross floor area.
Telecom	munications facility ⁽⁸¹⁾
manner th	ote - In accordance with the Federal legislation Telecommunications facilities (81) must be constructed and operated in a lat will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications agnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to uency Fields - 3Khz to 300Ghz.
RAD51	A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.
RAD52	The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.
RAD53	Equipment shelters and associated structures are located:
	 a. directly beside the existing equipment shelter and associated structures; b. behind the main building line; c. further away from the frontage than the existing equipment shelter and associated structures; d. a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.
RAD54	Equipment shelters and other associated structures are either the same type of colour or material to match the surrounding locality.
RAD55	The facility is enclosed by security fencing or by other means to ensure public access is prohibited.
RAD56	A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the development and street frontage and adjoining uses.
	Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.
	Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person to ensure compliance with Planning scheme policy - Integrated design.
RAD57	All equipment comprising the telecommunications facility ⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

Values and constraints requirements

Note - The relevant values and constraints requirements 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.

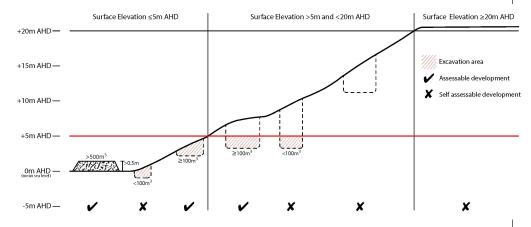
Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following requirements apply)

Note - Planning scheme policy - Acid sulfate soils provides guidance for requirements for accepted development that has the potential to disturb acid sulfate soils i.e. development involving filling or excavation works below the thresholds of 100m³ and 500m³ respectively.

RAD58

Development does not involve:

- a. excavation or otherwise removing of more than 100m³ of soil or sediment where below 5m Australian Height Datum AHD, or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m AHD.



Environmental areas (refer Overlay map - Environmental areas to determine if the following requirements apply)

Note - The following are excluded from the native clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this requirement primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Editors' Note - When clearing native vegetation within a MSES area, you may still require approval from the State government.

RAD59

Where no suitable land cleared of native vegetation exists, clearing of native vegetation in a High Value Area or Value Area is for the purpose of a new dwelling house⁽²²⁾ or extension to an existing dwelling house⁽²²⁾ only on lots less than 750m².

Editor's note - See in heading above for other uses excluded from native vegetation clearing requirements.

Editor's note - Where vegetation clearance is accepted development subject to requirements, care should be undertaken to avoid adverse impacts on koalas, koala habitat values and habitat connectivity and to encourage existing koala usage of the site. Measures to minimise impacts include:

- i. co-locating all associated activities, infrastructure and access strips;
- ii. be the least valued area of koala habitat on the site;
- iii. minimise the footprint of the development envelope area;
- iv. minimise edge effects to areas external to the development envelope;
- v. location and design consideration to ensure koala safety and movement in accordance with the Koala-sensitive Design Guideline and Planning scheme policy Environmental areas;
- vi. sufficient area between the development and koala habitat trees to achieve their long-term viability.

Editor's note - Where vegetation clearing is accepted development subject to requirements, consideration should be given to avoid clearing habitat trees. Habitat trees may contain structural hollows where animals live, breed and shelter. The provision of nest boxes or salvaging of hollows will provide compensatory roosting and nesting opportunities for local wildlife including sugar gliders, possums and owls. For further information see Planning scheme policy – Environmental areas.

RAD60

No clearing of native vegetation is to occur within the Value Offset Area MLES - Waterway buffer or Value Offset Area MLES - Wetland buffer.

This does not apply to the following:

- Clearing of native vegetation located within an approved development footprint;
- Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental management and conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;

- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Extractive resources separation area (refer Overlay map - Extractive resources (separation area) to determine if the following requirements apply)

RAD61 Development does not result in more than one dwelling house (22) per lot within separation areas. RAD62 Development within the separation area does not include the following uses: caretaker's accommodation⁽¹⁰⁾; b. community residence (16); C. dual occupancy⁽²¹⁾ d. dwelling unit (23): hospital⁽³⁶⁾: e. f. rooming accommodation (69); g. multiple dwelling⁽⁴⁹⁾; h. non-resident workforce accommodation (52); i. relocatable home park⁽⁶²⁾: j. residential care facility (65); k. resort complex⁽⁶⁶⁾; I. retirement facility⁽⁶⁷⁾; m. rural workers' accommodation⁽⁷¹⁾; n. short-term accommodation⁽⁷⁷⁾: 0. tourist park (84). RAD63 All habitable rooms within the separation area are: a. acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008; provided with mechanical ventilation. RAD64 Private open space areas are separated from the resource processing area by buildings or a 1.8m high solid structure.

Extractive resources transport routes (refer Overlay map - Extractive resources (transport route and

buffer) to determine if the following requirements apply)

RAD65 The following uses are not located within the 100m wide transport route buffer:

- a. Caretaker's accommodation⁽¹⁰⁾, except where located in the Extractive industry zone;
- b. Community residence⁽¹⁶⁾;
- C. Dual occupancy⁽²¹⁾
- d. Dwelling house; (22)

Dwelling unit⁽²³⁾; f. Hospital (36); g. Rooming accommodation (69): h. Multiple dwelling⁽⁴⁹⁾ i. Non-resident workforce accommodation (52); Relocatable home park⁽⁶²⁾; j. k. Residential care facility (65); I. Resort complex⁽⁶⁶⁾; m. Retirement facility⁽⁶⁷⁾; n. Rural workers' accommodation⁽⁷¹⁾; 0. Short-term accommodation⁽⁷⁷⁾; p. Tourist park (84). RAD66 Except for an existing vacant lot, development does not create a new vehicle access point onto an Extractive resources transport route. RAD67 A vehicle access point is located, designed and constructed in accordance with Planning scheme policy - Integrated design. Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following requirements apply) Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character. RAD68 Development is for the preservation, maintenance, repair and restoration of the site, object or This does not apply to Listed item 99, in Schedule 1 - List of sites, objects and buildings of significant historical and cultural value of Planning scheme policy - Heritage and landscape character. Note - Preservation, maintenance, repair and restoration are defined in Schedule 1 - Definitions RAD69 A cultural heritage conservation management plan is prepared in accordance with Planning scheme policy – Heritage and landscape character and submitted to Council prior to the commencement of any preservation, maintenance, repair and restoration works. Any preservation, maintenance, repair and restoration works are in accordance with the Council approved cultural heritage conservation management plan. This does not apply to Listed item 99 in Schedule 1 - List of sites, objects and buildings of significant historical and cultural value of Planning scheme policy - Heritage and landscape character. RAD70 Development does not result in the removal of or damage to any significant tree identified on Overlay map – Heritage and landscape character and listed in Appendix 2 of Planning scheme policy – Heritage and landscape character.

RAD71 The following development does not occur within 20m of the base of any significant tree, identified on Overlay map - Heritage and landscape character and listed in Appendix 2 of Planning scheme policy - Heritage and landscape character: construction of any building; a. laying of overhead or underground services; b. any sealing, paving, soil compaction; any alteration of more than 75mm to the ground surface prior to work commencing. RAD72 Pruning of a significant tree occurs in accordance with Australian Standard AS 4373-2007 - Pruning of Amenity Trees. Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following requirements apply) RAD73 Development does not include the following uses within a Wastewater treatment site buffer: a. Caretaker's accommodation⁽¹⁰⁾: b. Community residence⁽¹⁶⁾: C. Dual occupancy⁽²¹⁾ d. Dwelling house: (22); e. Dwelling unit⁽²³⁾; f. Hospital (36): g. Rooming accommodation⁽⁶⁹⁾; h. Multiple dwelling⁽⁴⁹⁾ i. Non-resident workforce accommodation (52): j. Relocatable home park⁽⁶²⁾: k. Residential care facility⁽⁶⁵⁾: I. Resort complex⁽⁶⁶⁾: m. Retirement facility⁽⁶⁷⁾; n. Rural workers' accommodation⁽⁷¹⁾; 0. Short-term accommodation⁽⁷⁷⁾: p. Tourist park⁽⁸⁴⁾. RAD74 Development does not involve the construction of any buildings or structures within a Bulk water supply infrastructure buffer. RAD75 Development involving a major hazard facility or an Environmentally Relevant Activity (ERA) is setback 30m from a Bulk water supply infrastructure buffer. RAD76 All habitable rooms located within an Electricity supply substation buffer are: located a minimum of 10m from an electricity supply substation (80); and acoustically insulated to achieve the noise levels listed in Schedule 1, Acoustic Quality b. Objectives, Environmental Protection (Noise) Policy 2008. Overland flow path (refer Overlay map - Overland flow path to determine if the following requirements apply) RAD77 Development for a material change of use or building work does not involve the construction of a building or structure in an Overland flow path area.

RAD78

Development for a material change of use or operational work does not impede the flow of flood waters through the premises or worsen flood flows to other premises.

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

RAD79

Development for a material change of use or building work ensures that fencing in an overland flow path area is at least 50% permeable.

RAD80

Development for a material change of use or building work that involves a hazardous chemical ensures the hazardous chemicals is not located within an overland flow path area.

RAD81

Development for a material change of use or building work for a Park⁽⁵⁷⁾ ensures that work is provided in accordance with the requirements set out in Appendix B of the Planning scheme policy - Integrated design.

Scenic amenity - Regionally significant (Hills) and Locally important (Coast) - (refer Overlay map - Scenic amenity to determine if the following requirements apply)

RAD82

Where located in the Locally important (Coast) scenic amenity overlay;

- landscaping comprises indigenous coastal species;
- b. fences and walls facing the coast are no higher than 1m. Where fences and walls are higher than 1m, they have 50% transparency. This does not apply to a fence or wall at an angle of 900 to the coast;
- c. where over 12m in height, the building design includes the following architectural character elements:
- i. curving balcony edges and walls, strong vertical blades and wall planes;









ii. balcony roofs, wall articulation expressed with different colours, curves in plan and section, and window awnings;









iii. Roof top outlooks, tensile structure as shading devices; and









iv. lightweight structures use white frame elements in steel and timber, bold colour contrast.









d. existing pine trees, palm trees, mature fig and cotton trees are retained.

Note - A list of appropriate indigenous coastal species is identified in Planning scheme policy - Integrated design.

Riparian and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the following requirements 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.

RAD83

No development is to occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

Note - W1, W2 and W3 waterways and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian and wetland setbacks.

Note - In some cases, the top of bank may not be easily defined, as such a hydraulic measurement may be applied instead. Moreton Bay Regional Council will provide further direction on how to determine and locate the setback boundary in these locations.

Note - The minimum setback distance applies to the each side of waterway.

6.2.1.1 Caboolture centre precinct

6.2.1.1.1 Purpose - Caboolture centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Caboolture centre precinct:
 - a. Development reinforces the Caboolture centre precinct as the main centre for administration and business within the Moreton Bay Region.
 - b. Development contributes to the consolidation of the Caboolture centre precinct, through:
 - i. greater land use efficiency within the precinct;
 - ii. increasing residential density and diversity within the centre and around the railway station.
 - c. Development is contained within the precinct boundaries and does not result in centre uses occurring outside of the expansion of the Caboolture centre precinct into adjoining zones.
 - d. Development incorporates transit oriented development principles and encourages increased active and public transport usage, by:
 - i. increasing land use intensity within walking distance of public transport facilities;
 - ii. contributing to attractive, walkable street environments, through streetscape upgrades and enhancements;
 - iii. prioritising pedestrian and cycle safety and movement over private vehicle access and movement.
 - e. High density residential activities are encouraged within the precinct.
 - f. The intensity of development and mix of land uses provided in the precinct supports the provision of high frequency public transport services and other services and facilities.
 - g. The built form of the Caboolture centre precinct is characterised by medium to high rise buildings.
 - h. King Street remains the prominent location for higher order retail uses in the precinct.
 - i. Strategic re-development of key sites within the precinct provide an opportunity to:
 - i. increase the intensity and mix of land uses provided in the precinct;
 - ii. increase land use efficiency, through more intense building forms;
 - iii. realise important pedestrian connections and public realm improvements.
 - j. The number of car parking spaces is managed to:
 - encourage the use of active and public transport;
 - ii. increase land use efficiency;
 - iii. improve development feasibility;
 - iv. avoid the negative impacts of large areas of car parking on the streetscape.

- k. Pedestrian connections are provided to integrate the development with the street, public spaces and the surrounding area.
- I. Buildings contribute to an efficient and attractive, sub-tropical centre, through:
 - i. high quality, distinctive design which addresses streets and public spaces;
 - ii. energy efficient buildings which achieve best practice environmental performance;
 - iii. the use of high quality, low-maintenance building materials, lightweight elements and recesses.
- m. Crime prevention through environmental design principles are incorporated into the design of buildings and public spaces to ensure the safety and security of people and property.
- n. The ground and podium levels of development are occupied by retail, commercial or Community uses⁽¹⁷⁾ to provide activities close to the public realm.

o. Service stations:

- i. establish where they will not disrupt, fragment or negatively impact active frontages or streets where pedestrian safety and comfort are of high importance;
- ii. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts from road vehicle noise;
- iii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
- iv. do not negatively impact adjoining residents or the streetscape;
- v. ancillary uses or activities only service the convenience needs of users.
- p. Adverse impacts on the amenity of surrounding land uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining the centre.
- q. Uses and activities contribute to a horizontal and vertical mix and the co-location of uses, concentrated in a compact urban form.
- r. General works associated with the development achieves the following:
 - new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
 - ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants;
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
 - iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network:

- iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
- v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- s. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- t. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- u. Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- v. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;
 - vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
 - vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
 - viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
 - ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;

- x. ensuring effective and efficient disaster management response and recovery capabilities;
- xi. where located in an overland flow path:
 - A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
 - C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
 - D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- w. Development in the Caboolture centre precinct includes one or more of the following:

•	Bar ⁽⁷⁾	•	Function facility ⁽²⁹⁾	•	Place of worship ⁽⁶⁰⁾
•	Caretaker's accommodation ⁽¹⁰⁾	•	Hardware and trade supplies ⁽³²⁾	•	Rooming accommodation ⁽⁶⁹⁾
•	Child care centre ⁽¹³⁾	•	Health care services ⁽³³⁾	•	Sales office ⁽⁷²⁾
•	Club ⁽¹⁴⁾	•	Home based business ⁽³⁵⁾	•	Service industry ⁽⁷³⁾
•	Community care centre ⁽¹⁵⁾	•	Hotel ⁽³⁷⁾	•	Shop ⁽⁷⁵⁾
•	Community use ⁽¹⁷⁾	•	Indoor sport and recreation ⁽³⁸⁾	•	Shopping centre ⁽⁷⁶⁾
•	Dual occupancy ⁽²¹⁾ - if in a mixed use building	•	Low impact industry ⁽⁴²⁾ - if not located adjoining a	•	Short term accommodation ⁽⁷⁷⁾
•	Dwelling unit ⁽²³⁾		main street	•	Showroom ⁽⁷⁸⁾
•	Educational	•	Market ⁽⁴⁶⁾	•	Theatre ⁽⁸²⁾
	establishment ⁽²⁴⁾	•	Multiple dwelling ⁽⁴⁹⁾	•	Veterinary services (87
•	Emergency services ⁽²⁵⁾	•	Office ⁽⁵³⁾		
•	Food and drink outlet ⁽²⁸⁾				

y. Development in the Caboolture centre precinct does not include any of the following:

Agricultural supplies store ⁽²⁾	•	Extractive industry ⁽²⁷⁾	•	Rural industry ⁽⁷⁰⁾
• Air services ⁽³⁾	•	High impact industry ⁽³⁴⁾	•	Rural workers accommodation ⁽⁷¹⁾

Animal husbandry ⁽⁴⁾	 Intensive animal industry⁽³⁹⁾ 	Special industry ⁽⁷⁹⁾
• Animal keeping ⁽⁵⁾	• Intensive horticulture ⁽⁴⁰⁾	• Tourist park ⁽⁸⁴⁾
 Aquaculture⁽⁶⁾ Brothel⁽⁸⁾ 	• Marine industry ⁽⁴⁵⁾	 Transport depot⁽⁸⁵⁾ Warehouse⁽⁸⁸⁾
Bulk landscape	 Medium impact industry⁽⁴⁷⁾ 	Wholesale nursery ⁽⁸⁹⁾
supplies ⁽⁹⁾ • Cemetery ⁽¹²⁾	• Motor sport facility ⁽⁴⁸⁾	• Winery ⁽⁹⁰⁾
• Crematorium ⁽¹⁸⁾	 Outdoor sport and recreation⁽⁵⁵⁾ 	
• Cropping ⁽¹⁹⁾	• Permanent plantation ⁽⁵⁹⁾	
• Detention facility ⁽²⁰⁾	Relocatable home park ⁽⁶²⁾	

z. Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the zone.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

Part B - Criteria for assessable development - Caboolture centre 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 6.2.1.1.1 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 6.2.1.1.1 Assessable development - Caboolture centre precinct

Per	formance outcomes	Examples that achieve aspects of the Performance Outcomes				
	General	l criteria				
Role of Caboolture centre precinct						
PO'	1	No example provided.				
Dev	velopment in the Caboolture centre precinct:					
a.	reflects the prominence of the Caboolture centre precinct as a higher order centre and key focal point for regional employment and development in South East Queensland;					

- does not undermine the growth of the Caboolture centre precinct as the central business district, being the focus for administration, business, commercial and high quality retail in the Moreton Bay region;
- is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.

Note - Refer to Moreton Bay centres network Table 6.2.1.1

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

PO2

Development maximises the efficient use of land and provides for future growth within the precinct by maintaining or increasing the GFA and land use intensity within the precinct boundaries to promote economic development.

Note - Development within the Caboolture centre precinct is expected to capitalise on the area's strategic advantages, including co-location with other businesses and government administration and access to high quality public transport, by maximising the efficient use of land. Activities that are land intensive, but do not promote economic development, such as open car parks, are discouraged.

E2

Development within the Caboolture centre precinct core, as indicated on 'Figure 6.2.1.1.1 - Caboolture ', achieves a minimum plot ratio of 1:1.

Note - Plot ratio is the ratio of gross floor area to the area of the site. For example, a minimum plot ratio of 1:1 means a 1,000m² site is to be developed with a minimum of 1,000m² gross floor area

Active frontage

PO₃

Development incorporates transit oriented development principles and encourages active and public transport usage, by:

- contributing to attractive, highly walkable street environments, through streetscape upgrades and enhancements (e.g wide footpaths, furniture, art, street trees etc.);
- prioritising pedestrian and cycle safety and movement over private vehicle access and movement.

Note - Streetscape upgrades are to be designed and constructed in accordance with Planning scheme policy - Integrated design.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

No example provided.

PO4

Development on a site shown on 'Figure 6.2.1.1.1 - Caboolture 'as requiring a frontage type A, B or C, is built to the street alignment (0m setback) for the full width of the street frontage.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

No example provided.

PO5

Buildings are designed and oriented to address and activate areas of pedestrian movement, to:

- a. promote vitality, interaction and casual surveillance;
- b. concentrate and reinforce pedestrian activity;
- c. avoid opaque facades to provide visual interest to the street frontage.

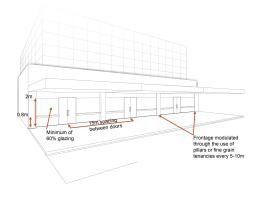
Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

E5.1

Development on-sites shown on 'Figure 6.2.1.1.1 - Caboolture 'as requiring a frontage type A incorporates:

- a minimum of 60% of the length of the street frontage glazed between 0.8m and 2.0m above ground level;
- external doors which directly adjoin the street frontage at least every 15m;
- modulation in the facade, by incorporating a change in tenancy or the use of pillars or similar elements every 5-10m;
- d. the minimum window or glazing is to remain uncovered and free of signage.

Figure - Frontage Type A



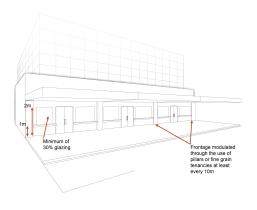
E5.2

Development on-sites shown on 'Figure 6.2.1.1.1 - Caboolture 'as requiring a frontage type B incorporates:

 a minimum of 50% of the length of the street frontage glazed between 1.0m and 2.0m above ground level;

- modulation in the facade, by incorporating fine grain tenancies or the use of pillars or similar elements at least every 10m;
- c. the minimum window or glazing is to remain uncovered and free of signage.

Figure - Frontage Type B

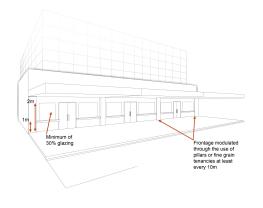


E5.3

Development on-sites shown on 'Figure 6.2.1.1.1 - Caboolture 'as requiring a frontage type C incorporates:

- a minimum of 30% of the length of the street frontage glazed between 1.0m and 2.0m above ground level;
- modulation in the facade, by incorporating fine grain tenancies or the use of pillars or similar elements at least every 10m;
- c. the minimum window or glazing is to remain uncovered and free of signage.

Figure - Frontage Type C



P06

Building frontages encourage streetscape activity, by providing pedestrian protection from solar exposure and inclement weather.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

E6

Development on-sites shown on 'Figure 6.2.1.1.1 - Caboolture 'as requiring a frontage type A, B or C incorporate an awning which:

- a. is cantilevered;
- b. extends for the full width of the site;
- c. is a minimum of 3.2m and maximum 4.2m above the pavement height;
- d. aligns with adjoining sites to provide continuous shade and shelter for pedestrians;
- e. is constructed from high quality, low maintenance materials;
- f. is set back 1.5m from the kerb line to accommodate mature street trees and regulatory signage.

Consistent height with adjoining properties.

Figure - Awning requirements

PO7

Buildings on highly visible and accessible street corners (as shown on 'Figure 6.2.1.1.1 - Caboolture ') incorporate design measures on the corners to assist in legibility of the street environment and promote activity on the street frontage.

E7.1

Buildings located on a street corner shown on 'Figure 6.2.1.1.1 - Caboolture 'as a prominent corner incorporate windows which address both street frontages.

Note - Design measures will vary depending on the building and location, however may include the following:

- a. increasing the height of the building on the corner;
- b. stepping back the building on the corner to create an additional face;
- including prominent building entrances and windows on the corners;
- the use of a focal point, such as a tower, visual display or artwork on the corner.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

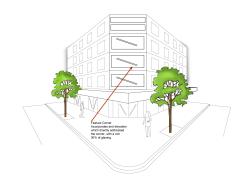
Figure - Prominent corner requirements



E7.2

Buildings located on a street corner shown on 'Figure 6.2.1.1.1 - Caboolture 'as a feature corner incorporate an elevation which directly faces the corner and has a minimum of 30% glazing.

Figure - Feature corner requirements



E7.3

Buildings located at the junction of Beerburrum Road and Hasking Street and James Street:

- a. provide a 4.0m by 4.0m truncation, to be dedicated as road reserve;
- b. incorporate a 4.0m by 4.0m concave building chamfer at the corner for the full height of the building;
- c. provide a well-designed facade, including:
 - i. windows and openings;

- ii. pedestrian entrances, particularly on the building chamfer;
- iii. projections and articulation.

Note - Where above-ground infrastructure, service pillars or cabinets are located in the middle of the footpath as a result of a corner truncation, development relocates the infrastructure to the new boundary.

Setbacks

PO8

Front building setbacks ensure buildings address and actively interface with streets and public spaces.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

E8

Buildings are built to the street alignment for the full width of the street frontage, excluding vehicle crossovers.

Site area

PO9

The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping.

No example provided.

Building height

PO10

Building height:

- reflects the prominence of the Caboolture centre precinct as a higher order centre and key focal point for regional employment and development in South East Queensland;
- maximises land use intensity around the Caboolture rail station;
- c. allows for distinctive and innovative design outcomes on prominent sites;
- d. ensures an even distribution of retail and commercial development across the Caboolture centre precinct and avoids over-concentration of activities in one location;
- e. provides a transition to lower density areas surrounding the Central Business District.

E10

Building height is within the minimum and maximum height identified on Overlay map - Building heights.

Note - Development on street corners identified as a prominent or feature corner on 'Figure 6.2.1.1.1 - Caboolture 'may incorporate an increased building height on the corner, if the building:

- provides high quality and unique architectural design outcomes that emphasise the prominence of the street corner:
- positively contributes to the cityscape.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples. PO11 E11.1 Taller buildings incorporate a podium which provides For sites that adjoin Elliot Street, Esme Street, James a human-scaled, strong and continuous frontage to Street and Hasking Street: the street. buildings include a podium that is built to the boundary to a maximum height of 15m; Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples. b. all parts of the building that are greater than 15m in height are setback a minimum of 6m. E11.2 For sites that adjoin King Street and George Street: a. buildings include a podium that is built to the boundary to a maximum height of 12m; b. all parts of the building that are greater than 12m in height are setback a minimum of 6m. **Built form** PO12 E12.1 Buildings incorporate a minimum floor to ceiling height Buildings are designed to be adaptable to accommodate a variety of uses over the life of the of 4.2m for the ground floor. building. E12.2 Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples. Where a building incorporates a podium, the minimum floor to ceiling height for podium levels is 3.3m. PO13 No example provided. Buildings are designed and constructed to: incorporate a mix of colours and high quality materials to add diversification to treatments and finishes: articulate and detail the building facade at street level and respond to the human scale; C. visually integrate with the surrounding area and adjoining buildings through appropriate design and materials: d. avoid blank walls through articulation and architectural treatments to create visual interest:

6 Zones

- e. avoid highly reflective finishes;
- f. avoid the visual dominance of plant and equipment on building roofs.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

PO14

Building entrances:

- a. are readily identifiable from the road frontage;
- b. are designed to limit opportunities for concealment;
- are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- d. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance;
- e. are adequately lit to ensure public safety and security.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance outcome.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

No example provided.

Accessibility and permeability

PO15

Development contributes to greater permeability within the Caboolture centre precinct by facilitating a network of convenient and safe pedestrian walkways and mid-block connections, as outlined in 'Figure 6.2.1.1.1 - Caboolture '.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

E15.1

Pedestrian connections are provided on-sites indicated on 'Figure 6.2.1.1.1 - Caboolture 'and are:

- a. accessible 24 hours a day, 7 days a week;
- b. designed to be safe at all times;
- c. is sealed and of a sufficient width and grade to permit universal access
- d. generally located as shown on 'Figure 6.2.1.1.1 Caboolture '.

Note - Walking connections are to be designed in accordance with Crime Prevention through Environmental Design principles to ensure they are safe and enjoyable places for pedestrians to utilise at all times. Ensuring buildings and uses overlook the walking connection is critical to ensuring a safe and well-utilised public space.

E15.2

Pedestrian amenity areas are provided on-sites indicated on 'Figure 6.2.1.1.1 - Caboolture 'and are:

- a. shaded and protected from weather;
- b. accessible and designed to be safe 24 hours a day, 7 days a week.

Note - Pedestrian resting areas are to be designed in accordance with Crime Prevention through Environmental Design principles to ensure they are safe and enjoyable places for pedestrians to utilise at all times. Ensuring buildings and uses overlook the pedestrian areas is critical to ensuring a safe and well-utilised public space.

Figure - Example of a pedestrian resting area

Movement network

PO16

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

Car parking			
PO17	E17		
The provision of car parking spaces:	Car parking is p	rovided in accorda	ance with the table
a. is appropriate for the use;			I
b. avoids an oversupply of car parking spaces.	Land use	Maximum number of Car Spaces to be Provided	Minimum Number of Car Spaces to be Provided
Note - Refer to Planning scheme policy - Integrated transport	Non-residential	1 per 50m² GFA	1 per 75m ² GFA
assessment for guidance on how to achieve compliance with this outcome.	Residential - Permanent/long term	N/A	2 per 5 dwelling
	Residential - Serviced/short term	1 per 4 dwellings + staff spaces	1 per 10 dwellings +staff spaces
	discretion of the de Note - Residential dwelling (49), Reloc facility (65), Retiren Note - Residential accommodation (69) Note - The above with a disability red	- Permanent/long term catable home park ⁽⁶²⁾	n includes: Multiple , Residential care includes: Rooming nmodation ⁽⁷⁷⁾ . ing spaces for people
PO18 Car parking is designed to avoid the visual impact of large areas of surface car parking on the streetscape.	No example pro	vided.	
PO19	No example pro	vided.	
Car parking design includes innovative solutions, including on-street parking and shared parking areas.			
Note - Refer to Planning scheme policy - Integrated design for details and examples of on-street parking.			
PO20	E20		
The design of car parking areas:	in accordance w	areas are designed vith Australian Sta s Part 1: Off-street	ndard AS <mark>2890.1</mark>

- a. does not impact on the safety of the external road network;
- b. ensures the safe movement of vehicles within the site.

Bicycle parking and end of trip facilities

Note - Building work to which this code applies constitutes Major Development for purposes of development requirements for end of trip facilities prescribed in the Queensland Development Code MP 4.1.

PO21

- a. End of trip facilities are provided for employees or occupants, in the building or on-site within a reasonable walking distance, and include:
 - adequate bicycle parking and storage facilities; and
 - ii. adequate provision for securing belongings; and
 - iii. change rooms that include adequate showers, sanitary compartments, wash basins and mirrors.
- Notwithstanding a. there is no requirement to provide end of trip facilities if it would be unreasonable to provide these facilities having regard to:
 - the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - ii. whether it would be practical to commute to and from the building on a bicycle, having regard to the likely commute distances and nature of the terrain; or
 - iii. the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

Editor's note - The intent of b above is to ensure the requirements for bicycle parking and end of trip facilities are not applied in unreasonable circumstances. For example these requirements should not, and do not apply in the Rural zone or the Rural residential zone etc.

Editor's note - This performance outcome is the same as the Performance Requirement prescribed for end of trip facilities

E21.1

Minimum bicycle parking facilities are provided in accordance with the table below (rounded up to the nearest whole number).

Use	Minimum Bicycle Parking
Residential uses comprised of dwellings	Minimum 1 space per dwelling
All other residential uses	Minimum 1 space per 2 car parking spaces identified in Schedule 7 – car parking
Non-residential uses	Minimum 1 space per 200m2 of GFA

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those examples. This example is a combination of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E21.2

Bicycle parking is:

- a. provided in accordance with Austroads (2008),
 Guide to Traffic Management Part 11: Parking;
- b. protected from the weather by its location or a dedicated roof structure;
- located within the building or in a dedicated, secure structure for residents and staff;
- d. adjacent to building entrances or in public areas for customers and visitors.

Note - Bicycle parking structures are to be constructed to the standards prescribed in AS2890.3.

under the Queensland Development Code. For development incorporating building work, that Queensland Development Code performance requirement cannot be altered by a local planning instrument and has been reproduced here solely for information purposes. Council's assessment in its building work concurrence agency role for end of trip facilities will be against the performance requirement in the Queensland Development Code. As it is subject to change at any time, applicants for development incorporating building work should ensure that proposals that do not comply with the examples under this heading meet the current performance requirement prescribed in the Queensland Development Code.

Note - Bicycle parking and end of trip facilities provided for residential and non-residential activities may be pooled, provided they are within 100 metres of the entrance to the building.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E21.3

For non-residential uses, storage lockers:

- are provide at a rate of 1.6 per bicycle parking space (rounded up to the nearest whole number);
- b. have minimum dimensions of 900mm (height) x 300mm (width) x 450mm (depth).

Note - Storage lockers may be pooled across multiple sites and activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E21.4

For non-residential uses, changing rooms:

- a. are provided at a rate of 1 per 10 bicycle parking spaces;
- b. are fitted with a lockable door or otherwise screened from public view;
- are provided with shower(s), sanitary compartment(s) and wash basin(s) in accordance with the table below:

Bicycle spaces provided	Male/ Female	Change rooms required	Showers required	Sanitary compartments required	Washbasins required
1-5	Male and female	1 unisex change room	1	1 closet pan	1
6-19	Female	1	1	1 closet pan	1

20 or more	Male	1	1	1 closet pan	1
more	Female	1	2, plus 1 for every 20 bicycle spaces provided thereafter	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking spaces provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter
	Male	1	2, plus 1 for every 20 bicycle spaces provided thereafter	1 urinal and 1 closet pans, plus 1 sanitary compartment at the rate of 1 closet pan or 1 urinal for every 60 bicycle space provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter

Note - All showers have a minimum 3-star Water Efficiency Labelling and Standards (WELS) rating shower head.

Note - All sanitary compartments are constructed in compliance with F2.3 (e) and F2.5 of BCA (Volume 1).

- d. are provided with:
 - i. a mirror located above each wash basin;
 - ii. a hook and bench seating within each shower compartment;
 - iii. a socket-outlet located adjacent to each wash basin.

Note - Change rooms may be pooled across multiple sites, residential and non-residential activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

Loading and servicing

PO22

Loading and servicing areas:

a. are not visible from the street frontage;

b. are integrated into the design of the building;

6 Zones

 c. include screening and buffers to reduce negative impacts on adjoining sensitive land uses; d. are consolidated and shared with adjoining sites, where possible. Note - Refer to Planning scheme policy - Centre and neighbourhood hub design. 	
Waste	
PO23	E23
Bins and bin storage area/s are designed, located and managed to prevent amenity impacts on the locality.	Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.
Landscaping	
PO24	No example provided.
On-site landscaping is provided, that:	
 a. is incorporated into the design of the development; 	
 reduces the dominance of car parking and servicing areas from the street frontage; 	
c. incorporates shade trees in car parking areas;	
d. retains mature trees wherever possible;	
e. contributes to quality public spaces and the microclimate by providing shelter and shade;	
f. maintains the achievement of active frontages and sightlines for casual surveillance.	
Note - Landscaping is to be provided in accordance with Planning scheme policy - Integrated design.	
Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.	
Environmentally sensitive design	
PO25	No example provided.
Development incorporates energy efficient design principles, including:	

a.	maximising internal cross-ventilation and prevailing breezes;	
b.	maximising the effect of northern winter sun and screening undesirable northern summer sun and western sun;	
C.	reducing demand on non-renewable energy sources for cooling and heating;	
d.	maximising the use of daylight for lighting;	
e.	retaining existing established trees on-site where possible.	
PO2	26	No example provided.
Best practice Water Sensitive Urban Design (WSUD) is incorporated within development sites to mitigate the impacts of stormwater run-off in accordance with Planning scheme policy - Integrated design.		
Crin	ne prevention through environmental design	
PO2	27	No example provided.
inco	elopment contributes to a safe public realm by rporating crime prevention through environmental gn principles including:	
inco	rporating crime prevention through environmental	
inco desi	rporating crime prevention through environmental gn principles including: orienting buildings towards the street and public spaces and providing clear sightlines to public spaces to allow opportunities for casual	
inco desi a.	rporating crime prevention through environmental gn principles including: orienting buildings towards the street and public spaces and providing clear sightlines to public spaces to allow opportunities for casual surveillance; ensuring the site layout, building design and landscaping does not result in potential	
inco desi a. b.	rporating crime prevention through environmental gn principles including: orienting buildings towards the street and public spaces and providing clear sightlines to public spaces to allow opportunities for casual surveillance; ensuring the site layout, building design and landscaping does not result in potential concealment or entrapment areas; ensuring high risk areas, including stairwells, arcades, walkways and concealed car parking areas have adequate surveillance to reduce risk	
b.	rporating crime prevention through environmental gn principles including: orienting buildings towards the street and public spaces and providing clear sightlines to public spaces to allow opportunities for casual surveillance; ensuring the site layout, building design and landscaping does not result in potential concealment or entrapment areas; ensuring high risk areas, including stairwells, arcades, walkways and concealed car parking areas have adequate surveillance to reduce risk or able to be secured outside of business hours.	

6 Zones

Lighting is designed to provide adequate levels of illumination to public and communal spaces to maximise safety while minimising adverse impacts on sensitive land uses.

Amenity

PO29

The amenity of the area and adjacent sensitive land uses are protected from the impacts of dust, odour, chemicals and other environmental nuisances.

No example provided.

Noise

PO30

Noise generating uses do not adversely affect existing or potential noise sensitive uses.

Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.

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.

No example provided.

PO31

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

E31.1

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E31.2

Noise attenuation structures (e.g. walls, barriers or fences):

- a. are not visible from an adjoining road or public area unless:
 - 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.

- 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.

Hazardous Chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'

PO32

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E32.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E32.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of $0.5\ x$ 10-6/year.

E32.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or>23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E32.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5×10 -6/year.

E32.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or>23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E32.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year. **PO33** E33 Buildings and package stores containing fire-risk Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early hazardous chemicals are provided with 24 hour stages of a fire situation and notify a designated monitored fire detection system for early detection of person. a fire event. **PO34** E34 Common storage areas containing packages of Storage areas containing packages of flammable and flammable and toxic hazardous chemicals are toxic hazardous chemicals are designed with spill designed with spill containment system(s) that are containment system(s) capable of containing a adequate to contain releases, including fire fighting minimum of the total aggregate capacity of all media. packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes. **PO35** E35.1 Storage and handling areas, including manufacturing The base of any tank with a WC >2,500L or kg is areas, containing hazardous chemicals in quantities higher than any relevant flood height level identified greater than 2,500L or kg within a Local Government in an area's flood hazard area. Alternatively: "flood hazard area" are located and designed in a bulk tanks are anchored so they cannot float if a. manner to minimise the likelihood of inundation of submerged or inundated by water; and flood waters from creeks, rivers, lakes or estuaries. b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level. E35.2 The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level. Clearing of habitat trees where not located within the Environmental areas overlay map **PO36** No example provided Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.

6 Zones

- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

Works criteria

Utilities

PO37

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

No example provided.

Access

PO38

Development provides functional and integrated car parking and vehicle access, that:

- prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.);
- b. provides safety and security of people and property at all times;
- c. does not impede active transport options;
- d. does not impact on the safe and efficient movement of traffic external to the site;
- e. where possible vehicle access points are consolidated and shared with adjoining sites.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

PO39

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

PO40

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- c. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E40.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E40.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E40.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E40.4

The development layout allows forward vehicular access to and from the site.

PO41

Safe access is provided for all vehicles required to access the site.

E41.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:

- AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
- ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities;
- iii. Planning scheme policy Integrated design;
- iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E41.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- a. AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;
- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E41.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E41.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO42

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

E42

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO43

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E43.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E43.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO44

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement;
- c. adequate on street parking;
- stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;

- f. utility services location;
- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

PO45

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m² GFA;
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;

E45.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E45.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E45.3

- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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.

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

PO46

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

E46

New intersection spacing (centreline – centreline) along a through road conforms with the following:

- a. where the through road provides an access function;
 - i. intersecting road located on the same side = 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- b. Where the through road provides a collector or sub-arterial function:
 - intersecting road located on the same side
 = 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:

- i. intersecting road located on the same side= 300 metres;
- ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
- iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO47

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

E47

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation	Minimum construction
Frontage road unconstructed or gravel road only; OR Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard; OR	Construct the verge adjoining the development and the carriageway (including development side kerb and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel

Frontage road partially constructed* to Planning scheme policy - Integrated design standard.

shoulder and table drainage to the opposite side.

The minimum total travel lane width is:

- 6m for minor roads;
- 7m for major roads.

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO48

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E48.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E48.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E48.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO49

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

E49.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E49.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E49.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E49.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

PO50

Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.

E50

The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.

PO51

Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises.

Note - Refer to Planning scheme policy - Integrated design for details.

Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure. **PO52** No example provided. Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site. Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome. **PO53** No example provided. Where development: is for an urban purpose that involves a land area of 2500m2 or greater; and b. will result in: i. 6 or more dwellings; or an impervious area greater than 25% of the net developable area. stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives. Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management. Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C). **PO54** E54

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

PO55

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.

No example provided.

PO56

Council is provided with accurate representations of the completed stormwater management works within residential developments.

E56

"As Built" drawings and specifications of the stormwater management devices certified by an RPEQ is provided.

Note - Documentation is to include:

- a. photographic evidence and inspection date of the installation of approved underdrainage;
- copy of the bioretention filter media delivery dockets/quality certificates confirming the materials comply with specifications in the approved Stormwater Management Plan;
- c. date of the final inspection.

Site works and construction management

PO57

The site and any existing structures are maintained in a tidy and safe condition.

No example provided.

PO58

All works on-site are managed to:

- minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light;
- b. minimise as far as possible, impacts on the natural environment;
- ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises;
- avoid adverse impacts on street trees and their critical root zone.

E58.1

Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following:

- a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions;
- stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind;
- c. stormwater discharge rates do not exceed pre-existing conditions;
- minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E58.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E58.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E58.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO59

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

E59

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO60

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- a. the aggregate volume of imported or exported material is greater than 1000m³; or
- b. the aggregate volume of imported or exported material is greater than 200m³ per day; or
- the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

PO60.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

E60.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E60.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E60.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E60.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E60.6

Access to the development site is obtained via an existing lawful access point.

PO61

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

E61

At completion of construction all disturbed areas of the site are to be:

- a. topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO62

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E62

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO63

E63.1

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E63.2

Disposal of materials is managed in one or more of the following ways:

- a. all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

PO64

All development works are carried out at times which minimise noise impacts to residents.

E64

All development works are carried out within the following times:

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
- no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

PO65

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

Earthworks

PO66

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- b. short and long-term slope stability;
- c. soft or compressible foundation soils;
- d. reactive soils;
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E66.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E66.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E66.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E66.4

All filling or excavation is contained on-site and is free draining.

E66.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use:
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E66.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

PO67

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E67

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment

PO68

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

E68.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E68.2

Filling or excavation that would result in any of the following is not carried out on-site:

- a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;
- an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken;
- c. prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

Note - All building work covered by QDC MP1.4 is excluded from this provision.

PO69

Filling or excavation does not result in land instability.

Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance.

PO70

Filling or excavation does not result in:

- a. adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway;
- b. increased flood inundation outside the site;
- any reduction in the flood storage capacity in the floodway;
- d. any clearing of native vegetation.

Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements.

No example provided.

PO71

Filling or excavation on the development site is undertaken in a manner which does not create or accentuate problems associated with stormwater flows and drainage systems on land adjoining the site.

E71

Filling and excavation undertaken on the development site are shaped in a manner which does not:

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - i. concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO72

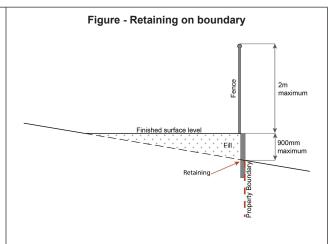
All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

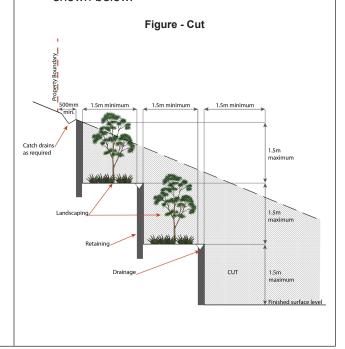
E72

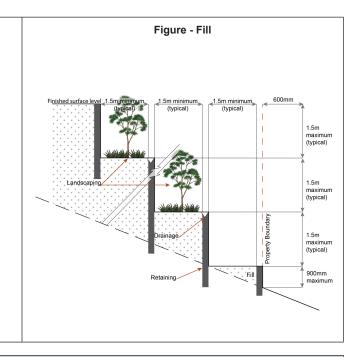
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;



- where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.





Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme;
 - iii. material change of use for a Tourist park⁽⁸⁴⁾ with accommodation in the form of caravans or tents; or
 - iv. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials

AND

- b. none of the following exceptions apply:
 - i. the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO73

Development incorporates a fire fighting system that:

 satisfies the reasonable needs of the fire fighting entity for the area;

E73.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations.*

- is appropriate for the size, shape and topography of the development and its surrounds;
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks (84) or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans:
 - iii. for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- d. in regard to fire hydrant accessibility and clearance requirements Part 3.5 and, where applicable, Part 3.6.

E73.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;
- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E73.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO74

E74

For development that contains on-site fire hydrants external to buildings:

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - i. the overall layout of the development (to scale);
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - v. external hydrants and hydrant booster points;
 - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO75

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E75

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO76

The scale and intensity of the Home based business⁽³⁵⁾:

- is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape or road safety;
- c. does not adversely impact on the amenity of the adjoining and nearby premises;
- d. remains ancillary to the residential use of the Dwelling house⁽²²⁾;
- e. does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- f. ensures employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E76.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E76.2

The Home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure⁽⁴³⁾, Substation⁽⁸⁰⁾ and Utility installation⁽⁸⁶⁾

PO77

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E77.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;
- c. have a similar height, bulk and scale to the surrounding fabric;
- d. have horizontal and vertical articulation applied to all exterior walls.

E77.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO78

E78

Access control arrangements:

Infrastructure does not have an impact on pedestrian health and safety.

- do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO79

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- a. generates no audible sound at the site boundaries where in a residential setting; or
- meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E79

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO80

Development contributes to greater housing choice and affordability by:

- a. contributing to the range of dwelling types and sizes in the area;
- providing greater housing density within the Caboolture centre precinct and around the Caboolture rail station making efficient use of land

No example provided.

PO81

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other Dwelling units⁽²³⁾ and centre uses;
- c. accessible and readily identifiable for residents, visitors and emergency services;
- d. located to not compromise active frontages.

E81

A dwelling has a clearly defined, private outdoor living space that is:

a. as per table below;

Use	Minimum Area	Minimum Dimension in all directions	
Ground floor dwelling	gs		
All dwelling types	16m²	4m	
Above ground floor d	wellings		
1 bedroom or studio,	8m²	2.5m	
2 or more bedrooms	12m²	3.0m	

- a. accessed from a living area;
- b. sufficiently screened or elevated for privacy;

- ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- d. balconies orientate to the street;
- e. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas). Note: areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided).

PO82

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E82

The dwelling:

- includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses;
- b. clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services;
- c. is provided with a separate entrance to that of any non-residential use on the site;
- where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

Retail and commercial uses

PO83

King Street remains the primary location for significant retail activity in the Caboolture Central Business District.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

E83.1

Retail tenancies are limited to 250m² GFA where located outside of the Caboolture centre core as identified on 'Figure 6.2.1.1.1 - Caboolture '.

E83.2

Development on-sites with a frontage to King Street, incorporates retail uses on the ground floor directly accessible from the King Street frontage.

PO84

The Caboolture centre precinct retains a strong commercial and administrative focus, with residential activities provided only where part of a mixed use building and not located at the ground level or within a podium.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

Service station

Note - Where the use specific outcomes relating to Service Stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO85

Service stations are located, designed and orientated to:

- establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- b. establish outside of Key Sites;
- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- e. ensure the amenity of adjoining properties is protected;
- f. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;
- minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area. (e.g. high order road in urban or next generation neighbourhood, likely to be noisy and not like suburban);
- h. provide ancillary uses that meet the convenience needs of users.

E85.1

Service stations are located:

- a. on the periphery of the Centre adjoining or within 100m of land zoned other than Centre zone:
- b. on the corner lot of an arterial or sub-arterial road;
- c. outside areas nominated as Key Sites.

E85.2

Service stations are designed and orientated on site to:

- include a landscaping strip having a minimum depth of 1m adjoining all road frontages;
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;
- include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO86 E86.1

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E86.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO87

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

E87

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

PO88

Telecommunications facilities⁽⁸¹⁾ do not conflict with lawful existing land uses both on and adjoining the site.

E88

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO89

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E89.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

E89.2

In all other areas towers do not exceed 35m in height.

E89.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E89.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m. Where there is no established building line the facility is located at the rear of the site.

E89.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E89.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

PO90

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

E90

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

PO91

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

E91

All equipment comprising the Telecommunications facility⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

Key sites

PO92

Development of Key site A (Caboolture park shopping centre), shown on 'Figure 6.2.1.1.1 - Caboolture ':

- incorporates an appropriate mix of uses, including a substantial retail and commercial component;
- b. incorporates residential uses along the Elliot Street frontage;

6 Zones

C.	increases permeability, especially for pedestrians within the Caboolture centre precinct;

 contributes to a high quality streetscape, providing active frontages and high quality finishes along streets and public spaces.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

PO93

Development of Key site C (James Street site), shown on 'Figure 6.2.1.1.1 - Caboolture ':

- a. incorporates a mix of uses, including residential activities where appropriate;
- provides a high quality, active building frontage along James Street connecting the Caboolture train station with the Caboolture town square;
- contributes to greater pedestrian permeability within the Caboolture centre precinct, by providing cross block pedestrian links;
- d. does not incorporate car parking between buildings and the James Street frontage;
- e. utilises Armstrong Lane for vehicle access and servicing;
- f. includes street trees.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

No example provided.

PO94

Development of Key Site B (Lakes centre), shown on 'Figure 6.2.1.1.1 - Caboolture ':

- incorporates an appropriate mix of uses, including commercial, retail and residential where appropriate;
- b. contributes to the provision of civic space within the Caboolture centre precinct, capitalising on the site's mature trees;

- increases permeability within the Caboolture centre precinct, through the provision of a connection between King Street and Esme Avenue;
- d. contributes to a high quality streetscape on King Street and Esme Avenue;
- supports the consolidation of vehicle access points with adjoining properties along King Street.

Note - Refer to Planning scheme policy - Caboolture concept plan for details and examples.

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following requirements apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO95

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- a. is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- c. protects buildings and infrastructure from the effects of acid sulfate soils.

E95

Development does not involve:

- excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following requirements apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;

- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO96

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- b. on-site mitigation measures, mechanisms or processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any

other on-site mitigation options identified in the Planning scheme policy - Environmental areas*. * Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014. **PO97** No example provided. Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by: a. retaining habitat trees; b. providing contiguous patches of habitat; provide replacement and rehabilitation planting C. to improve connectivity; avoiding the creation of fragmented and d. isolated patches of habitat; e. providing wildlife movement infrastructure. Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy - Environmental areas. Vegetation clearing and habitat protection **PO98** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO99** No example provided. Development does not result in the net loss or degradation of habitat value in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value, development will: rehabilitate, revegetate, restore and enhance a. an area to ensure it continues to function as a viable and healthy habitat area; provide replacement fauna nesting boxes in b. the event of habitat tree loss in accordance with Planning scheme policy - Environmental C. undertake rehabilitation, revegetation and restoration in accordance with the South East

	Queensland Ecological Restoration Framework.	
PO'	100	No example provided.
and	elopment ensures safe, unimpeded, convenient ongoing wildlife movement and habitat nectivity by:	
a. b. c. d.	providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure; providing replacement and rehabilitation planting to improve connectivity.	
Veg	etation clearing and soil resource stability	
PO'	101	No example provided.
Dev	elopment does not:	
a. b.	result in soil erosion or land degradation; leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.	
Veg	etation clearing and water quality	
PO	102	No example provided.
grou	elopment maintains or improves the quality of undwater and surface water within, and enstream, of a site by:	
a.b.c.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; avoiding or minimising changes to landforms to maintain hydrological water flows; adopting suitable measures to exclude	
0.	livestock from entering a waterbody where a site is being used for animal husbandry ⁽⁴⁾ and animal keeping ⁽⁵⁾ activities.	
PO'	103	No example provided.
	elopment minimises adverse impacts of mwater run-off on water quality by:	
a. b. c. d. e.	minimising flow velocity to reduce erosion; minimising hard surface areas; maximising the use of permeable surfaces; incorporating sediment retention devices; minimising channelled flow.	

vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; c. restoring, rehabilitating and increasing the size of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors; e. landscaping with native plants of local origin. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. PO106 Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: a. pervious surfaces; b. providing deeply planted vegetation buffers and green linkage opportunities; c. landscaping with local native plant species to achieve well-shaded urban places; d. increasing the service extent of the urban	PO104	No example provided.
Development minimises potential adverse 'edge effects' on ecological values by: a. providing dense planting buffers of native vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; c. restoring, rehabilitating and increasing the size of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors; e. landscaping with native plants of local origin. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. PO106 Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: a. pervious surfaces; b. providing deeply planted vegetation buffers and green linkage opportunities; c. landscaping with local native plant species to achieve well-shaded urban places; d. increasing the service extent of the urban	access in a manner that does not result in the adverse edge effects or the loss or degradation of	
effects' on ecological values by: a. providing dense planting buffers of native vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; c. restoring, rehabilitating and increasing the size of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors; e. landscaping with native plants of local origin. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. PO106 Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: a. pervious surfaces; b. providing deeply planted vegetation buffers and green linkage opportunities; c. landscaping with local native plant species to achieve well-shaded urban places; d. increasing the service extent of the urban	PO105	No example provided.
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lorest carropy.	 b. providing deeply planted vegetation buffers and green linkage opportunities; c. landscaping with local native plant species to achieve well-shaded urban places; 	
Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offs	Vegetation clearing and Matters of Local Environ	mental Significance (MLES) environmental offsets

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following requirements apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra Charter

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO108

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building;
- c. be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;
- e. incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building;
- f. retain public access where this is currently provided.

E108

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works

PO109

Demolition and removal is only considered where:

 a report prepared by a suitably qualified conservation architect or conservation

- engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or
- b. demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- c. limited demolition is performed in the course of repairs, maintenance or restoration; or
- demolition is performed following a catastrophic event which substantially destroys the building or object.

PO110

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

PO111

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.

E111

Development does:

- a. not result in the removal of a significant tree;
- b. not occur within 20m of a protected tree;
- involve pruning of a tree in accordance with Australian Standard AS 4373-2007 – Pruning of Amenity Trees.

Overland flow path (refer Overlay map - Overland flow path to determine if the following requirements 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.

PO112

Development:

- a. minimises the risk to persons from overland flow;
- does not increase the potential for damage from overland flow either on the premises or

other premises, public land, watercourses, roads or infrastructure.	
PO113	No example provided.
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;	
 does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property. 	
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.	
PO114	No example provided.
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 other premises, public lands, watercourses, roads 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.	
PO115	E115
Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.	Development ensures that a hazardous chemical is not located or stored in an Overland flow path area. Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot. Development which is not in a Rural zone that an 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.

PO117

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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

E117.1

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.

E117.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO118

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

- a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- b. an overland flow path where it crosses more than one premises;
- 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)

PO119

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;

E119

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.

6 Zones

- b. impacts on the asset life and integrity of park structures is minimised;
- maintenance and replacement costs are minimised.

Riparian and wetland setbacks

PO120

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- a. impact on fauna habitats;
- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

E120

Development does not occur within:

- 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.



Figure 6.2.1.1.1 - Caboolture

6.2.1.2 Morayfield centre precinct

6.2.1.2.1 Purpose - Morayfield centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Morayfield centre precinct:
 - Development incorporates a limited mix of predominately large-format retail and commercial activities which support, but do not compete with the business, commercial or retail functions of the Caboolture centre precinct.
 - b. Development contributes to the consolidation of the Morayfield centre precinct, through:
 - i. greater land use efficiency within the precinct;
 - ii. consolidation of existing large-format retail and showroom⁽⁷⁸⁾ retail development.
 - c. Development is contained within the precinct boundaries and does not result in centre uses occurring outside of the Morayfield centre precinct into adjoining zones.
 - d. Development encourages increased active and public transport usage by:
 - increasing land use intensity within walking distance of public transport facilities;
 - ii. contributing to attractive, walkable street environments, through streetscape upgrades and enhancements:
 - iii. prioritising pedestrian and cycle safety and movement over private vehicle access and movement.
 - e. Adverse impacts on the amenity of surrounding land uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining the centre.
 - f. Development achieves a high standard of urban design and contributes to a visually interesting frontage along transport corridors.
 - g. Facilities and infrastructure are provided to improve pedestrian connectivity and walkability between key destinations within and external to the site through public realm improvements.
 - h. Development ensures the safety, comfort and enjoyment of residents, visitors and works.
 - i. The design, siting and construction of buildings:
 - i. contributes to a high quality centre consistent with the desired character of the centre and surrounding area;
 - ii. maintains a human scale, through appropriate building heights and form;
 - iii. provides attractive, active frontages that address internal and external public spaces and adjoining roads;
 - iv. provides for active and passive surveillance of the public spaces and road frontages;
 - v. ensures parking, manoeuvring and servicing areas are designed, located and aesthetically treated to not be visually dominant features from surrounding sites and road frontages.

- j. Major re-development of the Morayfield Shopping Centre site is designed to:
 - i. incorporate greater land use efficiency through a more intense built form;
 - ii. re-focus the centre to the north;
 - iii. incorporate active frontages to Leda Boulevard, William Berry Drive and Dickson Road;
 - iv. locate vehicle parking areas away from street frontages;
 - v. provide street connections through the site to increase permeability;
 - vi. incorporate the transit interchange into the overall design of the centre.
- k. Development does not provide an oversupply of car parking spaces and wherever possible, consolidates vehicle access and parking areas with surrounding development.

I. Service stations:

- i. establish where they will not disrupt, fragment or negatively impact active frontages or streets where pedestrian safety and comfort are of high importance;
- ii. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts from road vehicle noise;
- iii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
- iv. do not negatively impact adjoining residents or the streetscape;
- v. ancillary uses or activities only service the convenience needs of users.
- m. General works associated with the development achieves the following:
 - new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
 - ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants;
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
 - iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network;
 - iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
 - v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- n. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.

- o. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- p. Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- q. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;
 - vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
 - vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
 - viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
 - ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;
 - x. ensuring effective and efficient disaster management response and recovery capabilities;
 - xi. where located in an overland flow path:
 - A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;

- C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
- D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- r. Development in the Morayfield centre precinct includes one or more of the following uses:

•	Caretaker's accommodation ⁽¹⁰⁾	•	Home based business ⁽³⁵⁾	•	Service industry ⁽⁷³⁾
•	Food and drink outlet ⁽²⁸⁾	•	Indoor sport and recreation ⁽³⁸⁾	•	Shop ⁽⁷⁵⁾
•	Emergency services ⁽²⁵⁾		Market ⁽⁴⁶⁾	•	Showroom ⁽⁷⁸⁾
•	Garden centre ⁽³¹⁾		Outdoor sales ⁽⁵⁴⁾	•	Veterinary services ⁽⁸⁷⁾
•	Hardware and trade				
	supplies ⁽³²⁾		Place of worship ⁽⁶⁰⁾		

s. Development in the Morayfield centre precinct does not include any of the following uses:

• Air services ⁽³⁾	• Intensive horticulture ⁽⁴⁰⁾	• Roadside stall ⁽⁶⁸⁾
• Animal husbandry ⁽⁴⁾	• Marine industry ⁽⁴⁵⁾	• Rural industry ⁽⁷⁰⁾
• Animal keeping ⁽⁵⁾	 Medium impact industry⁽⁴⁷⁾ 	Rural workers' accommodation ⁽⁷¹⁾
 Aquaculture⁽⁶⁾ Brothel⁽⁸⁾ 	Motor sport facility ⁽⁴⁸⁾	Short-term accommodation ⁽⁷⁷⁾
Bulk landscape supplies ⁽⁹⁾	 Nature-based tourism⁽⁵⁰⁾ Nightclub entertainment 	• Special industry ⁽⁷⁹⁾
• Cemetery ⁽¹²⁾	facility ⁽⁵¹⁾	• Tourist attraction ⁽⁸³⁾
• Crematorium ⁽¹⁸⁾	Non-resident workforce accommodation ⁽⁵²⁾	 Tourist park⁽⁸⁴⁾ Transport depot⁽⁸⁵⁾
• Cropping ⁽¹⁹⁾	 Outdoor sport and recreation⁽⁵⁵⁾ 	• Warehouse ⁽⁸⁸⁾
• Detention facility ⁽²⁰⁾	Permanent plantation ⁽⁵⁹⁾	

•	Extractive industry ⁽²⁷⁾	•	Relocatable home park ⁽⁶²⁾	•	Wholesale nursery ⁽⁸⁹⁾
•	Function facility ⁽²⁹⁾	•	Resort complex ⁽⁶⁶⁾	•	Winery ⁽⁹⁰⁾
•	High impact industry ⁽³⁴⁾		Result complex		
•	Intensive animal industry ⁽³⁹⁾				

t. Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the precinct.

Part C - Criteria for assessable development - Morayfield centre 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 C, Table 6.2.1.2.1 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 6.2.1.2.1 Assessable development - Morayfield centre precinct

Perf	formance outcomes	Examples that achieve aspects of the Performance Outcomes
	General	criteria
Role	e of Morayfield centre precinct	
PO1		No example provided.
Dev	elopment in the Morayfield centre precinct:	
а.	reflects the intended role of the precinct as a predominately large format retail and commercial precinct supporting the higher order business, commercial and retail functions of the Caboolture centre precinct;	
b. does not undermine the growth of the Caboolture centre precinct as being the focus for administration, business, commercial and high quality retail in the Moreton Bay region;		
c. is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.		
Note	e - Refer to Moreton Bay centres network Table 6.2.1.1	
PO2	2	No example provided.

Development maximises the efficient use of land and provides for future growth within the precinct by maintaining or increasing the GFA and land use intensity within the precinct boundaries to promote economic development.

Active frontage

PO₃

Buildings and individual tenancies address street frontages and other areas of pedestrian movement.

No example provided.

PO4

Awnings are provided at the ground floor fronting pedestrian footpaths. Awnings:

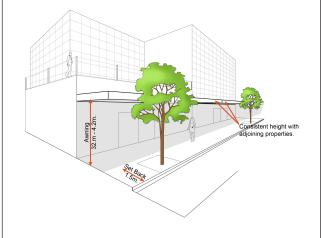
- a. provide adequate protection for pedestrians from solar exposure and inclement weather;
- b. are integrated with the design of the building and the form and function of the street;
- c. do not compromise the provision of street trees and signage;
- d. ensure the safely of pedestrians and vehicles (e.g. No support poles).

E4

Buildings incorporate an awning that:

- is cantilevered;
- b. extends from the face of the building;
- c. has a minimum height of 3.2m and a maximum height of 4.4m above the pavement level;
- does not extend past a vertical plane of 1.5m inside the kerb line to allow for street trees and regulatory signage;
- e. aligns with adjoining buildings to provide continuous shelter where possible.

Figure - Awning requirements



Setbacks

PO₅

Side and rear setbacks are of a dimension to:

6 Zones

- a. cater for required openings, the location of loading docks and landscaped buffers;
- protect the amenity of adjoining sensitive land uses.

Site area

PO6

The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping.

No example provided.

Building height

PO7

Building height:

- reflects the prominence of the Morayfield centre precinct as a higher order centre and key focal point for regional employment and development in South East Queensland;
- b. maximises land use intensity;
- c. allows for distinctive and innovative design outcomes on prominent sites;
- d. provides a transition to lower density areas surrounding the precinct.

E7

Building height is within the minimum and maximum height identified on Overlay map - Building heights.

Built form

PO8

Buildings are designed and constructed to:

- incorporate a mix of colours and high quality materials to add diversification to treatments and finishes;
- b. articulate and detail the building facade at street level and respond to the human scale;
- visually integrate with the surrounding area and adjoining buildings through appropriate design and materials;
- d. avoid blank walls through articulation and architectural treatments to create visual interest;

- e. avoid highly reflective finishes;
- f. avoid cluttering of plant and equipment on building roofs.

PO9

Building entrances:

- a. are readily identifiable from the road frontage;
- are designed to limit opportunities for concealment;
- are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- are adequately lit to ensure public safety and security;
- e. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance Outcome.

No example provided.

Movement network

PO10

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

No example provided.

Car parking

PO11

The provision of car parking spaces:

a. is appropriate for the use;

E11

Car parking is provided in accordance with Schedule 7.

Note - The above rates exclude car parking spaces for people with a disability required by Disability Discrimination Act 1992 or the relevant disability discrimination legislation and standards.

6 Zones

	b. interconnects with car parking areas on adjoining sites wherever possible;	
	c. avoids an oversupply of car parking spaces.	
	Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.	
	PO12	No example provided.
	Car parking is designed to avoid the visual impact of large areas of surface car parking on the streetscape.	
ľ	PO13	No example provided.
	Car parking design includes innovative solutions, including on-street parking and shared parking areas.	
	Note - Refer to Planning scheme policy - Integrated design for details and examples of on-street parking.	
	PO14	E14
	The design of car parking areas:	All car parking areas are designed and constructed
	 does not impact on the safety of the external road network; 	in accordance with Australian Standard AS2890.1 Parking facilities Part 1: Off-street car parking.
	b. ensures the safe movement of vehicles within the site.	

Bicycle parking and end of trip facilities

Note - Building work to which this code applies constitutes Major Development for purposes of development requirements for end of trip facilities prescribed in the Queensland Development Code MP 4.1.

PO15

- a. End of trip facilities are provided for employees or occupants, in the building or on-site within a reasonable walking distance, and include:
 - adequate bicycle parking and storage facilities; and

E15.1

Minimum bicycle parking facilities are provided in accordance with the table below (rounded up to the nearest whole number).

Use	Minimum Bicycle Parking		
Residential uses comprised of dwellings	Minimum 1 space per dwelling		

- ii. adequate provision for securing belongings; and
- iii. change rooms that include adequate showers, sanitary compartments, wash basins and mirrors.
- Notwithstanding a. there is no requirement to provide end of trip facilities if it would be unreasonable to provide these facilities having regard to:
 - the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - ii. whether it would be practical to commute to and from the building on a bicycle, having regard to the likely commute distances and nature of the terrain: or
 - iii. the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

Editor's note - The intent of b above is to ensure the requirements for bicycle parking and end of trip facilities are not applied in unreasonable circumstances. For example these requirements should not, and do not apply in the Rural zone or the Rural residential zone etc.

Editor's note - This performance outcome is the same as the Performance Requirement prescribed for end of trip facilities under the Queensland Development Code. For development incorporating building work, that Queensland Development Code performance requirement cannot be altered by a local planning instrument and has been reproduced here solely for information purposes. Council's assessment in its building work concurrence agency role for end of trip facilities will be against the performance requirement in the Queensland Development Code. As it is subject to change at any time, applicants for development incorporating building work should ensure that proposals that do not comply with the examples under this heading meet the current performance requirement prescribed in the Queensland Development Code.

All other residential uses	Minimum 1 space per 2 car parking spaces identified in Schedule 7 – car parking
Non-residential uses	Minimum 1 space per 200m2 of GFA

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is a combination of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E15.2

Bicycle parking is:

- a. provided in accordance with Austroads (2008), Guide to Traffic Management - Part 11: Parking;
- b. protected from the weather by its location or a dedicated roof structure;
- c. located within the building or in a dedicated, secure structure for residents and staff;
- d. adjacent to building entrances or in public areas for customers and visitors.

Note - Bicycle parking structures are to be constructed to the standards prescribed in AS2890.3.

Note - Bicycle parking and end of trip facilities provided for residential and non-residential activities may be pooled, provided they are within 100 metres of the entrance to the building.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E15.3

For non-residential uses, storage lockers:

- a. are provide at a rate of 1.6 per bicycle parking space (rounded up to the nearest whole number);
- b. have minimum dimensions of 900mm (height) x 300mm (width) x 450mm (depth).

Note - Storage lockers may be pooled across multiple sites and activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E15.4

For non-residential uses, changing rooms:

- a. are provided at a rate of 1 per 10 bicycle parking spaces;
- b. are fitted with a lockable door or otherwise screened from public view;
- c. are provided with shower(s), sanitary compartment(s) and wash basin(s) in accordance with the table below:

Bicycle spaces provided	Male/ Female	Change rooms required	Showers required	Sanitary compartments required	Washbasins required
1-5	Male and female	1 unisex change room	1	1 closet pan	1
6-19	Female	1	1	1 closet pan	1
20 or more	Male	1	1	1 closet pan	1
more	Female	1	2, plus 1 for every 20 bicycle spaces provided thereafter	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking spaces provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter
	Male	1	2, plus 1 for every 20 bicycle spaces provided thereafter	1 urinal and 1 closet pans, plus 1 sanitary compartment at the rate of 1 closet pan or 1 urinal for every 60 bicycle space provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter

Note - All showers have a minimum 3-star Water Efficiency Labelling and Standards (WELS) rating shower head.

Note - All sanitary compartments are constructed in compliance with F2.3 (e) and F2.5 of BCA (Volume 1).

- d. are provided with:
 - i. a mirror located above each wash basin;
 - a hook and bench seating within each shower compartment;
 - iii. a socket-outlet located adjacent to each wash basin.

Note - Change rooms may be pooled across multiple sites, residential and non-residential activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

Loading and servicing

PO16

Loading and servicing areas:

- a. are not visible from the street frontage;
- b. are integrated into the design of the building;
- c. include screening and buffers to reduce negative impacts on adjoining sensitive land uses;
- d. are consolidated and shared with adjoining sites, where possible.

Note - An access easement may be required to be registered to ensure shared access between properties is permitted.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design.

No example provided.

Waste

PO17

Bins and bin storage area/s are designed, located and managed to prevent amenity impacts on the locality.

E17

Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.

Landscaping

PO18

On-site landscaping is provided, that:

- a. is incorporated into the design of the development;
- b. reduces the dominance of car parking and servicing areas from the street frontage;
- incorporates shade trees in car parking areas;
- d. retains mature trees wherever possible;
- e. contributes to quality public spaces and the microclimate by providing shelter and shade;
- f. maintains the achievement of active frontages and sight lines for casual surveillance.

Note - Landscaping is to be provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

E18.1

Where adjoining land is contained within the General Residential zone, a 3m deep landscaping strip is provided for the length of the boundary. Landscaping must have a mature height of at least 3m.

Note - Refer to Planning scheme policy - Integrated design for species, details and examples.

E18.2

Trees are provided in car parking areas at a rate of 1 tree per 10 car parking spaces.

Note - Refer to Planning scheme policy - Integrated design for species, details and examples.

E18.3

Development includes the provision of street trees.

Note - Refer to Planning scheme policy - Integrated design for species, details and examples.

Environmentally sensitive design

PO19

Development incorporates energy efficient design principles, including:

- maximising internal cross-ventilation and prevailing breezes;
- maximising the effect of northern winter sun and screening undesirable northern summer sun and western sun;
- reducing demand on non-renewable energy sources for cooling and heating;
- d. maximising the use of daylight for lighting;
- e. retaining existing established trees on-site where possible.

Note - Further guidance on environmentally sustainable design is available in *Subtropical Urban Design in South East Queensland - A Handbook for Planners, Developers and Decision Makers*, Centre for Subtropical Design, Brisbane, 2010.

PO20 Best practice Water Sensitive Urban Design (WSUD) is incorporated within development sites to mitigate the impacts of stormwater run-off in accordance with Planning scheme policy - Integrated design. **PO21**

No example provided.

Crime prevention through environmental design

Development contributes to a safe public realm by incorporating crime prevention through environmental design principles including:

- orienting buildings towards the street and public a. spaces and providing clear sightlines to public spaces to allow opportunities for casual surveillance;
- b. ensuring the site layout, building design and landscaping does not result in potential concealment or entrapment areas;
- ensuring high risk areas, including stairwells, C. arcades, walkways and concealed car parking areas have adequate surveillance to reduce risk or are able to be secured outside of business hours.

Note - Further information is available in Crime Prevention through Environmental Design: Guidelines for Queensland, State of Queensland, 2007.

No example provided.

Lighting

PO22

Lighting is designed to provide adequate levels of illumination to public and communal spaces to maximise safety while minimising adverse impacts on sensitive land uses.

No example provided.

Amenity

PO23

The amenity of the area and adjacent sensitive land uses are protected from the impacts of dust, odour, chemicals and other environmental nuisances.

No example provided.

Noise

PO24

Noise generating uses do not adversely affect existing or potential noise sensitive uses.

Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.

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.

PO25

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

E25.1

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E25.2

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.
- do not remove existing or prevent future active transport routes or connections to the street network:
- 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.

Hazardous Chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

PO26

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E26.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E26.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of $0.5\ x$ 10-6/year.

E26.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

 For any hazard scenario involving the release of gases or vapours:

i. AEGL2 (60minutes) or if not available ERPG2: An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure. For any hazard scenario involving fire or explosion: 7kPa overpressure; 4.7kW/m2 heat radiation. If criteria E26.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5 x 10-6/year. E26.3 Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below: Dangerous Dose For any hazard scenario involving the release of gases or vapours: AEGL2 (60minutes) or if not available ERPG2; An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure. For any hazard scenario involving fire or explosion: 14kPa overpressure; ii. 12.6kW/m2 heat radiation. If criteria E26.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year. **PO27 E27**

Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early stages of a fire situation and notify a designated person.

Buildings and package stores containing fire-risk hazardous chemicals are provided with 24 hour monitored fire detection system for early detection of a fire event.

PO28

Common storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) that are adequate to contain releases, including fire fighting media.

E28

Storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) capable of containing a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes.

PO29

Storage and handling areas, including manufacturing areas, containing hazardous chemicals in quantities greater than 2,500L or kg within a Local Government "flood hazard area" are located and designed in a manner to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries.

E29.1

The base of any tank with a WC >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively:

- bulk tanks are anchored so they cannot float if submerged or inundated by water; and
- b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level.

E29.2

The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level.

Clearing of habitat trees where not located within the Environmental areas overlay map

PO30

- Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.
- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.

 Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

Works criteria					
Utilities					
PO31	No example provided.				
All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).					

Access				
PO32		No example provided.		
Development provides functional and integrated car parking and vehicle access, that:				
1	prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.); provides safety and security of people and property at all times; does not impede active transport options; does not impact on the safe and efficient movement of traffic external to the site; where possible vehicle access points are consolidated and shared with adjoining sites. e - Refer to Planning scheme policy - Centre neighbourhood hub design for details and examples.			
PO33		No example provided.		

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

PO34

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- c. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E34.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E34.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E34.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E34.4

The development layout allows forward vehicular access to and from the site.

PO35

Safe access is provided for all vehicles required to access the site.

E35.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
 - AS/NZS2890.1 Parking facilities Part 1: Off street car parking;

- ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities;
- iii. Planning scheme policy Integrated design;
- iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E35.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- a. AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;
- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E35.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E35.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO36

E36

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO37

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E37.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E37.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO38

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement;
- c. adequate on street parking;
- d. stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;
- f. utility services location;

No example provided.

- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

PO39

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m² GFA;
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;
- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

E39.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E39.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E39.3

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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.

PO40

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

E40

New intersection spacing (centreline – centreline) along a through road conforms with the following:

- a. where the through road provides an access function;
 - i. intersecting road located on the same side= 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- Where the through road provides a collector or sub-arterial function:
 - i. intersecting road located on the same side = 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:
 - intersecting road located on the same side= 300 metres;

- ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
- iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO41

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

E41

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation	Minimum construction
Frontage road unconstructed or gravel road only; OR Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard; OR Frontage road partially constructed* to Planning scheme policy - Integrated design standard.	Construct the verge adjoining the development and the carriageway (including development side kerb and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel shoulder and table drainage to the opposite side.

The minimum total travel lane width is:

- 6m for minor roads;
- 7m for major roads.

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO42

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E42.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E42.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E42.3

E43.1

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO43

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E43.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E43.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E43.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

PO44

Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.

E44

The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.

PO45

Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises.

Note - Refer to Planning scheme policy - Integrated design for details.

No example provided.

Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure. **PO46** No example provided. Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site. Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome. **PO47** No example provided. Where development: is for an urban purpose that involves a land area of 2500m2 or greater; and b. will result in: i. 6 or more dwellings; or an impervious area greater than 25% of the net developable area. stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives. Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management. Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C). **PO48 E48**

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

PO49

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.

No example provided.

PO50

Council is provided with accurate representations of the completed stormwater management works within residential developments.

E50

"As Built" drawings and specifications of the stormwater management devices certified by an RPEQ is provided.

Note - Documentation is to include:

- a. photographic evidence and inspection date of the installation of approved underdrainage;
- copy of the bioretention filter media delivery dockets/quality certificates confirming the materials comply with specifications in the approved Stormwater Management Plan;
- c. date of the final inspection.

Site works and construction management

PO51

The site and any existing structures are maintained in a tidy and safe condition.

No example provided.

PO52

All works on-site are managed to:

- minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light;
- b. minimise as far as possible, impacts on the natural environment;
- ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises;
- avoid adverse impacts on street trees and their critical root zone.

E52.1

Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following:

- a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions;
- stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind;
- c. stormwater discharge rates do not exceed pre-existing conditions;
- minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E52.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E52.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E52.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO53

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

E53

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO54

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- a. the aggregate volume of imported or exported material is greater than 1000m³; or
- b. the aggregate volume of imported or exported material is greater than 200m³ per day; or
- the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

E54.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

E54.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E54.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E54.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E54.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E54.6

Access to the development site is obtained via an existing lawful access point.

PO55

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

E55.1

At completion of construction all disturbed areas of the site are to be:

- a. topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO56

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E56.1

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO57

E57.1

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E57.2

Disposal of materials is managed in one or more of the following ways:

- all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

PO58

All development works are carried out at times which minimise noise impacts to residents.

E58

All development works are carried out within the following times:

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
- no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

PO59

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

No example provided.

Earthworks

PO60

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- b. short and long-term slope stability;
- c. soft or compressible foundation soils;
- d. reactive soils;
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E60.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E60.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E60.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E60.4

All filling or excavation is contained on-site and is free draining.

E60.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use:
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E60.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

PO61

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E61

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment

PO62

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

E62.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E62.2

Filling or excavation that would result in any of the following is not carried out on-site:

- a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;
- an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken;
- prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

Note - All building work covered by QDC MP1.4 is excluded from this provision.

PO63

Filling or excavation does not result in land instability.

Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance.

No example provided.

PO64

Filling or excavation does not result in:

- a. adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway;
- b. increased flood inundation outside the site;
- any reduction in the flood storage capacity in the floodway;
- d. any clearing of native vegetation.

Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements.

No example provided.

PO65

Filling or excavation on the development site is undertaken in a manner which does not create or accentuate problems associated with stormwater flows and drainage systems on land adjoining the site.

E65

Filling and excavation undertaken on the development site are shaped in a manner which does not:

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - i. concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO66

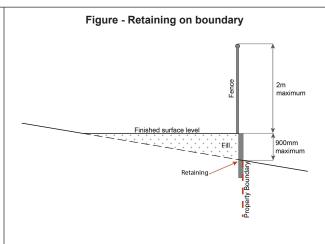
All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

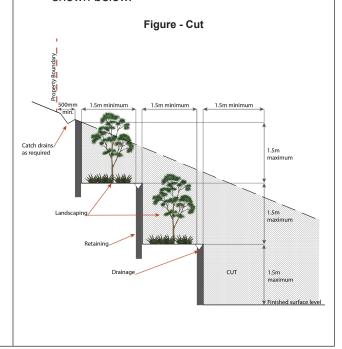
PO66

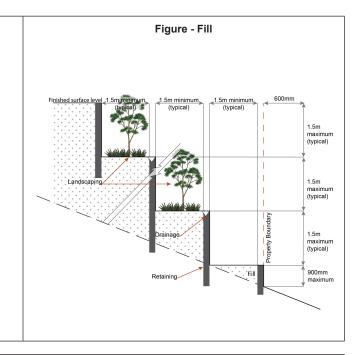
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;



- c. where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.





Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme;
 - iii. material change of use for a Tourist park⁽⁸⁴⁾ with accommodation in the form of caravans or tents; or
 - iv. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials

AND

- b. none of the following exceptions apply:
 - i. the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO67

Development incorporates a fire fighting system that:

 satisfies the reasonable needs of the fire fighting entity for the area;

E67.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations.*

- is appropriate for the size, shape and topography of the development and its surrounds;
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks (84) or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans:
 - iii. for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and, where applicable, Part 3.6.

E67.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;
- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E67.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO68

E68

For development that contains on-site fire hydrants external to buildings:

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - i. the overall layout of the development (to scale);
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - v. external hydrants and hydrant booster points;
 - vi. physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO69

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E69

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO70

The scale and intensity of the Home based business⁽³⁵⁾:

- is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape or road safety;
- does not adversely impact on the amenity of the adjoining and nearby premises;
- remains ancillary to the residential use of the Dwelling houseCould not findID-2693465-5150;
- does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- f. ensure employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E70.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E70.2

The Home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure⁽⁴³⁾, Substation⁽⁸⁰⁾ and Utility installation⁽⁸⁶⁾

PO71

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line:
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E71.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;
- c. have a similar height, bulk and scale to the surrounding fabric;
- d. have horizontal and vertical articulation applied to all exterior walls.

E71.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO72

E72

Access control arrangements:

Infrastructure does not have an impact on pedestrian health and safety.

- do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO73

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- a. generates no audible sound at the site boundaries where in a residential setting; or
- b. meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E73

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO74

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other Dwelling units⁽²³⁾ and centre uses:
- accessible and readily identifiable for residents, visitors and emergency services;
- d. located to not compromise active frontages.

E74

A dwelling has a clearly defined, private outdoor living space that is:

a. as per table-

Use	Minimum Area	Minimum Dimension in all directions
Ground floor dwellings		
All dwelling types	16m²	4m
Above ground floor dwellings		
1 bedroom or studio,	8m²	2.5m
2 or more bedrooms	12m²	3.0m

- accessed from a living area;
- c. sufficiently screened or elevated for privacy;
- ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- e. balconies orientate to the street;
- f. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas).

Note - Areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided).

PO75

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E75

The dwelling:

- a. includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses:
- clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services⁽²⁵⁾;
- c. is provided with a separate entrance to that of any non-residential use on the site;
- where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

Service station

Note - Where the use specific outcomes relating to Service Stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO76

Service stations are located, designed and orientated to:

- establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- b. establish outside of Key Sites;
- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- e. ensure the amenity of adjoining properties is protected;

E76.1

Service stations are located:

- a. on the periphery of the Centre adjoining or within 100m of land zoned other than Centre zone;
- on the corner lot of an arterial or sub-arterial road:
- c. outside areas nominated as Key Sites.

E76.2

Service stations are designed and orientated on site to:

 include a landscaping strip having a minimum depth of 1m adjoining all road frontages;

- f. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;
- g. minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area. (e.g. high order road in urban or next generation neighbourhood, likely to be noisy and not like suburban);
- h. provide ancillary uses that meet the convenience needs of users.
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;
- c. include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO77

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

E77.1

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E77.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO78

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

E78

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

PO79

Telecommunications facilities⁽⁸¹⁾ do not conflict with lawful existing land uses both on and adjoining the site.

E79

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO80

E80.1

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line:
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- otherwise consistent with the amenity and character of the zone and surrounding area.

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

E80.2

In all other areas towers do not exceed 35m in height.

E80.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E80.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

E80.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E80.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

PO81

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

E81

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

PO82

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

E82

All equipment comprising the Telecommunications facility⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

Key sites

PO83

Development on the Morayfield Shopping Centre site (Lot 3 SP128123):

- incorporates an appropriate mix of uses, with the main focus remaining on large format retail premises;
- does not include higher order retail, commercial and business uses which are more appropriately located in the Caboolture centre precinct;
- achieves greater land use efficiency through a more intense built form;
- d. contributes to a high quality streetscape along Morayfield Road and the internal road network;
- e. incorporates active frontages along Leda Boulevard, William Berry Drive and Dickson Road;
- does not involve the location of large areas of surface car parking along major transport corridors;
- g. supports the consolidation of vehicle access points and parking areas with adjoining properties;
- incorporates cross block (east-west) linkages to create a more permeable/connected site and encourage pedestrian movement.

No example provided.

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following requirements apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO84

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- protects buildings and infrastructure from the effects of acid sulfate soils.

E84

Development does not involve:

- excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following requirements apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO85

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- b. on-site mitigation measures, mechanisms or processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy Environmental areas*.

* Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014.

No example provided.

PO86

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- a. retaining habitat trees;
- b. providing contiguous patches of habitat;
- c. provide replacement and rehabilitation planting to improve connectivity;
- d. avoiding the creation of fragmented and isolated patches of habitat;
- e. providing wildlife movement infrastructure.

Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with

No example provided.

Fur	ges, underpasses, overpasses, land bridges and rope bridges. ther information is provided in Planning scheme policy – vironmental areas.			
Vegetation clearing and habitat protection				
PO	37	No example provided.		
inte	relopment ensures that the biodiversity quality and grity of habitats is not adversely impacted upon maintained and protected.			
PO	38	No example provided.		
deg a Va in th	relopment does not result in the net loss or radation of habitat value in a High Value Area or alue Offset Area. Where development does result ne loss or degradation of habitat value, elopment will:			
a.	rehabilitate, revegetate, restore and enhance an area to ensure it continues to function as a viable and healthy habitat area;			
b.	provide replacement fauna nesting boxes in the event of habitat tree loss in accordance with Planning scheme policy - Environmental areas;			
C.	undertake rehabilitation, revegetation and restoration in accordance with the South East Queensland Ecological Restoration Framework.			
PO89 No example provided.		No example provided.		
	relopment ensures safe, unimpeded, convenient ongoing wildlife movement and habitat connectivity			
a. b.	providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat;			
c. d.	providing wildlife movement infrastructure; providing replacement and rehabilitation planting to improve connectivity.			
Veg	etation clearing and soil resource stability			
POS	90	No example provided.		
Dev	relopment does not:			
a. b.	result in soil erosion or land degradation; leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.			

PO91	1	No example provided.		
grour	elopment maintains or improves the quality of indwater and surface water within, and instream, of a site by:			
b. c.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; avoiding or minimising changes to landforms to maintain hydrological water flows; adopting suitable measures to exclude livestock from entering a waterbody where a site is being used for animal husbandry ⁽⁴⁾ and animal keeping ⁽⁵⁾ activities.			
PO92	2	No example provided.		
a. b. c. d.	elopment minimises adverse impacts of nwater run-off on water quality by: minimising flow velocity to reduce erosion; minimising hard surface areas; maximising the use of permeable surfaces; incorporating sediment retention devices; minimising channelled flow.			
Vegetation clearing and access, edge effects and urban heat island effects				
PO93	3	No example provided.		
acces edge	elopment retains safe and convenient public ss in a manner that does not result in the adverse effects or the loss or degradation of biodiversity is within the environment.			
PO94	4	No example provided.		
	elopment minimises potential adverse 'edge ts' on ecological values by:			
b. c. d.	providing dense planting buffers of native vegetation between a development and environmental areas; retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; restoring, rehabilitating and increasing the size of existing patches of native vegetation; ensuring that buildings and access (public and vehicle) are setback as far as possible from			

Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. **PO95** No example provided. Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: a. pervious surfaces; providing deeply planted vegetation buffers and green linkage opportunities; landscaping with local native plant species to achieve well-shaded urban places; d. increasing the service extent of the urban forest canopy. Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO96

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

No example provided.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following requirements apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra Charter.

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO97	E97

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building;
- c. be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;
- e. incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building;
- f. retain public access where this is currently provided.

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

PO98

Demolition and removal is only considered where:

- a report prepared by a suitably qualified conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or
- demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- c. limited demolition is performed in the course of repairs, maintenance or restoration; or
- d. demolition is performed following a catastrophic event which substantially destroys the building or object.

No example provided.

PO99

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

PO100

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

E100

Development does:

- a. not result in the removal of a significant tree;
- b. not occur within 20m of a protected tree;
- involve pruning of a tree in accordance with Australian Standard AS 4373-2007 – Pruning of Amenity Trees.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.

Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following requirements apply)

PO101

Habitable rooms within an Electricity supply substation buffer are located a sufficient distance from substations⁽⁸⁰⁾ to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

E101

Habitable rooms:

- a. are not located within an Electricity supply substation buffer; and
- b. proposed on a site subject to an Electricity supply supply substation⁽⁸⁰⁾ are acoustically insulted to achieve the noise levels listed in Schedule 1, Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

PO102

Habitable rooms within an Electricity supply substation buffer are acoustically insulated from the noise of a substation (80) to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008 and provides a safe, healthy and disturbance free living environment.

Note - To demonstrate achievement of the performance outcome, a noise impact assessment report is prepared by a suitably qualified person. Guidance to preparing an noise impact assessment report is provided in Planning scheme policy – Noise.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

No example provided.

Overland flow path (refer Overlay map - Overland flow path to determine if the following requirements 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.

PO103

No example provided.

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 other premises, public land, watercourses, roads or infrastructure. PO104 No example provided. Development: 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 - 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. PO105 No example provided. Development does not: directly, indirectly or cumulatively cause any a. increase in overland flow velocity or level; increase the potential for flood damage from overland flow either on the premises or other premises, public lands, watercourses, roads 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. **PO106** E106 Development ensures that public safety and the risk Development ensures that a hazardous chemical is to the environment are not adversely affected by a not located or stored in an Overland flow path area. detrimental impact of overland flow on a hazardous chemical located or stored on the premises. Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances. **PO107** E107

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot. Development which is not in a Rural zone that an 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.

PO108

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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

E108.1

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.

E108.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO109

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

- a. a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- b. an overland flow path where it crosses more than one premises;
- 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)

PO110

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;

E110

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;
- maintenance and replacement costs are minimised.

Riparian and wetland setbacks

PO111

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- a. impact on fauna habitats;
- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

E111

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.

6.2.1.3 Strathpine centre precinct

6.2.1.3.1 Purpose - Strathpine centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Strathpine centre precinct:
 - a. Development reinforces the role of the Strathpine centre as a key centre for administration and business within the Moreton Bay Region.
 - b. Development contributes to the consolidation of the Strathpine centre, through:
 - i. greater land use efficiency within the precinct;
 - ii. increasing residential density and diversity within the centre and around railway stations.
 - c. Development is contained within the precinct boundaries and does not result in centre uses occurring outside of the Strathpine centre precinct into adjoining zones.
 - d. Development incorporates transit oriented development principles and encourages increased active and public transport usage surrounding the Strathpine and Bray Park rail stations, by:
 - i. increasing land use intensity within walking distance of public transport facilities;
 - ii. contributing to attractive, highly walkable street environments, through streetscape upgrades and enhancements and improved connectivity;
 - iii. prioritising pedestrian and cycle safety and movement over private vehicle access and movement.
 - e. High density residential activities are encouraged within this precinct.
 - f. The intensity of development and mix of land uses provided in the precinct supports the provision of public transport services and other services and facilities.
 - g. Through redevelopment the built form of the Strathpine centre along Gympie Road is to be characterised by active frontages adjoining Gympie Road forming a main street core.
 - h. Development encourages social activity through the provision of high quality civic and forecourt spaces.
 - i. The re-development of key sites within the precinct provides an opportunity to improve:
 - i. the mix and intensity of uses within the centre;
 - ii. built form outcomes on key streets;
 - iii. pedestrian connectivity throughout the centre;
 - iv. maximise the amenity offered by the South Pine River.
 - j. The safety and efficiency of pedestrian movement is prioritised in the design of car parking areas and the size and frequency of vehicle crossovers.
 - k. Parking, manoeuvring and servicing areas are designed, located and aesthetically treated to not be visually dominant features from the streetscape and public spaces.

- I. The number of car parking spaces is managed to:
 - i. encourage the use of active and public transport;
 - ii. increase land use efficiency;
 - iii. improve development feasibility;
 - iv. avoid the negative impacts of large areas of surface car parking on the streetscape.
- m. Pedestrian connections are provided to integrate the development with the street, public spaces and the surrounding area.
- n. Buildings contribute to an efficient and attractive, sub-tropical centre, through:
 - i. high quality, distinctive designs that address streets and public spaces;
 - ii. energy efficient buildings that achieve best practice environmental performance;
 - iii. the use of high quality, low maintenance building materials, light weight elements, recesses etc.
- o. Crime prevention through environmental design principles are incorporated into the design of buildings and public spaces (e.g. casual surveillance, avoid areas of concealment etc.), to ensure the safety and security of people and property.
- p. Ground floor and podium tenancies are occupied by retail, commercial or community uses to provide activities close to the public realm.
- q. Service stations:
 - i. establish where they will not disrupt, fragment or negatively impact active frontages or streets where pedestrian safety and comfort are of high importance;
 - ii. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts from road vehicle noise;
 - iii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
 - iv. do not negatively impact adjoining residents or the streetscape;
 - v. ancillary uses or activities only service the convenience needs of users.
- r. Adverse impacts on the amenity of surrounding land uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining the centre.
- s. Uses and activities contribute to a horizontal and vertical mix and the co-location of uses, concentrated in a compact urban form.
- t. General works associated with the development achieves the following:
 - i. new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services,

- telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
- ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants:
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
- iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network;
- iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
- v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- u. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- v. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- w. Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- x. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;
 - vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;

- vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
- viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
- ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;
- x. ensuring effective and efficient disaster management response and recovery capabilities;
- xi. where located in an overland flow path:
 - A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
 - C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
 - D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- y. Development in the Strathpine centre precinct includes one or more of the following:

Bar ⁽⁷⁾	Hardware and trade supplies ⁽³²⁾	• Place of worship ⁽⁶⁰⁾
Caretaker's accommodation ⁽¹⁰⁾	Health care services ⁽³³⁾	Rooming accommodation ⁽⁶⁹⁾
Child care centre ⁽¹³⁾	Home based business ⁽³⁵⁾	• Sales office ⁽⁷²⁾
Club ⁽¹⁴⁾	• Hotel ⁽³⁷⁾	Service industry ⁽⁷³⁾
Community care centre ⁽¹⁵⁾	Indoor sport and recreation ⁽³⁸⁾	• Shop ⁽⁷⁵⁾
Community use ⁽¹⁷⁾	Low impact industry ⁽⁴²⁾ - if not located adjoining a	 Shopping centre⁽⁷⁶⁾ Short-term
Dual occupancy ⁽²¹⁾ - if in a mixed use building	main street	accommodation ⁽⁷⁷⁾
Dwelling unit ⁽²³⁾	• Market ⁽⁴⁶⁾	• Showroom ⁽⁷⁸⁾
Educational	• Multiple dwelling ⁽⁴⁹⁾	• Theatre ⁽⁸²⁾
establishment ⁽²⁴⁾	Nightclub entertainment facility ⁽⁵¹⁾	Veterinary services ⁽⁸⁷⁾
Emergency services ⁽²⁵⁾	• Office ⁽⁵³⁾	

•	Food and drink outlet ⁽²⁸⁾	
•	Function facility ⁽²⁹⁾	

z. Development in the Strathpine centre precinct does not include any of the following:

Agricultural s store ⁽²⁾	supplies	Extractive industry ⁽²⁷⁾	Relocatable home park ⁽⁶²⁾
 Air services⁽³⁾ Animal husb Animal keep Aquaculture⁽³⁾ Brothel⁽⁸⁾ 	andry ⁽⁴⁾	High impact industry ⁽³⁴⁾ Intensive animal industry ⁽³⁹⁾ Intensive horticulture ⁽⁴⁰⁾ Marine industry ⁽⁴⁵⁾ Medium impact industry ⁽⁴⁷⁾	 Rural industry⁽⁷⁰⁾ Rural workers accommodation⁽⁷¹⁾ Special industry⁽⁷⁹⁾ Tourist park⁽⁸⁴⁾ Transport depot⁽⁸⁵⁾
 Bulk landsca supplies⁽⁹⁾ Cemetery⁽¹²⁾ Crematorium Cropping⁽¹⁹⁾ Detention face 	•	Motor sport facility ⁽⁴⁸⁾ Outdoor sport and recreation ⁽⁵⁵⁾ Permanent plantation ⁽⁵⁹⁾	 Warehouse⁽⁸⁸⁾ Wholesale nursery⁽⁸⁹⁾ Winery⁽⁹⁰⁾

aa. Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the zone.

Part D - Criteria for assessable development - Strathpine centre 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 D, Table 6.2.1.3.1 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 6.2.1.3.1 Assessable development - Strathpine centre precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes	
General criteria		
Role of Strathpine centre precinct		

PO1

Development in the Strathpine centre precinct:

- reflects the prominence of the Strathpine centre precinct as a higher order centre and key focal point for regional employment and development in South East Queensland;
- is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.

Note - Refer to Moreton Bay centres network Table 6.2.1.1.

No example provided.

PO₂

Development maximises the efficient use of land and provides for future growth within the precinct by maintaining or increasing the GFA and land use intensity within the precinct boundaries to promote economic development.

Note - Development within the Strathpine centre precinct is expected to capitalise on the area's strategic advantages, including co-location with other businesses and government administration and access to high quality public transport, by maximising the efficient use of land. Activities that are land intensive, but do not promote economic development, such as open car parks, are discouraged.

E2

Development within the precinct achieves a minimum plot ratio of 1:1.

Note - Plot ratio is the ratio of gross floor area to the area of the site. For example, a minimum plot ratio of 1:1 means a 1,000m² site is to be developed with a minimum of 1,000m² gross floor area.

Active frontage

PO₃

Buildings are designed and oriented to address and activate areas of pedestrian movement, to:

- promote vitality, interaction and casual surveillance;
- b. concentrate and reinforce pedestrian activity;
- c. avoid opaque facades to provide visual interest to the street frontage.

E3.1

Buildings on sites shown on 'Figure 6.2.1.3.1 - Strathpine' as requiring frontage type A incorporates:

- a. a minimum of 60% of the length of the street frontage glazed between 0.8m and 2.0m above ground level;
- b. external doors which directly adjoin the street frontage at least every 15m;
- modulation in the facade, by incorporating a different tenancy or the use of pillars or similar elements every 5-10m;
- d. the minimum window or glazing is to remain uncovered and free of signage.

Figure - Frontage type A

2m

0.8m

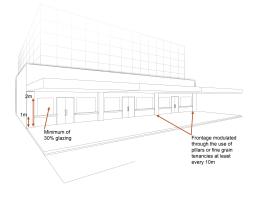
Minimum of between doors 60% glazing library frontage modulated through the use of pillars or fine grain terrancies every \$-10m

E3.2

Buildings on sites shown on 'Figure 6.2.1.3.1 - Strathpine' as requiring a frontage type B incorporates:

- a minimum of 50% of the length of the street frontage glazed between 1.0m and 2.0m above ground level;
- modulation in the facade, by incorporating fine grain tenancies or the use of pillars or similar elements at least every 10m;
- c. the minimum window or glazing is to remain uncovered and free of signage.

Figure - Frontage type B



PO4

Awnings are provided at the ground floor fronting pedestrian footpaths. Awnings:

 provide adequate protection for pedestrians from solar exposure and inclement weather;

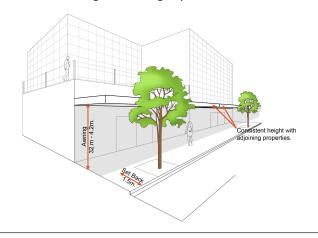
E4

Buildings incorporate an awning that:

- a. is cantilevered;
- b. extends from the face of the building;

- b. are integrated with the design of the building and the form and function of the street;
- do not compromise the provision of street trees and signage;
- d. ensure the safety of pedestrians and vehicles (e.g. No support poles).
- c. has a minimum height of 3.2m and a maximum height of 4.2m above pavement level;
- d. does not extend past a vertical plane of 1.5m inside the kerb line to allow for street trees and regulatory signage;
- e. aligns with adjoining buildings to provide continuous shelter where possible.

Figure - Awning requirements



PO₅

Buildings on prominent corners (as shown on 'Figure 6.2.1.3.1 - Strathpine') incorporate design measures on corners to assist in legibility of the street environment and promote activity on the street frontage.

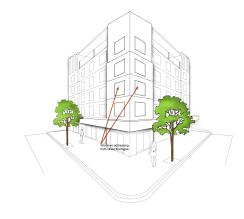
Note - Design measures will vary depending on the building and location, however may include the following:

- a. increasing the height of the building on the corner;
- stepping back the building on the corner to create and additional face;
- including prominent building entrances and windows on the corners;
- the use of a focal point, such as a tower, visual display or artwork on the corner.

E5.1

Buildings located on a street corner shown on 'Figure 6.2.1.3.1 - Strathpine' as a prominent corner incorporate windows which address both street frontages OR which directly face the corner and have a minimum of 30% glazing.

Figure - Prominent corner requirements



E5.2

Buildings located on a landmark site shown on 'Figure 6.2.1.3.1 - Strathpine' incorporate a well designed facade, including:

a. windows and openings;

- b. pedestrian entrances, particularly on the building chamfer;
- c. projections and articulation.

Setbacks

PO6

Front building setbacks ensure buildings address and actively interface with streets and public spaces. Taller buildings adjoining narrow roads incorporate a podium to maintain human scale.

E6.1

For sites that adjoin Gympie Road, buildings are built to the street alignment.

E6.2

For sites that adjoin Dixon Street, Learmonth Street and Mecklam Street:

- a. buildings include a podium that is built to the boundary to a maximum height of 12m;
- b. all parts of the building that are greater than 12m in height are setback a minimum of 4m.

E6.3

Buildings on Lot 1 SP128097 adjoining the residential lots fronting Learmonth Street are setback are a minimum of:

Building height	Minimum setback
Less than 12m	10m
>12m - 21m	25m
Greater than 21m	50m

E6.4

Buildings on Lot 1 SP128097 (Westfield shopping centre) are setback a maximum of 6 metres from the eastern boundary adjacent to the South Pine River.

Site area

PO7

The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping.

No example provided.

Building height

PO8

Building height:

- reflects the prominence of the Strathpine centre as a higher order centre and key focal point for regional employment and development in South East Queensland;
- maximises land use intensity around the Strathpine and Bray Park rail stations;
- c. allows for distinctive and innovative design outcomes on prominent sites;
- d. ensures an even distribution of retail and commercial development across the Strathpine Centre and avoids over-concentration of activities in one location;
- e. provides a transition to lower density areas surrounding the centre precinct.

E

Minimum and maximum building heights are in accordance with Overlay map - Building heights.

Note - Development on street corners identified as a 'Landmark' site or prominent corner on 'Figure 6.2.1.3.1 - Strathpine' may incorporate an increased building height on the corner, if the building:

- provides high quality and unique architectural design outcomes that emphasise the prominence of the street corner; and
- b. positively contribute to the cityscape.

Built form

PO9

Buildings are designed and constructed to:

- incorporate a mix of colours and high quality materials to add diversification to treatments and finishes:
- b. articulate and detail the building facade at the street level and respond to human scale;
- visually integrate with the surrounding area and adjoining buildings through appropriate design and materials;
- d. avoid blank walls through articulation and architectural treatments to create visual interest;
- e. avoid highly reflective finishes;
- f. avoid the visual dominance of plant and equipment on building roofs.

No example provided.

PO10

Building entrances:

- a. are readily identifiable from the road frontage;
- b. add visual interest to the streetscape;

No example provided.

6 Zones

- are designed to limit opportunities for concealment;
- d. are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- e. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance;
- f. are adequately lit to ensure public safety and security.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance Outcome.

Accessibility and permeability

PO11

Development contributes to greater permeability within the Strathpine centre precinct by facilitating a network of convenient and safe pedestrian walkways, cycle ways, road connections and mid-block connections, as outlined in 'Figure 6.2.1.3.1 - Strathpine'. No example provided.

Movement network

PO12

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

No example provided.

Car parking

PO13

The provision of car parking spaces is:

- a. appropriate to the use;
- b. avoids an oversupply of car parking spaces.

E13

Car parking is provided in accordance with the table below.

The safety and efficiency of pedestrian movement is priorities in the design of car parking areas through providing pedestrian paths in car parking areas that are:

- a. located along the most direct pedestrian routes between building entrances, car parks and adjoining uses;
- protected from vehicle intrusion through the use of physical and visual separation (e.g. wheel stops, trees etc);
- of a width to allow safe and efficient access for prams and wheelchairs.

Bicycle parking and end of trip facilities

Note - Building work to which this code applies constitutes Major Development for purposes of development requirements for end of trip facilities prescribed in the Queensland Development Code MP 4.1.

PO18

- End of trip facilities are provided for employees or occupants, in the building or on-site within a reasonable walking distance, and include:
 - i. adequate bicycle parking and storage facilities; and
 - ii. adequate provision for securing belongings; and
 - iii. change rooms that include adequate showers, sanitary compartments, wash basins and mirrors.
- Notwithstanding a. there is no requirement to provide end of trip facilities if it would be unreasonable to provide these facilities having regard to:
 - the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - whether it would be practical to commute to and from the building on a bicycle, having regard to the likely commute distances and nature of the terrain; or
 - iii. the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

E18.1

Minimum bicycle parking facilities are provided in accordance with the table below (rounded up to the nearest whole number).

Use	Minimum Bicycle Parking
Residential uses comprised of dwellings	Minimum 1 space per dwelling
All other residential uses	Minimum 1 space per 2 car parking spaces identified in Schedule 7 – car parking
Non-residential uses	Minimum 1 space per 200m2 of GFA

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is a combination of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.2

Bicycle parking is:

- a. provided in accordance with Austroads (2008), Guide to Traffic Management - Part 11: Parking;
- b. protected from the weather by its location or a dedicated roof structure;

Editor's note - The intent of b above is to ensure the requirements for bicycle parking and end of trip facilities are not applied in unreasonable circumstances. For example these requirements should not, and do not apply in the Rural zone or the Rural residential zone etc.

Editor's note - This performance outcome is the same as the Performance Requirement prescribed for end of trip facilities under the Queensland Development Code. For development incorporating building work, that Queensland Development Code performance requirement cannot be altered by a local planning instrument and has been reproduced here solely for information purposes. Council's assessment in its building work concurrence agency role for end of trip facilities will be against the performance requirement in the Queensland Development Code. As it is subject to change at any time, applicants for development incorporating building work should ensure that proposals that do not comply with the examples under this heading meet the current performance requirement prescribed in the Queensland Development Code.

- c. located within the building or in a dedicated, secure structure for residents and staff;
- adjacent to building entrances or in public areas for customers and visitors.

Note - Bicycle parking structures are to be constructed to the standards prescribed in AS2890.3.

Note - Bicycle parking and end of trip facilities provided for residential and non-residential activities may be pooled, provided they are within 100 metres of the entrance to the building.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.3

For non-residential uses, storage lockers:

- a. are provide at a rate of 1.6 per bicycle parking space (rounded up to the nearest whole number);
- b. have minimum dimensions of 900mm (height) x 300mm (width) x 450mm (depth).

Note - Storage lockers may be pooled across multiple sites and activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.4

For non-residential uses, changing rooms:

 a. are provided at a rate of 1 per 10 bicycle parking spaces;

- b. are fitted with a lockable door or otherwise screened from public view;
- are provided with shower(s), sanitary compartment(s) and wash basin(s) in accordance with the table below:

Bicycle spaces provided	Male/ Female	Change rooms required	Showers required	Sanitary compartments required	Washbasins required
1-5	Male and female	1 unisex change room	1	1 closet pan	1
6-19	Female	1	1	1 closet pan	1
20 or more	Male	1	1	1 closet pan	1
nore	Female	1	2, plus 1 for every 20 bicycle spaces provided thereafter	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking spaces provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter
	Male	1	2, plus 1 for every 20 bicycle spaces provided thereafter	1 urinal and 1 closet pans, plus 1 sanitary compartment at the rate of 1 closet pan or 1 urinal for every 60 bicycle space provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter

Note - All showers have a minimum 3-star Water Efficiency Labelling and Standards (WELS) rating shower head.

Note - All sanitary compartments are constructed in compliance with F2.3 (e) and F2.5 of BCA (Volume 1).

- d. are provided with:
 - i. a mirror located above each wash basin;
 - a hook and bench seating within each shower compartment;
 - ii. a socket-outlet located adjacent to each wash basin.

Note - Change rooms may be pooled across multiple sites, residential and non-residential activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

Loading and Servicing

PO19

Loading and servicing areas:

- a. are not visible from any street frontage;
- b. are integrated into the design of the building;
- c. include screening and buffers to reduce negative impacts on adjoining sensitive land uses;
- d. are consolidated and shared with adjoining sites where possible.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design.

No example provided.

Waste

PO20

Bins and bin storage area/s are designed, located and managed to prevent amenity impacts on the locality.

E20

Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.

Landscaping and fencing

PO21

On-site landscaping:

- is incorporated into the design of the development;
- b. reduces the dominance of car parking and servicing areas from the street frontage;
- c. incorporates shade trees in car parking areas;
- d. retains mature trees wherever possible;
- e. contributes to quality public spaces and the microclimate by providing shelter and shade;
- f. maintains the achievement of active frontages and sightlines for casual surveillance.

Note - Landscaping is to be provided in accordance with Planning scheme policy - Integrated design.

No example provided.

6 Zones

No example provided.		
No example provided.		
No example provided.		
Crime prevention through environmental design		
No example provided.		

orienting buildings towards the street and public spaces and providing clear sightlines to public spaces to allow opportunities for casual surveillance;	
b. ensuring the site layout, building design and landscaping does not result in potential concealment or entrapment areas; and	
c. ensuring high risk areas, including stairwells and concealed car parking areas have adequate surveillance to reduce risk or able to be secured outside of business hours.	
Note - Further information is available in <i>Crime Prevention</i> through Environmental Design: Guidelines for Queensland, State of Queensland, 2007.	
Lighting	
PO26	No example provided.
Lighting is designed to provide adequate levels of illumination to public and communal spaces to maximise safety while minimising adverse impacts on sensitive land uses.	
Amenity	
PO27	No example provided.
The amenity of the area and adjacent sensitive land uses are protected from the impacts of dust, odour, chemicals and other environmental nuisances.	
Noise	
PO28	No example provided.
Noise generating uses do not adversely affect existing or potential noise sensitive uses.	
Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.	
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.	
PO29	E29.1

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E29.2

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.
- do not remove existing or prevent future active transport routes or connections to the street network:
- 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.

Hazardous Chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

PO30

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E30.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

For any hazard scenario involving the release of gases or vapours:

- i. AEGL2 (60minutes) or if not available ERPG2;
- ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E30.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 0.5 x 10-6/year.

E30.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2:
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E30.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5×10 -6/year.

E30.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- For any hazard scenario involving fire or explosion:
 - i. 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E30.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year.

PO31

Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early stages of a fire situation and notify a designated person.

E31

Buildings and package stores containing fire-risk hazardous chemicals are provided with 24 hour monitored fire detection system for early detection of a fire event.

PO32

Common storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) that are adequate to contain releases, including fire fighting media.

E32

Storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) capable of containing a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes.

PO33

Storage and handling areas, including manufacturing areas, containing hazardous chemicals in quantities greater than 2,500L or kg within a Local Government "flood hazard area" are located and designed in a manner to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries.

E33.1

The base of any tank with a WC >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively:

- a. bulk tanks are anchored so they cannot float if submerged or inundated by water; and
- b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level.

E33.2

The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level.

Clearing of habitat trees where not located within the Environmental areas overlay map

PO34

- Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.
- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

No example provided.

Works Criteria

Utilities

PO35

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

No example provided.

Access

PO36

Development provides functional and integrated car parking and vehicle access, that:

- prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.);
- b. provides safety and security of people and property at all times;
- c. does not impede active transport options;
- d. does not impact on the safe and efficient movement of traffic external to the site;
- e. where possible vehicle access points are consolidated and shared with adjoining sites.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

No example provided.

PO37

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

PO38

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- c. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E38.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E38.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E38.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E38.4

The development layout allows forward vehicular access to and from the site.

PO39

Safe access is provided for all vehicles required to access the site.

E39.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
 - AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
 - ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities:
 - iii. Planning scheme policy Integrated design;
 - iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E39.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;

- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E39.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E39.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO40

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

E40

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO41

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E41.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E41.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO42

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement;
- c. adequate on street parking;
- stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;
- f. utility services location;
- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

No example provided.

PO43

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

E43.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1.000m² GFA:
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;
- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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 - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E43.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E43.3

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

PO44

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

E44

New intersection spacing (centreline – centreline) along a through road conforms with the following:

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

- a. where the through road provides an access function;
 - i. intersecting road located on the same side= 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- b. Where the through road provides a collector or sub-arterial function:
 - i. intersecting road located on the same side = 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:
 - i. intersecting road located on the same side = 300 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO45

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

E45

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation	Minimum construction			
Frontage road unconstructed or gravel road only;	Construct the verge adjoining the development and the			
OR	carriageway (including development side kerb			
Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard; OR Frontage road partially constructed* to Planning scheme policy - Integrated design standard.	and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel shoulder and table drainage to the opposite side. The minimum total travel lane width is:			
				• 6m for minor roads;
				• 7m for major roads.

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO46

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E46.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E46.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E46.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO47

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

E47.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E47.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E47.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E47.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

PO48	E48
Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.	The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.
PO49	No example provided.
Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises. Note - Refer to Planning scheme policy - Integrated design for details.	
Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	
Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure.	
PO50	No example provided.
Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site.	
Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	
PO51	No example provided.
Where development:	
a. is for an urban purpose that involves a land area of 2500m² or greater; and	
b. will result in:	

- i. 6 or more dwellings; or
- ii. an impervious area greater than 25% of the net developable area,

stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives.

Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management.

Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C).

PO52

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

E52

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

PO53 No example provided.

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion. **PO54** E54 Council is provided with accurate representations of "As Built" drawings and specifications of the the completed stormwater management works within stormwater management devices certified by an residential developments. RPEQ is provided. Note - Documentation is to include: photographic evidence and inspection date of the installation of approved underdrainage; copy of the bioretention filter media delivery b. dockets/quality certificates confirming the materials comply with specifications in the approved Stormwater Management Plan; date of the final inspection.

Site works and construction management	
PO55	No example provided.
The site and any existing structures are maintained in a tidy and safe condition.	
PO56	E56.1
 All works on-site are managed to: a. minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light; b. minimise as far as possible, impacts on the natural environment; c. ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises; d. avoid adverse impacts on street trees and their critical root zone. 	Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following: a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions; b. stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind; c. stormwater discharge rates do not exceed pre-existing conditions;

- d. minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E56.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E56.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E56.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO57

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

E57

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO58

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

E58.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- the aggregate volume of imported or exported material is greater than 1000m³; or
- b. the aggregate volume of imported or exported material is greater than 200m³ per day; or
- the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

E58.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E58.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E58.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E58.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E58.6

Access to the development site is obtained via an existing lawful access point.

PO59 E59

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

At completion of construction all disturbed areas of the site are to be:

- topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO60

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E60

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO61

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works: and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

E61.1

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E61.2

Disposal of materials is managed in one or more of the following ways:

- all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

PO62

E62

All development works are carried out within the following times:

All development works are carried out at times which minimise noise impacts to residents.

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
- b. no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

PO63

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

No example provided.

Earthworks

PO64

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- b. short and long-term slope stability;
- soft or compressible foundation soils;
- reactive soils;
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E64.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E64.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E64.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E64.4

All filling or excavation is contained on-site and is free draining.

E64.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use;
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E64.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

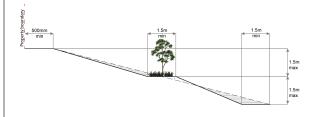
PO65

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E65

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment



PO66

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

E66.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E66.2

Filling or excavation that would result in any of the following is not carried out on-site:

 a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;

an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken; prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes. Note - Public sector entity is defined in Schedule 2 of the Act. Note - All building work covered by QDC MP1.4 is excluded from this provision. **PO67** No example provided. Filling or excavation does not result in land instability. Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ gualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance. **PO68** No example provided. Filling or excavation does not result in: adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway; increased flood inundation outside the site; b. C. any reduction in the flood storage capacity in the floodway; d. any clearing of native vegetation. Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements. **PO69** E69 Filling or excavation on the development site is Filling and excavation undertaken on the development undertaken in a manner which does not create or site are shaped in a manner which does not: accentuate problems associated with stormwater flows а prevent stormwater surface flow which, prior to and drainage systems on land adjoining the site. commencement of the earthworks, passed onto the development site, from entering the land; or

- b. redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - i. concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO70

All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

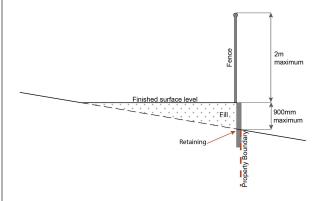
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E70

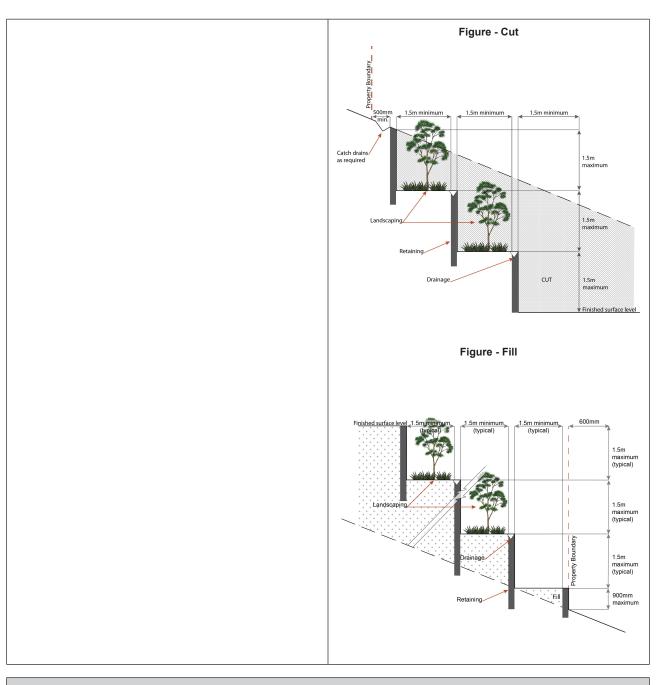
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;

Figure - Retaining on boundary



- c. where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.



Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme; or
 - iii. material change of use for a Tourist park⁽⁸⁴⁾ with accommodation in the form of caravans or tents; or
 - iv. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials.

AND

- b. none of the following exceptions apply:
 - i. the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO71

Development incorporates a fire fighting system that:

- satisfies the reasonable needs of the fire fighting entity for the area;
- is appropriate for the size, shape and topography of the development and its surrounds;
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

E71.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations.*

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and
 Part 3.2.2.1, with the exception that for Tourist parks (84)
 or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
 - for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and, where applicable, Part 3.6.

E71.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;

- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E71.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO72

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

E72

For development that contains on-site fire hydrants external to buildings:

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - the overall layout of the development (to scale);
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - external hydrants and hydrant booster points;
 - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO73

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E73

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO74

The scale and intensity of the Home based business⁽³⁵⁾.

- is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape or road safety;
- does not adversely impact on the amenity of the adjoining and nearby premises;
- d. remains ancillary to the residential use of the dwelling house⁽²²⁾;
- does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- ensures employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E74.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E74.2

The home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure⁽⁴³⁾, Substation⁽⁸⁰⁾ and Utility installation⁽⁸⁶⁾

PO75

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;

E75.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;

- d. located behind the main building line;
- e. below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.
- c. have a similar height, bulk and scale to the surrounding fabric;
- have horizontal and vertical articulation applied to all exterior walls.

E75.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO76

Infrastructure does not have an impact on pedestrian health and safety.

E76

Access control arrangements:

- a. do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO77

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- generates no audible sound at the site boundaries where in a residential setting; or
- b. meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E77

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO78

Residential uses contribute to greater housing choice and affordability by:

- contributing to the availability of a range of dwelling types and sizes in the centre;
- providing greater housing density within walking distance of the Strathpine centre and Strathpine and Bray Park rail stations making efficient use of land.

Note - The Queensland Government *Transit oriented development guide* provides further guidance on achieving residential densities within proximity of transit services.

No example provided.

PO79

E79

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other dwelling units⁽²³⁾ and centre uses;
- accessible and readily identifiable for residents, visitors and emergency services⁽²⁵⁾;
- d. located to not compromise active frontages.

A dwelling has a clearly defined, private outdoor living space that is:

a. as per the table below;

Use	Minimum Area	Minimum Dimension in all directions	
Ground floor dwellings			
All dwelling types	16m²	4m	
Above ground floor dwellings			
1 bedroom or studio	8m²	2.5m	
2 or more bedrooms	12m²	3.0m	

- b. accessed from a living area;
- c. sufficiently screened or elevated for privacy;
- ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- e. balconies orientate to the street;
- f. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas).

Note - Areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided).

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

PO80

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E80

The dwelling:

- includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses;
- clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services;

- c. is provided with a separate entrance to that of any non-residential use on the site;
- d. where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window

tinting are considered acceptable forms of screening.

Retail and commercial uses

PO81

Gympie Road remains the primary location for significant retail activity in the Strathpine.

E81

Development on sites with a frontage to Gympie Road incorporates retail uses on the ground floor directly accessible from the street frontage that:

- a. for ground floor tenancies do not exceed 250m²
 GFA;
- b. have a maximum frontage of 20m.

PO82

Buildings are designed to be adaptable to accommodate a variety of uses over the life of the building.

E82.1

Buildings incorporate a minimum floor to ceiling height of 4.2m for the ground floor.

E82.2

Where a building incorporates a podium, the minimum floor to ceiling height for podium levels is 3.3m.

Service station

Note - Where the use specific outcomes relating to Service Stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO83

Service stations are located, designed and orientated to:

- a. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- b. establish outside of Key Sites;

E83.1

Service stations are located:

- a. on the periphery of the Centre adjoining or within 100m of land zoned other than Centre zone;
- b. on the corner lot of an arterial or sub-arterial road;
- c. outside areas nominated as Key Sites.

- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- d. not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- e. ensure the amenity of adjoining properties is protected;
- f. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;
- g. minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area. (e.g. high order road in urban or next generation neighbourhood, likely to be noisy and not like suburban);
- h. provide ancillary uses that meet the convenience needs of users.

E83.2

Service stations are designed and orientated on site to:

- a. include a landscaping strip having a minimum depth of 1m adjoining all road frontages;
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;
- c. include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO84

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

E84.1

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E84.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO85

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

E85

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

PO86

E86

Telecommunications facilities⁽⁸¹⁾ do not conflict with lawful existing land uses both on and adjoining the site.

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO87

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E87.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

E87.2

In all other areas towers do not exceed 35m in height.

E87.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E87.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

E87.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E87.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

PO88

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

E88

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

PO89

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

E89

All equipment comprising the Telecommunications facility⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

Key sites

PO90

A Strathpine town square as shown on 'Figure 6.2.1.3.1 - Strathpine' is to be established as to:

- become the spatial focus for the centre and act as a cultural hub for Strathpine and the surrounding region;
- b. accommodate a range of activities, including cultural events, community displays and informal gathering, creating a lively atmosphere;
- include a strong use of public art, cultural uses, outdoor dining and retail edge interfaces that will create a vibrant environment;
- d. be of the highest quality;
- incorporate street furniture, landscape and urban pavement treatment to create a quality space for workers, shoppers, the local community and visitors to enjoy.

Note - For details and examples of civic space requirements refer to

Planning scheme policy - Centre and neighbourhood hub design.

No example provided.

PO91

E91

Development on Key Site A (the western portion of Development on Key Site A (the western portion of Westfield shopping centre) adjoining Gympie Road, the Westfield shopping centre) adjoining Gympie Learmonth Street and Dixon Street, shown on 'Figure Road, Learmonth Street and Dixon Street, shown on 6.2.1.3.1 - Strathpine' is to: 'Figure 6.2.1.3.1 - Strathpine' is to: incorporates an appropriate mix of uses, increase pedestrian connectivity to the western supporting the growth of Strathpine as a higher side of Gympie Road and the Strathpine rail order centre; station: b. incorporates a substantial retail presence at the b. include active uses (cafes, restaurants, shops (75) ground floor; with a gfa <250m²) adjoining Dixon Street, Learmonth Street and Gympie Road contributes to a high quality streetscape C. (redeveloping the car parking area); providing active frontages and high quality finishes along street frontages; C. include a civic space in the north western corner and the south west corner; includes a civic space or forecourt area within d. the site for social interaction, public gathering, include a civic space within the site at the d. markets⁽⁴⁶⁾ etc; eastern end of the shopping centre⁽⁷⁶⁾ building, establishes connections to the South Pine River. e. establish a pedestrian linkage through the site e. to the South Pine River. **PO92** No example provided. Development on Key site A (the eastern portion of Westfield shopping centre), shown on 'Figure 6.2.1.3.1 - Strathpine' adjoining the South Pine River contains high density residential uses that address and adjoin the South Pine River. **PO93** No example provided. Development on Key site B (north of Westfield shopping centre), shown on 'Figure 6.2.1.3.1 -Strathpine' includes: active retail and commercial uses adjoining Learmonth Street:

PO94

Land adjoining or directly adjacent to Strathpine train station, Key site D, shown on 'Figure 6.2.1.3.1 - Strathpine' or Bray Park train station, Key site E, 'Figure 6.2.1.3.1 - Strathpine' incorporates:

medium density residential uses addressing

Raynbird Park (linear park).

 a mix of active retail, commercial and high density residential uses; No example provided.

attractive and active frontages;	
civic and forecourt spaces for public interaction, outdoor dining and enhanced pedestrian connectivity etc.	
95	No example provided.
is configured in a grid like pattern, establishing permeability and connectivity with the rest of the centre and Strathpine rail station;	
for lot 43, provides active and mixed use frontages and uses along the eastern boundary, adjoining the rail station land;	
for lot 43, includes higher density residential uses to the west that address and adjoin the park.	
06	No example provided.
d open space), shown on 'Figure 6.2.1.3.1 - thpine' includes active uses (i.e. Uses that burage activity on adjoining land e.g. Shop, food drink outlet (28) etc.) that address and adjoin the	
	civic and forecourt spaces for public interaction, outdoor dining and enhanced pedestrian connectivity etc. 95 elopment on Key site C, shown on 'Figure 1.3.1 - Strathpine': is configured in a grid like pattern, establishing permeability and connectivity with the rest of the centre and Strathpine rail station; for lot 43, provides active and mixed use frontages and uses along the eastern boundary, adjoining the rail station land; for lot 43, includes higher density residential uses to the west that address and adjoin the

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO97	E97
Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:	Development does not involve:

- a. is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- c. protects buildings and infrastructure from the effects of acid sulfate soils.
- excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO98	No example provided.

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- b. on-site mitigation measures, mechanisms or processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy Environmental areas*.

PO99

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- a. retaining habitat trees;
- b. providing contiguous patches of habitat;
- provide replacement and rehabilitation planting to improve connectivity;
- d. avoiding the creation of fragmented and isolated patches of habitat;
- e. providing wildlife movement infrastructure.

Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy – Environmental areas.

No example provided.

Vegetation clearing and habitat protection

PO100

Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.

No example provided.

^{*} Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014.

PO1	01	No example provided.
degr a Val in the	elopment does not result in the net loss or adation of habitat value in a High Value Area or lue Offset Area. Where development does result e loss or degradation of habitat value, elopment will:	
a. b. c.	rehabilitate, revegetate, restore and enhance an area to ensure it continues to function as a viable and healthy habitat area; provide replacement fauna nesting boxes in the event of habitat tree loss in accordance with Planning scheme policy - Environmental areas; undertake rehabilitation, revegetation and restoration in accordance with the South East Queensland Ecological Restoration Framework.	
PO1	02	No example provided.
and	elopment ensures safe, unimpeded, convenient ongoing wildlife movement and habitat sectivity by:	
a. b. c.	providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure;	
d.	providing replacement and rehabilitation planting to improve connectivity.	
Vege	etation clearing and soil resource stability	
PO1	03	No example provided.
Deve	elopment does not:	
a. b.	result in soil erosion or land degradation; leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.	
Vege	etation clearing and water quality	
PO1	04	No example provided.
grou	elopment maintains or improves the quality of ndwater and surface water within, and nstream, of a site by:	
a. b. c.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; avoiding or minimising changes to landforms to maintain hydrological water flows; adopting suitable measures to exclude livestock	

from entering a waterbody where a site is being

used for animal husbandry ⁽⁴⁾ and animal keeping ⁽⁵⁾ activities.	
PO105	No example provided.
Development minimises adverse impacts of stormwater run-off on water quality by:	
 a. minimising flow velocity to reduce erosion; b. minimising hard surface areas; c. maximising the use of permeable surfaces; d. incorporating sediment retention devices; e. minimising channelled flow. 	
Vegetation clearing and access, edge effects and	urban heat island effects
PO106	No example provided.
Development retains safe and convenient public access in a manner that does not result in the adverse edge effects or the loss or degradation of biodiversity values within the environment.	
PO107	No example provided.
Development minimises potential adverse 'edge effects' on ecological values by:	
 a. providing dense planting buffers of native vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; c. restoring, rehabilitating and increasing the size 	
of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors;	
e. landscaping with native plants of local origin. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow.	
PO108	No example provided.
Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by:	

6 Zones

- a. pervious surfaces;
- b. providing deeply planted vegetation buffers and green linkage opportunities;
- c. landscaping with local native plant species to achieve well-shaded urban places;
- d. increasing the service extent of the urban forest canopy.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO109

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

No example provided.

Extractive resources separation area (refer Overlay map - Extractive resources (separation area) to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcomes, a noise impact assessment report is prepared by a suitably qualified person. Guidance to preparing noise impact assessment report is provided in Planning scheme policy – Noise.

PO110

Development does not increase the number of people living in the Extractive Resources separation area.

E110

One dwelling house⁽²²⁾ permitted per lot within separation area.

PO111

Development:

- does not introduce or increase uses that are sensitive to the impacts of an Extractive industry⁽²⁷⁾;
- is compatible with the operation of an Extractive industry⁽²⁷⁾;
- does not comprise or undermine the function and integrity of the separation area in providing a buffer between key extractive and processing activities and sensitive, incompatible uses outside the separation area.

E111

Development within the separation area does not include the following activities:

- a. Caretaker's accommodation⁽¹⁰⁾;
- b. Community residence⁽¹⁶⁾;
- C. Dual occupancy⁽²¹⁾;
- d. Dwelling unit⁽²³⁾;
- e. Hospital⁽³⁶⁾;
- f. Rooming accommodation⁽⁶⁹⁾;
- 9. Multiple dwelling⁽⁴⁹⁾;
- h. Non-resident workforce accommodation⁽⁵²⁾;
- i. Relocatable home park⁽⁶²⁾;
- j. Residential care facility⁽⁶⁵⁾;

k. Resort complex⁽⁶⁶⁾; l. Retirement facility⁽⁶⁷⁾; m. Rural workers' accommodation⁽⁷¹⁾; n. Short-term accommodation⁽⁷⁷⁾;

O. Tourist park⁽⁸⁴⁾.

PO112

Habitable rooms achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008 and provides a safe, healthy and disturbance free living environment.

E112

All habitable rooms within the separation area are:

- a. acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008;
- b. provided with mechanical ventilation.

PO113

Development provides open space areas for passive recreation in a manner where impacts from key extractive/processing activities, particularly noise, is minimised.

E113

Private open space areas are separated from the resource processing area by buildings or a 1.8m high solid structure.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO114

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building;
- be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;

E114

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

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incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building; f. retain public access where this is currently provided. **PO115** No example provided. Demolition and removal is only considered where: a report prepared by a suitably qualified conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or demolition is confined to the removal of b. outbuildings, extensions and alterations that are not part of the original structure; or limited demolition is performed in the course of C. repairs, maintenance or restoration; or demolition is performed following a catastrophic d. event which substantially destroys the building or object. **PO116** No example provided. Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view. PO117 E117 Development does not adversely impact upon the Development does: health and vitality of significant trees. Where not result in the removal of a significant tree; development occurs in proximity to a significant tree, a. b. not occur within 20m of a protected tree; construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development involve pruning of a tree in accordance with C. sites are adopted to ensure a significant tree's health, Australian Standard AS 4373-2007 - Pruning wellbeing and vitality. of Amenity Trees. Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome. Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following

assessment criteria apply)

PO118

E118

Development within a Bulk water supply infrastructure buffer is located, designed and constructed to:

- a. protect the integrity of the water supply pipeline;
- maintain adequate access for any required maintenance or upgrading work to the water supply pipeline;

Development:

- does not involve the construction of any buildings or structures within a Bulk water supply infrastructure buffer;
- involving a major hazard facility or environmentally relevant activity (ERA) is setback 30m from a Bulk water supply infrastructure buffer.

PO119

Development within a Pumping station buffer is located, designed and constructed to:

- ensure that odour or other air pollutant impacts on the amenity of the development met the air quality of objectives in the Environmental Protection (Air) Policy 2008;
- ensure that noise impacts on the amenity of the development met the indoor noise objectives set out in the Environmental Protection (Noise) Policy 2008.

E119

Development does not involve the construction of any buildings or structures within a Pumping station buffer.

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.

PO120

Development:

- a. minimises the risk to persons from overland flow;
- does not increase the potential for damage from overland flow either on the premises or other premises, public land, watercourses, roads or infrastructure.

No example provided.

PO121

Development:

- 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;
- does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property.

Note - A report from a suitably qualified Registered Professional Engineer Queensland is required certifying that the development

No example provided.

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

PO122

Development does not:

- directly, indirectly or cumulatively cause any increase in overland flow velocity or level;
- increase the potential for flood damage from overland flow either on the premises or other premises, public lands, watercourses, roads 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.

No example provided.

PO123

Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.

E123

Development ensures that a hazardous chemical is not located or stored in an Overland flow path area.

Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

PO124

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot.

E124

Development which is not in a Rural zone that an 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.

PO125

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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.

E125.1

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.

E125.2

Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland flow

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO126

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

- a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- b. an overland flow path where it crosses more than one premises;
- 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)

PO127

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;
- maintenance and replacement costs are minimised.

E127

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

PO128

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

a. impact on fauna habitats;

E128

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line

6 Zones

- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.

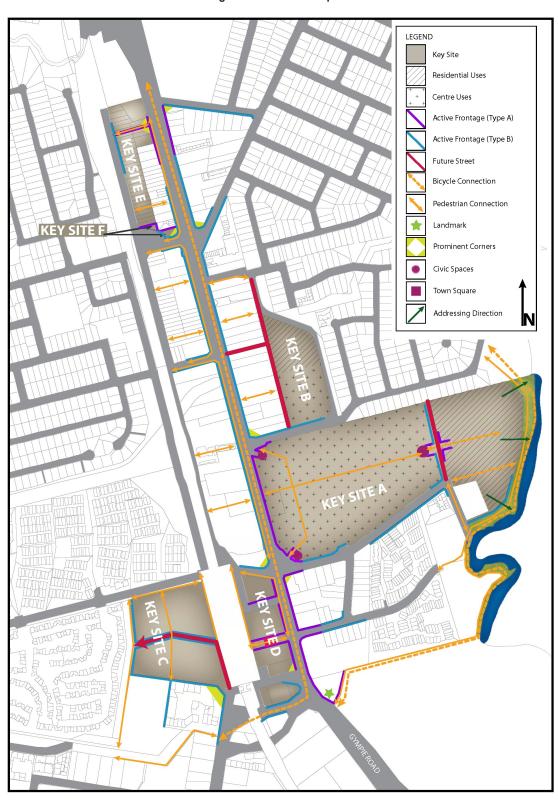


Figure 6.2.1.3.1 - Strathpine

6.2.1.4 District centre precinct

6.2.1.4.1 Purpose - District centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the District centre precinct:
 - a. Development is of a size, scale and range of services commensurate with the role and function of this precinct within the centre network.
 - b. Uses and activities contribute to a horizontal and vertical mix and the co-location of uses, concentrated in a compact urban form.
 - c. Development is of a sufficient intensity and land use mix to support high frequency public transport, improve land efficiency and support centre facilities.
 - d. Medium density housing is incorporated within centres.
 - e. Adverse impacts on the amenity of surrounding residential uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining a district centre.
 - f. The safety and efficiency of pedestrian movement is prioritised in the design of car parking areas and the size, frequency and location of vehicle crossovers.
 - g. The amount of on-site car parking encourages the use of public and active transport, increases land use efficiency and does not negatively impact the streetscape.
 - h. Facilities, infrastructure and public realm improvements are provided to support active transport usage and contribute to improved pedestrian connectivity and walkability between key destinations.
 - i. Pedestrian connections are provided to integrate the development with the street, public spaces and the surrounding area.
 - j. Development encourages social activity through the provision of high quality civic and plaza spaces.
 - k. The design, siting and construction of buildings within a district centre:
 - i. contributes to a high quality centre consistent with the desired character of the centre and surrounding area;
 - ii. maintains a human scale, through appropriate building heights and form;
 - iii. are centred around a main street;
 - iv. provides attractive, active frontages that maximise pedestrian activity along road frontages and public spaces;
 - provides for active and passive surveillance of the public spaces, road frontages and movement corridors:
 - vi. locates tenancies at the street frontage with car parking located at the rear;
 - vii. does not result in internalised shopping centres with large external blank walls and tenancies only accessible from within the building;
 - viii. ensures expansive areas of surface car parking do not dominate road frontages or public spaces;

- ix. ensures parking, manoeuvring and servicing areas are designed, located and aesthetically treated to not be visually dominant features from the streetscape and public spaces;
- x. include buffers or other treatments measures to respond to the interface with residential zoned land.
- I. The establishment of new district centres, including the expansion of a local centre to a district scale, does not occur unless designated in the Strategic framework.
- m. Out-of-centre development, for the expansion of a district centre (into adjoining zones and precincts) or a new district centre only occurs where:
 - i. it maintains the scale and function of a district centre consistent with Table 6.2.1.1;
 - ii. for a new district centre, if it is in a location identified in the planning scheme;
 - iii. expansion will strengthen the existing centre as an important district activity node;
 - iv. clear separation from existing higher order, district and local centres within the network is maintained to reduce catchment overlap;
 - v. located on a highly accessible site, adjoining the existing centre and not resulting in the fragmentation of the centre;
 - vi. designed to include active frontages around a main street core;
 - vii. expansion does not result in an elongated centre forming a ribbon of development along regional through roads.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

Note - Interim uses may be acceptable within a centre where the use would be compatible with existing and proposed centre activities provided the interim use would not be likely to prejudice or delay the ultimate development of the site and adjoining areas. Interim uses should be low intensity in nature and characterised by low investment in buildings and infrastructure relative to the value of the site (e.g. Bulk landscape supplies⁽⁹⁾, garden centre⁽³¹⁾, market⁽⁴⁶⁾, outdoor sales⁽⁵⁴⁾, wholesale nursery⁽⁸⁹⁾ or outdoor sport and recreation⁽⁵⁵⁾);

n. Service stations:

- i. establish where they will not disrupt, fragment or negatively impact active frontages or streets where pedestrian safety and comfort are of high importance;
- ii. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts from road vehicle noise;
- iii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
- iv. do not negatively impact adjoining residents or the streetscape;
- v. ancillary uses or activities only service the convenience needs of users.
- o. General works associated with the development achieves the following:

- i. new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
- ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants;
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
- iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network:
- iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
- v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- p. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- q. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- r. Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- s. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;

- vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
- vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
- viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
- ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;
- x. ensuring effective and efficient disaster management response and recovery capabilities;
- xi. where located in an overland flow path:
 - A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
 - C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
 - D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- t. Development in the District centre precinct is for one or more of the uses identified below:

•	Bar ⁽⁷⁾	Health care services ⁽³³⁾	•	Sales office ⁽⁷²⁾
•	Caretaker's accommodation ⁽¹⁰⁾	Home based business ⁽³⁵⁾	•	Service industry ⁽⁷³⁾
•	Child care centre ⁽¹³⁾	• Hotel ⁽³⁷⁾	•	Shop ⁽⁷⁵⁾
•	Club ⁽¹⁴⁾	Low impact industry ⁽⁴²⁾ - if not located adjoining a main street	•	Shopping centre ⁽⁷⁶⁾ Short term
•	Community care centre ⁽¹⁵⁾	• Market ⁽⁴⁶⁾		accommodation ⁽⁷⁶⁾
•	Community use ⁽¹⁷⁾	Multiple dwelling ⁽⁴⁹⁾	•	Showroom ⁽⁷⁸⁾ - if 250m ² GFA or less
•	Dual occupancy ⁽²¹⁾ - if in a mixed use building	• Office ⁽⁵³⁾		
•	Dwelling unit ⁽²³⁾	 Place of worship⁽⁶⁰⁾ Rooming 		
•	Emergency services ⁽²⁵⁾	accommodation ⁽⁶⁹⁾		

Food and drink outlet ⁽²⁸⁾	
Hardware and trade supplies ⁽³²⁾ - if 250m² GFA or less	

Development in the District centre precinct does not include one or more of the following uses:

• Air services ⁽³⁾	• High impact industry ⁽³⁴⁾	• Port services ⁽⁶¹⁾
Animal husbandry ⁽⁴⁾	 Intensive animal industry⁽³⁹⁾ 	Relocatable home park ⁽⁶²⁾
• Animal keeping ⁽⁵⁾	• Intensive horticulture ⁽⁴⁰⁾	• Rural industry ⁽⁷⁰⁾
• Aquaculture ⁽⁶⁾	• Marine industry ⁽⁴⁵⁾	Rural workers' accommodation ⁽⁷¹⁾
 Cemetery⁽¹²⁾ Crematorium⁽¹⁸⁾ 	 Medium impact industry⁽⁴⁷⁾ 	Special industry ⁽⁷⁹⁾
• Cropping ⁽¹⁹⁾	 Motor sport facility⁽⁴⁸⁾ 	• Tourist park ⁽⁸⁴⁾
Detention facility ⁽²⁰⁾	Outdoor sport and	• Transport depot ⁽⁸⁵⁾
Extractive industry ⁽²⁷⁾	recreation ⁽⁵⁵⁾ • Permanent plantation ⁽⁵⁹⁾	• Winery ⁽⁹⁰⁾
Hardware and trade supplies ⁽³²⁾ - if greater than 250m ² GFA	i eimanent piantation	

v. Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the zone.

Part E — Criteria for assessable development - District centre 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 E, Table 6.2.1.4.1 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 6.2.1.4.1 Assessable development - District centre precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes	
General criteria		
Centre network and function		

PO1

Development in the District centre precinct is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.

Note - Refer to Moreton Bay centres network Table 6.2.1.1

No example provided.

Active frontage

PO₂

Development addresses and activates streets and public spaces by:

- establishing and maintaining interaction, pedestrian activity and casual surveillance through appropriate land uses and building design (e.g. the use of windows or glazing and avoiding blank walls with the use of sleeving);
- ensuring buildings and individual tenancies address street frontages and other areas of pedestrian movement;
- new buildings adjoin or are within 3m of a primary street frontage, civic space or public open space;
- d. locating car parking areas behind or under buildings to not dominate the street environment;
- e. providing visual interest to the façade (e.g. windows or glazing, variation in colours, materials, finishes, articulation, recesses or projections);
- f. establishing or maintaining human scale.

E2.1

Development addresses the street frontage.

E2.2

New buildings and extensions are built to the street alignment.

E2.3

At-grade car parking:

- a. does not adjoin a main street or a corner;
- where at-grade car parking adjoins a street (other than a main street) or civic space it does not take up more than 40% of the length of the street frontage.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

E2.4

Development on corner lots:

- a. addresses both street frontages;
- b. expresses strong visual elements, including feature building entries.

E2.5

Development incorporates active uses adjacent to a street frontage, civic space, public open space or pedestrian thoroughfare.

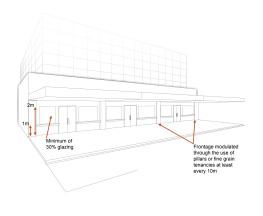
E2.6

The front facade of the building:

- a. is made up of a minimum of 50% windows or glazing between a height of 1m and 2m;
- b. the minimum area of window or glazing is to remain uncovered and free of signage.

Note - This does not apply to Adult stores (1).

Figure - Glazing



E2.7

Individual tenancies do not exceed a frontage length of 20m.

E2.8

Large format retail uses (e.g. showroom⁽⁷⁸⁾, supermarket or discount department store) are sleeved by smaller tenancies (e.g. retail and similar uses).

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

Setbacks

PO₃

Side and rear setbacks are of a dimension to:

- cater for required openings, the location of loading docks and landscaped buffers etc.;
- b. protect the amenity of adjoining sensitive land uses.

No example provided.

Site area **PO4** No example provided. The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping. **Building height PO5 E5** The height of buildings reflect the individual character Building height is within the minimum and maximum of the centre. height identified on Overlay map - Building heights. Public realm **PO6** No example provided. Developments incorporating a gross leasable area greater than 3,000m² include a public plaza on-site, that: is integrated with adjacent development, in a. relation to built form, streetscape, landscaping and the street and pedestrian network; b. is directly accessible from adjacent development or tenancies and is easily and conveniently accessible to the public; is of a sufficient size and dimensions to cater C. for passive recreation activities (e.g. alfresco dining and temporary activities etc); d. includes greening (e.g. Landscaping, planter boxes, street trees etc) that contributes to the identity of the centre; is lit and has adequate signage for way finding, ensuring adjoining and near by residential uses are not impacted by 'overspill'; is designed to achieve CPTED principles e.g. visible at all times. Note - For details and examples of civic space requirements refer to Planning scheme policy - Centre and neighbourhood hub design. **Streetscape PO7** No example provided.

Development contributes to an attractive and walkable street environment through the provision of streetscape features (e.g. footpaths, lighting, bins, furniture, landscaping, pedestrian crossings etc), as outlined in Planning scheme policy - Integrated design.

Editor's note - Additional approvals may be required where works are required within road reserves.

Built form

PO8

Ground floor spaces are designed to enable the flexible re-use of floor area for commercial and retail activities.

E8

The ground floor has a minimum ceiling height of 4.2m.

PO9

Awnings are provided at the ground floor fronting pedestrian footpaths. Awnings:

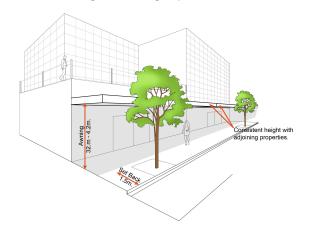
- a. provide adequate protection for pedestrians from solar exposure and inclement weather;
- b. are integrated with the design of the building and the form and function of the street;
- do not compromise the provision of street trees and signage;
- d. ensure the safety of pedestrians and vehicles (e.g. No support poles).

E9

Buildings incorporate an awning that:

- a. is cantilevered;
- b. extends from the face of the building;
- c. has a minimum height of 3.2m and a maximum height of 4.2m above pavement level;
- d. does not extend past a vertical plane of 1.5m inside the kerb line to allow for street trees and regulatory signage;
- e. aligns with adjoining buildings to provide continuous shelter where possible.

Figure - Awning requirements



PO10

All buildings exhibit a high standard of design and construction, which:

No example provided.

- a. adds visual interest to the streetscape (e.g. variation in materials, patterns, textures and colours, cantilevered awning);
- b. enables differentiation between buildings;
- c. contributes to a safe environment;
- incorporates architectural features within the building facade at the street level to create human scale;
- e. treat or break up blank walls that are visible from public areas;
- f. includes building entrances that are readily identifiable from the road frontage, located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- g. facilitate casual surveillance of all public spaces.

PO11

Building entrances:

- a. are readily identifiable from the road frontage;
- b. add visual interest to the streetscape;
- are designed to limit opportunities for concealment;
- are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage;
- e. include footpaths that connect with adjoining sites;
- f. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance Outcome.

No example provided.

Movement network

PO12

E12.1

Development provides and maintains the connections shown on the following movement figures:

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

- Figure 1 Deception Bay Bailey Road / Park Road
- b. Figure 2 Mango Hill
- c. Figure 3 Kallangur

E12.2

For areas not shown on the above movement figures, no example provided.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the Performance outcome.

Car parking

PO13

The number of car parking spaces is managed to:

- provide for the parking of visitors and employees that is appropriate for the use and the sites proximity to public and active transport options;
- b. not include an oversupply of car parking spaces.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E13

Car parking is provided in accordance with the table below.

Land use	Maximum number of Car Spaces to be Provided	Minimum Number of Car Spaces to be Provided	
Non-residential	1 per 30m ² of GFA	1 per 50m ² of GFA	
Residential - Permanent/long term	N/A	1 per dwelling	
Residential - Serviced/short term	3 per 4 dwellings + staff spaces	1 per 5 dwelling + staff spaces	

Note - Car parking rates are to be rounded up to the nearest whole number.

Note - Allocation of car parking spaces to dwellings is at the discretion of the developer.

Note - Residential - Permanent/long term includes: Multiple dwelling $^{(49)}$, Relocatable home park $^{(62)}$, Residential care facility $^{(65)}$, Retirement facility $^{(67)}$.

Note - Residential - Services/short term includes: Rooming accommodation (69) or Short-term accommodation (77).

Note - The above rates exclude car parking spaces for people with a disability required by Disability Discrimination Act 1992 or the relevant disability discrimination legislation and standards.

PO14

Car parking is designed to avoid the visual impact of large areas of surface car parking on the streetscape.

No example provided.

PO15

Car parking design includes innovative solutions, including on-street parking and shared parking areas.

Note - Refer to Planning scheme policy - Integrated design for details and examples of on-street parking.

No example provided.

PO16

The design of car parking areas:

- a. does not impact on the safety of the external road network;
- ensures the safe movement of vehicles within the site.

E16

All car parking areas are designed and constructed in accordance with Australian Standard AS2890.1 Parking facilities Part 1: Off-street car parking.

PO17

The safety and efficiency of pedestrian movement is prioritised in the design of car parking areas through providing pedestrian paths in car parking areas that are:

- a. located along the most direct pedestrian routes between building entrances, car parks and adjoining uses;
- protected from vehicle intrusion through the use of physical and visual separation (e.g. wheel stops, trees etc);
- c. of a width to allow safe and efficient access for prams and wheelchairs.

No example provided.

Bicycle parking and end of trip facilities

Note - Building work to which this code applies constitutes Major Development for purposes of development requirements for end of trip facilities prescribed in the Queensland Development Code MP 4.1.

PO18

- End of trip facilities are provided for employees or occupants, in the building or on-site within a reasonable walking distance, and include:
 - adequate bicycle parking and storage facilities; and

E18.1

Minimum bicycle parking facilities are provided in accordance with the table below (rounded up to the nearest whole number).

Use	Minimum Bicycle Parking
Residential uses comprised of dwellings	Minimum 1 space per dwelling

- ii. adequate provision for securing belongings; and
- iii. change rooms that include adequate showers, sanitary compartments, wash basins and mirrors.
- Notwithstanding a. there is no requirement to provide end of trip facilities if it would be unreasonable to provide these facilities having regard to:
 - the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - ii. whether it would be practical to commute to and from the building on a bicycle, having regard to the likely commute distances and nature of the terrain; or
 - iii. the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

Editor's note - The intent of b above is to ensure the requirements for bicycle parking and end of trip facilities are not applied in unreasonable circumstances. For example these requirements should not, and do not apply in the Rural zone or the Rural residential zone etc.

Editor's note - This performance outcome is the same as the Performance Requirement prescribed for end of trip facilities under the Queensland Development Code. For development incorporating building work, that Queensland Development Code performance requirement cannot be altered by a local planning instrument and has been reproduced here solely for information purposes. Council's assessment in its building work concurrence agency role for end of trip facilities will be against the performance requirement in the Queensland Development Code. As it is subject to change at any time, applicants for development incorporating building work should ensure that proposals that do not comply with the examples under this heading meet the current performance requirement prescribed in the Queensland Development Code.

All other residential uses	Minimum 1 space per 2 car parking spaces identified in Schedule 7 – car parking
Non-residential uses	Minimum 1 space per 200m2 of GFA

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is a combination of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.2

Bicycle parking is:

- a. provided in accordance with Austroads (2008), Guide to Traffic Management - Part 11: Parking;
- b. protected from the weather by its location or a dedicated roof structure;
- c. located within the building or in a dedicated, secure structure for residents and staff;
- d. adjacent to building entrances or in public areas for customers and visitors.

Note - Bicycle parking structures are to be constructed to the standards prescribed in AS2890.3.

Note - Bicycle parking and end of trip facilities provided for residential and non-residential activities may be pooled, provided they are within 100 metres of the entrance to the building.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.3

For non-residential uses, storage lockers:

- are provide at a rate of 1.6 per bicycle parking space (rounded up to the nearest whole number);
- b. have minimum dimensions of 900mm (height) x 300mm (width) x 450mm (depth).

Note - Storage lockers may be pooled across multiple sites and activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.4

For non-residential uses, changing rooms:

- a. are provided at a rate of 1 per 10 bicycle parking spaces;
- b. are fitted with a lockable door or otherwise screened from public view;
- are provided with shower(s), sanitary compartment(s) and wash basin(s) in accordance with the table below:

Bicycle spaces provided	Male/ Female	Change rooms required	Showers required	Sanitary compartments required	Washbasins required
1-5	Male and female	1 unisex change room	1	1 closet pan	1
6-19	Female	1	1	1 closet pan	1
20 or more	Male	1	1	1 closet pan	1
	Female	1	2, plus 1 for every 20 bicycle spaces provided thereafter	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking spaces provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter
	Male	1	2, plus 1 for every 20 bicycle spaces provided thereafter	1 urinal and 1 closet pans, plus 1 sanitary compartment at the rate of 1 closet pan or 1 urinal for every 60 bicycle space provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter

Note - All showers have a minimum 3-star Water Efficiency Labelling and Standards (WELS) rating shower head.

Note - All sanitary compartments are constructed in compliance with F2.3 (e) and F2.5 of BCA (Volume 1).

- d. are provided with:
 - i. a mirror located above each wash basin;

- ii. a hook and bench seating within each shower compartment;
 - a socket-outlet located adjacent to each wash basin.

Note - Change rooms may be pooled across multiple sites, residential and non-residential activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

Loading and servicing

PO19

Loading and servicing areas:

- a. are not visible from any street frontage;
- b. are integrated into the design of the building;
- c. include screening and buffers to reduce negative impacts on adjoining sensitive land uses;
- d. are consolidated and shared with adjoining sites where possible.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design.

No example provided.

Waste

PO20

Bins and bin storage area/s are designed, located and managed to prevent amenity impacts on the locality.

E20

Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.

Landscaping and fencing

PO21

On-site landscaping:

is incorporated into the design of the development;

No example provided.

b.	reduces the dominance of car parking and servicing areas from the street frontage;	
c.	incorporates shade trees in car parking areas;	
d.	retains mature trees wherever possible;	
e.	contributes to quality public spaces and the microclimate by providing shelter and shade;	
f.	maintains the achievement of active frontages and sightlines for casual surveillance.	
	e - All landscaping is to accord with Planning scheme policy egrated design.	
PO2	2	No example provided.
	reillance and overlooking are maintained between road frontage and the main building line.	
Ligh	iting	
PO2	3	No example provided.
illum maxi	ting is designed to provide adequate levels of ination to public and communal spaces to imise safety while minimising adverse impacts ensitive land uses.	
Ame	enity	
PO2	4	No example provided.
uses	amenity of the area and adjacent sensitive land are protected from the impacts of dust, odour, nicals and other environmental nuisances.	
Nois	se	
PO2	5	No example provided.
	e generating uses do not adversely affect existing otential noise sensitive uses.	
a roa	e - The use of walls, barriers or fences that are visible from ad or adjoin a road or public area are not appropriate noise nuation measure unless adjoining a motorway, arterial road ail lines.	
dem asse	e - A noise impact assessment may be required to constrate compliance with this PO. Noise impact essments are to be prepared in accordance with Planning teme policy - Noise.	

PO26

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

E26.1

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E26.2

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.
- 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.

Hazardous Chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'

PO27

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E27.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E27.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 0.5 x 10-6/year.

E27.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or>23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E27.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5 x 10-6/year.

E27.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E27.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year.

PO28

Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early stages of a fire situation and notify a designated person.

E28

Buildings and package stores containing fire-risk hazardous chemicals are provided with 24 hour monitored fire detection system for early detection of a fire event.

PO29

Common storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) that are adequate to contain releases, including fire fighting media.

E29

Storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) capable of containing a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes.

PO30

Storage and handling areas, including manufacturing areas, containing hazardous chemicals in quantities greater than 2,500L or kg within a Local Government "flood hazard area" are located and designed in a manner to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries.

E30.1

The base of any tank with a WC >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively:

- a. bulk tanks are anchored so they cannot float if submerged or inundated by water; and
- b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level.

E30.2

The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level.

Clearing of habitat trees where not located within the Environmental areas overlay map

PO31

- Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.
- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

No example provided.

Works criteria

Utilities

PO32

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

No example provided.

Access

PO33

Development provides functional and integrated car parking and vehicle access, that:

- prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.);
- b. provides safety and security of people and property at all times;
- does not impede active transport options;
- d. does not impact on the safe and efficient movement of traffic external to the site;
- e. where possible vehicle access points are consolidated and shared with adjoining sites.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

No example provided.

PO34

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

PO35

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E35.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E35.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E35.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E35.4

The development layout allows forward vehicular access to and from the site.

PO36

Safe access is provided for all vehicles required to access the site.

E36.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
 - AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
 - ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities:
 - iii. Planning scheme policy Integrated design;
 - iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E36.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;

- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E36.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E36.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO37

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

E37

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO38

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E38.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E38.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO39

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement;
- c. adequate on street parking;
- stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;
- f. utility services location;
- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

E39

No example provided.

PO40

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

E40.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m² GFA;
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;
- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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 - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E40.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E40.3

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

PO41

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

E41

New intersection spacing (centreline – centreline) along a through road conforms with the following:

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

- a. where the through road provides an access function;
 - i. intersecting road located on the same side= 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- b. Where the through road provides a collector or sub-arterial function:
 - i. intersecting road located on the same side= 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:
 - i. intersecting road located on the same side = 300 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO42

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

E42

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation	Minimum construction	
Frontage road unconstructed or gravel road only;	Construct the verge adjoining the development and the	
OR	carriageway (including development side kerb	
Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard; OR Frontage road partially constructed* to Planning scheme policy - Integrated design standard.	and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel shoulder and table drainage to the opposite side.	
		• 6m for minor roads;
	• 7m for major roads.	

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO43

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E43.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E43.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E43.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO44

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

E44.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E44.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E44.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E44.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

DO45	E45
Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.	The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.
PO46	No example provided.
Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises. Note - Refer to Planning scheme policy - Integrated design for details.	
Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	
Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure.	
PO47	No example provided.
Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site.	
Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome.	
PO48	No example provided.
Where development:	
 is for an urban purpose that involves a land area of 2500m² or greater; and 	
b. will result in:	

- i. 6 or more dwellings; or
- ii. an impervious area greater than 25% of the net developable area,

stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives.

Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management.

Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C).

PO49

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

E49

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

PO50 No example provided.

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion. **PO51** E51 Council is provided with accurate representations of "As Built" drawings and specifications of the the completed stormwater management works within stormwater management devices certified by an residential developments. RPEQ is provided. Note - Documentation is to include: photographic evidence and inspection date of the installation of approved underdrainage; copy of the bioretention filter media delivery b. dockets/quality certificates confirming the materials comply with specifications in the approved Stormwater Management Plan; date of the final inspection.

Site works and construction management			
PO52	No example provided.		
The site and any existing structures are maintained in a tidy and safe condition.			
PO53	E53.1		
 All works on-site are managed to: a. minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light; b. minimise as far as possible, impacts on the natural environment; c. ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises; d. avoid adverse impacts on street trees and their critical root zone. 	Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following: a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions; b. stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind; c. stormwater discharge rates do not exceed pre-existing conditions;		

- d. minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E53.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E53.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E53.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO54

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

E54

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO55

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

E55.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- the aggregate volume of imported or exported material is greater than 1000m³; or
- b. the aggregate volume of imported or exported material is greater than 200m³ per day; or
- the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

E55.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E55.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E55.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E55.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E55.6

Access to the development site is obtained via an existing lawful access point.

PO56 E56

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

At completion of construction all disturbed areas of the site are to be:

- topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO57

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E57

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO58

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

E58.1

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E58.2

Disposal of materials is managed in one or more of the following ways:

- all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

PO59

E59

All development works are carried out within the following times:

All development works are carried out at times which minimise noise impacts to residents.

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
- b. no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

PO60

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

No example provided.

Earthworks

PO61

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- b. short and long-term slope stability;
- soft or compressible foundation soils;
- reactive soils;
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E61.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E61.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E61.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E61.4

All filling or excavation is contained on-site and is free draining.

E61.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use;
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E61.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

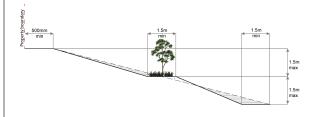
PO62

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E62

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment



PO63

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

E63.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E63.2

Filling or excavation that would result in any of the following is not carried out on-site:

 a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;

an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken; prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes. Note - Public sector entity is defined in Schedule 2 of the Act. Note - All building work covered by QDC MP1.4 is excluded from this provision. **PO64** No example provided. Filling or excavation does not result in land instability. Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ gualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance. **PO65** No example provided. Filling or excavation does not result in: adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway; increased flood inundation outside the site; b. C. any reduction in the flood storage capacity in the floodway; d. any clearing of native vegetation. Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements. **PO66** E66 Filling or excavation on the development site is Filling and excavation undertaken on the development undertaken in a manner which does not create or site are shaped in a manner which does not: accentuate problems associated with stormwater flows а prevent stormwater surface flow which, prior to and drainage systems on land adjoining the site. commencement of the earthworks, passed onto the development site, from entering the land; or

- b. redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - i. concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO67

All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

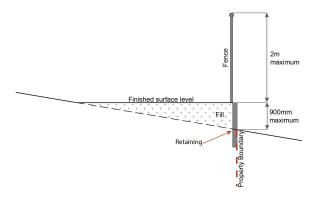
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E67

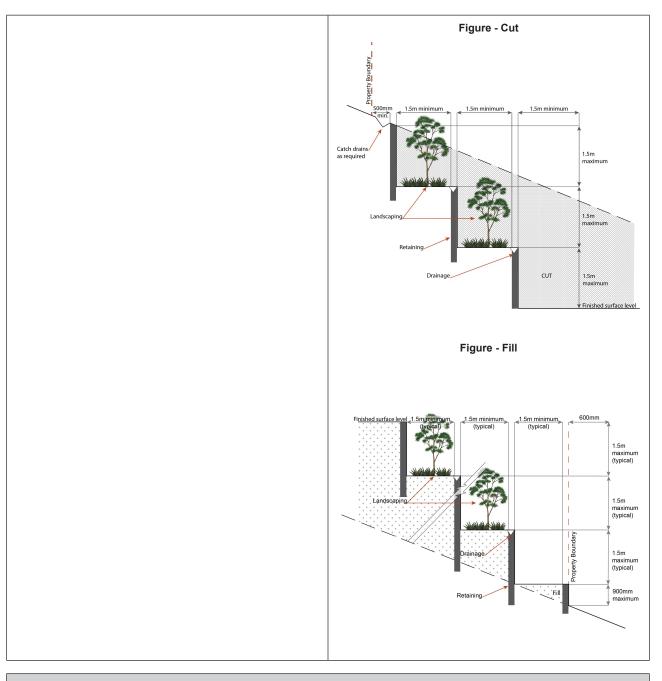
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;

Figure - Retaining on boundary



- c. where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.



Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme; or
 - iii. material change of use for a Tourist park (84) with accommodation in the form of caravans or tents; or
 - iv. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials.

AND

- b. none of the following exceptions apply:
 - the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO68

Development incorporates a fire fighting system that:

- satisfies the reasonable needs of the fire fighting entity for the area;
- is appropriate for the size, shape and topography of the development and its surrounds:
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

E68.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations*.

Note - For this requirements for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and
 Part 3.2.2.1, with the exception that for Tourist parks (84)
 or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
 - for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and, where applicable, Part 3.6.

E68.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;

- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E68.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO69

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

E69

For development that contains on-site fire hydrants external to buildings:

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - the overall layout of the development (to scale);
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - external hydrants and hydrant booster points;
 - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO70

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E70

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO71

The scale and intensity of the Home based business⁽³⁵⁾:

- is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape or road safety;
- c. does not adversely impact on the amenity of the adjoining and nearby premises;
- d. remains ancillary to the residential use of the dwelling house⁽²²⁾;
- does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- f. ensures employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E71.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E71.2

The home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure $^{(43)}$, Substation $^{(80)}$ and Utility installation $^{(86)}$

PO72

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;

E72.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;

- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.
- c. have a similar height, bulk and scale to the surrounding fabric;
- have horizontal and vertical articulation applied to all exterior walls.

E72.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO73

Infrastructure does not have an impact on pedestrian health and safety.

E73

Access control arrangements:

- a. do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO74

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- generates no audible sound at the site boundaries where in a residential setting; or
- b. meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E74

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO75

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other dwelling units⁽²³⁾ and centre uses;
- c. accessible and readily identifiable for residents, visitors and emergency services;
- d. located to not compromise active frontages.

E75

A dwelling has a clearly defined, private outdoor living space that is:

a. as per the table below;

Minimum Area	Minimum Dimension in all directions	
16m²	4m	
Above ground floor dwellings		
8m²	2.5m	
12m²	3.0m	
	16m ² gs 8m ²	

- b. accessed from a living area;
- c. sufficiently screened or elevated for privacy;
- ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- e. balconies orientate to the street;
- f. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas).

Note - Areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided).

PO76

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E76

The dwelling:

- includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses;
- clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services;
- is provided with a separate entrance to that of any non-residential use on the site;
- d. where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

Service station

Note - Where the use specific outcomes relating to Service Stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO77 E77.1

Service stations are located:

Service stations are located, designed and orientated to:

- establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- d. ensure the amenity of adjoining properties is protected;
- e. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;
- f. minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area. (e.g. high order road in urban or next generation neighbourhood, likely to be noisy and not like suburban);
- g. provide ancillary uses that meet the convenience needs of users.

- a. on the periphery of the Centre adjoining or within 100m of land zoned other than Centre zone;
- b. on the corner lot of an arterial or sub-arterial road.

E77.2

Service stations are designed and orientated on site to:

- a. include a landscaping strip having a minimum depth of 1m adjoining all road frontages;
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;
- include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO78

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

E78.1

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E78.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO79

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

E79

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

Telecommunications facilities⁽⁸¹⁾ do not conflict with lawful existing land uses both on and adjoining the site.

E80

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO81

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E81.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

E81.2

In all other areas towers do not exceed 35m in height.

E81.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E81.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

E81.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E81.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design. **PO82** E82 An Access and Landscape Plan demonstrates how Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or 24 hour vehicular access will be obtained and surrounding uses. maintained to the facility in a manner that is appropriate to the site's context. **PO83** E83 All equipment comprising the Telecommunications All activities associated with the development occur within an environment incorporating sufficient controls facility⁽⁸¹⁾ which produces audible or non-audible to ensure the facility generates no audible sound at sound is housed within a fully enclosed building the site boundaries where in a residential setting. incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO84

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- a. is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- c. protects buildings and infrastructure from the effects of acid sulfate soils.

E84

Development does not involve:

- excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO85

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- on-site mitigation measures, mechanisms or processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a

No example provided.

Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy - Environmental areas*.

* Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014.

PO86

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- a. retaining habitat trees;
- b. providing contiguous patches of habitat;
- c. provide replacement and rehabilitation planting to improve connectivity;
- d. avoiding the creation of fragmented and isolated patches of habitat;
- e. providing wildlife movement infrastructure.

Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy — Environmental areas.

No example provided.

Vegetation clearing and habitat protection

PO87

Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.

No example provided.

PO88

Development does not result in the net loss or degradation of habitat value in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value, development will:

 rehabilitate, revegetate, restore and enhance an area to ensure it continues to function as a viable and healthy habitat area; No example provided.

b.	provide replacement fauna nesting boxes in the event of habitat tree loss in accordance with Planning scheme policy - Environmental areas; undertake rehabilitation, revegetation and restoration in accordance with the South East Queensland Ecological Restoration Framework.	
PO8	9	No example provided.
and	elopment ensures safe, unimpeded, convenient ongoing wildlife movement and habitat nectivity by:	
a. b.	providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat;	
d.	providing wildlife movement infrastructure; providing replacement and rehabilitation planting to improve connectivity.	
Veg	etation clearing and soil resource stability	
PO9	00	No example provided.
Dev	elopment does not:	
a. b.	result in soil erosion or land degradation; leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.	
Veg	etation clearing and water quality	
PO9	1	No example provided.
grou	elopment maintains or improves the quality of indwater and surface water within, and instream, of a site by:	
a. b.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; avoiding or minimising changes to landforms to	
о. С.	maintain hydrological water flows; adopting suitable measures to exclude livestock from entering a waterbody where a site is being	
	used for animal husbandry ⁽⁴⁾ and animal	
	keeping ⁽⁵⁾ activities.	
PO9		No example provided.
Dev		No example provided.

C. maximising the use of permeable surfaces; d. incorporating sediment retention devices; e. minimising channelled flow. Vegetation clearing and access, edge effects and urban heat island effects **PO93** No example provided. Development retains safe and convenient public access in a manner that does not result in the adverse edge effects or the loss or degradation of biodiversity values within the environment. **PO94** No example provided. Development minimises potential adverse 'edge effects' on ecological values by: providing dense planting buffers of native vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; restoring, rehabilitating and increasing the size of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors; landscaping with native plants of local origin. e. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. **PO95** No example provided. Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: pervious surfaces; a. providing deeply planted vegetation buffers and green linkage opportunities; landscaping with local native plant species to achieve well-shaded urban places; d. increasing the service extent of the urban forest canopy.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

No example provided.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO97

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building:
- be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;
- e. incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building;
- f. retain public access where this is currently provided.

E97

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

PO98

Demolition and removal is only considered where:

No example provided.

6 Zones

- a report prepared by a suitably qualified conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or
- demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- c. limited demolition is performed in the course of repairs, maintenance or restoration; or
- demolition is performed following a catastrophic event which substantially destroys the building or object.

PO99

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

PO100

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.

E100

Development does:

- a. not result in the removal of a significant tree;
- b. not occur within 20m of a protected tree;
- c. involve pruning of a tree in accordance with Australian Standard AS 4373-2007 Pruning of Amenity Trees.

Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply)

PO101

Habitable rooms within an Electricity supply substation buffer are located a sufficient distance from substations⁽⁸⁰⁾ to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields.

Note - Habitable room is defined in the Building Code of Australia (Volume 1)

E101

Habitable rooms:

- a. are not located within an Electricity supply substation buffer; and
- proposed on a site subject to an Electricity supply supply substation⁽⁸⁰⁾ are acoustically insulted to achieve the noise levels listed in Schedule 1, Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008.

Note - Habitable room is defined in the Building Code of Australia (Volume 1) **PO102** No example provided. Habitable rooms within an Electricity supply substation buffer are acoustically insulated from the noise of a substation⁽⁸⁰⁾ to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008 and provides a safe, healthy and disturbance free living environment. Note - To demonstrate achievement of the performance outcome, a noise impact assessment report is prepared by a suitably qualified person. Guidance to preparing an noise impact assessment report is provided in Planning scheme policy -Note - Habitable room is defined in the Building Code of Australia (Volume 1) PO103 E103 Development within a Pumping station buffer is Development does not involve the construction of any located, designed and constructed to: buildings or structures within a Pumping station buffer. ensure that odour or other air pollutant impacts on the amenity of the development met the air quality of objectives in the Environmental Protection (Air) Policy 2008; b. ensure that noise impacts on the amenity of the development met the indoor noise objectives set out in the Environmental Protection (Noise) Policy 2008. 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. PO104 No example provided. Development: minimises the risk to persons from overland flow; does not increase the potential for damage from overland flow either on the premises or other premises, public land, watercourses, roads or

infrastructure.

Development:

- 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;
- does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property.

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.

PO106

Development does not:

- directly, indirectly or cumulatively cause any increase in overland flow velocity or level;
- increase the potential for flood damage from overland flow either on the premises or other premises, public lands, watercourses, roads 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.

No example provided.

PO107

Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.

E107

Development ensures that a hazardous chemical is not located or stored in an Overland flow path area.

Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

PO108

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot.

E108

Development which is not in a Rural zone that an 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.

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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

E109.1

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.

E109.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO110

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

- a. a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- b. an overland flow path where it crosses more than one premises;
- 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⁾

PO111

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;
- maintenance and replacement costs are minimised.

E111

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

PO112

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- a. impact on fauna habitats;
- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

E112

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.

Scenic amenity - Regionally significant (Hills) and Locally important (Coast) (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply)

PO113

Landscaping

- complements the coastal landscape character and amenity;
- has known resilience and robustness in the coastal environment;

Fences and walls:

- do not appear visually dominant or conspicuous within its setting;
- reduce visual appearance through the use of built form articulation, setbacks, and plant screening;
- use materials and colours that are complementary to the coastal environment.

Building design responds to the bayside location and complements the particular bayside character and amenity by adopting and incorporating a range of architectural character elements.

Vegetation that contributes to bayside character and identity are:

- a. retained;
- b. protected from development diminishing their significance.

E113

Where located in the Locally Important (Coast) scenic amenity overlay:

- landscaping comprises indigenous coastal species;
- b. fences and walls are no higher than 1m; and
- c. existing pine trees, palm trees, mature fig and cotton trees are retained.
- d. where over 12m in height, the building design includes the following architectural character elements:
 - i. curving balcony edges and walls, strong vertical blades and wall planes;
 - balcony roofs, wall articulation expressed with different colours, curves in plan and section, and window awnings;
 - iii. roof top outlooks, tensile structures as shading devices;
 - iv. lightweight structures use white frame elements in steel and timber, bold colour contrast.

Movement network figures

Figure 1 - Deception Bay - Bailey Road / Park Road

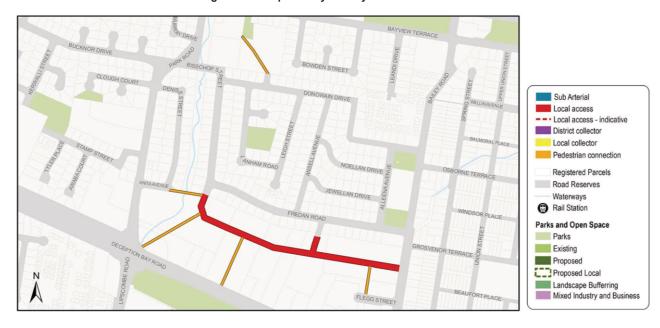


Figure 2 - Mango Hill



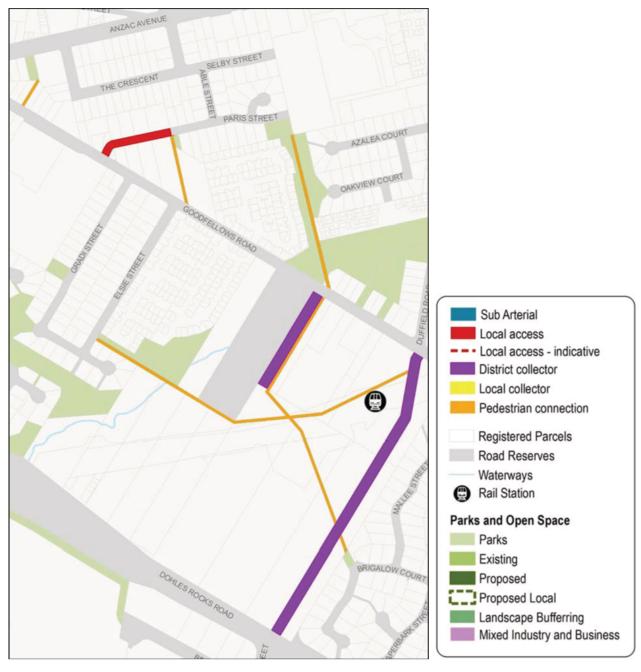


Figure 3 - Kallangur

6.2.1.5 Local centre precinct

6.2.1.5.1 Purpose - Local centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the local centre precinct:
 - a. Development is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.
 - b. Development contributes to a mix and the co-location of compatible uses, in a compact urban form.
 - c. Development is of a sufficient intensity and land use mix to support public transport, active transport, improve land efficiency and support centre facilities.
 - d. Medium density housing, in the form of low-rise multiple dwellingsCould not findID-2693465-5213 incorporating mixed uses where possible, is incorporated within local centres.
 - e. Adverse impacts on the amenity of surrounding residential uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining a local centre.
 - f. The safety and efficiency of pedestrian movement is prioritised in the design of car parking areas and the size, frequency and location of vehicle crossovers.
 - g. The amount of on-site car parking encourages the use of public and active transport, increases land use efficiency and does not negatively impact the streetscape.
 - h. Facilities, infrastructure and public realm improvements are provided to support active transport usage and contribute to improved pedestrian connectivity and walkability between key destinations.
 - i. Pedestrian connections are provided to integrate the development with the street, public spaces and the surrounding area.
 - j. Development encourages social activity through the provision of high quality civic and plaza spaces.
 - k. The design, siting and construction of buildings within a local centre:
 - i. contributes to a high quality centre consistent with the desired character of the centre and surrounding area;
 - ii. maintains a human scale, through appropriate building heights and form;
 - iii. is centred around a main street;
 - iv. provides attractive, active frontages that maximise pedestrian activity along road frontages and public spaces;
 - v. provides for active and passive surveillance of the public spaces, road frontages and movement corridors:
 - vi. does not result in internalised shopping centres⁽⁷⁶⁾ with large external blank walls and tenancies only accessible from within the building;
 - vii. locates tenancies at the street with car parking at the rear;
 - viii. ensures expansive areas of surface car parking do not dominate road frontages or public spaces;

- ix. ensures parking, manoeuvring and servicing areas are designed, located and aesthetically treated to not be visually dominant features from the streetscape and public spaces;
- x. includes buffers or other treatments measures to respond to the interface with residential zoned land.
- I. Out-of-centre development, including centre expansion (into adjoining zones and precincts) or the establishment of a new centre only occurs where:
 - it maintains the scale and function of a local centre consistent with Table 6.2.1.1 including provision of one full line supermarket plus local speciality shops and lower order commercial uses;
 - ii. expansion strengthens the existing centre as an important local activity node, or for a new centre, strengthens the centres network within the region;
 - clear separation from existing higher order, district and local centres within the network are maintained to reduce catchment overlap and to establish 15 minute walkable neighbourhoods (generally, local centres should be separated from other centres by 2400m and neighbourhood hubs by 1600m, measured from the centre of each centre or neighbourhood hub);
 - iv. for expansion, it is located on a highly accessible site, adjoining the existing centre not resulting in the fragmentation of the centre;
 - v. for a new centre, it is located on a sub-arterial or collector road;
 - vi. designed to include active frontages around a main street core;
 - vii. expansion does not result in an elongated centre forming a ribbon of development along regional through roads.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

Note - Interim uses may be acceptable within a centre where the use would be compatible with existing and proposed centre activities provided the interim use would not be likely to prejudice or delay the ultimate development of the site and adjoining areas. Interim uses should be low intensity in nature and characterised by low investment in buildings and infrastructure relative to the value of the site (e.g. Bulk landscape supplies⁽⁹⁾, garden centre⁽³¹⁾, market⁽⁴⁶⁾, outdoor sales⁽⁵⁴⁾, wholesale nursery⁽⁸⁹⁾, outdoor sport and recreation⁽⁵⁵⁾).

m. Service stations:

- i. establish where they will not disrupt, fragment or negatively impact active frontages or streets where pedestrian safety and comfort are of high importance;
- ii. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts from road vehicle noise;
- iii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
- iv. do not negatively impact adjoining residents or the streetscape;
- v. ancillary uses or activities only service the convenience needs of users.
- n. General works associated with the development achieves the following:

- new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
- ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants;
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
- iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network:
- iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
- v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- o. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- p. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- q. Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- r. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;

- vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
- vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
- viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;
- ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;
- x. ensuring effective and efficient disaster management response and recovery capabilities;
- xi. where located in an overland flow path:
 - A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
 - C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
 - D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- s. Development in the Local centre precinct is for one or more of the uses identified below:

•	Caretaker's accommodation ⁽¹⁰⁾	•	Emergency services ⁽²⁵⁾	•	Low impact industry ⁽⁴²⁾ - if not located adjoining a
•	Child care centre ⁽¹³⁾	•	Food and drink outlet ⁽²⁸⁾		main street
•	Club ⁽¹⁴⁾	•	Hardware and trade supplies (32) - if 250m ²	•	Market ⁽⁴⁶⁾
•	Community care		GFA or less	•	Office ⁽⁵³⁾
	centre ⁽¹⁵⁾	•	Health care services (33)	•	Place of worship ⁽⁶⁰⁾
•	Community use ⁽¹⁷⁾	•	Home based business ⁽³⁵⁾	•	Service industry ⁽⁷³⁾
•	Dwelling unit ⁽²³⁾			•	Shop ⁽⁷⁵⁾
				•	Shopping centre ⁽⁷⁶⁾
				•	Showroom ⁽⁷⁸⁾ - if 250m ² GFA or less

t. Development in the Local centre precinct does not include one or more of the following uses:

•	Air services ⁽³⁾	•	Intensive horticulture ⁽⁴⁰⁾	•	Research and technology industry ⁽⁶⁴⁾
•	Animal husbandry ⁽⁴⁾	•	Major sport, recreation and entertainment	•	Resort complex ⁽⁶⁶⁾
•	Animal keeping ⁽⁵⁾		facility ⁽⁴⁴⁾	•	Rooming
•	Aquaculture ⁽⁶⁾	•	Marine industry ⁽⁴⁵⁾		accommodation ⁽⁶⁹⁾
•	Brothel ⁽⁸⁾	•	Medium impact industry ⁽⁴⁷⁾	•	Rural industry ⁽⁷⁰⁾
•	Cemetery ⁽¹²⁾	•	Motor sport facility ⁽⁴⁸⁾	•	Rural workers' accommodation ⁽⁷¹⁾
•	Crematorium ⁽¹⁸⁾	•	Nightclub entertainment	•	Short-term
•	Cropping ⁽¹⁹⁾		facility ⁽⁵¹⁾		accommodation ⁽⁷⁷⁾
•	Detention facility ⁽²⁰⁾	•	Outdoor sales ⁽⁵⁴⁾	•	Showroom ⁽⁷⁸⁾ - if more than 250m ² GFA
•	Extractive industry ⁽²⁷⁾	•	Outdoor sport and recreation ⁽⁵⁵⁾	•	Special industry ⁽⁷⁹⁾
•	Hardware and trade supplies ⁽³²⁾ - if more than	•	Parking station ⁽⁵⁸⁾	•	Tourist park ⁽⁸⁴⁾
	250m² GFA	•	Permanent plantation ⁽⁵⁹⁾	•	Transport depot ⁽⁸⁵⁾
•	High impact industry ⁽³⁴⁾	•	Port services ⁽⁶¹⁾	•	Winery ⁽⁹⁰⁾
•	Hotel ⁽³⁷⁾	•	Relocatable home		-
•	Intensive animal industry ⁽³⁹⁾		park ⁽⁶²⁾		

u. Development not listed in the tables above may be considered on its merits and where it reflects and supports the outcomes of the zone.

Part F - Criteria for assessable development - Local centre 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 F, Table 6.2.1.5.1 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 6.2.1.5.1 Assessable development - Local centre precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes	
General criteria		
Centre network and function		

Development in the Local centre precinct is of a size, scale, range of services commensurate with the role and function of this precinct within the centres network.

Note - Refer to Moreton Bay centres network Table 6.2.1.1

No example provided.

Active frontage

PO₂

Development addresses and activates streets and public spaces by:

- establishing and maintaining interaction, pedestrian activity and casual surveillance through appropriate land uses and building design (e.g. the use of windows or glazing and avoiding blank walls with the use of sleeving);
- ensuring buildings and individual tenancies address street frontages and other areas of pedestrian movement;
- new buildings adjoin or are within 3m of a primary street frontage, civic space or public open space;
- d. locating car parking areas behind or under buildings to not dominate the street environment;
- e. providing visual interest to the façade (e.g. windows or glazing, variation in colours, materials, finishes, articulation, recesses or projections);
- f. establishing or maintaining human scale.

E2.1

Development addresses the street frontage.

E2.2

New buildings and extensions are built to the street alignment.

E2.3

At-grade car parking:

- a. does not adjoin a main street or a corner;
- where at-grade car parking adjoins a street (other than a main street) or civic space it does not take up more than 40% of the length of the street frontage.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

E2.4

Development on corner lots:

- a. addresses both street frontages;
- b. expresses strong visual elements, including feature building entries.

E2.5

Development incorporates active uses adjacent to a street frontage, civic spaces, public open space or pedestrian thoroughfare.

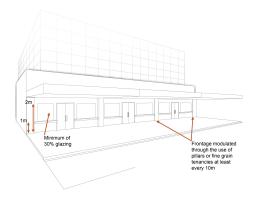
E2.6

The front facade of the building:

- a. is made up of a minimum of 50% windows or glazing between a height of 1m and 2m;
- b. the minimum area of window or glazing is to remain uncovered and free of signage.

Note - This does not apply to Adult stores (1).

Figure - Glazing



E2.7

Individual tenancies do not exceed a frontage length of 20m.

E2.8

Large format retail uses (e.g. showroom⁽⁷⁸⁾, supermarket or discount department store) are sleeved by smaller tenancies (e.g. retail and similar uses).

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

Setbacks

PO₃

Side and rear setbacks are of a dimension to:

- a. cater for required openings, the location of loading docks and landscaped buffers etc;
- b. protect the amenity of adjoining sensitive land uses.

No example provided.

Site area

6 Zones

PO4

The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping.

No example provided.

Building height

PO5

The height of buildings reflect the individual character of the centre.

E5

Building height does not exceed the maximum height identified on Overlay map - Building heights.

Public realm

PO6

Developments incorporating a gross leasable area greater than 3,000m² include a public plaza on-site, that:

- is integrated with adjacent development, in relation to built form, streetscape, landscaping and the street and pedestrian network;
- is directly accessible from adjacent development or tenancies and is easily and conveniently accessible to the public;
- is of a sufficient size and dimensions to cater for passive recreation activities (e.g. alfresco dining and temporary activities etc);
- includes greening (e.g. Landscaping, planter boxes, street trees etc) that contributes to the identity of the centre;
- is lit and has adequate signage for way finding, ensuring adjoining and near by residential uses are not impacted by 'overspill';
- f. is designed to achieve CPTED principles e.g. visible at all times.

Note - For details and examples of civic space requirements refer to Planning scheme policy - Centre and neighbourhood hub design.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

No example provided.

Streetscape

Development contributes to an attractive and walkable street environment through the provision of streetscape features (e.g. footpaths, lighting, bins, furniture, landscaping, pedestrian crossings etc), as outlined in Planning scheme policy - Integrated design.

Editor's note - Additional approvals may be required where works are required within road reserves.

No example provided.

Built form

PO8

Ground floor spaces are designed to enable the flexible re-use of floor area for commercial and retail activities.

E8

The ground floor has a minimum ceiling height of 4.2m.

PO9

Awnings are provided at the ground floor fronting pedestrian footpaths. Awnings:

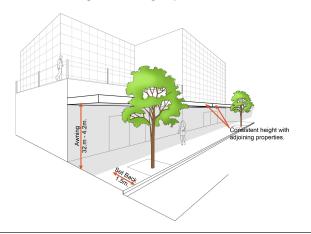
- a. provide adequate protection for pedestrians from solar exposure and inclement weather;
- b. are integrated with the design of the building and the form and function of the street;
- do not compromise the provision of street trees and signage;
- d. ensure the safety of pedestrians and vehicles (e.g. No support poles).

E9

Buildings incorporate an awning that:

- a. is cantilevered;
- b. extends from the face of the building;
- c. has a minimum height of 3.2m and a maximum height of 4.2m above pavement level;
- d. does not extend past a vertical plane of 1.5m inside the kerb line to allow for street trees and regulatory signage;
- e. aligns with adjoining buildings to provide continuous shelter where possible.

Figure - Awning requirements



PO10

No example provided.

All buildings exhibit a high standard of design and construction, which:

- a. adds visual interest to the streetscape (e.g. variation in materials, patterns, textures and colours, cantilevered awning);
- b. enables differentiation between buildings;
- c. contributes to a safe environment;
- incorporates architectural features within the building facade at the street level to create human scale;
- e. treat or break up blank walls that are visible from public areas;
- f. includes building entrances that are readily identifiable from the road frontage, located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- g. facilitate casual surveillance of all public spaces.

PO11

Building entrances:

- a. are readily identifiable from the road frontage;
- b. add visual interest to the streetscape;
- are designed to limit opportunities for concealment;
- d. are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage;
- e. include footpaths that connect with adjoining sites:
- f. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance Outcome.

No example provided.

Movement network

PO12 E12.1

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

Development provides and maintains the connections shown on the following movement figure:

a. Figure 1 - Mango Hill

E12.2

For areas not shown on the above movement figure, no example provided.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the Performance outcome.

Car parking

PO13

The number of car parking spaces is managed to:

- provide for the parking of visitors and employees that is appropriate to the use and the site's proximity to public and active transport options;
- b. not include an oversupply of car parking spaces.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E13

Car parking is provided in accordance with the table below.

Land use	Maximum number of Car Spaces to be Provided	Minimum Number of Car Spaces to be Provided
Non-residential	1 per 30m ² of GFA	1 per 50m² of GFA
Residential - Permanent/long term	N/A	1 per dwelling
Residential - Serviced/short term	3 per 4 dwellings + staff spaces	1 per 5 dwelling + staff spaces

Note - Car parking rates are to be rounded up to the nearest whole number.

Note - Allocation of car parking spaces to dwellings is at the discretion of the developer.

Note - Residential - Permanent/long term includes: Multiple dwelling $^{(49)}$, Relocatable home park $^{(62)}$, Residential care facility $^{(65)}$, Retirement facility $^{(67)}$.

Note - Residential - Services/short term includes: Rooming accommodation⁽⁶⁹⁾ or Short-term accommodation⁽⁷⁷⁾.

Note - The above rates exclude car parking spaces for people with a disability required by Disability Discrimination Act 1992 or the relevant disability discrimination legislation and standards.

PO14

Car parking is designed to avoid the visual impact of large areas of surface car parking on the streetscape.

E14

At-grade car parking:

PO15	 a. does not adjoin a main street or a corner; b. where at-grade car parking adjoins a street (other than a main street) or civic spaces it does not take up more than 40% of the length of the street frontage. No example provided.
Car parking design includes innovative solutions, including on-street parking and shared parking areas. Note - Refer to Planning scheme policy - Integrated design for details and examples of on-street parking.	The example provided.
PO16	E16
The design of car parking areas: a. does not impact on the safety of the external road network; b. ensures the safe movement of vehicles within the site.	All car parking areas are designed and constructed in accordance with Australian Standard AS 2890.1 Parking facilities Part 1: Off-street car parking.
PO17	No example provided.
The safety and efficiency of pedestrian movement is prioritised in the design of car parking areas through providing pedestrian paths in car parking areas that are: a. located along the most direct pedestrian routes between building entrances, car parks and	
adjoining uses;	
 protected from vehicle intrusion through the use of physical and visual separation (e.g. wheel stops, trees etc); 	
c. of a width to allow safe and efficient access for prams and wheelchairs.	
Bicycle parking and end of trip facilities Note - Building work to which this code applies constitutes Major of trip facilities prescribed in the Queensland Development Code	

E18.1

nearest whole number).

Minimum bicycle parking facilities are provided in accordance with the table below (rounded up to the

960

PO18

End of trip facilities are provided for employees

or occupants, in the building or on-site within a reasonable walking distance, and include:

- adequate bicycle parking and storage facilities; and
- ii. adequate provision for securing belongings; and
- iii. change rooms that include adequate showers, sanitary compartments, wash basins and mirrors.
- Notwithstanding a. there is no requirement to provide end of trip facilities if it would be unreasonable to provide these facilities having regard to:
 - the projected population growth and forward planning for road upgrading and development of cycle paths; or
 - ii. whether it would be practical to commute to and from the building on a bicycle, having regard to the likely commute distances and nature of the terrain; or
 - iii. the condition of the road and the nature and amount of traffic potentially affecting the safety of commuters.

Editor's note - The intent of b above is to ensure the requirements for bicycle parking and end of trip facilities are not applied in unreasonable circumstances. For example these requirements should not, and do not apply in the Rural zone or the Rural residential zone etc.

Editor's note - This performance outcome is the same as the Performance Requirement prescribed for end of trip facilities under the Queensland Development Code. For development incorporating building work, that Queensland Development Code performance requirement cannot be altered by a local planning instrument and has been reproduced here solely for information purposes. Council's assessment in its building work concurrence agency role for end of trip facilities will be against the performance requirement in the Queensland Development Code. As it is subject to change at any time, applicants for development incorporating building work should ensure that proposals that do not comply with the examples under this heading meet the current performance requirement prescribed in the Queensland Development Code.

Use	Minimum Bicycle Parking
Residential uses comprised of dwellings	Minimum 1 space per dwelling
All other residential uses	Minimum 1 space per 2 car parking spaces identified in Schedule 7 – car parking
Non-residential uses	Minimum 1 space per 200m2 of GFA

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is a combination of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.2

Bicycle parking is:

- a. provided in accordance with Austroads (2008), Guide to Traffic Management - Part 11: Parking;
- b. protected from the weather by its location or a dedicated roof structure;
- c. located within the building or in a dedicated, secure structure for residents and staff;
- adjacent to building entrances or in public areas for customers and visitors.

Note - Bicycle parking structures are to be constructed to the standards prescribed in AS2890.3.

Note - Bicycle parking and end of trip facilities provided for residential and non-residential activities may be pooled, provided they are within 100 metres of the entrance to the building.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.3

For non-residential uses, storage lockers:

- a. are provide at a rate of 1.6 per bicycle parking space (rounded up to the nearest whole number);
- b. have minimum dimensions of 900mm (height) x 300mm (width) x 450mm (depth).

Note - Storage lockers may be pooled across multiple sites and activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities.

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

E18.4

For non-residential uses, changing rooms:

- a. are provided at a rate of 1 per 10 bicycle parking spaces;
- b. are fitted with a lockable door or otherwise screened from public view;
- c. are provided with shower(s), sanitary compartment(s) and wash basin(s) in accordance with the table below:

Bicycle spaces provided	Male/ Female	Change rooms required	Showers required	Sanitary compartments required	Washbasins required
1-5	Male and female	1 unisex change room	1	1 closet pan	1
6-19	Female	1	1	1 closet pan	1
20 or more	Male	1	1	1 closet pan	1
more	Female	1	2, plus 1 for every 20 bicycle spaces provided thereafter	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking spaces provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter
	Male	1	2, plus 1 for every 20 bicycle spaces provided thereafter	1 urinal and 1 closet pans, plus 1 sanitary compartment at the rate of 1 closet pan or 1 urinal for every 60 bicycle space provided thereafter	1, plus 1 for every 60 bicycle parking spaces provided thereafter

Note - All showers have a minimum 3-star Water Efficiency Labelling and Standards (WELS) rating shower head.

Note - All sanitary compartments are constructed in compliance with F2.3 (e) and F2.5 of BCA (Volume 1).

- d. are provided with:
 - i. a mirror located above each wash basin;
 - ii. a hook and bench seating within each shower compartment;
 - iii. a socket-outlet located adjacent to each wash basin.

Note - Change rooms may be pooled across multiple sites, residential and non-residential activities when within 100 metres of the entrance to the building and within 50 metres of bicycle parking and storage facilities

Editor's note - The examples for end of trip facilities prescribed under the Queensland Development Code permit a local planning instrument to prescribe facility levels higher than the default levels identified in those acceptable solutions. This example is an amalgamation of the default levels set for end of trip facilities in the Queensland Development Code and the additional facilities required by Council.

Loading and servicing

PO19

Loading and servicing areas:

- a. are not visible from any street frontage;
- b. are integrated into the design of the building;
- include screening and buffers to reduce negative impacts on adjoining sensitive land uses;
- d. are consolidated and shared with adjoining sites where possible.

Note - Refer to Planning scheme policy – Centre and neighbourhood hub design.

No example provided.

Waste

PO20

Bins and bin storage area/s are designed, located and managed to prevent amenity impacts on the locality.

E20

Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.

Landscaping and fencing

6 Zones

1 02	21	No example provided.
On		No example provided.
	site landscaping:	
a.	is incorporated into the design of the development;	
b.	reduces the dominance of car parking and servicing areas from the street frontage;	
C.	incorporates shade trees in car parking areas;	
d.	retains mature trees wherever possible;	
e.	contributes to quality public spaces and the microclimate by providing shelter and shade;	
f.	maintains the achievement of active frontages and sightlines for casual surveillance.	
	te - All landscaping is to accord with Planning scheme policy tegrated design.	
PO	22	No example provided.
	veillance and overlooking are maintained between road frontage and the main building line.	
Lig	hting	
Ligi PO2		No example provided.
PO2		No example provided.
Ligh illun max on s	ating is designed to provide adequate levels of nination to public and communal spaces to kimise safety while minimising adverse impacts	No example provided.
Ligh illun max on s	ating is designed to provide adequate levels of nination to public and communal spaces to kimise safety while minimising adverse impacts sensitive land uses.	No example provided. No example provided.
Lighillum max on s	ating is designed to provide adequate levels of nination to public and communal spaces to kimise safety while minimising adverse impacts sensitive land uses.	
Lighillum max on s	ating is designed to provide adequate levels of nination to public and communal spaces to dimise safety while minimising adverse impacts sensitive land uses. The amenity of the area and adjacent sensitive land is are protected from the impacts of dust, odour, micals and other environmental nuisances.	
PO2 Light illum max on s Am PO2 The use che	ating is designed to provide adequate levels of nination to public and communal spaces to dimise safety while minimising adverse impacts sensitive land uses. enity amenity of the area and adjacent sensitive land is are protected from the impacts of dust, odour, micals and other environmental nuisances.	

Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.

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.

PO26

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

E26.1

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E26.2

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.
- do not remove existing or prevent future active transport routes or connections to the street network;
- 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.

Hazardous chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E27.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or>23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E27.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 0.5 x 10-6/year.

E27.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E27.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5 x 10-6/year.

E27.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

Dangerous Dose

- a. For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or>23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E27.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year.

PO28

Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early stages of a fire situation and notify a designated person.

E28

Buildings and package stores containing fire-risk hazardous chemicals are provided with 24 hour monitored fire detection system for early detection of a fire event.

PO29

Common storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) that are adequate to contain releases, including fire fighting media.

E29

Storage areas containing packages of flammable and toxic hazardous chemicals are designed with spill containment system(s) capable of containing a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes.

PO30

E30.1

Storage and handling areas, including manufacturing areas, containing hazardous chemicals in quantities greater than 2,500L or kg within a Local Government "flood hazard area" are located and designed in a manner to minimise the likelihood of inundation of flood waters from creeks, rivers, lakes or estuaries.

The base of any tank with a WC >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively:

- a. bulk tanks are anchored so they cannot float if submerged or inundated by water; and
- b. tank openings not provided with a liquid tight seal, i.e. an atmospheric vent, are extended above the relevant flood height level.

E30.2

The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level.

Clearing of habitat trees where not located within the Environmental areas overlay map

PO31

- Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.
- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

No example provided.

Works criteria

PO32 No example provided.

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

Access

PO33

Development provides functional and integrated car parking and vehicle access, that:

- prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.);
- b. provides safety and security of people and property at all times;
- c. does not impede active transport options;
- d. does not impact on the safe and efficient movement of traffic external to the site;
- e. where possible vehicle access points are consolidated and shared with adjoining sites.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

No example provided.

PO34

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

PO35

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- c. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E35.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E35.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E35.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E35.4

The development layout allows forward vehicular access to and from the site.

PO36

Safe access is provided for all vehicles required to access the site.

E36.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:
 - AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
 - ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities;
 - iii. Planning scheme policy Integrated design;
 - iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E36.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- a. AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;
- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E36.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E36.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO37

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

E37

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO38

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E38.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E38.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO39

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- a. access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement:
- c. adequate on street parking;
- d. stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;
- f. utility services location;
- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

No example provided.

PO40

E40.1

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m² GFA;
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;
- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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.

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E40.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E40.3

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

PO41 E41

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

New intersection spacing (centreline – centreline) along a through road conforms with the following:

- a. where the through road provides an access function;
 - i. intersecting road located on the same side= 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- Where the through road provides a collector or sub-arterial function:
 - i. intersecting road located on the same side= 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:
 - i. intersecting road located on the same side = 300 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the

deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO42

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding

E42

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Situation Minimum construction Frontage road Construct the verge unconstructed or gravel adjoining the road only; development and the carriageway (including OR development side kerb and channel) to a Frontage road sealed minimum sealed width but not constructed* to containing near side Planning scheme policy parking lane (if - Integrated design required), cycle lane (if standard; required), 2 travel lanes plus 1.5m wide (full OR depth pavement) gravel shoulder and table Frontage road partially drainage to the opposite constructed* to Planning side. scheme policy -Integrated design The minimum total travel standard. lane width is: 6m for minor roads: 7m for major roads.

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy

- Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO43

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E43.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E43.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E43.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO44

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

E44.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E44.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E44.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E44.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel. Note - Refer to QUDM for recommended average flow velocities. **PO45** E45 Provide measures to properly manage surface flows The stormwater drainage system is designed and for the 1% AEP event (for the fully developed constructed in accordance with Planning scheme catchment) draining to and through the land to ensure policy - Integrated design. no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development. **PO46** No example provided. Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises. Note - Refer to Planning scheme policy - Integrated design for details Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome. Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure. **PO47** No example provided. Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site. Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome. **PO48** No example provided.

Where development:

- a. is for an urban purpose that involves a land area of 2500m² or greater; and
- b. will result in:
 - i. 6 or more dwellings; or
 - ii. an impervious area greater than 25% of the net developable area.

stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives.

Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management.

Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C).

PO49

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

E49

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

	Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system. Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.
PO50 Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.	No example provided.
PO51 Council is provided with accurate representations of the completed stormwater management works within residential developments.	 "As Built" drawings and specifications of the stormwater management devices certified by an RPEQ is provided. Note - Documentation is to include: a. photographic evidence and inspection date of the installation of approved underdrainage; b. copy of the bioretention filter media delivery dockets/quality certificates confirming the materials comply with specifications in the approved Stormwater Management Plan; c. date of the final inspection.

Site works and construction management		
PO52	No example provided.	
The site and any existing structures are maintained in a tidy and safe condition.		
PO53	E53.1	
All works on-site are managed to: a. minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light; b. minimise as far as possible, impacts on the natural environment;	Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following:	
c. ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises;	a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions;	

d. avoid adverse impacts on street trees and their critical root zone.

- stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind;
- stormwater discharge rates do not exceed pre-existing conditions;
- d. minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E53.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E53.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E53.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO54

E54

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO55

E55.1

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- a. the aggregate volume of imported or exported material is greater than 1000m³; or
- the aggregate volume of imported or exported material is greater than 200m³ per day; or
- c. the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

E55.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E55.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E55.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E55.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E55.6

Access to the development site is obtained via an existing lawful access point.

PO56

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details

E56

At completion of construction all disturbed areas of the site are to be:

- topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO57

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E57

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO58

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

E58.1

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E58.2

Disposal of materials is managed in one or more of the following ways:

- a. all cleared vegetation, declared weeds, stumps, rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or
- b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site.

Note - The chipped vegetation must be stored in an approved location.

PO59

All development works are carried out at times which minimise noise impacts to residents.

E59

All development works are carried out within the following times:

- a. Monday to Saturday (other than public holidays) between 6:30am and 6:30pm on the same day;
- b. no work is to be carried out on Sundays or public holidays.

Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties.

PO60

Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

No example provided.

Earthworks

PO61

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- short and long-term slope stability;
- c. soft or compressible foundation soils;
- d. reactive soils;
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E61.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E61.2

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E61.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E61.4

All filling or excavation is contained on-site and is free draining.

E61.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use:
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E61.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

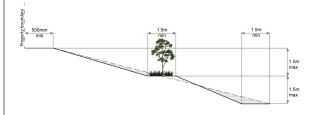
PO62

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E62

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment



PO63

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

E63.1

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E63.2

Filling or excavation that would result in any of the following is not carried out on-site:

PO66	Filling and excavation undertaken on the development site are shaped in a manner which does not:
PO65 Filling or excavation does not result in: a. adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway; b. increased flood inundation outside the site; c. any reduction in the flood storage capacity in the floodway; d. any clearing of native vegetation. Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements.	No example provided.
PO64 Filling or excavation does not result in land instability. Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance.	No example provided.
Note - Public sector entity is defined in Schedule 2 of the Act.	 a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm; b. an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken; c. prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes. Note - Public sector entity is defined in Schedule 2 of the Act. Note - All building work covered by QDC MP1.4 is excluded from this provision.

Filling or excavation on the development site is undertaken in a manner which does not create or accentuate problems associated with stormwater flows and drainage systems on land adjoining the site.

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- b. redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - i. concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO67

All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

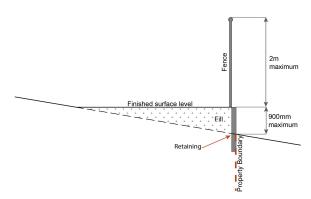
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E67

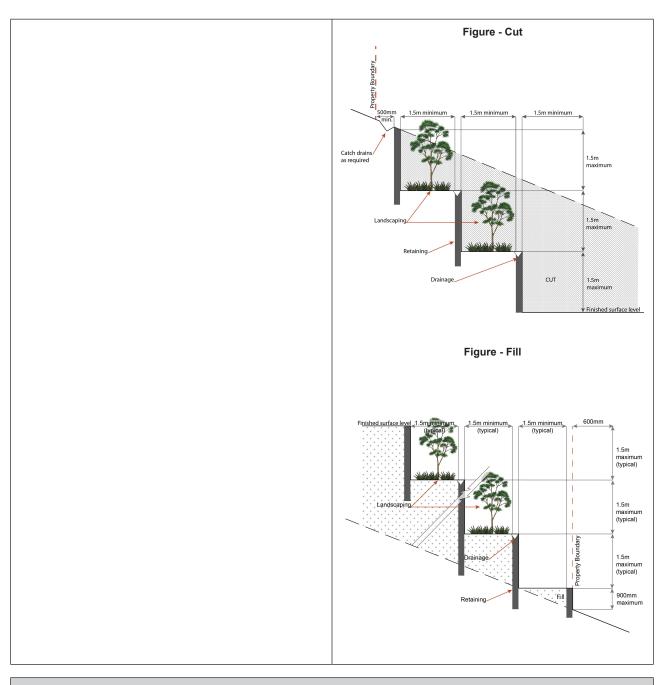
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;

Figure - Retaining on boundary



- c. where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.



Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme; or
 - iii. material change of use for a Tourist park⁽⁸⁴⁾ with accommodation in the form of caravans or tents; or
 - material change of use for outdoor sales (54), outdoor processing or outdoor storage where involving combustible materials.

AND

- b. none of the following exceptions apply:
 - the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO68

Development incorporates a fire fighting system that:

- satisfies the reasonable needs of the fire fighting entity for the area;
- is appropriate for the size, shape and topography of the development and its surrounds:
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

E68.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations.*

Note - For this requirements for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and
 Part 3.2.2.1, with the exception that for Tourist parks (84)
 or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans;
 - for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- d. in regard to fire hydrant accessibility and clearance requirements Part 3.5 and, where applicable, Part 3.6.

E68.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;

- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E68.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO69

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

E69

For development that contains on-site fire hydrants external to buildings:

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - the overall layout of the development (to scale);
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - external hydrants and hydrant booster points;
 - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO70

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E70

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO71

The scale and intensity of the Home based business⁽³⁵⁾:

- is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape or road safety;
- c. does not adversely impact on the amenity of the adjoining and nearby premises;
- remains ancillary to the residential use of the dwelling houseCould not findID-2693465-5150;
- does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- ensures employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E71.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E71.2

The home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure⁽⁴³⁾, Substation⁽⁸⁰⁾ and Utility installation⁽⁸⁶⁾

P72

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;

E72.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;

- d. located behind the main building line;
- e. below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.
- c. have a similar height, bulk and scale to the surrounding fabric;
- have horizontal and vertical articulation applied to all exterior walls.

E72.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO73

Infrastructure does not have an impact on pedestrian health and safety.

E73

Access control arrangements:

- a. do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO74

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- a. generates no audible sound at the site boundaries where in a residential setting; or
- b. meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E74

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO75

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other dwelling units⁽²³⁾ and centre uses;
- c. accessible and readily identifiable for residents, visitors and emergency services;
- d. located to not compromise active frontages.

E75

A dwelling has a clearly defined, private outdoor living space that is:

a. as per the table below;

Use	Minimum Area	Minimum Dimension
Ground floor dwellings		
All dwelling types	16m²	4m
Above ground floor dwellings		
1 bedroom or studio,	8m²	2.5m
2 or more bedrooms	12m²	3.0m

- b. accessed from a living area;
- c. sufficiently screened or elevated for privacy;
- ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- e. balconies orientate to the street;
- f. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas).

Note - Areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided). External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

PO76

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E76

The dwelling:

- a. includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses;
- clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services;
- c. is provided with a separate entrance to that of any non-residential use on the site;
- d. where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

Service station

Note - Where the use specific outcomes relating to Service stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO77

Service stations are located, designed and orientated to:

E77.1

Service stations are located:

- establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- d. ensure the amenity of adjoining properties is protected;
- e. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;
- f. minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area. (e.g. high order road in urban or next generation neighbourhood, likely to be noisy and not like suburban);
- g. provide ancillary uses that meet the convenience needs of users.

- a. on the periphery of the Local centre, with at least one boundary adjoining land zoned other than Centre zone;
- b. on the corner lot of an arterial or sub-arterial road.

E77.2

Service stations are designed and orientated on site to:

- a. include a landscaping strip having a minimum depth of 1m adjoining all road frontages;
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;
- c. include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO78

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

E78.1

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E78.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO79

E79

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

PO80

Telecommunications facilities⁽⁸¹⁾ do not conflict with lawful existing land uses both on and adjoining the site.

E80

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO81

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures:
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped:
- otherwise consistent with the amenity and character of the zone and surrounding area.

E81.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

E81.2

In all other areas towers do not exceed 35m in height.

E81.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E81.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

E81.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E81.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

PO82

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

E82

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

PO83

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

E83

All equipment comprising the Telecommunications facility⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO84

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- a. is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- protects buildings and infrastructure from the effects of acid sulfate soils.

E84

Development does not involve:

- a. excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- c. Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;
- f. Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- g. Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO85

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

 a. the quality and integrity of the biodiversity and ecological values inherent to a High Value Area No example provided.

and a Value Offset Area is maintained and not lost or degraded: on-site mitigation measures, mechanisms or b. processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy - Environmental areas*. * Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014. **PO86** No example provided. Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by: retaining habitat trees: a. b. providing contiguous patches of habitat; C. provide replacement and rehabilitation planting to improve connectivity; d. avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure. Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy - Environmental areas. Vegetation clearing and habitat protection **PO87** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO88** No example provided. Development does not result in the net loss or degradation of habitat value in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value,

development will:

b. pro even Place. universes	habilitate, revegetate, restore and enhance area to ensure it continues to function as a able and healthy habitat area; ovide replacement fauna nesting boxes in the rent of habitat tree loss in accordance with anning scheme policy - Environmental areas; adertake rehabilitation, revegetation and storation in accordance with the South East ucensland Ecological Restoration Framework.	
PO89		No example provided.
	oment ensures safe, unimpeded, convenient going wildlife movement and habitat tivity by:	
b. ave par c. prod. pro	oviding contiguous patches of habitat; oiding the creation of fragmented and isolated atches of habitat; oviding wildlife movement infrastructure; oviding replacement and rehabilitation planting improve connectivity.	
Vegetat	tion clearing and soil resource stability	
PO90		No example provided.
Develop	oment does not:	
b. lea	sult in soil erosion or land degradation; ave cleared land exposed for an unreasonable riod of time but is rehabilitated in a timely anner.	
Vegetat	tion clearing and water quality	
PO91		No example provided.
groundy	oment maintains or improves the quality of water and surface water within, and ream, of a site by:	
b. ave ma c. add fro use	isuring an effective vegetated buffers and tbacks from waterbodies is retained to achieve atural filtration and reduce sediment loads; roiding or minimising changes to landforms to aintain hydrological water flows; lopting suitable measures to exclude livestock or entering a waterbody where a site is being ated for animal husbandry ⁽⁴⁾ and animal reping ⁽⁵⁾ activities.	
	oment minimises adverse impacts of ater run-off on water quality by:	No example provided.

a. minimising flow velocity to reduce erosion; minimising hard surface areas; b. C. maximising the use of permeable surfaces; d. incorporating sediment retention devices; minimising channelled flow. e. Vegetation clearing and access, edge effects and urban heat island effects **PO93** No example provided. Development retains safe and convenient public access in a manner that does not result in the adverse edge effects or the loss or degradation of biodiversity values within the environment. **PO94** No example provided. Development minimises potential adverse 'edge effects' on ecological values by: providing dense planting buffers of native a. vegetation between a development and environmental areas; b. retaining patches of native vegetation of greatest possible size where located between a development and environmental areas; C. restoring, rehabilitating and increasing the size of existing patches of native vegetation; d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors; landscaping with native plants of local origin. e. Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow. **PO95** No example provided. Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by: pervious surfaces; a. providing deeply planted vegetation buffers and green linkage opportunities; landscaping with local native plant species to C. achieve well-shaded urban places; increasing the service extent of the urban forest

canopy.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO96

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

No example provided.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra Charter

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO97

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building:
- be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;
- e. incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building;
- retain public access where this is currently provided.

E97

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

PO98

Demolition and removal is only considered where:

No example provided.

- a report prepared by a suitably qualified conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or
- demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- c. limited demolition is performed in the course of repairs, maintenance or restoration; or
- demolition is performed following a catastrophic event which substantially destroys the building or object.

PO99

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply)

PO100

Development within a Pumping station buffer is located, designed and constructed to:

- ensure that odour or other air pollutant impacts on the amenity of the development met the air quality of objectives in the Environmental Protection (Air) Policy 2008;
- b. ensure that noise impacts on the amenity of the development met the indoor noise objectives set out in the Environmental Protection (Noise) Policy 2008.

E100

Development does not involve the construction of any buildings or structures within a Pumping station buffer.

PO101

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified

E101

Development does:

- a. not result in the removal of a significant tree;
- b. not occur within 20m of a protected tree;
- involve pruning of a tree in accordance with Australian Standard AS 4373-2007 – Pruning of Amenity Trees.

arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.				
	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.			
PO1	02	No example provided.		
Dev	elopment:			
a. b.	minimises the risk to persons from overland flow; does not increase the potential for damage from overland flow either on the premises or other premises, public land, watercourses, roads or infrastructure.			
PO1	03	No example provided.		
Dev	elopment:			
a. b.	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; does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property.			
Eng doe	e - A report from a suitably qualified Registered Professional ineer Queensland is required certifying that the development s not increase the potential for significant adverse impacts an upstream, downstream or surrounding premises.			
	e - Reporting to be prepared in accordance with Planning eme policy – Flood hazard, Coastal hazard and Overland			
PO1	04	No example provided.		
Development does not:				
a. b.	directly, indirectly or cumulatively cause any increase in overland flow velocity or level; increase the potential for flood damage from overland flow either on the premises or other premises, public lands, watercourses, roads 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.

PO105

Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.

E105

Development ensures that a hazardous chemical is not located or stored in an Overland flow path area.

Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

PO106

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot.

E106

Development which is not in a Rural zone that an 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.

PO107

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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

E107.1

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.

E107.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO108

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over:

- a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- an overland flow path where it crosses more than one premises;
- 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)

PO109

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;
- maintenance and replacement costs are minimised.

E109

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

PO110

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- a. impact on fauna habitats;
- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

E110

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.

Scenic amenity - Regionally significant (Hills) and Locally important (Coast) (refer Overlay map - Scenic amenity to determine if the following assessment criteria apply)

PO111

Landscaping

E111

Where located in the Locally Important (Coast) scenic amenity overlay:

- a. complements the coastal landscape character and amenity;
- b. has known resilience and robustness in the coastal environment;

Fences and walls:

- do not appear visually dominant or conspicuous within its setting;
- reduce visual appearance through the use of built form articulation, setbacks, and plant screening;
- c. use materials and colours that are complementary to the coastal environment.

Building design responds to the bayside location and complements the particular bayside character and amenity by adopting and incorporating a range of architectural character elements.

Vegetation that contributes to bayside character and identity are:

- a. retained;
- b. protected from development diminishing their significance.

- a. landscaping comprises indigenous coastal species;
- b. fences and walls are no higher than 1m; and
- c. existing pine trees, palm trees, mature fig and cotton trees are retained.
- d. where over 12m in height, the building design includes the following architectural character elements:
 - i. curving balcony edges and walls, strong vertical blades and wall planes;
 - balcony roofs, wall articulation expressed with different colours, curves in plan and section, and window awnings;
 - iii. roof top outlooks, tensile structures as shading devices;
 - iv. lightweight structures use white frame elements in steel and timber, bold colour contrast.

Movement network figure

Figure 1 - Mango Hill Sub Arterial Local access --- Local access - indicative District collector Local collector Pedestrian connection Registered Parcels Road Reserves Waterways Rail Station Parks and Open Space Parks Existing Proposed Proposed Local Landscape Bufferring
Mixed Industry and Business

6.2.1.6 Specialised centre precinct

6.2.1.6.1 Purpose - Specialised centre precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Specialised centre precinct:
 - a. Development is of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.
 - Note Refer to the centre network identified in Table 6.2.1.1 Moreton Bay centres network.
 - b. Development is contained within precinct boundaries and does not result in the expansion of Specialised centre precincts into adjoining zones or the establishment of new Specialised centre precincts.
 - c. Specialised centres specifically accommodate large bulky goods retail activities, which due to their size, location or servicing requirements, are not located within the region's other centre precincts. Uses not of a bulky goods nature only service the convenience needs of users while on site.
 - d. Service stations:
 - i. establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
 - ii. establish in locations that will not have a negative impact on the street environments intended to include active frontages;
 - iii. ancillary uses or activities only service the convenience needs of users.
 - e. Adverse impacts on the amenity of surrounding residential uses are minimised by mitigating noise, odour and air quality impacts on residents to a level consistent with the location within or adjoining a specialised centre.
 - f. Facilities and infrastructure are provided to improve pedestrian connectivity and walkability between key destinations within and external to the site through public realm improvements.
 - g. Development ensures the safety, comfort and enjoyment of residents, visitors and workers.
 - h. The design, siting and construction of buildings within a specialised centre:
 - i. contributes to a high quality centre consistent with the desired character of the centre and surrounding area;
 - ii. maintains a human scale, through appropriate building heights and form;
 - iii. provides attractive frontages that address internal and external public spaces and adjoining arterial roads;
 - iv. provides for active and passive surveillance of the public spaces and road frontages;
 - v. ensures parking, manoeuvring and servicing areas are designed, located and aesthetically treated to not be visually dominant features from the streetscape and public spaces.
 - i. General works associated with the development achieves the following:

- new development is provided with a high standard of services to meet and support the current and future needs of users of the site, including roads, street lighting services, telecommunications and reticulated electricity (underground wherever possible), water and sewerage (where available);
- ii. the development manages stormwater to:
 - A. ensure the discharge of stormwater does not adversely affect the quality, environmental values or ecosystem functions of downstream receiving waters;
 - B. prevent stormwater contamination and the release of pollutants;
 - C. maintain or improve the structure and condition of drainage lines and riparian areas;
 - D. avoid off-site adverse impacts from stormwater.
- iii. the development does not result in unacceptable impacts on the capacity and safety of the external road network;
- iv. the development ensures the safety, efficiency and useability of access ways and parking areas:
- v. site works including earthworks are managed to be safe and have minimal impacts on adjoining or adjacent premises, the streetscape or the environment.
- j. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- k. Noise generating uses are designed, sited and constructed to minimise the transmission of noise to appropriate levels and do not cause environmental harm or nuisance.
- Noise sensitive uses are designed, sited and constructed so as not to be subject to unacceptable levels of noise.
- m. Development avoids areas subject to constraint, limitation, or environmental value. Where development cannot avoid these identified areas, it responds by:
 - i. adopting a 'least risk, least impact' approach when designing, siting and locating development in any area subject to a constraint, limitation or environmental value 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. when located within a Water buffer area, complying with the Water Quality Vision and Objectives contained in the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments 2012.
 - iv. maintaining, restoring and rehabilitating environmental values, including natural, ecological, biological, aquatic, hydrological and amenity values, and enhancing these values through the provision of planting and landscaping, and facilitating safe wildlife movement and connectivity through:
 - A. the provision of replacement, restoration, rehabilitation planting and landscaping;
 - B. the location, design and management of development to avoid or minimise adverse impacts on ecological systems and processes;
 - C. the requiring of environmental offsets in accordance with the Environmental Offsets Act 2014.
 - v. protecting native species and protecting and enhancing species habitat;
 - vi. protecting and preserving the natural, aesthetic, architectural historic and cultural values of significant trees, places, objects and buildings of heritage and cultural significance;
 - vii. establishing effective separation distances, buffers and mitigation measures associated with identified infrastructure to minimise adverse effects on sensitive land uses from odour, noise, dust and other nuisance generating activities;
 - viii. establishing, maintaining and protecting appropriate buffers to waterways, wetlands, native vegetation and significant fauna habitat;

- ix. ensuring it promotes and does not undermine the ongoing viability, integrity, operation, maintenance and safety of identified infrastructure;
- x. ensuring effective and efficient disaster management response and recovery capabilities;
- xi. where located in an overland flow path:
- xii. A. development siting, built form, layout and access responds to the risk presented by the overland flow and minimises risk to personal safety;
 - B. development is resilient to the impacts of overland flow by ensuring the siting and design accounts for the potential risks to property associated with the overland flow;
 - C. development does not impact on the conveyance of the overland flow for any event up to and including the 1% AEP for the fully developed upstream catchment;
 - D. development directly, indirectly and cumulatively avoid an increase in the severity of overland flow and potential for damage on the premises or other premises, public lands, watercourses, roads or infrastructure.
- n. Development in the Specialised centre precinct is for one or more of the uses identified below:

Caretaker's accommodation ⁽¹⁰⁾	• Garden centre ⁽³¹⁾	Outdoor sales ⁽⁵⁴⁾
 Car wash⁽¹¹⁾ Emergency services⁽²⁵⁾ 	Hardware and trade supplies ⁽³²⁾	• Showroom ⁽⁷⁸⁾

o. Development in the Specialised centre precinct does not include one or more of the following uses:

•	Air services ⁽³⁾	• Hotel ⁽³⁷⁾	•	Resort complex ⁽⁶⁶⁾
•	Animal husbandry ⁽⁴⁾	 Intensive animal industry⁽³⁹⁾ 	•	Retirement facility ⁽⁶⁷⁾
•	Animal keeping ⁽⁵⁾	• Intensive horticulture ⁽⁴⁰⁾	•	Roadside stall ⁽⁶⁸⁾
•	Aquaculture ⁽⁶⁾	Low impact industry (42)	•	Rooming accommodation ⁽⁶⁹⁾
•	Bar ⁽⁷⁾	Major sport, recreation	•	Rural industry ⁽⁷⁰⁾
•	Brothel ⁽⁸⁾	and entertainment facility ⁽⁴⁴⁾		Rural workers'
•	Cemetery ⁽¹²⁾	• Market ⁽⁴⁶⁾		accommodation ⁽⁷¹⁾
•	Child care centres ⁽¹³⁾	Marine industry ⁽⁴⁵⁾	•	Sales office ⁽⁷²⁾
•	Club ⁽¹⁴⁾	Medium impact	•	Service industry ⁽⁷³⁾
•	Community care centre ⁽¹⁵⁾	industry ⁽⁴⁷⁾	•	Shop ⁽⁷⁵⁾ - if for a supermarket, department
		Motor sport facility ⁽⁴⁸⁾		or discount department store or having a gfa less
	Community residence ⁽¹⁶⁾	Multiple dwelling ⁽⁴⁹⁾		than 500m ²
	Community use ⁽¹⁷⁾			

	(40)		/FA\		(76)
•	Crematorium ⁽¹⁸⁾	•	Nature-based tourism ⁽⁵⁰⁾	•	Shopping centre ⁽⁷⁶⁾ - if including a supermarket,
•	Cropping ⁽¹⁹⁾	•	Nightclub entertainment facility ⁽⁵¹⁾		department or discount department store or a
•	Detention facility ⁽²⁰⁾	•	Non-resident workforce		shop ⁽⁷⁵⁾ having a gfa less than 500m ²
•	Dwelling unit ⁽²³⁾		accommodation ⁽⁵²⁾		Short-term
•	Dual occupancy ⁽²¹⁾	•	Office ⁽⁵³⁾		accommodation ⁽⁷⁷⁾
•	Dwelling house ⁽²²⁾	•	Outdoor sport and recreation ⁽⁵⁵⁾	•	Special industry ⁽⁷⁹⁾
•	Educational			•	Theatre ⁽⁸²⁾
	Establishment ⁽²⁴⁾	•	Parking station ⁽⁵⁸⁾	•	Tourist attraction ⁽⁸³⁾
•	Extractive industry ⁽²⁷⁾	•	Permanent plantation ⁽⁵⁹⁾		
•	Food and drink outlet ⁽²⁸⁾	•	Port services ⁽⁶¹⁾		Tourist park ⁽⁸⁴⁾
	 if including a drive through 	•	Relocatable home	•	Transport depot ⁽⁸⁵⁾
	· ·		park ⁽⁶²⁾	•	Warehouse ⁽⁸⁸⁾
	Function facility ⁽²⁹⁾	•	Renewable energy	•	Winery ⁽⁹⁰⁾
•	Health care services (29)		facility ⁽⁶³⁾		•
•	High impact industry ⁽³⁴⁾	•	Research and technology industry ⁽⁶⁴⁾		
•	Home based business ⁽³⁵⁾	•	Residential care facility ⁽⁶⁵⁾		
•	Hospital ⁽³⁶⁾		•		

p. Development not listed in the tables above may be considered on its merits where it reflects and supports the outcomes of the zone.

Part G - Criteria for assessable development - Specialised centre 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 G, Table 6.2.1.6.1 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 6.2.1.6.1 Assessable development - Specialised centre precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes	
General criteria		
Centre network and function		

PO1 Uses

Uses and activities:

- provide only for large bulky goods retail activities; or provide only for the immediate needs of users while on-site and do not provide for the day-to-day convenience needs of customers;
- b. are of a size, scale and range of services commensurate with the role and function of this precinct within the centres network.

Note - Refer to Moreton Bay centres network Table 6.2.1.1.

E1.1

Food and drink outlets (28):

- are located internally within large bulky goods tenancies, and do not have an external frontage;
- b. are ancillary and subordinate to the large bulky goods activities;
- c. have the same opening hours as the large bulky goods tenancy.

E1.2

All other uses, no example provided.

Active frontage

PO₂

Buildings and individual tenancies address street frontages and other areas of pedestrian movement.

No example provided.

Setbacks

PO₃

Side and rear setbacks are of a dimension to:

- a. cater for required openings, the location of loading docks and landscaped buffers etc.;
- b. protect the amenity of adjoining sensitive land

No example provided.

Site area

PO4

The development has sufficient area and dimensions to accommodate required buildings and structures, vehicular access, manoeuvring and parking and landscaping.

No example provided.

Building height

PO₅

The height of buildings reflect the individual character of the centre.

E5

Building height does not exceed the maximum height identified on Overlay map - Building heights.

Built form

PO6

Awnings are provided at the ground floor fronting pedestrian footpaths. Awnings:

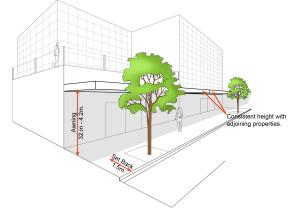
- a. provide adequate protection for pedestrians from solar exposure and inclement weather;
- are integrated with the design of the building and the form and function of the street;
- c. are compatible with awnings on adjoining buildings where possible.

E6

Buildings incorporate an awning that:

- a. is cantilevered;
- b. extends from the face of the building;
- c. has a minimum height of 3.2m and not more than 4.2m above pavement level;
- does not extend past a vertical plane of 1.5m inside the kerb line to allow for street trees and regulatory signage;
- e. aligns with adjoining buildings to provide continuous shelter where possible.

Figure - Awning requirements



P07

All buildings exhibit a high standard of design and construction, which:

- adds visual interest to the streetscape
 (e.g.variation in materials, patterns, textures and colours, a consistent building line, blank walls that are visible from public places are treated to not negatively impact the surrounding amenity);
- contributes to a safe environment (e.g. through the use of lighting and not resulting in concealed recesses or potential entrapment areas);
- c. incorporates architectural features within the building facade at the street level to create human scale.

No example provided.

PO8

No example provided.

Building entrances:

- a. are readily identifiable from the road frontage;
- b. add visual interest to the streetscape:
- are designed to limit opportunities for concealment;
- d. are located and oriented to favour active and public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites;
- e. Include footpaths that connect with adjoining sites;
- f. provide a dedicated, sealed pedestrian footpath between the street frontage and the building entrance.

Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this Performance Outcome.

Movement network

PO9

Development is designed to connect to and form part of the surrounding neighbourhood by providing interconnected streets, pedestrian and cyclist pathways to adjoining development, nearby centres, neighbourhood hubs, community facilities, public transport nodes and open space.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the above outcome.

E9.1

Development provides and maintains the connections shown on the following movement figure:

a. Figure 1 - Morayfield - Anderson Road

E9.2

For areas not shown on the above movement figure, no example provided.

Note - Refer to Planning scheme policy - Neighbourhood design for guidance on achieving the Performance outcome.

Car parking

PO10

The provision of car parking spaces is:

- a. appropriate for the use;
- b. avoids an oversupply of car parking spaces.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E10

Car parking is provided in accordance with Schedule 7 - Car parking.

Note - The above rates exclude car parking spaces for people with a disability required by Disability Discrimination Act 1992 or the relevant disability discrimination legislation and standards.

6 Zones

PO	11	No example provided.	
	parking is designed to avoid the visual impact of e areas of surface car parking.		
PO	12	No example provided.	
Car parking design includes innovative solutions, including on-street parking and shared parking areas.			
Note - Refer to Planning scheme policy - Integrated design for details and examples of on-street parking.			
PO	13	E13	
The	design of car parking areas:	All car parking areas are designed and constructed	
a.	does not impact on the safety of the external road network;	in accordance with Australian Standard AS 2890.1 Parking facilities Part 1: Off-street car parking.	
b.	ensures the safe movement of vehicles within the site;		
C.	interconnects with car parking areas on adjoining sites wherever possible.		
PO	14	No example provided.	
prio	safety and efficiency of pedestrian movement is ritised in the design of car parking areas through riding pedestrian paths in car parking areas that		
a.	located along the most direct pedestrian routes between building entrances, car parks and adjoining uses;		
b.	protected from vehicle intrusion through the use of physical and visual separation (e.g. wheel stops, trees etc);		
C.	are of a width to allow safe and efficient access for prams and wheelchairs.		
Loa	ding and servicing		
PO	15	No example provided.	
Loa	ding and servicing areas:		
a.	are not visible from any street frontage;		
b.	are integrated into the design of the building;		

C.	include screening and buffers to reduce negative impacts on adjoining sensitive land uses;	
d.	are consolidated and shared with adjoining sites where possible.	
	te - Refer to Planning scheme policy - Centre and ghbourhood hub design	
Was	ste	
PO	16	E16
	s and bin storage area/s are designed, located and naged to prevent amenity impacts on the locality.	Development is designed to meet the criteria in the Planning scheme policy - Waste and is demonstrated in a waste management program.
Lan	dscaping and fencing	
PO	17	No example provided.
On-	site landscaping:	
a.	is incorporated into the design of the development;	
b.	reduces the dominance of car parking and servicing areas from the street frontage;	
c.	incorporates shade trees in car parking areas;	
d.	retains mature trees wherever possible;	
e.	contributes to quality public spaces and the microclimate by providing shelter and shade;	
f.	maintains the achievement of active frontages and sightlines for casual surveillance.	
	te - All landscaping is to accord with Planning scheme policy - egrated design.	
PO	18	No example provided.
	veillance and overlooking are maintained between road frontage and the main building line.	
Lig	hting	
PO	19	No example provided.

Lighting is designed to provide adequate levels of illumination to public and communal spaces to maximise safety while minimising adverse impacts on sensitive land uses.

Amenity

PO20

The amenity of the area and adjacent sensitive land uses are protected from the impacts of dust, odour, chemicals and other environmental nuisances.

No example provided.

Noise

PO21

Noise generating uses do not adversely affect existing or potential noise sensitive uses.

Note - The use of walls, barriers or fences that are visible from or adjoin a road or public area are not appropriate noise attenuation measures unless adjoining a motorway, arterial road or rail line.

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.

No example provided.

PO22

Sensitive land uses are provided with an appropriate acoustic environment within designated external private outdoor living spaces and internal areas while:

- contributing 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. maintaining 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.

E22.1

Development is designed to meet the criteria outlined in the Planning Scheme Policy – Noise.

E22.2

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.

- do not remove existing or prevent future active transport routes or connections to the street network;
- 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.

Hazardous chemicals

Note - To assist in demonstrating compliance with the following performance outcomes, a Hazard Assessment Report may be required to be prepared and submitted by a suitably qualified person in accordance with 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'.

Note - Terms used in this section are defined in 'State Planning Policy Guideline - Guidance on development involving hazardous chemicals'

PO23

Off sites risks from foreseeable hazard scenarios involving hazardous chemicals are commensurate with the sensitivity of the surrounding land use zones.

E23.1

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of land zoned for vulnerable or sensitive land uses as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - i. AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E23.1 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 0.5 x 10-6/year.

E23.2

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of a commercial or community activity land use zone as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- b. For any hazard scenario involving fire or explosion:
 - i. 7kPa overpressure;
 - ii. 4.7kW/m2 heat radiation.

If criteria E23.2 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 5 x 10-6/year.

E23.3

Off site impacts or risks from any foreseeable hazard scenario does not exceed the dangerous dose at the boundary of an industrial land use zone as described below:

Dangerous Dose

- For any hazard scenario involving the release of gases or vapours:
 - AEGL2 (60minutes) or if not available ERPG2;
 - ii. An oxygen content in air <19.5% or >23.5% at normal atmospheric pressure.
- For any hazard scenario involving fire or explosion:
 - i. 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E23.3 (a) or (b) cannot be achieved, then the risk of any foreseeable hazard scenario shall not exceed an individual fatality risk level of 50 x 10-6/year. **PO24** E24 Buildings and package stores containing fire-risk Buildings and package stores containing fire-risk hazardous chemicals are designed to detect the early hazardous chemicals are provided with 24 hour stages of a fire situation and notify a designated person. monitored fire detection system for early detection of a fire event. **PO25 E25** Common storage areas containing packages of Storage areas containing packages of flammable flammable and toxic hazardous chemicals are designed and toxic hazardous chemicals are designed with with spill containment system(s) that are adequate to spill containment system(s) capable of containing contain releases, including fire fighting media. a minimum of the total aggregate capacity of all packages plus the maximum operating capacity of any fire protection system for the storage area(s) over a minimum of 60 minutes. **PO26** E26.1 Storage and handling areas, including manufacturing The base of any tank with a WC >2,500L or kg is areas, containing hazardous chemicals in quantities higher than any relevant flood height level identified greater than 2,500L or kg within a Local Government in an area's flood hazard area. Alternatively: "flood hazard area" are located and designed in a bulk tanks are anchored so they cannot float manner to minimise the likelihood of inundation of flood if submerged or inundated by water; and waters from creeks, rivers, lakes or estuaries. tank openings not provided with a liquid tight b. seal, i.e. an atmospheric vent, are extended above the relevant flood height level. E26.2 The lowest point of any storage area for packages >2,500L or kg is higher than any relevant flood height level identified in an area's flood hazard area. Alternatively, package stores are provided with impervious bund walls or racking systems higher than the relevant flood height level. Clearing of habitat trees where not located within the Environmental areas overlay map **PO27** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.

6 Zones

- b. Development does not result in the net loss of fauna habitat. Where development does result in the loss of a habitat tree, development will provide replacement fauna nesting boxes at the following 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.
- Development does not result in soil erosion or land degradation or leave land exposed for an unreasonable period of time but is rehabilitated in a timely manner

Note: Further guidance on habitat trees is provided in Planning scheme policy - Environmental areas

Works criteria

Utilities

PO28

All services including water supply, sewage disposal, electricity, street lighting, telecommunications and gas (if available) are provided in accordance with Planning scheme policy - Integrated design (Appendix A).

No example provided.

Access

PO29

Development provides functional and integrated car parking and vehicle access, that:

- prioritises the movement and safety of pedestrians between car parking areas at the rear through to the 'main street' and the entrance to the building (e.g. rear entry, arcade etc.);
- b. provides safety and security of people and property at all times;
- c. does not impede active transport options;
- d. does not impact on the safe and efficient movement of traffic external to the site;
- e. where possible vehicle access points are consolidated and shared with adjoining sites.

Note - Refer to Planning scheme policy - Centre and neighbourhood hub design for details and examples.

No example provided.

PO30

Where required, access easements contain a driveway and provision for services appropriate to the use. The easement covers all works associated with the access in accordance with Planning scheme policy - Integrated design.

No example provided.

PO31

The layout of the development does not compromise:

- a. the development of the road network in the area;
- b. the function or safety of the road network;
- c. the capacity of the road network.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E31.1

Direct vehicle access for residential development does not occur from arterial or sub-arterial roads or a motorway.

Editor's note - Residential developments should consider amalgamation with the lot to the rear and gaining access via a laneway.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

E31.2

The development provides for the extension of the road network in the area in accordance with Council's road network planning.

E31.3

The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning.

E31.4

The development layout allows forward vehicular access to and from the site.

PO32

Safe access is provided for all vehicles required to access the site.

E32.1

Site access and driveways are designed, located and constructed in accordance with:

- a. where for a Council-controlled road and associated with a Dwelling house:
 - i. Planning scheme policy Integrated design;
- b. where for a Council-controlled road and not associated with a Dwelling house:

- AS/NZS2890.1 Parking facilities Part 1: Off street car parking;
- ii. AS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities;
- iii. Planning scheme policy Integrated design;
- iv. Schedule 8 Service vehicle requirements;
- where for a State-Controlled road, the Safe Intersection Sight Distance requirements in Austroads and the appropriate IPWEAQ standard drawings, or a copy of a Transport Infrastructure Act 1994, section 62 approval.

E32.2

Internal driveways, car parks and access ways are designed and constructed with a sealed pavement and in accordance with:

- a. AS/NZS 2890.1 Parking Facilities Part 1: Off street car parking;
- b. AS 2890.2 Parking Facilities Part 2: Off street commercial vehicle facilities;
- c. Planning scheme policy Integrated design; and
- d. Schedule 8 Service vehicle requirements.

Note - This includes queue lengths (refer to Schedule 8 - Service vehicle requirements), pavement widths and construction.

E32.3

Access driveways, manoeuvring areas and loading facilities are sealed and provide for service vehicles listed in Schedule 8 - Service vehicle requirements for the relevant use. The on-site manoeuvring is to be in accordance with Schedule 8 - Service vehicle requirements.

E32.4

Landscaping (including shade trees) is provided within car parks in accordance with Planning scheme policy - Integrated design.

PO33

Sealed and flood free road access during the minor storm event is available to the site from the nearest arterial or sub-arterial road.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approvals may be required from the Department of Transport and Main Roads.

E33

Roads or streets giving access to the development from the nearest arterial or sub-arterial road are flood free during the minor storm event and are sealed.

Note - The road network is mapped on Overlay map - Road hierarchy.

PO34

Roads which provide access to the site from an arterial or sub-arterial road remain trafficable during major storm events without flooding or impacting upon residential properties or other premises.

E34.1

Access roads to the development have sufficient longitudinal and cross drainage to remain safely trafficable during major storm (1% AEP) events.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - Refer to QUDM for requirements regarding trafficability.

E34.2

Culverts and causeways do not increase inundation levels or increase velocities, for all events up to the defined flood event, to upstream or downstream properties.

Street design and layout

PO35

Streets are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. The street design and construction accommodates the following functions:

- access to premises by providing convenient vehicular movement for residents between their homes and the major road network;
- safe and convenient pedestrian and cycle movement;
- c. adequate on street parking;
- stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;

No example provided.

6 Zones

- f. utility services location;
- g. emergency access and waste collection;
- h. setting and approach (streetscape, landscaping and street furniture) for adjoining residences;
- i. expected traffic speeds and volumes; and
- j. wildlife movement (where relevant).

Note - Preliminary road design (including all services, street lighting, stormwater infrastructure, access locations, street trees and pedestrian network) may be required to demonstrate compliance with this PO.

Note - Refer to Planning scheme policy - Environmental areas and corridors for examples of when and where wildlife movement infrastructure is required.

PO36

The existing road network (whether trunk or non-trunk) is upgraded where necessary to cater for the impact from the development.

Note - An applicant may be required to submit an Integrated Transport Assessment (ITA), prepared in accordance with Planning scheme policy - Integrated transport assessment to demonstrate compliance with this PO, when any of the following occurs:

- Development is within 200m of a transport sensitive location such as a school, shopping centre, bus or train station or a large generator of pedestrian or vehicular traffic;
- Forecast traffic to/from the development exceeds 5% of the two way flow on the adjoining road or intersection in the morning or afternoon transport peak within 10 years of the development completion;
- Development access onto a sub arterial, or arterial road or within 100m of a signalised intersection;
- Residential development greater than 50 lots or dwellings;
- Offices greater than 4,000m² Gross Floor Area (GFA);
- Retail activities including Hardware and trade supplies, Showroom, Shop or Shopping centre greater than 1,000m² GFA;
- Warehouses and Industry greater than 6,000m² GFA;
- On-site carpark greater than 100 spaces;

E36.1

New intersections onto existing roads are designed to accommodate traffic volumes and traffic movements taken from a date 10 years from the date of completion of the last stage of the development. Detailed design is to be in accordance with Planning scheme policy - Integrated design.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at new road intersections and along road frontages wherever practicable.

E36.2

Existing intersections external to the site are upgraded as necessary to accommodate increased traffic from the development. Design is in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Note - All turns vehicular access to existing lots is to be retained at new road intersections wherever practicable.

Note - Existing on-street parking is to be retained at upgraded road intersections and along road frontages wherever practicable.

E36.3

- Development has a trip generation rate of 100 vehicles or more within the peak hour;
- Development which dissects or significantly impacts on an environmental area or an environmental corridor.

The ITA is to review the development's impact upon the external road network for the period of 10 years from completion of the development. The ITA is to provide sufficient information for determining the impact and the type and extent of any ameliorative works required to cater for the additional traffic. The ITA must include a future structural road layout of adjoining properties that will form part of this catchment and road connecting to these properties. The ITA is to assess the ultimate developed catchment's impacts and necessary ameliorative works, and the works or contribution required by the applicant as identified in the study.

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.

The active transport network is extended in accordance with Planning scheme policy - Integrated design.

PO37

New intersections along all streets and roads are located and designed to provide safe and convenient movements for all users.

Note - Refer Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures for design and construction standards.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

E37

New intersection spacing (centreline – centreline) along a through road conforms with the following:

- a. where the through road provides an access function;
 - i. intersecting road located on the same side= 60 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 60 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 40 metres.
- b. Where the through road provides a collector or sub-arterial function:
 - intersecting road located on the same side
 = 100 metres;
 - ii. intersecting road located on opposite side (Left Right Stagger) = 100 metres;
 - iii. intersecting road located on opposite side (Right Left Stagger) = 60 metres.
- c. Where the through road provides an arterial function:

- i. intersecting road located on the same side= 300 metres;
- ii. intersecting road located on opposite side (Left Right Stagger) = 300 metres;
- iii. intersecting road located on opposite side (Right Left Stagger) = 300 metres;
- d. Walkable block perimeter does not exceed 1000 metres.

Note - Based on the absolute minimum intersection spacing identified above, all turns access may not be permitted (ie. left in/left out only) at intersections with sub-arterial roads or arterial roads.

Note - The road network is mapped on Overlay map - Road hierarchy.

Note - An Integrated Transport Assessment (ITA) including preliminary intersection designs, prepared in accordance with Planning scheme policy - Integrated transport assessment may be required to demonstrate compliance with this PO. Intersection spacing will be determined based on the deceleration and queue storage distances required for the intersection after considering vehicle speed and present/forecast turning and through volumes.

PO38

All Council controlled frontage roads adjoining the development are designed and constructed in accordance with Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. All new works are extended to join any existing works within 20m.

Note - Frontage roads include streets where no direct lot access is provided.

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 - Roads are considered to be constructed in accordance with Council's standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

E38

Design and construct all Council controlled frontage roads in accordance with Planning scheme policy - Integrated design, Planning scheme policy - Operational works inspection, maintenance and bonding procedures and the following:

Frontage road unconstructed or gravel road only; OR Frontage road sealed but not constructed* to Planning scheme policy - Integrated design standard; OR	Construct the verge adjoining the development and the carriageway (including development side kerb and channel) to a minimum sealed width containing near side parking lane (if required), cycle lane (if required), 2 travel lanes plus 1.5m wide (full depth pavement) gravel

Frontage road partially constructed* to Planning scheme policy - Integrated design standard.

shoulder and table drainage to the opposite side.

The minimum total travel lane width is:

- 6m for minor roads;
- 7m for major roads.

Note - Major roads are sub-arterial roads and arterial roads. Minor roads are roads that are not major roads.

Note - Construction includes all associated works (services, street lighting and linemarking).

Note - Alignment within road reserves is to be agreed with Council.

Note - *Roads are considered to be constructed in accordance with Council standards when there is sufficient pavement width, geometry and depth to comply with the requirements of Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures. Testing of the existing pavement may be required to confirm whether the existing works meet the standards in Planning scheme policy - Integrated design and Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

Stormwater

PO39

Minor stormwater drainage systems (internal and external) have the capacity to convey stormwater flows from frequent storm events for the fully developed upstream catchment whilst ensuring pedestrian and vehicular traffic movements are safe and convenient.

E39.1

The capacity of all minor drainage systems are designed in accordance with Planning scheme policy - Integrated design.

E39.2

Stormwater pipe network capacity is to be calculated in accordance with the Hydraulic Grade Line method as detailed in Australian Rainfall and Runoff or QUDM.

E39.3

Development ensures that inter-allotment drainage infrastructure is provided in accordance with the relevant level as identified in QUDM.

PO40

Major stormwater drainage system(s) have the capacity to safely convey stormwater flows for the 1% AEP event for the fully developed upstream catchment.

E40.1

The internal drainage system safely and adequately conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment through the site.

E40.2

The external (downstream) drainage system safely conveys the stormwater flows for the 1% AEP event for the fully developed upstream catchment without allowing the flows to encroach upon private lots.

E40.3

Overland flow paths from roads and public open space areas do not pass through private lots. Drainage pathways are provided to accommodate overland flows from roads and public open space areas.

E40.4

The flow velocity in all unlined or soft faced open drains is kept within acceptable limits for the type of material or lining and condition of the channel.

Note - Refer to QUDM for recommended average flow velocities.

PO41

Provide measures to properly manage surface flows for the 1% AEP event (for the fully developed catchment) draining to and through the land to ensure no actionable nuisance is created to any person or premises as a result of the development. The development must not result in ponding on adjacent land, redirection of surface flows to other premises or blockage of a surface flow relief path for flows exceeding the design flows for any underground system within the development.

E41

The stormwater drainage system is designed and constructed in accordance with Planning scheme policy - Integrated design.

PO42

Stormwater run-off from the site is conveyed to a point of lawful discharge without causing actionable nuisance to any person, property or premises.

Note - Refer to Planning scheme policy - Integrated design for details.

No example provided.

Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance Note - A watercourse as defined in the Water Act may be accepted as a lawful point of discharge providing the drainage discharge from the site does not increase the downstream flood levels during events up to and including the 1% AEP storm. An afflux of +20mm may be accepted on Council controlled land and road infrastructure. No worsening is ensured when stormwater is discharged into a catchment that includes State Transport Infrastructure. **PO43** No example provided. Stormwater generated from the development does not compromise the capacity of existing stormwater infrastructure downstream of the site. Note - A downstream drainage discharge report in accordance with Planning scheme policy - Stormwater management may be required to demonstrate achievement of this performance outcome. **PO44** No example provided. Where development: is for an urban purpose that involves a land area of 2500m2 or greater; and b. will result in: i. 6 or more dwellings; or an impervious area greater than 25% of the net developable area. stormwater quality management systems are designed, constructed, established and maintained to minimise the environmental impact of stormwater on surface, groundwater and receiving water environments and meet the design objectives outlined in Schedule 10 - Stormwater management design objectives. Note - A site based stormwater management plan prepared by a suitably qualified professional will be required in accordance with Planning scheme policy - Stormwater management. Stormwater quality infrastructure is to be designed in accordance with Planning scheme policy - Integrated design (Appendix C). **PO45** E45

Stormwater drainage pipes and structures through or within private land (including inter-allotment drainage) are protected by easements in favour of Council with sufficient area for practical access for maintenance purposes.

Note - In order to achieve a lawful point of discharge, stormwater easements may also be required over temporary drainage channels/infrastructure where stormwater discharges to a balance lot prior to entering Council's stormwater drainage system.

Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land (including inter-allotment drainage) is protected by easements in favour of Council. Minimum easement widths are as follows:

Pipe Diameter	Minimum easement width (excluding access requirements)
Stormwater pipe up to 825mm diameter	3.0m
Stormwater pipe up to 825mm diameter with sewer pipe up to 225m diameter	4.0m
Stormwater pipe greater than 825mm diameter	Easement boundary to be 1m clear of the outside wall of the stormwater pipe (each side).

Note - Additional easement width may be required in certain circumstances in order to facilitate maintenance access to the stormwater system.

Note - Refer to Planning scheme policy - Integrated design (Appendix C) for easement requirements over open channels.

PO46

Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.

No example provided.

Site works and construction management

PO47

The site and any existing structures are maintained in a tidy and safe condition.

No example provided.

PO48

All works on-site are managed to:

 minimise as far as practicable, impacts on adjoining or adjacent premises and the streetscape in regard to erosion and sedimentation, dust, noise, safety and light;

E48.1

Works incorporate temporary stormwater runoff, erosion and sediment controls and trash removal devices designed in accordance with the Urban Stormwater Quality Planning Guidelines, State Planning Policy, Schedule 10 - Stormwater management design objectives, Planning scheme

- b. minimise as far as possible, impacts on the natural environment;
- ensure stormwater discharge is managed in a manner that does not cause actionable nuisance to any person or premises;
- d. avoid adverse impacts on street trees and their critical root zone.

policy - Stormwater management and Planning scheme policy - Integrated design, including but not limited to the following:

- a. stormwater is not discharged to adjacent properties in a manner that differs significantly from pre-existing conditions;
- stormwater discharged to adjoining and downstream properties does not cause scour or erosion of any kind;
- c. stormwater discharge rates do not exceed pre-existing conditions;
- d. minimum design storm for all temporary diversion drains and sedimentation basins in accordance with Schedule 10 - Stormwater management design objectives;
- e. ponding or concentration of stormwater does not occur on adjoining properties.

E48.2

Stormwater runoff, erosion and sediment controls are constructed in accordance with Planning scheme policy - Integrated design (Appendix C) prior to commencement of any clearing or earthworks and are maintained and adjusted as necessary at all times to ensure their ongoing effectiveness.

Note - The measures are adjusted on-site to maximise their effectiveness.

E48.3

The completed earthworks area is stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques to control erosion and sediment and dust from leaving the property.

E48.4

Existing street trees are protected and not damaged during works.

Note - Where development occurs in the tree protection zone, measures and techniques as detailed in Australian Standard AS 4970 Protection of trees on development sites are adopted and implemented.

PO49 E49

Dust suppression measures are implemented during soil disturbances and construction works to protect nearby premises from unreasonable dust impacts.

No dust emissions extend beyond the boundaries of the site during soil disturbances and construction works.

PO50

All development works including the transportation of material to and from the site are managed to not negatively impact the existing road network, the amenity of the surrounding area or the streetscape.

Note - A Traffic Management Plan may be required to demonstrate compliance with this PO. A Traffic Management Plan is to be prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Note - A haulage route must be identified and approved by Council where imported or exported material is transported to the site via a road of Local Collector standard or less, and:

- the aggregate volume of imported or exported material is greater than 1000m³; or
- the aggregate volume of imported or exported material is greater than 200m³ per day; or
- c. the proposed haulage route involves a vulnerable land use or shopping centre.

Note - A dilapidation report (including photographs) may be required for the haulage route to demonstrate compliance with this PO.

Editor's note - Where associated with a State-controlled road, further requirements may apply, and approval may be required from the Department of Transport and Main Roads.

E50.1

Construction traffic including contractor car parking is controlled in accordance with a traffic management plan, prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) to ensure all traffic movements to and from the site are safe.

E50.2

All contractor car parking is either provided on the development site, or on an alternative site in the general locality which has been set aside for car parking. Contractors vehicles are generally not to be parked in existing roads.

E50.3

Any material dropped, deposited or spilled on the road(s) as a result of construction processes associated with the site are to be cleaned at all times.

E50.4

Construction traffic to and from the development site uses the highest classification streets or roads where a choice of access routes is available. Haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard must be approved routes.

Note - The road hierarchy is mapped on Overlay map - Road hierarchy.

Note - A dilapidation report may be required to demonstrate compliance with this E.

E50.5

Where works are carried out in existing roads, the works must be undertaken so that the existing roads are maintained in a safe and usable condition. Practical access for residents, visitors and services (including postal deliveries and refuse collection) is retained to existing lots during the construction period and after completion of the works.

Note - A traffic control plan prepared in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be required for any works that will affect access, traffic movements or traffic safety in existing roads.

E50.6

Access to the development site is obtained via an existing lawful access point.

PO51

All disturbed areas are to be progressively stabilised during construction and the entire site rehabilitated and substantially stabilised at the completion of construction.

Note - Refer to Planning scheme policy - Integrated design for details.

E51

At completion of construction all disturbed areas of the site are to be:

- topsoiled with a minimum compacted thickness of fifty (50) millimetres;
- b. stabilised using turf, established grass seeding, mulch or sprayed stabilisation techniques.

Note - These areas are to be maintained during any maintenance period to maximise grass coverage.

PO52

Earthworks are undertaken to ensure that soil disturbances are staged into manageable areas.

Note - A site specific Erosion and Sediment Control Plan (ESCP) will be required to demonstrate compliance with this PO. An ESCP is to be prepared in accordance with Planning scheme policy - Stormwater management and Planning scheme policy - Integrated design (Appendix C).

E52

Soil disturbances are staged into manageable areas of not greater than 3.5 ha.

PO53

The clearing of vegetation on-site:

- is limited to the area of infrastructure works, building areas and other necessary areas for the works; and
- includes the removal of declared weeds and other materials which are detrimental to the intended use of the land;
- c. is disposed of in a manner which minimises nuisance and annoyance to existing premises.

E53.1

All native vegetation to be retained on-site is temporarily fenced or protected prior to and during development works.

Note - No parking of vehicles or storage of machinery or goods is to occur in these areas during development works.

E53.2

Disposal of materials is managed in one or more of the following ways:

all cleared vegetation, declared weeds, stumps, Note - No burning of cleared vegetation is permitted. rubbish, car bodies, scrap metal and the like are removed and disposed of in a Council land fill facility; or b. all native vegetation with a diameter below 400mm is to be chipped and stored on-site. Note - The chipped vegetation must be stored in an approved location. **PO54** E54 All development works are carried out at times which All development works are carried out within the following times: minimise noise impacts to residents. Monday to Saturday (other than public holidays) a. between 6:30am and 6:30pm on the same day; no work is to be carried out on Sundays or public holidays. Note - Work outside the above hours may be approved (in writing) where it can be demonstrated that the work will not cause significant inconvenience or disruption to the public, or the work is unlikely to cause annoyance or inconvenience to occupants of adjacent properties. **PO55** No example provided. Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authorities, the Council or other person engaged in the provision of public utility services is to be carried with the development and at no cost to Council.

Earthworks

PO56

On-site earthworks are designed to consider the visual and amenity impact as they relate to:

- a. the natural topographical features of the site;
- b. short and long-term slope stability;
- c. soft or compressible foundation soils;

E56.1

All cut and fill batters are provided with appropriate scour, erosion protection and run-off control measures including catch drains at the top of batters and lined batter drains as necessary.

E56.2

- d. reactive soils:
- e. low density or potentially collapsing soils;
- f. existing fill and soil contamination that may exist on-site;
- g. the stability and maintenance of steep slopes and batters;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance of steep slopes and batters.

E56.3

Inspection and certification of steep slopes and batters is required by a suitably qualified and experienced RPEQ.

E56.4

All filling or excavation is contained on-site and is free draining.

E56.5

All fill placed on-site is:

- a. limited to that area necessary for the approved use:
- clean and uncontaminated (i.e. no building waste, concrete, green waste, actual acid sulfate soils, potential acid sulfate soils or contaminated material etc.).

E56.6

The site is prepared and the fill placed on-site in accordance with AS3798.

Note - The fill is to be inspected and tested in accordance with Planning scheme policy - Operational works inspection, maintenance and bonding procedures.

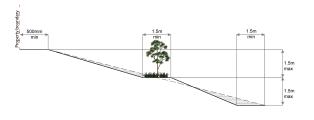
PO57

Embankments are stepped, terraced and landscaped to not adversely impact on the visual amenity of the surrounding area.

E57

Any embankments more than 1.5 metres in height are stepped, terraced and landscaped.

Figure - Embankment



PO58 E58.1

Filling or excavation is undertaken in a manner that:

- does not adversely impact on a Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the land;
- does not preclude reasonable access to a
 Council or public sector entity maintained
 infrastructure or any drainage feature on, or
 adjacent to the land for monitoring, maintenance
 or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

No filling or excavation is undertaken in an easement issued in favour of Council or a public sector entity.

Note - Public sector entity is defined in Schedule 2 of the Act.

E58.2

Filling or excavation that would result in any of the following is not carried out on-site:

- a. a reduction in cover over any Council or public sector entity infrastructure service to less than 600mm;
- an increase in finished surface grade over, or within 1.5m on each side of, the Council or public sector entity infrastructure above that which existed prior to the earthworks being undertaken;
- prevent reasonable access to Council or public sector entity maintained infrastructure or any drainage feature on, or adjacent to the site for monitoring, maintenance or replacement purposes.

Note - Public sector entity is defined in Schedule 2 of the Act.

Note - All building work covered by QDC MP1.4 is excluded from this provision.

PO59

Filling or excavation does not result in land instability.

Note - Steep slopes and batters are inspected and certified for long-term stability by a suitably qualified and experienced geotechnical engineer with RPEQ qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance.

No example provided.

PO60

Filling or excavation does not result in:

- a. adverse impacts on the hydrological and hydraulic capacity of the waterway or floodway;
- b. increased flood inundation outside the site;
- c. any reduction in the flood storage capacity in the floodway;
- d. any clearing of native vegetation.

No example provided.

Note - To demonstrate compliance with this outcome, Planning Scheme Policy - Stormwater Management provides guidance on the preparation of a site based stormwater management plan by a suitably qualified professional. Refer to Planning scheme policy - Integrated design for guidance on infrastructure design and modelling requirements.

PO61

Filling or excavation on the development site is undertaken in a manner which does not create or accentuate problems associated with stormwater flows and drainage systems on land adjoining the site.

E61

Filling and excavation undertaken on the development site are shaped in a manner which does not:

- a. prevent stormwater surface flow which, prior to commencement of the earthworks, passed onto the development site, from entering the land; or
- redirect stormwater surface flow away from existing flow paths; or
- c. divert stormwater surface flow onto adjacent land, (other than a road), in a manner which:
 - concentrates the flow; or
 - ii. increases the flow rates of stormwater over the affected section of the adjacent land above the situation which existed prior to the diversion; or
 - iii. causes actionable nuisance to any person, property or premises.

PO62

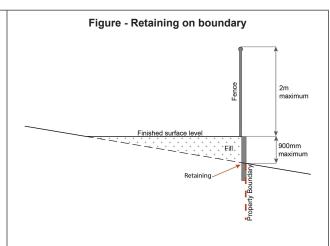
All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

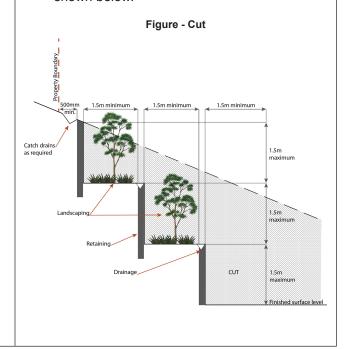
E62

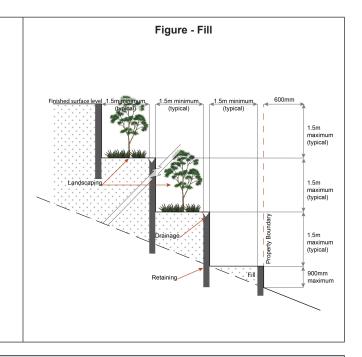
Earth retaining structures:

- a. are not constructed of boulder rocks or timber;
- where height is no greater than 900mm, are provided in accordance with Figure - Retaining on a boundary;



- c. where height is greater than 900mm but no greater than 1.5m, are to be setback at least the equivalent height of the retaining structure from any property boundary;
- d. where height is greater than 1.5m, are to be setback and stepped 1.5m vertical: 1.5m horizontal, terraced, landscaped and drained as shown below.





Fire Services

Note - The provisions under this heading only apply if:

- a. the development is for, or incorporates:
 - i. reconfiguring a lot for a community title scheme creating 1 or more vacant lots; or
 - ii. material change of use for 2 or more sole occupancy units on the same lot, or within the same community titles scheme;
 - iii. material change of use for a Tourist park⁽⁸⁴⁾ with accommodation in the form of caravans or tents; or
 - w. material change of use for outdoor sales⁽⁵⁴⁾, outdoor processing or outdoor storage where involving combustible materials

AND

- b. none of the following exceptions apply:
 - i. the distributor-retailer for the area has indicated, in its netserv plan, that the premises will not be served by that entity's reticulated water supply; or
 - ii. every part of the development site is within 60m walking distance of an existing fire hydrant on the distributor-retailer's reticulated water supply network, measured around all obstructions, either on or adjacent to the site.

Note - The provisions under this heading do not apply to buildings that are required by the Building Code of Australia to have a fire hydrant system complying with Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations or other fire fighting facilities which provide equivalent protection.

PO63

Development incorporates a fire fighting system that:

 satisfies the reasonable needs of the fire fighting entity for the area;

E63.1

External fire hydrant facilities are provided on site to the standard prescribed under the relevant parts of *Australian Standard AS 2419.1 (2005) – Fire Hydrant Installations.*

- is appropriate for the size, shape and topography of the development and its surrounds;
- c. is compatible with the operational equipment available to the fire fighting entity for the area;
- considers the fire hazard inherent in the materials comprising the development and their proximity to one another;
- e. considers the fire hazard inherent in the surrounds to the development site;
- f. is maintained in effective operating order.

Note - The Queensland Fire and Emergency Services is the entity currently providing the fire fighting function for the urban areas of the Moreton Bay Region.

Note - For this requirement for accepted development, the following are the relevant parts of AS 2419.1 (2005) that may be applicable:

- a. in regard to the form of any fire hydrant Part 8.5 and Part 3.2.2.1, with the exception that for Tourist parks (84) or development comprised solely of dwellings and their associated outbuildings, single outlet above-ground hydrants or suitably signposted in-ground hydrants would be an acceptable alternative;
- in regard to the general locational requirements for fire hydrants - Part 3.2.2.2 (a), (e), (f), (g) and (h) as well as Appendix B of AS 2419.1 (2005);
- in regard to the proximity of hydrants to buildings and other facilities - Part 3.2.2.2 (b), (c) and (d), with the exception that:
 - for dwellings and their associated outbuildings, hydrant coverage need only extend to the roof and external walls of those buildings;
 - for caravans and tents, hydrant coverage need only extend to the roof of those tents and caravans:
 - iii. for outdoor sales⁽⁵⁴⁾, processing or storage facilities, hydrant coverage is required across the entire area of the outdoor sales⁽⁵⁴⁾, outdoor processing and outdoor storage facilities;
- in regard to fire hydrant accessibility and clearance requirements - Part 3.5 and, where applicable, Part 3.6.

E63.2

A continuous path of travel having the following characteristics is provided between the vehicle access point to the site and each external fire hydrant and hydrant booster point on the land:

- a. an unobstructed width of no less than 3.5m;
- b. an unobstructed height of no less than 4.8m;
- c. constructed to be readily traversed by a 17 tonne HRV fire brigade pumping appliance;
- d. an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E63.3

On-site fire hydrant facilities are maintained in effective operating order in a manner prescribed in Australian Standard AS1851 (2012) – Routine service of fire protection systems and equipment.

PO64

E64

For development that contains on-site fire hydrants external to buildings:

On-site fire hydrants that are external to buildings, as well as the available fire fighting appliance access routes to those hydrants, can be readily identified at all times from, or at, the vehicular entry point to the development site.

- a. those external hydrants can be seen from the vehicular entry point to the site; or
- b. a sign identifying the following is provided at the vehicular entry point to the site:
 - i. the overall layout of the development (to scale):
 - ii. internal road names (where used);
 - iii. all communal facilities (where provided);
 - iv. the reception area and on-site manager's office (where provided);
 - v. external hydrants and hydrant booster points;
 - physical constraints within the internal roadway system which would restrict access by fire fighting appliances to external hydrants and hydrant booster points.

Note - The sign prescribed above, and the graphics used are to be:

- a. in a form;
- b. of a size;
- c. illuminated to a level;

which allows the information on the sign to be readily understood, at all times, by a person in a fire fighting appliance up to 4.5m from the sign.

PO65

Each on-site fire hydrant that is external to a building is signposted in a way that enables it to be readily identified at all times by the occupants of any firefighting appliance traversing the development site.

E65

For development that contains on-site fire hydrants external to buildings, those hydrants are identified by way of marker posts and raised reflective pavement markers in the manner prescribed in the technical note *Fire hydrant indication system* produced by the Queensland Department of Transport and Main Roads.

Note - Technical note Fire hydrant indication system is available on the website of the Queensland Department of Transport and Main Roads.

Use specific criteria

Home based business⁽³⁵⁾

PO66

The scale and intensity of the Home based business⁽³⁵⁾:

- a. is compatible with the physical characteristics of the site and the character of the local area;
- is able to accommodate anticipated car parking demand without negatively impacting the streetscape and road safety;
- c. does not adversely impact on the amenity of the adjoining and nearby premises;
- d. remains ancillary to the residential use of the dwelling house⁽²²⁾;
- e. does not create conditions which cause hazards or nuisances to neighbours or other persons not associated with the activity;
- f. ensures employees and visitors to the site do not negatively impact the expected amenity of adjoining properties.

E66.1

A maximum of 1 employee (not a resident) OR 2 customers OR customers from within 1 Small rigid vehicle (SRV) or smaller are permitted on the site at any one time.

E66.2

The home based business⁽³⁵⁾ occupies an area of the existing dwelling or on-site structure not greater than 40m² gross floor area.

Major electricity infrastructure⁽⁴³⁾, Substation⁽⁸⁰⁾ and Utility installation⁽⁸⁶⁾

PO67

The development does not have an adverse impact on the visual amenity of a locality and is:

- a. high quality design and construction;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E67.1

Development is designed to minimise surrounding land use conflicts by ensuring infrastructure, buildings, structures and other equipment:

- a. are enclosed within buildings or structures;
- b. are located behind the main building line;
- c. have a similar height, bulk and scale to the surrounding fabric;
- d. have horizontal and vertical articulation applied to all exterior walls.

E67.2

A minimum 3m wide strip of dense planting is provided around the outside of the fenced area, between the development and street frontage, side and rear boundaries.

PO68

Infrastructure does not have an impact on pedestrian health and safety.

E68

Access control arrangements:

- a. do not create dead-ends or dark alleyways adjacent to the infrastructure;
- b. minimise the number and width of crossovers and entry points;
- c. provide safe vehicular access to the site;
- d. do not utilise barbed wire or razor wire.

PO69

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility:

- a. generates no audible sound at the site boundaries where in a residential setting; or
- b. meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

E69

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

Residential uses

PO70

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with adequate functional and attractive private open space that is:

- directly accessible from the dwelling and is located so that residents and neighbouring uses experience a suitable level of amenity;
- designed and constructed to achieve adequate privacy for occupants from other dwelling units⁽²³⁾ and centre uses:
- accessible and readily identifiable for residents, visitors and emergency services;
- d. located to not compromise active frontages.

E70

A dwelling has a clearly defined, private outdoor living space that is:

a. as per the table below;

Use	Minimum Area	Minimum Dimension in all directions		
Ground floor dwelli	round floor dwellings			
All dwelling types	16m²	4m		
Above ground floor dwellings				
1 bedroom or studio	8m²	2.5m		
2 or more bedrooms	12m²	3.0m		

- accessed from a living area;
- c. sufficiently screened or elevated for privacy;
- d. ground floor open space is located behind the main building line and not within the primary or secondary frontage setbacks;
- e. balconies orientate to the street;
- f. clear of any non-recreational structure (including but not limited to air-conditioning units, water tanks, clothes drying facilities, storage structures, retaining structures and refuse storage areas).

Note - Areas for clothes drying are not visible from street frontages or public areas (e.g. Separate clothes drying areas are provided that are oriented to the side or rear of the site or screening is provided).

PO71

Caretaker's accommodation⁽¹⁰⁾ and Dwelling units⁽²³⁾ are provided with a reasonable level of access, identification and privacy from adjoining residential and non-residential uses.

Note - Refer to State Government standards for CPTED.

Note - Refer to Planning scheme policy - Residential design for details and examples.

E71

The dwelling:

- includes screening to a maximum external transparency of 50% for all habitable room windows that are visible from other dwellings and non-residential uses;
- clearly displays the street number at the entrance to the dwelling and at the front of the site to enable identification by emergency services:
- c. is provided with a separate entrance to that of any non-residential use on the site;
- where located on a site with a non-residential use the dwelling is located behind or above the non-residential use.

Note - External fixed or movable screening, opaque glass and window tinting are considered acceptable forms of screening.

Service station

Note - Where the use specific outcomes relating to Service Stations are inconsistent with other examples or Performance Outcomes in this Code, the use specific outcomes below prevail.

PO72

Service stations are located, designed and orientated to:

- establish on heavily trafficked roads where the amenity of surrounding residential uses is already subject to impacts by road vehicle noise;
- not negatively impact active streets, public spaces or hubs of activity where the pedestrian safety and comfort is of high importance;
- not result in the fragmentation of active streets (e.g. site where active uses are located on adjoining lots);
- d. ensure the amenity of adjoining properties is protected;
- e. reduce the visual impact of the Service station from the streetscape while maintaining surveillance from the site to the street;

E72.1

Service stations are located on the corner lot of an arterial or sub-arterial road.

E72.2

Service stations are designed and orientated on site to:

- a. include a landscaping strip having a minimum depth of 1m adjoining all road frontages;
- b. buildings and structures (including fuel pump canopies) are setback a minimum of 3m from the primary and secondary frontage and a minimum of 5m from side and rear boundaries;

- f. minimise impacts on adjoining residential uses, to a level suitable relative to expected residential amenity of the area;
- g. provide ancillary uses that meet the convenience needs of users.
- c. include a screen fence, of a height and standard in accordance with a noise impact assessment (Note - Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise), on side and rear boundaries where adjoining land is able to contain a residential use;
- d. not include more than 2 driveway crossovers.

Telecommunications facility⁽⁸¹⁾

Editor's note - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾must be constructed and operated in a manner that will not cause human exposure to electromagnetic radiation beyond the limits outlined in the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003 and Radio Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3Khz to 300Ghz.

PO73

Telecommunications facilities⁽⁸¹⁾ are co-located with existing telecommunications facilities⁽⁸¹⁾, Utility installation⁽⁸⁶⁾, Major electricity infrastructure⁽⁴³⁾ or Substation⁽⁸⁰⁾ if there is already a facility in the same coverage area.

E73.1

New telecommunication facilities⁽⁸¹⁾ are co-located on existing towers with new equipment shelter and associated structures positioned adjacent to the existing shelters and structures.

E73.2

If not co-located with an existing facility, all co-location opportunities have been investigated and fully exhausted within a 2km radius of the site.

PO74

A new Telecommunications facility⁽⁸¹⁾ is designed and constructed to ensure co-masting or co-siting with other carriers both on the tower or pole and at ground level is possible in the future.

E74

A minimum area of 45m² is available to allow for additional equipment shelters and associated structures for the purpose of co-locating on the proposed facility.

PO75

Telecommunications facilities (81) do not conflict with lawful existing land uses both on and adjoining the site.

E75

The development results in no net reduction in the minimum quantity and standard of landscaping, private or communal open space or car parking spaces required under the planning scheme or under an existing development approval.

PO76

The Telecommunications facility⁽⁸¹⁾ does not have an adverse impact on the visual amenity of a locality and is:

high quality design and construction;

E76.1

Where in an urban area, the development does not protrude more than 5m above the level of the existing treeline, prominent ridgeline or building rooftops in the surrounding townscape.

- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- d. located behind the main building line;
- below the level of the predominant tree canopy or the level of the surrounding buildings and structures;
- f. camouflaged through the use of colours and materials which blend into the landscape;
- g. treated to eliminate glare and reflectivity;
- h. landscaped;
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E76.2

In all other areas towers do not exceed 35m in height.

E76.3

Towers, equipment shelters and associated structures are of a design, colour and material to:

- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E76.4

All structures and buildings are setback behind the main building line and a minimum of 10m from side and rear boundaries, except where in the Industry and Extractive industry zones, the minimum side and rear setback is 3m.

Where there is no established building line the facility is located at the rear of the site.

E76.5

The facility is enclosed by security fencing or by other means to ensure public access is prohibited.

E76.6

A minimum 3m wide strip of dense planting is provided around the perimeter of the fenced area, between the facility and street frontage and adjoining uses.

Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.

Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person, to ensure compliance with Planning scheme policy - Integrated design.

P077

Lawful access is maintained to the site at all times that does not alter the amenity of the landscape or surrounding uses.

E77

An Access and Landscape Plan demonstrates how 24 hour vehicular access will be obtained and maintained to the facility in a manner that is appropriate to the site's context.

PO78

E78

All activities associated with the development occur within an environment incorporating sufficient controls to ensure the facility generates no audible sound at the site boundaries where in a residential setting.

All equipment comprising the Telecommunications facility⁽⁸¹⁾ which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to ensure no noise from this equipment can be heard, or felt at the site boundary.

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.

Acid sulfate soils - (refer Overlay map - Acid sulfate soils to determine if the following assessment criteria apply)

Note - To demonstrate achievement of the performance outcome, an Acid sulfate soils (ASS) investigation report and soil management plan is prepared by a qualified engineer. Guidance for the preparation an ASS investigation report and soil management plan is provided in Planning scheme policy - Acid sulfate soils.

PO79

Development avoids disturbing acid sulfate soils. Where development disturbs acid sulfate soils, development:

- is managed to avoid or minimise the release of surface or groundwater flows containing acid and metal contaminants into the environment;
- b. protects the environmental and ecological values and health of receiving waters;
- c. protects buildings and infrastructure from the effects of acid sulfate soils.

E79

Development does not involve:

- excavation or otherwise removing of more than 100m³ of soil or sediment where below than 5m Australian Height datum AHD; or
- b. filling of land of more than 500m³ of material with an average depth of 0.5m or greater where below the 5m Australian Height datum AHD.

Environmental areas (refer Overlay map - Environmental areas to determine if the following assessment criteria apply)

Note – The following are excluded from the native vegetation clearing provisions of this planning scheme:

- a. Clearing of native vegetation located within an approved development footprint;
- b. Clearing of native vegetation within 10m from a lawfully established building reasonably necessary for emergency access or immediately required in response to an accident or emergency;
- Clearing of native vegetation reasonably necessary to remove or reduce the risk vegetation poses to serious personal injury or damage to infrastructure;
- d. Clearing of native vegetation reasonably necessary to construct and maintain a property boundary fence and not exceed 4m in width either side of the fence where in the Rural, Rural residential and Environmental Management and Conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence;
- e. Clearing of native vegetation reasonably necessary for the purpose of maintenance or works within a registered easement for public infrastructure or drainage purposes;

- f Clearing of native vegetation in accordance with a bushfire management plan prepared by a suitably qualified person, submitted to and accepted by Council;
- Clearing of native vegetation associated with removal of recognised weed species, maintaining existing open pastures and g. cropping land, windbreaks, lawns or created gardens;
- h. Grazing of native pasture by stock;
- i. Native forest practice where accepted development under Part 1, 1.7.7 Accepted development.

Note - Definition for native vegetation is located in Schedule 1 Definitions.

Note - Native vegetation subject to this criteria primarily comprises of matters of national environmental significance (MNES), matters of state environmental significance (MSES). They also comprise some matters of local environmental significance (MLES). A MLES is defined in Schedule 1.2, Administrative definitions. A list of the elements that apply to the mapped MSES and MLES is provided in Appendix 1 of the Planning scheme policy - Environmental areas.

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.

Note - To demonstrate achievement of the performance outcome, an ecological assessment, vegetation management plan and fauna management plan, as required, are prepared by a suitably qualified person. Guidance for the preparation of above mentioned reports is provided in Planning scheme policy - Environmental areas.

Vegetation clearing, ecological value and connectivity

PO80

Development avoids locating in a High Value Area or a Value Offset Area. Where it is not practicable or reasonable for development to avoid establishing in these areas, development must ensure that:

- the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area is maintained and not lost or degraded;
- on-site mitigation measures, mechanisms or b. processes are in place demonstrating the quality and integrity of the biodiversity and ecological values inherent to a High Value Area and a Value Offset Area are maintained. For example, this can be achieved through replacement, restoration or rehabilitation planting as part of any proposed covenant, the development of a Vegetation Management Plan, a Fauna Management Plan, and any other on-site mitigation options identified in the Planning scheme policy - Environmental areas*.

No example provided.

offset under the Environmental Offsets Act 2014.

No example provided.

PO81

^{*} Editor's note - This is not a requirement for an environmental

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by: a. retaining habitat trees; b. providing contiguous patches of habitat; provide replacement and rehabilitation planting C. to improve connectivity; d. avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure. e. Editor's note - Wildlife movement infrastructure may include refuge poles, tree boulevarding, 'stepping stone' vegetation plantings, tunnels, appropriate wildlife fencing; culverts with ledges, underpasses, overpasses, land bridges and rope bridges. Further information is provided in Planning scheme policy – Environmental Vegetation clearing and habitat protection **PO82** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO83** No example provided. Development does not result in the net loss or degradation of habitat value in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value, development will: rehabilitate, revegetate, restore and enhance an area to ensure it continues to function as a viable and healthy habitat area; provide replacement fauna nesting boxes in the event of habitat tree loss in accordance with Planning scheme policy - Environmental areas; undertake rehabilitation, revegetation and restoration in accordance with the South East Queensland Ecological Restoration Framework. **PO84** No example provided. Development ensures safe, unimpeded, convenient and ongoing wildlife movement and habitat connectivity by:

a.

providing contiguous patches of habitat;

patches of habitat;

avoiding the creation of fragmented and isolated

c. d.	providing wildlife movement infrastructure; providing replacement and rehabilitation planting to improve connectivity.			
Veg	etation clearing and soil resource stability			
PO85		No example provided.		
Dev	velopment does not:			
a. b.	result in soil erosion or land degradation; leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner.			
Veg	etation clearing and water quality			
РО	86	No example provided.		
grou	relopment maintains or improves the quality of undwater and surface water within, and downstream, site by:			
a.b.c.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; avoiding or minimising changes to landforms to maintain hydrological water flows; adopting suitable measures to exclude livestock from entering a waterbody where a site is being used for animal husbandry ⁽⁴⁾ and animal keeping ⁽⁵⁾ activities.			
РО	87	No example provided.		
Development minimises adverse impacts of stormwater run-off on water quality by: a. minimising flow velocity to reduce erosion; b. minimising hard surface areas; c. maximising the use of permeable surfaces; d. incorporating sediment retention devices; e. minimising channelled flow.				
Vegetation clearing and access, edge effects and urban heat island effects				
PO		No example provided.		
Dev in a effe	relopment retains safe and convenient public access manner that does not result in the adverse edge cts or the loss or degradation of biodiversity values in the environment.			
PO	89	No example provided.		

Development minimises potential adverse 'edge effects' on ecological values by:

- providing dense planting buffers of native vegetation between a development and environmental areas;
- retaining patches of native vegetation of greatest possible size where located between a development and environmental areas;
- c. restoring, rehabilitating and increasing the size of existing patches of native vegetation;
- d. ensuring that buildings and access (public and vehicle) are setback as far as possible from environmental areas and corridors;
- e. landscaping with native plants of local origin.

Editor's note - Edge effects are factors of development that go to detrimentally affecting the composition and density of natural populations at the fringe of natural areas. Factors include weed invasion, pets, public and vehicle access, nutrient loads, noise and light pollution, increased fire frequency and changes in the groundwater and surface water flow.

PO90

Development avoids adverse microclimate change and does not result in increased urban heat island effects. Adverse urban heat island effects are minimised by:

- a. pervious surfaces;
- providing deeply planted vegetation buffers and green linkage opportunities;
- landscaping with local native plant species to achieve well-shaded urban places;
- d. increasing the service extent of the urban forest canopy.

No example provided.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO91

Where development results in the unavoidable loss of native vegetation within a Value Offset Area MLES waterway buffer or a Value Offset Area MLES wetland buffer, an environmental offset is required in accordance with the environmental offset requirements identified in Planning scheme policy - Environmental areas.

Editor's note - For MSES Koala Offsets, the environmental offset provisions in Schedule 11 of the Regulation, in combination with the requirements of the Environmental Offsets Act 2014, apply.

No example provided.

Extractive resources transport route (refer Overlay map - Extractive resources (transport route and buffer) to determine if the following assessment criteria apply)

PO92

Development:

- does not increase in the number of people living in close proximity to a transport route and being subject to the adverse effects from the transportation route;
- does not result in the establishment of uses that are incompatible with the operation of Extractive resources transport routes;
- adopts design and location measures to satisfactorily mitigate the potential adverse impacts associated with transportation routes on sensitive land uses. Such measures include, but are not limited to:
 - locating the furthest distance possible from the transportation route;
 - ii. habitable rooms being located the furthest from the transportation route;
 - iii. shielding and screening private outdoor recreation space from the transportation routes.

E92

The following uses are not located within the 100m wide transport route buffer:

- Caretaker's accommodation⁽¹⁰⁾, except where located in the Extractive industry zone;
- b. Community residence⁽¹⁶⁾;
- C. Dual occupancy (21);
- d. Dwelling house (22);
- e. Dwelling unit⁽²³⁾;
- f. Hospital⁽³⁶⁾:
- g. Rooming accommodation⁽⁶⁹⁾;
- h. Multiple dwelling⁽⁴⁹⁾;
- i. Non-resident workforce accommodation⁽⁵²⁾;
- j. Relocatable home park⁽⁶²⁾;
- k. Residential care facility (65);
- I. Resort complex⁽⁶⁶⁾;
- m. Retirement facility (67);
- n. Rural workers' accommodation⁽⁷¹⁾;
- O. Short-term accommodation⁽⁷⁷⁾;
- p. Tourist park⁽⁸⁴⁾.

PO93

Development:

- does not adversely impact upon the efficient and effective transportation of extractive material along a transportation route;
- ensures vehicle access and egress along transportation routes are designed and located to achieve a high degree of safety, having good visibility;
- utilises existing vehicle access points and where existing vehicle access points are sub-standard or poorly formed, they are upgraded to an appropriate standard.

E93.1

Development does not create a new vehicle access point onto an Extractive resources transport route.

E93.2

A vehicle access point is located, designed and constructed in accordance with Planning scheme policy - Integrated design.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria apply)

Note - To assist in demonstrating achievement of heritage performance outcomes, a Cultural heritage impact assessment report is prepared by a suitably qualified person verifying the proposed development is in accordance with The Australia ICOMOS Burra Charter

Note - To assist in demonstrating achievement of this performance outcome, a Tree assessment report is prepared by a qualified arborist in accordance with Planning scheme policy – Heritage and landscape character. The Tree assessment report will also detail the measures adopted in accordance with AS 4970-2009 Protection of trees on development sites.

Note - Places, including sites, objects and buildings having local cultural heritage significance, are identified on Overlay map - Heritage and landscape character and listed in Schedule 1 of Planning scheme policy - Heritage and landscape character. Places also having cultural heritage significance at a State level and being entered in the Queensland Heritage Register, are also identified in Schedule 1 of Planning scheme policy - Heritage and landscape character.

PO94

Development will:

- not diminish or cause irreversible damage to the cultural heritage values present on the site, and associated with a heritage site, object or building;
- b. protect the fabric and setting of the heritage site, object or building;
- c. be consistent with the form, scale and style of the heritage site, object or building;
- d. utilise similar materials to those existing, or where this is not reasonable or practicable, neutral materials and finishes;
- e. incorporate complementary elements, detailing and ornamentation to those present on the heritage site, object or building;
- retain public access where this is currently provided.

E94

Development is for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value.

Note - A cultural heritage conservation management plan for the preservation, maintenance, repair and restoration of a site, object or building of cultural heritage value is prepared in accordance with Planning scheme policy - Heritage and landscape character. The plan is sent to, and approved by Council prior to the commencement of any preservation, maintenance, repair and restoration works.

PO95

Demolition and removal is only considered where:

- a report prepared by a suitably qualified conservation architect or conservation engineer demonstrates that the building is structurally unsound and is not reasonably capable of economic repair; or
- demolition is confined to the removal of outbuildings, extensions and alterations that are not part of the original structure; or
- c. limited demolition is performed in the course of repairs, maintenance or restoration; or
- demolition is performed following a catastrophic event which substantially destroys the building or object.

No example provided.

PO96

Where development is occurring on land adjoining a site of cultural heritage value, the development is to be sympathetic to and consistent with the cultural heritage values present on the site and not result in their values being eroded, degraded or unreasonably obscured from public view.

No example provided.

PO97

E97

PO98

Development does not adversely impact upon the health and vitality of significant trees. Where development occurs in proximity to a significant tree, construction measures and techniques as detailed in AS 4970-2009 Protection of trees on development sites are adopted to ensure a significant tree's health, wellbeing and vitality.

Significant trees are only removed where they are in a poor state of health or where they pose a health and safety risk to persons or property. A Tree Assessment report prepared by a suitably qualified arborist confirming a tree's state of health is required to demonstrate achievement of this performance outcome.

Development does:

No example provided

- a. not result in the removal of a significant tree;
- b. not occur within 20m of a protected tree;
- involve pruning of a tree in accordance with Australian Standard AS 4373-2007 – Pruning of Amenity Trees.

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.

PU	70	no example provided.
Dev	relopment:	
a. b.	minimises the risk to persons from overland flow; does not increase the potential for damage from overland flow either on the premises or other premises, public land, watercourses, roads or infrastructure.	
POS	99	No example provided.
Dev	relopment:	
a. b.	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; does not concentrate, intensify or divert overland flow onto an upstream, downstream or surrounding property.	
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.		
	e - Reporting to be prepared in accordance with Planning eme policy – Flood hazard, Coastal hazard and Overland flow.	
PO'	100	No example provided.
Development does not:		

- a. directly, indirectly or cumulatively cause any increase in overland flow velocity or level;
- increase the potential for flood damage from overland flow either on the premises or other premises, public lands, watercourses, roads 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.

PO101

Development ensures that public safety and the risk to the environment are not adversely affected by a detrimental impact of overland flow on a hazardous chemical located or stored on the premises.

E101

Development ensures that a hazardous chemical is not located or stored in an Overland flow path area.

Note - Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.

PO102

Development which is not in a Rural zone ensures that overland flow is not conveyed from a road or public open space onto a private lot.

E102

Development which is not in a Rural zone that an 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.

PO103

Development ensures that inter-allotment drainage infrastructure, overland flow paths and open drains through private property cater for overland flows for a fully developed upstream catchment 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

E103.1

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.

E103.2

Development ensures that inter-allotment drainage infrastructure is designed to accommodate any event up to and including the 1% AEP for the fully developed upstream catchment.

PO104

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over: No example provided.

6 Zones

- a. a stormwater pipe if the nominal pipe diameter exceeds 300mm;
- b. an overland flow path where it crosses more than one premises;
- 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.

Additional criteria for development for a Park (57)

PO105

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.

E105

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

PO106

Development provides and maintains a suitable setback from waterways and wetlands that protects natural and environmental values. This is achieved by recognising and responding to the following matters:

- a. impact on fauna habitats;
- b. impact on wildlife corridors and connectivity;
- c. impact on stream integrity;
- d. impact of opportunities for revegetation and rehabilitation planting;
- e. edge effects.

E106

Development does not occur within:

- a. 50m from top of bank for W1 waterway and drainage line
- b. 30m from top of bank for W2 waterway and drainage line
- c. 20m from top of bank for W3 waterway and drainage line
- d. 100m from the edge of a Ramsar wetland, 50m from all other wetlands.

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.

Movement network figure

Figure 1 - Morayfield - Anderson Road

