6.2.7 Industry zone code

6.2.7.1 Application - Industry zone

This code applies to undertaking development in the Industry 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 all precincts;
- 2. Part B of the code applies only to assessable development in the 6.2.7.1 'Mixed industry and business precinct';
- 3. Part C of the code applies only to assessable development in the 6.2.7.2 'Light industry precinct';
- 4. Part D of the code applies only to assessable development in the 6.2.7.3 'General industry precinct';
- 5. Part E of the code applies only to assessable development in the 6.2.7.4 'Restricted industry precinct';
- 6. Part F of the code applies only to assessable development in the 6.2.7.5 'Marine industry precinct'.

6.2.7.2 Purpose - Industry zone

- 1. The purpose of the Industry zone code is to provide for a range of service, low, medium, or high impact industrial uses. It may include non-industrial and business uses that support the industrial activities where they do not compromise the long-term use of the land for industrial purposes.
- 2. Industry areas contain high quality, fully serviced, accessible land accommodating a wide range of industrial and supporting activities in accordance with acceptable environmental standards and with minimal impact on surrounding uses. The purpose of the Industry zone code is to implement the policy direction as set out in Part 3, Strategic Framework. The Industry zone contains 5 precincts which have the following purpose:
 - a. The Mixed industry and business precinct will facilitate a range of low impact industry (42) and associated commercial uses which have a nexus with other industrial activities occurring in the precinct.
 - b. The Light industry precinct will facilitate and maintain the long term viability of a range of low impact and low intensity industrial and business activities which are compatible with adjacent commercial and residential areas.
 - c. The General industry precinct will facilitate and maintain the long term viability of a broad range of industrial uses which provide significant employment opportunities and require locations which are well separated from incompatible uses.

- d. The Restricted industry precinct will support the continued viability of a range of high impact and hard to locate industrial uses which contribute significantly to the regional economy and require locations which are well separated from incompatible uses.
- e. The Marine industry precinct will facilitate and maintain the long-term viability waterfront-based industry and associated commercial activities which require direct access to a waterway.

6.2.7.3 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 6.2.7.1. Where the development does not meet a requirement for accepted development (RAD) within Part A, Table 6.2.7.1, the category of development changes to assessable development under the rules outlined in section 5.3.3. (1), and assessment is against the corresponding performance outcome (PO) identified in the table below. This only occurs whenever a RAD is not met, and is therefore limited to the subject matter of the RADs that are not complied with. To remove any doubt, for those RADs that are complied with, there is no need for assessment against the corresponding PO.

Requirements for accepted development	Mixed industry and business precinct - corresponding performance outcome	Light industry precinct - corresponding performance outcome	General industry precinct - corresponding performance outcome	Restricted industry precinct - corresponding performance outcome	Marine industry precinct - corresponding performance outcome
RAD1	PO1	PO1	PO1	PO1	PO4
RAD2	PO2	PO2	PO2	PO2	PO5
RAD3	PO3, PO4	PO3, PO4	PO3, PO4	PO3, PO4	PO6, PO7, PO8
RAD4	PO8	PO8	PO7	P07	PO11
RAD5	PO19	PO18	PO17	PO17	PO22
RAD6	PO12	PO12	PO11	PO11	PO15
RAD7	PO17	PO16	PO15	PO15	PO19
RAD8	PO27	PO26	PO25	PO25	PO30
RAD9	PO28	PO27	PO26	PO26	PO31
RAD10	PO37	PO36	PO35	PO35	PO40
RAD11	PO30, PO31	PO29, PO30	PO28, PO29	PO28, PO29	PO33, PO34
RAD12	PO30, PO31	PO29, PO30	PO28, PO29	PO28, PO29	PO33, PO34
RAD13	PO31	PO30	PO29	PO29	PO34
RAD14	PO31	PO30	PO29	PO29	PO34
RAD15	PO41	PO40	PO39	PO39	PO44
RAD16	PO43	PO42	PO41	PO41	PO46
RAD17	PO40	PO39	PO38	PO38	PO43
RAD18	PO40	PO39	PO38	PO38	PO43
RAD19	PO44	PO43	PO42	PO42	PO47

6 Zones

	1				
RAD20	PO46	PO45	PO44	PO44	PO49
RAD21	PO47	PO46	PO45	PO45	PO50
RAD22	PO48	PO47	PO46	PO46	PO51
RAD23	PO47	PO46	PO45	PO45	PO50
RAD24	PO47, PO50	PO46, PO49	PO45, PO48	PO45, PO48	PO46, PO50
RAD25	PO49	PO48	PO47	PO47	PO52
RAD26	PO49	PO48	PO47	PO47	PO49
RAD27	PO52	PO51	PO50	PO50	PO55
RAD28	PO52	PO51	PO50	PO50	PO55
RAD29	PO53	PO52	PO51	PO51	PO56
RAD30	PO61	PO60	PO59	PO59	PO64
RAD31	PO58	PO57	PO56	PO56	PO61
RAD32	PO55	PO54	PO53	PO53	PO58
RAD33	PO55	PO54	PO53	PO53	PO58
RAD34	PO55	PO54	PO53	PO53	PO58
RAD35	PO60	PO59	PO58	PO58	PO63
RAD36	PO55	PO54	PO53	PO53	PO58
RAD37	PO55	PO54	PO53	PO53	PO58
RAD38	PO57	PO56	PO55	PO55	PO60
RAD39	PO57	PO56	PO55	PO55	PO60
RAD40	PO62	PO61	PO60	PO60	PO65
RAD41	PO62	PO61	PO60	PO60	PO65
RAD42	PO63	PO62	PO61	PO61	PO62
RAD43	PO4, PO8, PO16, PO18-PO21, PO66	PO4, PO8, PO15, PO17-PO20, PO65	PO4, PO7, PO14, PO16-PO19, PO65	PO4, PO7, PO14, PO16-PO19, PO64	PO7, PO8, PO18, PO20-PO24, PO69
RAD44	PO65	PO64	PO63	PO63	PO68
RAD45	PO65	PO64	PO64	PO64	PO68
RAD46	PO68	PO68	PO71	PO67	PO78
RAD47	PO22-PO25	PO21-PO24	PO20-PO23	PO20-PO23	PO26-PO29
RAD48	PO22-PO25	PO21-PO24	PO20-PO23	PO20-PO23	PO26-PO29
RAD49	PO85	PO84	PO80	PO73	PO84
RAD50	PO86	PO85	PO81	PO74	PO85
RAD51	PO87	PO86	PO82	PO75	PO86
RAD52	PO87	PO86	PO82	PO75	PO86

RAD53	PO87	PO86	PO82	PO75	PO86
RAD54	PO87	PO86	PO82	PO75	PO86
RAD55	PO89	PO88	PO84	PO77	PO88
RAD56	PO90	PO89	PO85	PO85	PO89
RAD57	PO91-PO102	PO90-PO101	PO86-PO97	PO79-PO90	PO90-PO101
RAD58	PO91-PO102	PO90-PO101	PO86-PO97	PO79-PO90	PO90-PO101
RAD59	PO103	PO102	PO98	N/A	N/A
RAD60	PO104	PO103	PO99	N/A	N/A
RAD61	PO105	PO104	PO100	N/A	N/A
RAD62	PO106	PO105	PO101	N/A	N/A
RAD63	PO107	PO106	PO102	N/A	N/A
RAD64	PO108	PO107	PO103	N/A	N/A
RAD65	PO56	PO56	PO54	PO54	PO59
RAD66	PO109	PO108	PO104	PO91	PO102
RAD67	PO109	PO108	PO104	PO91	PO102
RAD68	PO112	PO111	PO107	PO94	PO105
RAD69	PO112	PO111	PO107	PO94	PO105
RAD70	PO112	PO111	PO107	PO94	PO105
RAD71	PO113	PO112	PO108	N/A	N/A
RAD72	PO114	PO113	PO109	N/A	N/A
RAD73	PO115, PO116	PO114, PO115	PO110, PO111	N/A	N/A
RAD74	PO118	PO117	PO113	N/A	N/A
RAD75	PO119-PO121, PO123-PO125	PO117-PO119, PO121-PO123	PO114-PO119	PO95-PO97, PO99-PO101	PO106-PO108, PO110-PO112
RAD76	PO119-PO121, PO123-PO125	PO117-PO119, PO121-PO123	PO114-PO116, PO118-PO120	PO95-PO97, PO99-PO101	PO106-PO108, PO110-PO112
RAD77	PO119-PO121	PO117-PO119	PO114-PO116	PO95-PO97	PO106-PO108
RAD78	PO122	PO120	PO117	PO101	PO109
RAD79	PO126	PO124	PO121	PO102	PO113
RAD80	PO127	PO125	PO122	PO103	PO114

Part A—Requirements for accepted development - All precincts

Table 6.2.7.1 Requirements for accepted development - All precincts

Requirements for accepted development	
	General requirements

Extensions to existing buildings

RAD1

Extensions to an existing building do not exceed 20% of the existing GFA on-site.

Note - The 20% increase in GFA includes all previous instances of GFA increase under this outcome, or as part of Building Work

Building height

RAD2

Building height does not exceed the maximum height identified on Overlay map - Building heights.

Setbacks

RAD3

Extensions to buildings maintain a minimum setback of:

- a. 6m to the street frontage (other than the Bruce Highway);
- b. 3m to the secondary street frontage;
- c. 5m to land not included in the Industry zone;
- d. 10m to a boundary adjoining the Bruce Highway.

Landscaping

RAD4

Development does not result in a net reduction in established landscaping on the site.

Lighting

RAD5

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of the Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those between 10pm and 7am the following day.

Car parking

RAD6

On-site car parking is provided at a rate identified in Schedule 7 - Car parking.

Waste

RAD7

Bins and bin storage area/s are provided, designed and managed in accordance with Planning scheme policy – Waste.

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

RAD8

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;

- 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

RAD9

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

Access

RAD10

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.

RAD11

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:
 - 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.
RAD12	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.
RAD13	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.
RAD14	Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.
	Note - Pavements are to be designed by a RPEQ.

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.

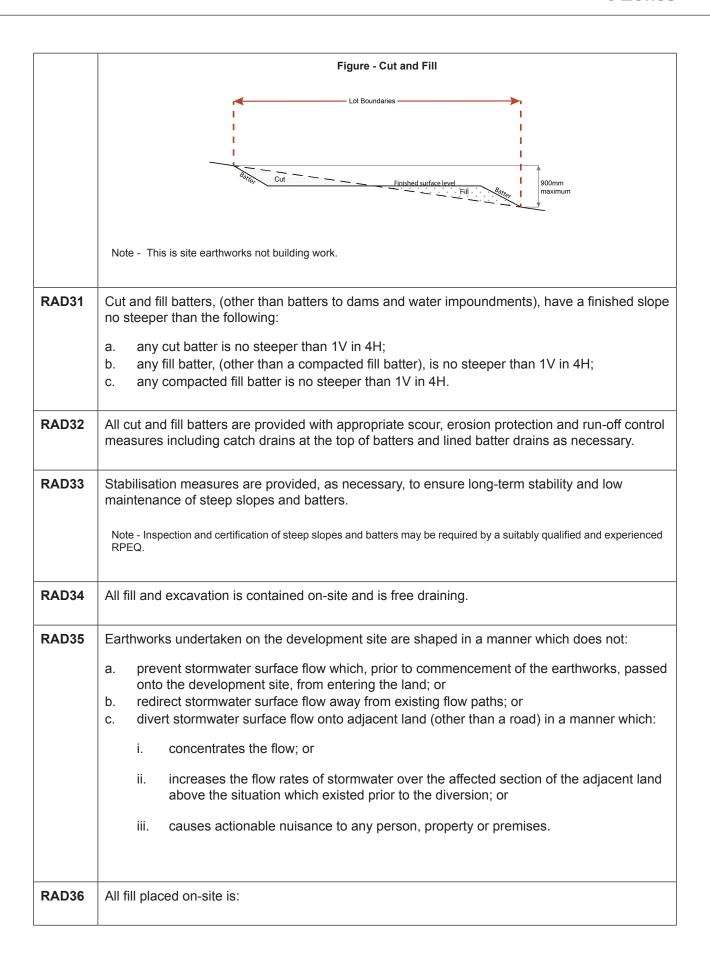
Note - The deemed to comply solution is to be designed, constructed, established and maintained in accordance with the requirements of Water by Design 'Deemed to Comply Solutions - Stormwater Quality Management for South East Queensland' and Planning scheme policy - Integrated design.

RAD17 Development ensures that surface flows entering the premises from adjacent properties are not blocked, diverted or concentrated. Note - A report from a suitably qualified Registered Professional Engineer Queensland may be required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. **RAD18** Development ensures that works (e.g. fences and walls) do not block, divert or concentrate the flow of stormwater to adjoining properties. Note - A report from a suitably qualified Registered Professional Engineer Queensland may be required certifying that the development does not increase the potential for significant adverse impacts on an upstream, downstream or surrounding premises. **RAD19** Stormwater drainage infrastructure (excluding detention and bio-retention systems) through or within private land is protected by easements in favour of Council (at no cost to 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 4.0m Sewer pipe up to 225m diameter 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 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.

Site work	Site works 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; 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.

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

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);
- 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.

Use specific requirements

Land use

RAD43

Where within 100m of a sensitive zone:

- a. development is undertaken fully indoors;
- b. uses do not create audible noise measured at the boundary of the site between the hours of 7:00 pm and 6:00 am;
- c. any new plant or air conditioning equipment is not located along adjoining boundaries with sensitive land uses and screened from view of the street;
- d. landscaping and noise attenuating fencing are used to buffer visual and audible impacts generated from the use.

RAD44

The combined area for ancillary office⁽⁵³⁾ and administration functions does not exceed 20% of the GFA or 200m² whichever is the lesser.

RAD45

The display of items for sale to the public is limited to commodities, articles or goods resulting from the industrial processes undertaken on-site and limited to 5% of the GFA or 100m² of the use, whichever is the lesser.

Caretaker's accommodation⁽¹⁰⁾

RAD46

Caretaker's accommodation⁽¹⁰⁾:

- a. has a maximum GFA of 80m²;
- b. does not gain access from a separate driveway to the principal use of the site;
- c. Includes a minimum 16m² of private open space directly accessible from a habitable room.

Hazardous Chemicals

Acid sulf	fate soils - (refer Overlay map - Acid sulfate soils to determine if the following requirements
	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
RAD55	Note - Council may require a detailed landscaping plan, prepared by a suitably qualified person to ensure compliance with Planning scheme policy - Integrated design. All equipment comprising the telecommunications facility ⁽⁸¹⁾ which produces audible or non-audible
	Note - Landscaping is provided in accordance with Planning scheme policy - Integrated design.
RAD54	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.
RAD53	The facility is enclosed by security fencing or by other means to ensure public access is prohibited
RAD52	Equipment shelters and other associated structures are either the same type of colour or materia to match the surrounding locality.
NAD 01	 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.
RAD51	Equipment shelters and associated structures are located:
RAD50	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.
RAD49	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.
Editor's no manner the (Electroma	munications facility ⁽⁸¹⁾ ote - In accordance with the Federal legislation Telecommunications facilities ⁽⁸¹⁾ must be constructed and operated in a last 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.
	thresholds.
RAD48	Development does not involve the storage or handling of hazardous chemicals listed in Schedule 9, Development involving hazardous chemicals, Table 9.0.2 Hazardous chemicals assessable
RAD47	All development that involves the storage or handling of hazardous chemicals listed in Schedule 9, Development involving hazardous chemicals, Table 9.0.1 Quantity thresholds for hazardous chemicals stored as accepted development subject to requirements complies with Table 9.0.3 Hazardous chemicals.

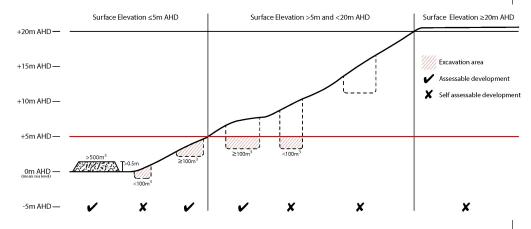
Note - Planning scheme policy - Acid sulfate soils provides guidance for requirements for accepted development that has the potential to disturb acid sulfate

soils i.e. development involving filling or excavation works below the thresholds of 100m3 and 500m3 respectively.

RAD56

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.

RAD57

Where no suitable land cleared of native vegetation exists, clearing of native vegetation in High Value Area or Value Offset Area is for the purpose of a new dwelling house⁽²²⁾ and all associated facilities* or an extension to an existing dwelling house⁽²²⁾ only, and comprises an area no greater than 1500m².

Note - *All associated facilities includes: on-site wastewater treatment, all areas of disturbance, on-site parking, access and manoeuvring areas.

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.

RAD58

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:

- a. 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

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residential and Environmental management and conservation zones. In any other zone, clearing is not to exceed 2m in width either side of the fence; 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 g. 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) RAD59 Development does not result in more than one dwelling house⁽²²⁾ per lot within separation areas. RAD60 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⁾; e. hospital⁽³⁶⁾; 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). RAD61 All habitable rooms within the separation area are: acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008; b. provided with mechanical ventilation. RAD62 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) RAD63 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⁾; 0. Short-term accommodation⁽⁷⁷⁾: p. Tourist park (84). RAD64 Except for an existing vacant lot, development does not create a new vehicle access point onto an Extractive resources transport route. RAD65 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.

RAD66

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

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

RAD67

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.

RAD68	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.
RAD69	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:
	a. construction of any building;
	b. laying of overhead or underground services;
	c. any sealing, paving, soil compaction;d. any alteration of more than 75mm to the ground surface prior to work commencing.
RAD70	Pruning of a significant tree occurs in accordance with Australian Standard AS 4373-2007 - Pruning of Amenity Trees.
	octure buffers (refer Overlay map - Infrastructure buffers to determine if the following nents apply)
RAD71	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⁾ ;
	O. Short-term accommodation ⁽⁷⁷⁾ ;
	p. Tourist park ⁽⁸⁴⁾ .
RAD72	Development does not include the following uses located within a landfill 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⁾ ;

	i. non resident workforce accommodation ⁽⁵²⁾ .
	non-resident worklorde accommodation ,
	Tologatable Home park
	residential care facility ,
	result complex ,
	remement admity ,
	n. rural workers' accommodation ⁽⁷¹⁾ ;
	o. short term accommodation ⁽⁷⁷⁾ ;
	p. tourist park ⁽⁸⁴⁾ .
RAD73	All habitable rooms located within an Electricity supply substation buffer are:
	 a. located a minimum of 10m from an electricity supply substation⁽⁸⁰⁾; and b. acoustically insulated to achieve the noise levels listed in Schedule 1, Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008.
RAD74	Development does not involve the construction of any buildings or structures containing habitable rooms or sensitive land uses within a High voltage electricity line buffer.
Overland apply)	I flow path (refer Overlay map - Overland flow path to determine if the following requirements
RAD75	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.
RAD76	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
RAD77	Development for a material change of use or building work ensures that fencing in an overland flow path area is at least 50% permeable.
RAD78	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.
RAD79	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.
	and wetland setbacks (refer Overlay map - Riparian and wetland setback to determine if the requirements apply)
	, W2 and W3 waterway and drainage lines, and wetlands are mapped on Schedule 2, Section 2.5 Overlay Maps – Riparian nd setbacks.
RAD80	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.

Transport noise corridors (refer Overlay map - Transport noise corridors)

Note - This is for information purposes only. No requirements for accepted development or criteria for assessable development apply. Development located within a Transport Noise Corridor must satisfy the requirements of the Queensland Development Code

6.2.7.1 Mixed industry and business precinct

6.2.7.1.1 Purpose - Mixed industry and business precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Mixed industry and business precinct:
 - a. A range of employment-intensive, knowledge-based, low impact industrial activities and associated commercial activities are established in the precinct which benefit from high levels of exposure and access to high quality transport infrastructure.
 - b. The operation and viability of existing and future industrial activities is protected from the intrusion of incompatible uses.
 - c. Development is located, designed and managed to:
 - i. maintain the health and safety of people;
 - ii. avoid significant adverse effects on the natural environment;
 - iii. minimise the possibility of adverse impacts on nearby non-industrial uses;
 - iv. be adaptable for alternative industry uses.
 - d. Development has access to infrastructure and essential services and safe and convenient access to major transport routes.
 - e. Development is designed to incorporate sustainable practices including water sensitive design and energy efficient building design.
 - f. The scale, character, and built form of development and the resulting streetscape contribute to a high standard of visual and physical amenity and incorporate crime prevention through environmental design (CPTED) principles.
 - g. Commercial, Shop and Office activities only occur in the precinct where:
 - i. there is a justified need for the use to be located in the precinct;
 - ii. the use does not compromise the role or function of the region's centres network.
 - h. Sensitive land uses do not occur where they could compromise or constrain existing or future industrial land uses in the precinct or adjoining industrial areas.
 - i. Special industry⁽⁷⁹⁾ does not establish within the precinct.
 - j. Development encourages public transport patronage and active transport choices through streetscape improvements and the provision of appropriate end of trip facilities.
 - k. The continued operation of Places of worship and Medium impact industries that were lawfully established at commencement is supported. Any extensions to these uses needs to satisfy the outcomes of this code.
 - I. Large format retail, car dominated uses or uses that require large outdoor storage space are not located in the precinct.
 - m. Development provides a high quality urban form and landscaped environment.

- 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.
- Development does 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 Mixed industry and business precinct includes one or more of the following:

•	Caretaker's accommodation ⁽¹⁰⁾	 Indoor sport recreation 		•	Sales office ⁽⁷²⁾
•	Educational establishment ⁽²⁴⁾ (if for technical or trade related education) Emergency services ⁽²⁵⁾ Food and drink outlet ⁽²⁸⁾ (if less than 100m² GFA) Hardware and trade supplies ⁽³²⁾ (where a maximum of 500m² GFA)	 Low impact Medium in industry (47 metres from land use of land u	ort industry ⁽⁴²⁾ Inpact (if at least 250 or a sensitive or zone) (where on a ollector road or ales ⁽⁵⁴⁾ (where goods ured on-site) and technology	•	Service industry ⁽⁷³⁾ Service station ⁽⁷⁴⁾ Showroom ⁽⁷⁸⁾ (where for industry or trade related products and a maximum of 500m ² GFA) Warehouse ⁽⁸⁸⁾

t. Development in the Mixed industry and business precinct does not include any of the following:

•	Air services ⁽³⁾	•	Funeral parlour ⁽³⁰⁾	•	Permanent plantation ⁽⁵⁹⁾
•	Animal keeping ⁽⁵⁾	•	Garden centre ⁽³¹⁾	•	Relocatable home park ⁽⁶²⁾
•	Bar ⁽⁷⁾	•	Hardware and trade supplies (32) (Where	•	Residential care facility ⁽⁶⁵⁾
•	Brothel ⁽⁸⁾		exceeding 500m ² GFA)	•	Resort complex ⁽⁶⁶⁾
•	Cemetery ⁽¹²⁾	•	High Impact Industry ⁽³⁴⁾	•	Retirement facility ⁽⁶⁷⁾

Community care centre ⁽¹⁵⁾	• Hospital ⁽³⁶⁾	Roadside stall ⁽⁶⁸⁾
Community residence	Hotel ⁽³⁷⁾ Intensive animal	Rooming accommodation ⁽⁶⁹⁾
• Community use ⁽¹⁷⁾	industry ⁽³⁹⁾	• Rural industry ⁽⁷⁰⁾
• Cropping ⁽¹⁹⁾	• Intensive horticulture ⁽⁴⁰⁾	Rural workers' accommodation ⁽⁷¹⁾
Detention facility ⁽²⁰⁾	• Landing ⁽⁴¹⁾	Shopping Centre ⁽⁷⁶⁾
• Dual occupancy ⁽²¹⁾	Major sport, recreation and entertainment	Short-term
• Dwelling house ⁽²²⁾	facility ⁽⁴⁴⁾	accommodation ⁽⁷⁷⁾
• Dwelling unit ⁽²³⁾	• Market ⁽⁴⁶⁾	• Showroom ⁽⁷⁸⁾ (where not for industry or trade
Education establishme (where not for technical)	ıl	related products or exceeds 500m ² GFA)
or trade related education)	• Nature-based tourism ⁽⁵⁰⁾	• Special industry ⁽⁷⁹⁾
Environment facility ⁽²⁶⁾	 Nightclub entertainment facility⁽⁵¹⁾ 	• Theatre ⁽⁸²⁾
Extractive industry ⁽²⁷⁾	Non-resident workforce accommodation ⁽⁵²⁾	• Tourist park ⁽⁸⁴⁾
• Food and drink outlet ⁽²⁾ (where exceeding 100)	8)	• Veterinary services ⁽⁸⁷⁾
GFA)	recreation ⁽⁵⁵⁾	• Wholesale nursery ⁽⁸⁹⁾
• Function facility ⁽²⁹⁾	 Parking station⁽⁵⁸⁾ 	• Winery ⁽⁹⁰⁾

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

6.2.7.1.2 Criteria for assessable development

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part B, Table 6.2.7.1.1 as well as the 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 B—Criteria for assessable development - Mixed industry and business precinct

Table 6.2.7.1.1 Assessable development - Mixed industry and business precinct

Performance outcomes Examples that achieve aspects of the Performan Outcomes
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General criteria

Site cover

PO1

Site cover is limited to a proportion of a site that ensures:

- A sufficient number and type of vehicle parking spaces are provided on the site to meet the parking demands and expectations of the proposed use;
- Any type of vehicle expected to visit the site on a regular basis is able to access and leave the site in a forward direction with clear manoeuvring on the site;
- setbacks to boundaries maximise the efficient use of the site while ensuring positive interfaces with public space or sensitive land uses;
- d. Areas of landscaping are provided to soften the built form and hard stand impacts of development whilst providing areas of natural space on a site.

No example provided.

Building height

PO2

The height of buildings is in keeping with the predominant industrial and commercial character of the precinct and does not cause adverse amenity impacts on nearby sensitive land uses and zones.

E2

Building height does not exceed the maximum height identified on Overlay map - Building heights.

Setbacks

PO₃

Street boundary setbacks:

- a. minimise building bulk and visual dominance from the street;
- b. provide areas for landscaping at the front of the site:
- allow for customer parking to be located at the front of the building;
- provide opportunities for dense landscaping to screen at maturity any visibility of development of a site from the Bruce Highway.

E3

Buildings maintain a minimum setback of:

- a. 6m to the primary frontage (other than the Bruce Highway);
- b. 3m to the secondary street frontage;
- c. 10m to a boundary adjoining the Bruce Highway.

PO4

Side and rear boundary setbacks maintain views, privacy, access to natural light and the visual amenity of adjoining sensitive land uses.

E4

Where a development adjoins general residential zoned land, the building is setback a minimum of 3m from the property boundary with dense landscaping installed along the boundary to provide screening of the development with a mature height of at least 3m.

Note - Refer to Planning scheme policy - Integrated design for determining acceptable levels of landscaping for screening purposes.

Building appearance and design

PO5

Buildings exhibit a high standard of commercial design and construction, which:

- a. adds visual interest to the streetscape, through variation in building materials, colours and features:
- b. does not result in blank, unarticulated walls fronting streets or public areas;
- c. reduces the perceived bulk of the building when viewed from the street;
- d. articulates or accentuates the administration and customer service areas of the building;
- e. contributes to safe environment, through the incorporation of CPTED principles;
- f. incorporates high quality, low maintenance building materials;
- g. does not utilise highly reflective materials.

Note - The following examples illustrate an acceptable design response to this outcome.

No example provided.





PO6

Buildings on corner allotments:

- a. address both street frontages;
- b. contain building openings facing both street frontages;
- c. do not present blank unarticulated walls to either frontage.

Note - The following example illustrates an acceptable design response to this outcome.

No example provided.



Staff recreation area

PO7

Staff are provided with adequate and amenable break/dining facilities to suit the nature of the activities on-site.

E7

Where the nature of the activities on-site do not allow staff to eat in their work environment, the development provides an on-site recreation area for staff that:

- a. includes adequate seating, tables and rubbish bins for the number of staff on-site;
- b. is adequately protected from the weather;
- c. is safely accessible to all staff;
- d. is separate and private from public areas;
- e. is located away from a noisy or odorous activity.

Landscaping

PO8

Landscaping is provided on the site to:

- visually soften the built form, areas of hardstand, storage areas and mechanical plant associated with the on-site activities;
- b. complement the existing or desired streetscape;
- minimise the impact of industrial development on any adjoining lots not zoned for industrial purposes.

E8

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

Fencing

PO9 E9

The provision of fencing on street frontages does not dominate the street or create safety issues.

Note - The following example illustrates an acceptable design response to this outcome.



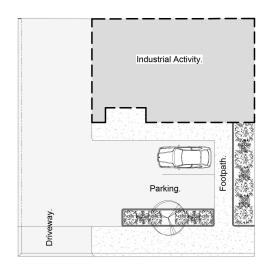
Where fencing is provided on the street frontage, fence sections between columns or posts have a minimum transparency of 70% spread evenly across its total surface area.

Public access

PO10

The use has a safe, clearly identifiable public access separate from service and parking areas.

Note - The following diagram illustrates an acceptable design response to this outcome.



E10.1

Pedestrian linkages are provided from the street and customer car parking areas directly to the main entrance of the building.

E10.2

Public access to the building is not provided through industrial service areas.

Movement network

PO11 E11.1

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 figures:

- Figure 1 Deception Bay Bailey Road / Park Road
- b. Figure 2 Deception Bay Deception Bay Road
- c. Figure 3 Dakabin

E11.2

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

PO12

Car parking is provided on-site to meet the anticipated demand of employees and visitors and avoid adverse impacts on the external road network.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E12

Car parking is provided in accordance with Schedule 7 - Car parking.

PO13

The design of vehicle entry points and car parking areas:

- does not impact on the safety of the external road network;
- b. ensures the safety of pedestrians at all times;
- ensures the safe movement of vehicles within the site:
- d. provides connections with car parking areas on adjoining sites where possible.

E13

All vehicle entry points and car parking areas are designed and constructed in accordance with Australian Standard AS 2890.1 Parking facilities Part 1: Off-street car parking.

PO14

Vehicle cross-overs do not dominate the street frontage.

E14

A maximum of 1 vehicle cross-over is provided to each street frontage unless required for manoeuvring purposes.

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

- 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.

E15.1

Minimum bicycle parking facilities are provided at a rate of 1 bicycle parking space for every 3 vehicles parking spaces required by Schedule 7 – Car parking.

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;

- 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

PO16

Service areas, including loading/unloading facilities, plant areas and outdoor storage areas, are screened from the direct view from land not included in the Industry zone and sub-arterial and arterial roads.

Note - If landscaping is proposed for screening purposes, refer to Planning scheme Policy - Integrated design for determining acceptable levels.

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.

Environmental impacts

PO18

Where a use is not an environmentally relevant activity under the *Environmental Protection Act 1994*, the release of any containment that may cause environmental harm is mitigated to an acceptable level.

E18

Development achieves the standard listed in Schedule 1 Air Quality Objectives, Environmental Protection (Air) Policy 2008.

Lighting

PO19

E19

Lighting is directed and shielded to not cause unreasonable disturbance to any person on adjoining land.

Artificial lighting is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of the Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day.

Noise

PO20

Noise generating uses do not adversely affect existing 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.

PO21

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.

E21.1

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

E21.2

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'.

PO22

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

E22.1

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:
 - 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 E22.1 (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.

E22.2

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. For any hazard scenario involving fire or explosion: 7kPa overpressure; 4.7kW/m2 heat radiation. If criteria E22.2 (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. E22.3 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: i. 14kPa overpressure; ii. 12.6kW/m2 heat radiation. If criteria E22.3 (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.

E23

PO23

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.

PO24

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.

E24

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.

PO25

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.

E25.1

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.

E25.2

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.

Emissions into Brisbane operational airspace

PO26

Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in Brisbane airport's operational airspace.

Note - Refer to State Planning Policy December 2013 mapping to identify Brisbane airport's operational airspace.

E26.1

Development does not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3m per second.

E26.2

Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m per second is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

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

6 Zones

PO27

- 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

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

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.

PO30

The layout of the development does not compromise:

a. the development of the road network in the area;

E30.1

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

- 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.

E30.2

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

E30.3

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

E30.4

For land located at Deception Bay, all vehicle access to Deception Bay Road is via a future 4-way signalised intersection at Deception Bay Road and Zammit Street, as illustrated in Figure 2 - Deception Bay-Deception Bay Road, except where an alternative access has been previously approved by TMR or allowed through an existing development approval. No direct property access is provided to Deception Bay Road.

PO31

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

E31.1

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.

E31.2

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.

E31.3

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.

E31.4

Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.

Note - Pavements are to be designed by an RPEQ.

E31.5

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

PO32

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.

E32

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.

PO33

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.

E33.1

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.

E33.2

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

PO34

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;
- 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).

No example provided.

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.

PO35

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

E35.1

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.

E35.2

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.

E35.3

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

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.

PO36

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.

E36

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:
 - 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.

PO37

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.

E37

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

PO38

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.

E38.1

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

E38.2

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.

E38.3

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

PO39

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

E39.1

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.

E39.2

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.

E39.3

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.

E39.4

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.

PO40

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.

E40

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

PO41

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.

No example provided.

PO42

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.

PO43

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).

No example provided.

PO44

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.

E44

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 wid circumstances in order to facilit stormwater system.	
	Note - Refer to Planning schem (Appendix C) for easement req	. , ,
PO45	No example provided.	
Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.		

Site works and construction management		
PO46		No example provided.
	site and any existing structures are maintained tidy and safe condition.	
PO4	17	E47.1
All wa.	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; minimise as far as possible, impacts on the natural environment; ensure stormwater discharge is managed in a manner that does not cause actionable nuisance	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
d.	to any person or premises; avoid adverse impacts on street trees and their	from pre-existing conditions; b. stormwater discharged to adjoining and
	critical root zone.	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.

E47.2

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.

E47.3

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.

E47.4

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.

PO48

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

E48

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

PO49

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.

E49.1

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.

E49.2

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.

E49.3

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.

E49.4

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.

E49.5

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.

E49.6

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

PO50 E50

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.

PO51

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).

E51

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

PO52

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.

E52.1

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.

E52.2

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
- 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.

PO53

E53

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.

PO54

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

PO55

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;
- 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).

E55.1

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.

E55.2

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

E55.3

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

E55.4

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

E55.5

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.).

E55.6

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.

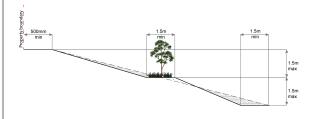
PO56

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

E56

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

Figure - Embankment



PO57

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.

E57.1

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.

E57.2

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. **PO58** 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. **PO59** 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. **PO60** E60 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.

PO61

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

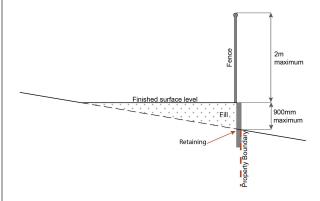
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E61

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.

PO62

Development incorporates a fire fighting system that:

- satisfies the reasonable needs of the fire fighting entity for the area;
- b. 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.

E62.1

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.

E62.2

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.

E62.3

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.

PO63

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.

E63

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.

PO64

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.

E64

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

Industrial land uses

PO65

Ancillary office⁽⁵³⁾, administration functions, retail sales and customer service components do not compromise the industrial activities in the precinct or compromise the role or function of the region's centres network.

E65

The combined area for ancillary office⁽⁵³⁾, administration functions, display and retail sale of commodities, articles or goods resulting from the industrial processes on-site, does not exceed 50% of the GFA.

PO66

Buildings directly adjoining non-industrial zoned land:

- are compatible with the character of the adjoining area;
- b. minimises overlooking and overshadowing;
- c. maintain privacy; and
- do not cause significant loss of amenity to neighbouring residents by way noise, vibration, odour, lighting, traffic generation and/or hours of operation.

No example provided.

PO67

Medium impact industry⁽⁴⁷⁾ uses only establish in the precinct where:

 buildings and activities are located at least 250m from a sensitive land use or sensitive zone; No example provided.

- b. do not constrain the function of existing or future uses in the precinct; and
- not adversely impact on the amenity, health or safety of adjoining industrial workers or sensitive land uses.

Note - Separation distance is to be measured in a straight-line (in accordance with the State policy)

Caretaker's accommodation⁽¹⁰⁾

PO68

Development of Caretaker's accommodation (10):

- a. does not compromise the productivity of the use occurring on-site and in the surrounding area;
- b. is domestic in scale;
- provides adequate car parking provisions exclusive on the primary use of the site;
- d. is safe for the residents;
- e. has regard to the open space and recreation needs of the residents.

E68

Caretaker's accommodation (10):

- a. has a maximum GFA is 80m²;
- b. does not gain access from a separate driveway to that of the industrial use;
- c. provides a minimum 16m² of private open space directly accessible from a habitable room;
- d. provides car parking in accordance with Schedule 7 Car parking.

Sales office⁽⁷²⁾

PO69

Sales office⁽⁷²⁾ remain temporary in duration and demonstrates a relationship to the land or buildings being displayed or sold.

E69

A Sales office⁽⁷²⁾ is located on the site for no longer than 2 years.

Home based business⁽³⁵⁾

PO70

Home based business(s)⁽³⁵⁾:

- a. is subordinate in size and function to the primary use on the site being residential;
- are of a scale and intensity that does not result in adverse visual or nuisance impacts on the residents in adjoining or nearby dwellings;
- results in a vehicular and pedestrian traffic generation consistent with that reasonably expected in the surrounding area;

No example provided.

d.	are suitably screened to ensure adverse visual impacts on the residents in adjoining or nearby dwellings are minimised;	
e.	sufficiently separated from adjoining properties so development does not result in adverse visual, noise, or nuisance impacts on adjoining residents.	
PO	71	E71.1
On-site display and sales of goods is limited to the activities being undertaken from the site and does not result in:		Only goods grown, produced or manufactured on-site are sold from the site.
a.	the display and sale of goods being viewed from	E71.2
	outside of the site;	Display of goods grown, produced or manufactured
b.	overall development on the site having a predominantly commercial appearance.	on-site are contained within a dwelling or on-site structure and the display of goods is not visible from the boundary of the site.
Oth	er Non-industrial land uses	
P072		No example provided.
Offic	ces located in the precinct must:	
a.	have a direct nexus with industrial activities;	
b.	not compromise the viability, role and function of the regions centre network.	
PO	73	No example provided.
Sho	wrooms ⁽⁷⁸⁾ are limited to:	
a.	industry and trade related product lines;	
b.	a gross floor area of 500m ²	
pro	e - Industry and trade related products are considered to be ducts used by the industry and trades in creating an end duct. Examples may include:	
•	Kitchen and bathroom showrooms ⁽⁷⁸⁾ (i.e. Fixtures, plumbing supplies, bench tops etc)	
•	Flooring showrooms ⁽⁷⁸⁾ (i.e. Tiles, carpet, hardwood flooring supplies)	
•	Electrical showrooms ⁽⁷⁸⁾ Building and construction products	
PO	74	No example provided.

6 Zones

	d and Drink Outlets ⁽²⁸⁾ are limited to a gross floor a of 100m ² .	
PO7	75	No example provided.
resid	the exception of Caretaker's accommodation (10), dential and other sensitive land uses do not ablish within the precinct.	
PO7	76	No example provided.
	ere not located on a district collector, sub-arterial rterial road, non-industrial uses:	
a.	provide direct convenience retail or services to the local industrial workforce;	
b.	are consolidated with existing non-industrial uses;	
C.	do not compromise the viability, role or function of the region's centre network;	
d.	are not subject to adverse amenity impacts or risks to health;	
e.	do not constrain the operations of industrial activities.	
	e - Hazard and Nuisance Mitigation Plan may be required e submitted to justify compliance with this outcome.	
	e - The Road hierarchy is mapped on Overlay map - Road earchy	
PO7	77	No example provided.
	ere located on a district collector, sub-arterial or rial road, non-industrial uses:	
a.	are consolidated with existing non-industrial uses;	
b.	do not compromise the viability, role or function of the region's centre network;	
C.	are not subject to adverse amenity impacts or risk to health;	
d.	do not constrain the operations of industrial activities.	

Note - A Hazard and Nuisance Mitigation Plan may be required to be submitted to justify compliance with this outcome. Note - The Road hierarchy is mapped on Overlay map - Road **PO78** No example provided. Traffic generated by non-industrial uses does not detrimentally impact upon the operation and functionality of the receiving road network. **PO79** No example provided. The design of non-industrial buildings in the precinct: 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); contribute to a safe environment (e.g. through the use of lighting and avoiding concealed recesses or potential entrapment areas); incorporate architectural features within the building facade at the street level to create human scale (e.g. awnings). d. are adaptable for future alternative industry uses. **PO80** E80.1 Building entrances: The main entrance to the building is clearly visible from and addresses the primary street frontage. are readily identifiable from the road frontage; a. E80.2 b. add visual interest to the streetscape; Where the building does not adjoin the street frontage, are designed to limit opportunities for a dedicated and sealed pedestrian footpath is concealment: provided between the street frontage and the building are located and oriented to favour active and entrance. public transport usage by connecting to pedestrian footpaths on the street frontage and adjoining sites. Note - The design provisions for footpaths outlined in Planning scheme policy - Integrated design may assist in demonstrating compliance with this outcome.

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

PO81

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.

E81.1

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;
- have horizontal and vertical articulation applied to all exterior walls.

E81.2

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.

PO82

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

E82

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.

PO83

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.

E83

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.

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 E84.1

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.

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

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

E86

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;
- b. visually integrated with the surrounding area;
- c. not visually dominant or intrusive;
- 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.

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.

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.

PO90

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.

E90

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 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.

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

Vegetation clearing, ecological value and connectivity **PO91** 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; 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. **PO92** No example provided. Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by: a. retaining habitat trees; providing contiguous patches of habitat; b. provide replacement and rehabilitation planting C. to improve connectivity; avoiding the creation of fragmented and isolated d. 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

No example provided.

PO93

Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.		
PO94	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:		
 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. 		
PO95	No example provided.	
Development ensures safe, unimpeded, convenient and ongoing wildlife movement and habitat connectivity by:		
 a. providing contiguous patches of habitat; b. avoiding the creation of fragmented and isolated patches of habitat; c. providing wildlife movement infrastructure; d. providing replacement and rehabilitation planting to improve connectivity. 		
Vegetation clearing and soil resource stability		
PO96	No example provided.	
Development does not:		
 a. result in soil erosion or land degradation; b. leave cleared land exposed for an unreasonable period of time but is rehabilitated in a timely manner. 		
Vegetation clearing and water quality		
PO97	No example provided.	
Development maintains or improves the quality of groundwater and surface water within, and downstream, of a site by:		

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 a. ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads; b. avoiding or minimising changes to landforms to maintain hydrological water flows; c. 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. 	
PO98	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
PO99	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.	
PO100	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.	

PO101

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 forest canopy.

No example provided.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO102

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 Offset 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.

PO103

Development does not increase the number of people living in the Extractive Resources separation area.

E103

One dwelling house⁽²²⁾ permitted per lot within separation area.

PO104

Development:

- does not introduce or increase uses that are sensitive to the impacts of an Extractive industry⁽²⁷⁾;
- b. is compatible with the operation of an Extractive industry⁽²⁷⁾;
- c. does not comprise or undermine the function and integrity of the separation area in providing

E104

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);

a buffer between key extractive and processing activities and sensitive, incompatible uses outside the separation area.

- 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⁾;
- O. Tourist park⁽⁸⁴⁾.

PO105

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.

E105

All habitable rooms within the separation area are:

- acoustically insulated to achieve the noise levels listed in Schedule 1 Acoustic Quality Objectives, Environmental Protection (Noise) Policy 2008;
- b. provided with mechanical ventilation.

PO106

Development provides open space areas for passive recreation in a manner where impacts from key extractive/processing activities, particularly noise, is minimised.

E106

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 assessment criteria apply)

PO107

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;
- c. 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:
 - i. locating the furthest distance possible from the transportation route;

E107

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⁾;
- 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⁾;

- ii. habitable rooms being located the furthest from the transportation route;
- shielding and screening private outdoor recreation space from the transportation routes.
- 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⁾.

PO108

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.

E108.1

Development does not create a new vehicle access point onto an Extractive resources transport route.

E108.2

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.

PO109

Development will:

- a. 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;

E109

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.

6 Zones

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. **PO110** 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. PO111 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. **PO112** E112 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)

PO113

E113

Odour sensitive development is separated from Wastewater treatment plants so they are not adversely affected by odour emission or other air pollutant impacts.

The foundation for treatment plants in pollutant impacts.

b.
c.
d.
e.
f.
g.
h.

The following uses are not located within a wastewater treatment site buffer:

- 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⁾;
- O. Short-term accommodation⁽⁷⁷⁾;
- p. Tourist park⁽⁸⁴⁾.

PO114

Odour sensitive development is separated from landfill sites so they are not adversely affected by odour emission or other air pollutant impacts.

E114

The following uses are not located within a Landfill 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⁾;
- O. Short-term accommodation⁽⁷⁷⁾;
- p. Tourist park⁽⁸⁴⁾.

PO115

E115

Habitable rooms:

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)

- 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)

PO116

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.

PO117

Development within a High voltage electricity line buffer provides adequate buffers to high voltage electricity lines to protect amenity and health by ensuring development:

- is located and designed to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields in accordance with the principle of prudent avoidance;
- is located and designed in a manner that maintains a high level of security of supply;
- is located and design so not to impede upon the functioning and maintenance of high voltage electrical infrastructure.

E117

Development does not involve the construction of any buildings or structures within a High voltage electricity line buffer.

PO118

Development within a Pumping station buffer is located, designed and constructed to:

E118

Development does not involve the construction of any buildings or structures within a Pumping station buffer.

a.	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.	
	rland flow path (refer Overlay map - Overland t eria apply)	flow path to determine if the following assessment
	e - The applicable river and creek flood planning levels associable by requesting a flood check property report from Cou	ated with defined flood event (DFE) within the inundation area can ncil.
PO1	19	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.	
PO120		No example provided.
Development:		
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. Note - Reporting to be prepared in accordance with Planning scheme policy – Flood hazard, Coastal hazard and Overland		
flow		
PO121		No example provided.
Dev	elopment 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.

PO122

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.

E122

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.

PO123

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.

E123

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.

PO124

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

E124.1

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.

E124.2

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.

PO125

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over: No example provided.

- 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)

PO126

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.

E126

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

PO127

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.

E127

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 figures

Figure 1 - Deception Bay - Bailey Road / Park Road

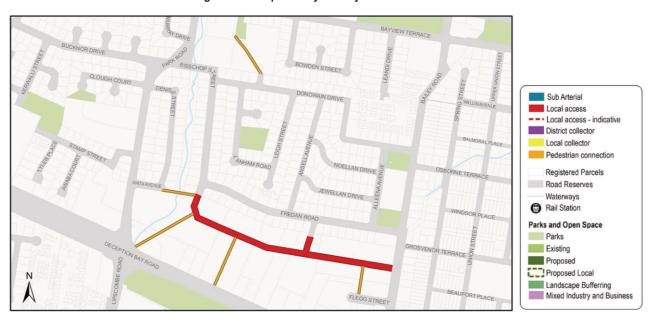


Figure 2 - Deception Bay - Deception Bay Road

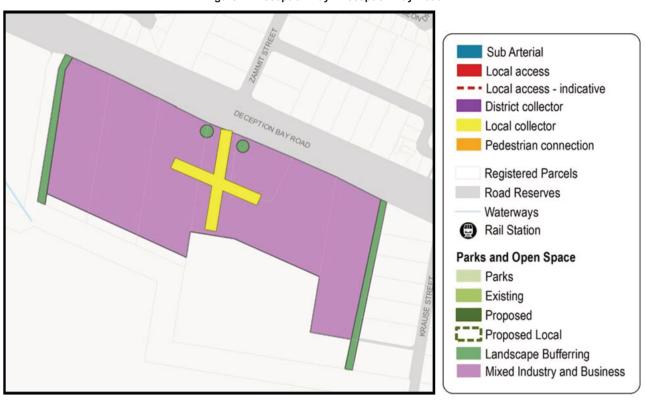




Figure 3 - Dakabin

6.2.7.2 Light industry precinct

6.2.7.2.1 Purpose - Light industry precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the Light industry precinct:
 - a. A range of industrial activities are established in the precinct which are of a low intensity and scale, with minimal off-site impacts and no adverse impacts on surrounding sensitive land uses.
 - b. The operation and viability of existing and future industrial activities is protected from the intrusion of incompatible uses.
 - c. Industrial activities which involve a high level of contact with the general public are located along arterial, sub-arterial and collector roads.
 - d. Industrial activities are located, designed and managed to:
 - i. maintain the health and safety of people;
 - ii. avoid significant adverse effects on the natural environment;
 - iii. minimise the possibility of adverse impacts on nearby non-industrial uses.
 - e. Development has access to infrastructure and essential services and convenient access to major transport routes.
 - f. Non-industrial uses occurring in the precinct:
 - i. Do not compromise or constrain the operation or viability of existing or future industrial activities;
 - ii. Are subordinate in function and scale to all centres within the region;
 - iii. Do not undermine the viability of existing or future centres or neighbourhood hubs;
 - iv. Are consolidated to minimise adverse impacts on the efficient functioning of industrial activities;
 - v. Provide a convenience service or support role to industries and employees in the precinct; or
 - vi. Where not providing a convenience service or support role, development:
 - A. Is located on a district collector, sub-arterial or arterial road;
 - B. Does not generate large amounts of vehicle traffic during operating hours of industry;
 - C. Cannot reasonably be located within a zone suited to the type of development
 - g. Development is designed to incorporate sustainable practices, including water sensitive design and energy efficient building design.
 - h. The scale, character and built form of development and the resulting streetscape contribute to a high standard of visual and physical amenity and incorporates crime prevention through environmental design (CPTED) principles.

- i. Special industry⁽⁷⁹⁾ does not occur within the precinct.
- j. The continued operation of Places of worship⁽⁶⁰⁾ and Medium impact industries⁽⁴⁷⁾ that were lawfully established at commencement is supported. Any extensions to these uses need to satisfy the outcomes of this code.
- k. With the exception of Caretaker's accommodation⁽¹⁰⁾, sensitive land uses do not occur within the precinct.
- I. 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;
 - 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.
- m. Activities associated with the use do not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- n. 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.
- p. 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.
- q. Development in the Light industry precinct includes one or more of the following:

•	Agricultural supplies store ⁽²⁾ Animal husbandry ⁽⁴⁾	•	Educational establishment (24) (where for technical and trade related education only)	•	Medium Impact Industry ⁽⁴⁷⁾ (if 250m or greater from a sensitive zone)
•	Aquaculture ⁽⁶⁾ (where in	•	Emergency services ⁽²⁵⁾	•	Outdoor sales ⁽⁵⁴⁾
•	a building) Bulk landscape	•	Food and drink outlet ⁽²⁸⁾ (where not exceeding	•	Research and technology industry ⁽⁶⁴⁾
	supplies ⁽⁹⁾		100m ² GFA)	•	Sales office ⁽⁷²⁾
•	Caretaker's accommodation ⁽¹⁰⁾	•	Hardware and trade supplies (32)	•	Service Industry
•	Car wash ⁽¹¹⁾	•	Low impact industry ⁽⁴²⁾	•	Service station ⁽⁷⁴⁾
				•	Warehouse ⁽⁸⁸⁾

r. Development in the Light industry precinct does not include any of the following:

•	Air services ⁽³⁾	Extractive industry ⁽²⁷⁾	• Parking station ⁽⁵⁸⁾
•	Animal keeping ⁽⁵⁾	• Food and drink outlet ⁽²⁸⁾	• Permanent plantation ⁽⁵⁹⁾
•	Bar ⁽⁷⁾	(where exceeding 100m ² GFA)	• Relocatable home park ⁽⁶²⁾
•	Brothel ⁽⁸⁾	• Function facility ⁽²⁹⁾	Renewable energy (63)
•	Cemetery ⁽¹²⁾	• Funeral parlour ⁽³⁰⁾	facility ⁽⁶³⁾
•	Child care centre ⁽¹³⁾	Health care services ⁽³³⁾	• Residential care facility ⁽⁶⁵⁾
•	Club ⁽¹⁴⁾	High impact industry ⁽³⁴⁾	• Resort complex ⁽⁶⁶⁾
•	Community care	Intensive animal	• Retirement facility ⁽⁶⁷⁾
	centre ⁽¹⁵⁾	industry ⁽³⁹⁾	 Roadside stall⁽⁶⁸⁾
•	Community residence ⁽¹⁶⁾	• Intensive horticulture ⁽⁴⁰⁾	 Rooming Accommodation⁽⁶⁹⁾
•	Community use ⁽¹⁷⁾	• Landing ⁽⁴¹⁾	Accommodation
			 Rural industry⁽⁷⁰⁾
•	Crematorium ⁽¹⁸⁾	Major sport, recreation and entertainment	Rural workers'
•	Cropping ⁽¹⁹⁾	facility ⁽⁴⁴⁾	accommodation ⁽⁷¹⁾
•	Detention facility ⁽²⁰⁾	• Market ⁽⁴⁶⁾	• Shopping Centre ⁽⁷⁶⁾
•	Dual occupancy ⁽²¹⁾	• Multiple dwelling ⁽⁴⁹⁾	• Short-term accommodation ⁽⁷⁷⁾
			accommodation

 Dwelling unit⁽²³⁾ Educational establishment⁽²⁴⁾ (where not for technical and trade related education) Environment facility⁽²⁶⁾ Non-resident workforce accommodation⁽⁵²⁾ Outdoor sport and recreation⁽⁵⁵⁾ Tourist attraction⁽⁸³⁾ Tourist park⁽⁸⁴⁾ Veterinary services⁽⁸⁷⁾ Winery⁽⁹⁰⁾ 	• Dwelling house ⁽²²⁾	Nightclub entertainment facility ⁽⁵¹⁾	• Special Industry ⁽⁷⁹⁾
establishment ⁽²⁴⁾ (where not for technical and trade related education) • Environment facility ⁽²⁶⁾ • Outdoor sport and recreation ⁽⁵⁵⁾ • Tourist park ⁽⁸⁴⁾ • Veterinary services ⁽⁸⁷⁾	• Dwelling unit ⁽²³⁾		• Theatre ⁽⁸²⁾
trade related education) Environment facility ⁽²⁶⁾ recreation ⁽⁵⁵⁾ recreation ⁽⁵⁵⁾ Veterinary services ⁽⁸⁷⁾			• Tourist attraction ⁽⁸³⁾
Environment facility(20)			• Tourist park ⁽⁸⁴⁾
• Winery ⁽⁹⁰⁾	• Environment facility ⁽²⁶⁾		• Veterinary services ⁽⁸⁷⁾
			• Winery ⁽⁹⁰⁾

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

6.2.7.2.2 Criteria for assessable development

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part C, Table 6.2.7.2.1 as well as the 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 C—Criteria for assessable development - Light industry precinct

Table 6.2.7.2.1 Assessable development - Light industry precinct

Perf	formance outcomes	Examples that achieve aspects of the Performance Outcomes
	General	criteria
Site	cover	
PO1		No example provided.
Site	cover is limited to a proportion of a site that ures:	
a.	A sufficient number and type of vehicle parking spaces are provided on the site to meet the parking demands and expectations of the proposed use;	
b.	Any type of vehicle expected to visit the site on a regular basis is able to access and leave the site in a forward direction with clear manoeuvring on the site;	

- setbacks to boundaries maximise the efficient use of the site while ensuring positive interfaces with public space or sensitive land uses;
- Areas of landscaping are provided to soften the built form and hard stand impacts of development whilst providing areas of natural space on a site.

Building height

PO₂

The height of buildings is in keeping with the predominant industrial character of the precinct and does not cause adverse amenity impacts on nearby sensitive land uses and zones.

E2

Building height does not exceed the maximum height identified on Overlay map - Building heights.

Setbacks

PO₃

Street boundary setbacks:

- a. minimise building bulk and visual dominance from the street;
- b. provide areas for landscaping at the front of the site;
- allow for customer parking to be located at the front of the building;
- Provide opportunities for dense landscaping to screen at maturity any visibility of development of a site from the Bruce Highway.

E3

Buildings maintain a minimum setback of:

- a. 6m to the primary frontage (other than the Bruce Highway);
- b. 3m to the secondary frontage;
- c. 10m to a boundary adjoining the Bruce Highway.

PO4

Side and rear boundary setbacks maintain views, privacy, access to natural light and the visual amenity of adjoining sensitive land uses.

E4

Where a development adjoins general residential zoned land, the building is setback a minimum of 3m from the property boundary with dense landscaping installed along the boundary to provide screening of the development with a mature height of at least 3m.

Note - Refer to Planning scheme policy - Integrated design for determining acceptable levels of landscaping for screening purposes.

Building appearance and design

PO₅

No example provided.

Where fronting a district collector, sub-arterial or arterial road, or visible from a $\mathsf{Park}^{(57)}$, or a centre zoned lot, buildings provide a high level of architectural design which adds visual interest to the streetscape and reduces the perceived bulk of the building, by incorporating:

- a range of building materials, colours and features;
- b. facade articulation along street frontages;
- c. design features to promote customer entry points;
- d. materials that are not highly reflective.

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

Note - The following example illustrates an acceptable design response to this outcome.



P06

Buildings on highly visible corner allotments:

- a. address both frontages;
- b. contain building openings facing both frontages;
- c. do not present blank unarticulated walls to either frontage.

No example provided.

Note - The following example illustrates an acceptable design response to this outcome.



Staff recreation area

PO7

Staff are provided with adequate and amenable break/dining facilities to suit the nature of the activities on-site.

E7

Where the nature of the activities on-site do not allow staff to eat in their work environment, the development provides an on-site recreation area for staff that:

- a. Includes adequate seating, tables and rubbish bins for the number of staff onsite;
- b. is adequately protected from the weather;
- c. is safely accessible to all staff;
- d. is separate and private from public areas;
- e. is located away from a noisy or odorous activity.

Landscaping

PO8

Landscaping is provided on the site to:

- a. visually soften the built form, areas of hardstand, storage areas and mechanical plant associated with the on-site activities;
- b. complement the existing or desired streetscape;
- minimise the impact of industrial development on adjoining lots not zoned for industrial purposes.

E8

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

Fencing

PO9

The provision of fencing on street frontages does not dominate the streetscape or create safety issues.

Note - The following example illustrates an acceptable design response to this outcome.



E9

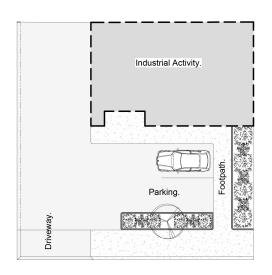
Where fencing is provided on the street frontage, fence sections between columns or posts have a minimum transparency of 70% spread evenly across its total surface area.

Public access

PO10

The use has a safe, clearly identifiable public access separated from service and parking areas.

Note - The following diagram illustrates an acceptable design response to this outcome.



E10.1

Pedestrian linkages are provided from the street and customer car parking areas directly to the main entrance of the building.

E10.2

The public access is separated from industrial service areas.

Movement network

PO11

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.

E11.1

Development provides and maintains the connections shown on the following movement figure:

a. Figure 1 - Elimbah East

E11.2

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

PO12

Car parking is provided on-site to meet the anticipated demand of employees and visitors and avoid adverse impacts on the external road network.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E12

Car parking is provided in accordance with Schedule 7 - Car parking.

PO13

The design of car parking areas:

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

E13

All car parking areas are designed and constructed in accordance with Australian Standard AS 2890.1 Parking facilities Part 1: Off-street car parking.

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.

PO14

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

E14.1

Minimum bicycle parking facilities are provided at a rate of 1 bicycle parking space for every 3 vehicles parking spaces required by Schedule 7 – Car parking.

- 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.

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.

E14.2

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.

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.

E14.3

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.

E14.4

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.

6 Zones

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

PO15

Service areas, including loading/unloading facilities, plant areas and outdoor storage areas, are screened from the direct view from land not included in the Industry zone and sub-arterial and arterial roads.

Note - If landscaping is proposed for screening purposes, refer to Planning scheme policy - Integrated design for determining acceptable levels.

No example provided.

Waste

PO16

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

E16

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

Environmental impacts

PO17

Where a use is not an environmentally relevant activity under the Environmental Protection Act, the release of any containment that may cause environmental harm is mitigated to an acceptable level.

E17

Development achieves the standard listed in Schedule 1 Air Quality Objectives, Environmental Protection (Air) Policy 2008.

Lighting

PO18

Lighting is directed and shielded to not cause unreasonable disturbance to any person on adjoining land.

E18

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day

Noise

PO19

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 performance outcome. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise.

No example provided.

PO20

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.

E20.1

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

E20.2

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'.

PO21

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

E21.1

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 E21.1 (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.

E21.2

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 E21.2 (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. E21.3 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; 12.6kW/m2 heat radiation. ii. If criteria E21.3 (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. **PO22 E22**

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.

PO23

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.

E23

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.

PO24

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.

E24.1

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.

E24.2

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.

Emissions into Brisbane operational airspace

PO25

Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in Brisbane airport's operational airspace.

Note - Refer to State Planning Policy December 2013 mapping to identify Brisbane airport's operational airspace.

E25.1

Development does not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3m per second.

E25.2

Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m per second is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

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

PO26

- 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

PO27

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

PO28

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.

PO29

The layout of the development does not compromise:

a. the development of the road network in the area;

E29.1

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

- 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.

E29.2

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

E29.3

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

E29.4

Vehicle access is not permitted via Foster Road for lots located in the Burpengary East Light industry precinct, as per Figure - Burpengary East Light Industry Access Restriction.

PO30

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

E30.1

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:
 - i. 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;
- 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.

E30.2

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.

E30.3

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.

E30.4

Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.

Note - Pavements are to be designed by an RPEQ.

E30.5

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

PO31

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.

E31

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.

PO32

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.

E32.1

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.

E32.2

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

PO33

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;
- 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).

No example provided.

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.

PO34

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

E34.1

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.

E34.2

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.

E 34.3

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

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.

PO35

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.

E35

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:
 - 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.

PO36

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.

E36

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 -	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		
Integrated design standard.	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

PO37

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.

E37.1

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

E37.2

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.

E37.3

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

PO38

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

E38.1

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.

E38.2

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.

E38.3

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.

E38.4

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.

PO39

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.

E39

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

PO40

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.

No example provided.

PO41

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.

PO42

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).

No example provided.

PO43

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.

E43

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 wid circumstances in order to facilit stormwater system.	
	Note - Refer to Planning schem (Appendix C) for easement req	. , ,
PO44	No example provided.	
Stormwater management facilities (excluding outlets) are located outside of riparian areas and prevent increased channel bed and bank erosion.		

Site works and construction management		
PO45		No example provided.
1	site and any existing structures are maintained tidy and safe condition.	
PO4	46	E46.1
All va.	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; 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;	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;
d.	avoid adverse impacts on street trees and their critical root zone.	 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.

E46.2

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.

E46.3

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.

E46.4

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.

PO47

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

E47

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

PO48

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.

E48.1

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
- 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.

E48.2

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.

E48.3

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.

E48.4

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.

E48.5

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.

E48.6

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

PO49 E49

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.

PO50

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).

E50

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

PO51

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.

E51.1

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.

E51.2

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.

PO52

E52

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.

PO53

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

PO54

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).

E54.1

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.

E54.2

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

E54.3

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

E54.4

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

E54.5

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.).

E54.6

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.

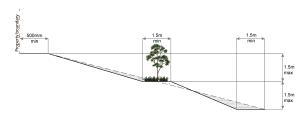
PO55

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

E55

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

Figure - Embankment



PO56

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.

E56.1

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.

E56.2

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. **PO57** 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. **PO58** 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; 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. **PO59** E59 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.

PO60

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

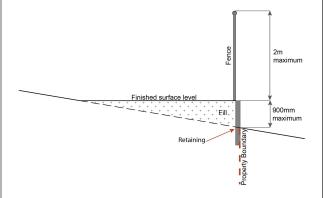
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E60

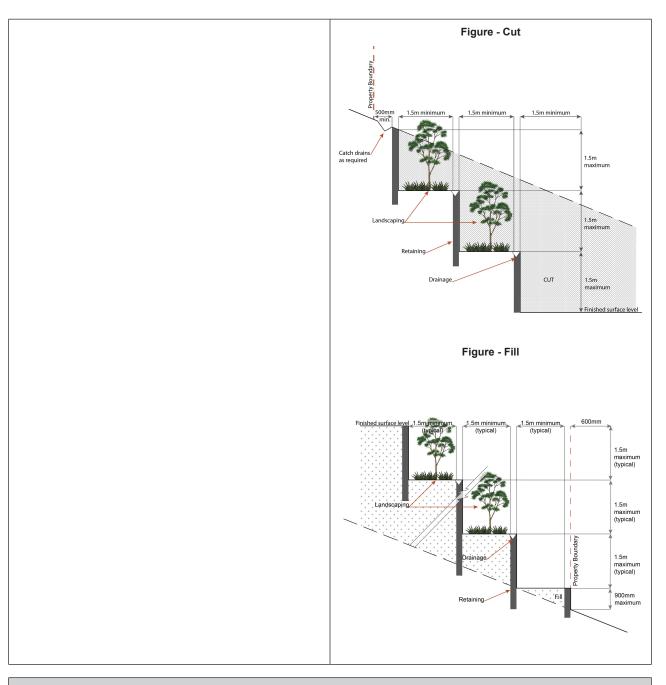
Earth retaining structures:

- 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.

PO61

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.

E61.1

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;
- d. in regard to fire hydrant accessibility and clearance requirements Part 3.5 and, where applicable, Part 3.6.

E61.2

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.

E61.3

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.

PO62

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.

E62

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);
 - 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.

PO63

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.

E63

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

Industrial land uses

PO64

Ancillary office⁽⁵³⁾, administration functions, retail sales and customer service components do not compromise the primary use of the site for industrial purposes or compromise the viability, role or function of the region's centres network.

E64

The combined area of ancillary non-industrial activities, including but not limited to offices⁽⁵³⁾, administration functions, display and retail sale of commodities, articles or goods resulting from the industrial processes on-site, does not exceed 30% of the GFA or 500m², whichever is the lesser.

PO65

Buildings directly adjoining non-industrial zoned land:

- are compatible with the character of the adjoining area;
- b. minimise overlooking and overshadowing;
- c. maintain privacy;
- d. do not cause significant loss of amenity to neighbouring residents by way of noise, vibration, odour, lighting, traffic generation and hours of operation.

No example provided.

PO66

Medium impact industry⁽⁴⁷⁾ uses only establish in the precinct where:

- buildings and activities are located at least 250m from a sensitive land use or sensitive zone;
- b. not constraining the function or viability of existing or future uses in the precinct;

No example provided.

C.	not adversely affecting the amenity, health or safety of employees and visitors of the surrounding uses;		
d.	not adversely affecting the amenity, health or safety of nearby sensitive land uses.		
Note - Separation distances are to be measured in a straight line, in accordance with the State policy.			
PO	37	No e	example provided.
Non-industrial components of buildings (including offices ⁽⁵³⁾ and retail areas) are designed as high quality architectural features and incorporate entry area elements such as forecourts, awnings and the architectural treatment of roof lines and fascias.			
Caretaker's accommodation ⁽¹⁰⁾			
PO68		E68	
Dev	elopment of Caretaker's accommodation ⁽¹⁰⁾ :	Care	etaker's accommodation ⁽¹⁰⁾ :
a.	does not compromise the productivity of the use occurring on-site and in the surrounding area;	a.	has a maximum GFA is 80m ² ;
b.	is domestic in scale;	b.	does not gain access from a separate driveway to that of the industrial use;
C.	provides adequate car parking provisions exclusive on the primary use of the site;	C.	provides a minimum 16m² of private open space directly accessible from a habitable room;
d.	is safe for the residents;	d.	provides car parking in accordance with
e.	has regard to the open space and recreation needs of the residents.		Schedule 7 - Car parking.
Sale	es office ⁽⁷²⁾		
PO6	9	E69	
Sales office ⁽⁷²⁾ remain temporary in duration and demonstrates a relationship to the land or buildings being displayed or sold.		1	ales office ⁽⁷²⁾ is located on the site for no longer 2 years.
Hon	ne based business ⁽³⁵⁾		
PO7	0	No e	example provided.
Hom	ne based business(s) ⁽³⁵⁾ :		

6 Zones

- a. is subordinate in size and function to the primary use on the site being residential;
- are of a scale and intensity that does not result in adverse visual or nuisance impacts on the residents in adjoining or nearby dwellings;
- results in a vehicular and pedestrian traffic generation consistent with that reasonably expected in the surrounding area;
- are suitably screened to ensure adverse visual impacts on the residents in adjoining or nearby dwellings are minimised;
- e. sufficiently separated from adjoining properties so development does not result in adverse visual, noise, or nuisance impacts on adjoining residents.

PO71

On-site display and sales of goods is limited to the activities being undertaken from the site and does not result in:

- a. the display and sale of goods being viewed from outside of the site;
- b. overall development on the site having a predominantly commercial appearance.

E71.1

Only goods grown, produced or manufactured on-site are sold from the site.

E71.2

Display of goods grown, produced or manufactured on-site are contained within a dwelling or on-site structure and the display of goods is not visible from the boundary of the site.

Other Non-industrial land uses

PO72

Showrooms⁽⁷⁸⁾ are limited to:

- Lots with frontages to district collectors, sub-arterial and arterial roads;
- b. Industry and trade related product lines;
- c. A gross floor area of 500m²

Note - Industry and trade related products are considered to be products used by the industry and trades in creating an end product. Example may include:

- Kitchen and bathroom showrooms⁽⁷⁸⁾ (i.e. Fixtures, plumbing supplies, bench tops, etc)
- Flooring showrooms⁽⁷⁸⁾ (i.e. Tiles, carpet, hardwood flooring supplies)

No example provided.

 Electrical showrooms⁽⁷⁸⁾ Building and construction products 	
PO73	No example provided.
Food and Drink Outlets ⁽²⁸⁾ are limited to a gross floor area of 100m ² .	
PO74	No example provided.
With the exception of Caretaker's accommodation ⁽¹⁰⁾ , residential and other sensitive land uses do not establish within the precinct.	
PO75	No example provided.
Non-industrial uses:	
are consolidated with existing non-industrial uses in the precinct;	
b. do not compromise the viability, role or function of the region's centre network;	
c. are not subject to adverse amenity impacts or risk to health from industrial activities;	
 do not constrain the function or viability of existing or future industrial activities in the surrounding area. 	
Note - The submission of a Hazard and Nuisance Mitigation Plan may be required to justify compliance with this outcome.	
PO76	No example provided.
Where located on a local collector or access street, non-industrial uses provide only direct convenience or support services to the industrial workforce.	
Note - The road hierarchy is mapped on Overlay map - Road hierarchy	
PO77	No example provided.
Traffic generated by non-industrial uses does not detrimentally impact the operation and functionality of the external road network.	
PO78	No example provided.

The design of non-industrial buildings in the precinct:

- 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);
- b. contributes to a safe environment (e.g. through the use of lighting and not resulting in concealed recesses or potential entrapment areas);
- incorporates architectural features within the building facade at the street level to create human scale (e.g. awnings).

PO79

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 and adjoining sites.

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

E79.1

The main entrance to the building is clearly visible from and addresses the primary street frontage.

E79.2

Where the building does not adjoin the street frontage, a dedicated and sealed pedestrian footpath is provided between the street frontage and the building entrance.

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

PO80

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;

E80.1

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.

E80.2

- h. landscaped:
- otherwise consistent with the amenity and character of the zone and surrounding area.

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.

PO81

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

E81

Access control arrangements:

- 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.

PO82

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.

E82

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.

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.

PO83

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.

E83.1

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.

E83.2

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.

PO84

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.

E84

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.

PO85

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

E85

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.

PO86

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.

E86.1

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.

E86.2

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

E86.3

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.

E86.4

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.

E86.5

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

E86.6

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.

PO87

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

E87

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.

PO88

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.

E88

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.

PO89

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.

E89

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
- 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 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;
- 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.

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

Vegetation clearing, ecological value and connectivity

PO90

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

No example provided.

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.

PO91

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- 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

PO92

Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected.

No example provided.

PO93

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.

6 Zones

b. c.	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.	
POS	4	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	
POS	5	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	
POS	96	No example provided.
grou	elopment maintains or improves the quality of indwater 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.	
POS	7	No example provided.
	elopment minimises adverse impacts of mwater run-off on water quality by:	
a. b.	minimising flow velocity to reduce erosion; 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 **PO98** 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. **PO99** 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. **PO100** 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

PO101

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 Offset 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.

PO102	E10
Development does not increase the number of people	One

Development does not increase the number of people living in the Extractive Resources separation area.

One dwelling house⁽²²⁾ permitted per lot within separation area.

PO103

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.

E103

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⁾;
- 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⁾;
- O. Tourist park⁽⁸⁴⁾.

PO104

E104

All habitable rooms within the separation area are:

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.

- 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.

PO105

Development provides open space areas for passive recreation in a manner where impacts from key extractive/processing activities, particularly noise, is minimised.

E105

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 assessment criteria apply)

PO106

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;
- c. 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;
 - shielding and screening private outdoor recreation space from the transportation routes.

E106

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⁾;
- 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⁾.

PO107

Development:

- does not adversely impact upon the efficient and effective transportation of extractive material along a transportation route;
- b. ensures vehicle access and egress along transportation routes are designed and located

E107.1

Development does not create a new vehicle access point onto an Extractive resources transport route.

E107.2

A vehicle access point is located, designed and constructed in accordance with Planning scheme policy - Integrated design.

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.

Heritage and landscape character (refer Overlay map - Heritage and landscape character to determine if the following assessment criteria 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.

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;
- 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.

No example provided.

PO110 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.

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.

Infrastructure buffers (refer Overlay map - Infrastructure buffers to determine if the following assessment criteria apply)

PO112

Odour sensitive development is separated from Wastewater treatment plants so they are not adversely affected by odour emission or other air pollutant impacts.

E112

The following uses are not located 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⁾;
- O. Short-term accommodation⁽⁷⁷⁾;
- p. Tourist park⁽⁸⁴⁾.

PO113

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)

E113

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)

PO114

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)

No example provided.

PO115

Development within a High voltage electricity line buffer provides adequate buffers to high voltage electricity lines to protect amenity and health by ensuring development:

- is located and designed to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields in accordance with the principle of prudent avoidance;
- is located and designed in a manner that maintains a high level of security of supply;
- is located and design so not to impede upon the functioning and maintenance of high voltage electrical infrastructure.

E115

Development does not involve the construction of any buildings or structures within a High voltage electricity line buffer.

PO116

E116

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. PO117 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. **PO118** 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; does not concentrate, intensify or divert overland b. 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 PO119 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.

PO120

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.

E120

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.

PO121

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.

E121

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.

PO122

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

E122.1

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.

E122.2

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.

PO123

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over: No example provided.

- 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⁾

PO124

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.

E124

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

PO125

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.

E125

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 figures

Figure 1 - Elimbah East MILE 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



Figure - Burpengary east Light Industry Precinct

2278

6.2.7.3 General industry precinct

6.2.7.3.1 Purpose - General industry precinct

- 1. The purpose of the code will be achieved through the following overall outcomes for the General industry precinct:
 - a. A range of industrial uses and supporting activities are established which are of a scale or intensity where the possibility of adverse impacts on sensitive receptors requires a location sufficiently buffered from incompatible activities.
 - b. The operation and viability of existing and future industrial activities is protected from the intrusion of incompatible uses.
 - c. Development is located, designed and managed to:
 - i. maintain the health and safety of people;
 - ii. avoid significant adverse effects on the natural environment;
 - iii. minimise the possibility of adverse impacts on surrounding non-industrial uses.
 - d. Development has access to infrastructure and essential services and convenient access to major transport routes.
 - e. Development is designed to incorporate sustainable practices where possible, including water sensitive design and energy efficient building design.
 - f. The scale, character and built form of development and the resulting streetscape contribute to a high standard of visual and physical amenity and incorporates crime prevention through environmental design (CPTED) principles.
 - g. Non-industrial uses occurring in the precinct:
 - i. Do not compromise or constrain the operation or viability of existing or future industrial activities;
 - ii. Are subordinate in function and scale to all centres with in the region;
 - iii. Do not undermine the viability of existing or future centres or neighbourhood hubs;
 - iv. Are consolidated to minimize adverse impacts on the efficient functioning of industrial activities;
 - v. Provide a convenience service or support roll to industries and employees within the precinct only.

Note - An Economic Impact Assessment may be required to demonstrate compliance with part of the outcome/s above. Refer to Planning scheme policy - Economic impact assessment for information required.

- h. Low impact industry⁽⁴²⁾, Service industry⁽⁷³⁾ and Warehouse⁽⁸⁸⁾ activities:
 - provide a supporting function to industries in the precinct, or are of a scale and intensity where the off-site impacts of the activity are similar to that of Medium impact industry⁽⁴⁷⁾;

- ii. are not detrimentally affected by the operations of existing or future industrial activities in the precinct;
- iii. do not compromise the operations of existing or future industrial activities in the precinct.
- i. High impact industry⁽³⁴⁾ activities only establish in the precinct where:
 - i. there is a minimum separation distance of 500m from an existing or approved sensitive land use or sensitive zone:
 - ii. it can be demonstrated that the use will operate without adverse impacts on the surrounding area.
- j. Special industry⁽⁷⁹⁾ does not establish within the precinct.
- k. Stand alone Offices do not establish within the precinct, unless on a Neighbourhood hub lot identified on Overlay map Community activities and neighbourhood hubs.
- I. Sensitive land uses, including all forms of residential development, do not occur within the precinct.
- 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, dust, electromagnetic interference, 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.
- Development in the General industry precinct includes one or more of the following:

•	Agricultural supplies store ⁽²⁾	•	Emergency services ⁽²⁵⁾	•	Research and technology industry ⁽⁶⁴⁾
•	Animal husbandry ⁽⁴⁾	•	Food and drink outlet ⁽²⁸⁾ (where does not exceed	•	Sales office ⁽⁷²⁾
•	Bulk landscape supplies ⁽⁹⁾		100m ² GFA) Medium impact	•	Warehouse ⁽⁸⁸⁾
•	Caretaker's		industry ⁽⁴⁷⁾	•	Where in a Neighbourhood hub:
	accommodation ⁽¹⁰⁾				° Office ⁽⁵³⁾
					° Shop ⁽⁷⁵⁾

s. Development in the General industry precinct does not include any of the following:

•	Air services ⁽³⁾	Garden centr	e ⁽³¹⁾	Permanent plantation ⁽⁵⁹⁾
•	Animal keeping ⁽⁵⁾	 Hardware an supplies⁽³²⁾ 	d trade •	Place of worship ⁽⁶⁰⁾
•	Bar ⁽⁷⁾	• Hospital ⁽³⁶⁾	•	Relocatable home park ⁽⁶²⁾
•	Brothel ⁽⁸⁾	• Hotel ⁽³⁷⁾	•	Residential care facility ⁽⁶⁵⁾
•	Cemetery ⁽¹²⁾	 Indoor sport a 		Resort complex ⁽⁶⁶⁾
•	Community care centre ⁽¹⁵⁾	recreation ⁽³⁸⁾		Retirement facility ⁽⁶⁷⁾
•	Community residence ⁽¹⁶⁾	 Intensive anii industry⁽³⁹⁾ 	mal	Roadside stall ⁽⁶⁸⁾
•	Community use ⁽¹⁷⁾	Intensive hor	ticulture ⁽⁴⁰⁾	Rooming accommodation ⁽⁶⁹⁾
•	Cropping ⁽¹⁹⁾	• Landing ⁽⁴¹⁾	•	Rural industry ⁽⁷⁰⁾
•	Detention facility ⁽²⁰⁾	 Major sport, r and entertain 		Rural workers' accommodation ⁽⁷¹⁾
•	Dual occupancy ⁽²¹⁾	facility ⁽⁴⁴⁾	•	Short-term
•	Dwelling house ⁽²²⁾	• Market ⁽⁴⁶⁾		accommodation ⁽⁷⁷⁾
•	Dwelling unit ⁽²³⁾	 Multiple dwel 		Showroom ⁽⁷⁸⁾
•	Educational establishment ⁽²⁴⁾	Nature-based		Special industry ⁽⁷⁹⁾
•	Environment facility ⁽²⁶⁾	 Nightclub ent facility⁽⁵¹⁾ 	ertainment	Theatre ⁽⁸²⁾
•	Extractive industry ⁽²⁷⁾	Non-resident		Tourist park ⁽⁸⁴⁾
•	Food and drink outlet ⁽²⁸⁾	accommodat		Veterinary services ⁽⁸⁷⁾
	(where exceeding 100m ² GFA)	 Outdoor spor recreation⁽⁵⁵⁾ 		Wholesale nursery ⁽⁸⁹⁾
•	Function facility ⁽²⁹⁾	 Parking station 	on ⁽⁵⁸⁾	Winery ⁽⁹⁰⁾
•	Funeral parlour ⁽³⁰⁾			

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

6.2.7.3.2 Criteria for assessable development

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part D, Table 6.2.7.3.1 as well as the 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 D—Criteria for assessable development - General industry precinct

Table 6.2.7.3.1 Assessable development - General industry precinct

Per	formance outcomes	Examples that achieve aspects of the Performance Outcomes			
	General criteria				
Site cover					
PO	1	No example provided.			
Site cover is limited to a proportion of a site that ensures:					
a.	A sufficient number and type of vehicle parking spaces are provided on the site to meet the parking demands and expectations of the proposed use;				
b.	Any type of vehicle expected to visit the site on a regular basis is able to access and leave the site in a forward direction with clear manoeuvring on the site;				
C.	setbacks to boundaries maximise the efficient use of the site while ensuring positive interfaces with public space or sensitive land uses;				
d.	Areas of landscaping are provided to soften the built form and hard stand impacts of development whilst providing areas of natural space on a site.				
Bui	lding height				
PO	2	E2			
The height of buildings is in keeping with the predominant industrial character of the precinct and does not cause adverse amenity impacts on surrounding sensitive land uses and zones.		Building height does not exceed the maximum heigidentified on Overlay map - Building heights.			
Setbacks					
PO	3	E3			
Street boundary setbacks:		Buildings maintain a minimum setback of :			

- a. minimise building bulk and visual dominance from the street;
- b. provide areas for landscaping at the front of the site;
- c. allow for customer parking to be located at the front of the building;
- d. Provide opportunities for dense landscaping to screen at maturity any visibility of development of a site from the Bruce Highway.
- a. 6m to the street frontage (other than the Bruce Highway);
- b. 3m to the secondary street frontage;
- c. 10m to a boundary adjoining the Bruce Highway.

Side and rear boundary setbacks maintain views, privacy, access to natural light and the visual amenity of adjoining sensitive land uses.

E4

Where a development adjoins general residential zoned land, the building is setback a minimum of 3m from the property boundary with dense landscaping installed along the boundary to provide screening of the development with a mature height of at least 3m.

Note - Refer to Planning scheme policy - Integrated design for determining acceptable levels of landscaping for screening purposes.

Building appearance and design

PO5

Where fronting an district collector, sub-arterial or arterial road, or visible from a Park⁽⁵⁷⁾, or a Centre zoned lot, buildings provide a high level of architectural design which adds visual interest to the streetscape and reduces the perceived bulk of the building, by incorporating:

- a. a range of building materials, colours and features;
- b. facade articulation along street frontages;
- c. design features to promote customer entry points;
- d. materials that are not highly reflective.

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

Note - The following examples illustrate an acceptable design response to this outcome.

No example provided.



Staff recreation

PO6

Staff are provided with adequate and amenable break/dining facilities to suit the nature of the activities on-site.

E6

Where the nature of the activities on-site do not allow staff to eat in their work environment, the development provides an on-site recreation area for staff that:

- a. Includes adequate seating, tables and rubbish bins for the number of staff on-site;
- b. is adequately protected from the weather;
- c. is safely accessible to all staff;
- d. is separate and private from public areas;
- e. is located away from a noisy or odorous activity.

Landscaping

PO7

Landscaping is provided on the site to:

- visually soften the built form, areas of hardstand, storage areas and mechanical plant associated with the on-site processes;
- b. complement the existing or desired streetscape;
- minimise the impact of industrial development on adjoining lots not zoned for industrial purposes.

E7

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

Fencing

PO8

The provision of fencing on street frontages does not dominate the streetscape or create safety issues.

Note - The following example illustrates an acceptable design response to this outcome.



E8

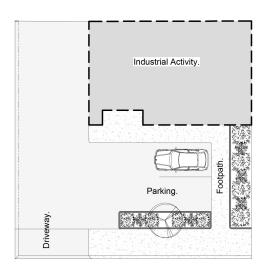
Where fencing is provided on the street frontage, fence sections between columns or posts have a minimum transparency of 70% spread evenly across its total surface area.

Public access

PO9

The use has a safe, clearly identifiable public access separated from service and parking areas.

Note - The following diagram illustrates an acceptable design response to this outcome.



E9.1

Pedestrian linkages are provided from the street and customer car parking areas directly to the main entrance of the building.

E9.2

The public access is separated from industrial service areas.

Movement network

PO10

Development maintains, contributes to or provides for interconnected street, pedestrian and cyclist networks.

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

E10.1

Development provides and maintains the connections shown on the following movement figure:

a. Figure 1 - Elimbah East

E10.2

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

PO11

Car parking is provided on-site to meet the anticipated demands of employees and visitors and avoid adverse impacts on the external road network.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E11

Car parking is provided in accordance with Schedule 7 - Car parking.

PO12

The design of car parking areas:

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

E12

All car parking areas are designed and constructed in accordance with Australian Standard AS2890.1 Parking facilities Part 1: Off-street car parking.

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.

PO13

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

E13.1

Minimum bicycle parking facilities are provided at a rate of 1 bicycle parking space for every 3 vehicles parking spaces required by Schedule 7 – Car parking.

- 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.

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.

E13.2

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;
- 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.

E13.3

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.

E13.4

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

PO14

Service areas, including loading/unloading facilities, plant areas and outdoor storage areas, are screened from the direct view from land not included in the Industry zone and sub-arterial and arterial roads.

Note - If landscaping is proposed for screening purposes, refer to Planning scheme policy - Integrated design for determining acceptable levels.

No example provided.

Waste

PO15

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

E15

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

Environmental impacts

PO16

Where a use is not an environmentally relevant activity under the Environmental Protection Act, the release of any containment that may cause environmental harm is mitigated to an acceptable level.

E16

Development achieves the standard listed in Schedule 1 Air Quality Objectives, Environmental Protection (Air) Policy 2008.

Lighting

PO17

Lighting is directed and shielded to not cause unreasonable disturbance to any person on adjoining land.

E17

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day

Noise

PO18

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 outcome. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise.

No example provided.

PO19

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.

E19.1

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

E19.2

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'.

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

PO20

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

zones.

E20.1

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 E20.1 (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.

E20.2

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. For any hazard scenario involving fire or explosion: i. 7kPa overpressure; 4.7kW/m2 heat radiation. If criteria E20.2 (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. E20.3 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 E20.3 (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. **PO21 E21**

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.

PO22

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.

E22

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.

PO23

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.

E23.1

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.

E23.2

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.

Emissions into Brisbane operational airspace

PO24

Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in Brisbane airport's operational airspace.

Note - Refer to State Planning Policy December 2013 mapping to identify Brisbane airport's operational airspace.

E24.1

Development does not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3m per second.

E24.2

Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m per second is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

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

6 Zones

PO25

- 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

PO26

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

PO27

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.

PO28

The layout of the development does not compromise:

a. the development of the road network in the area;

E28.1

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

- 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.

E28.2

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

E28.3

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

PO29

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

E29.1

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:
 - i. 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;
- 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.

E29.2

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.

E29.3

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.

E29.4

Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.

Note - Pavements are to be designed by an RPEQ.

E29.5

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

PO30

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.

E30

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.

PO31

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.

E31.1

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.

E31.2

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

PO32

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.

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.

E33.1

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.

E33.2

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.

E33.3

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

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.

E34

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:
 - 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.
- 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;
- 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.

PO35

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

E35

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

PO36

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.

E36.1

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

E36.2

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.

E36.3

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

PO37

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

E37.1

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.

E37.2

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.

E37.3

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.

E37.4

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. **PO38 E38** 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. **PO39** 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. **PO40** 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. **PO41** 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).

PO42

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.

E42

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.

PO43

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

Site works and construction management

PO44

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

No example provided.

PO45

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;
- d. avoid adverse impacts on street trees and their critical root zone.

E45.1

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;
- 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.

E45.2

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.

E45.3

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.

E45.4

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.

PO46

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

E46

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

PO47

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

E47.1

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.

E47.2

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.

E47.3

- b. 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.

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.

E47.4

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.

E47.5

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.

E47.6

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

PO48

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.

E48

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.

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).

E49

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

PO50

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;
- is disposed of in a manner which minimises nuisance and annoyance to existing premises.

Note - No burning of cleared vegetation is permitted.

E50.1

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.

E50.2

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.

PO51

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

E51

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.

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

PO53

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;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

E53.1

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.

E53.2

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

E53.3

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

E53.4

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

E53.5

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.).

E53.6

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.

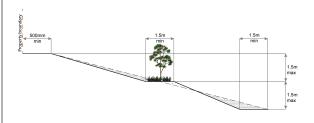
PO54

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

E54

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

Figure - Embankment



PO55

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.

E55.1

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.

E55.2

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. **PO56** 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 qualifications. Stabilisation measures are provided, as necessary, to ensure long-term stability and low maintenance. **PO57** 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. 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. **PO58** E58 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 a. 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 divert stormwater surface flow onto adjacent land, (other than a road), in a manner which: i. concentrates the flow; or 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.

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

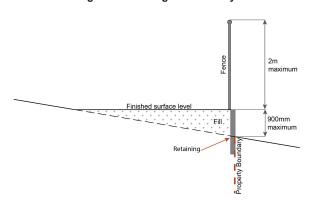
Note - Refer to Planning scheme policy - Residential design for guidance on how to achieve compliance with this performance outcome.

E59

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



- 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.

Figure - Cut

Catch drains as required

Landscaping

Drainage

Cut

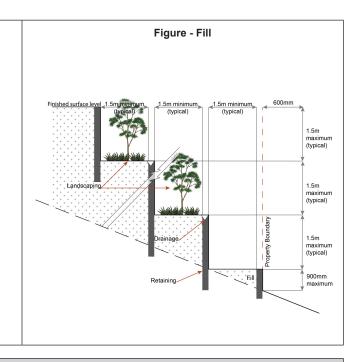
1.5m minimum

1.5m minimum

1.5m minimum

1.5m minimum

1.5m maximum



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.

PO60

Development incorporates a fire fighting system that:

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

E60.1

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;
- d. 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:

- 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;
 - 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;
- d. in regard to fire hydrant accessibility and clearance requirements Part 3.5 and, where applicable, Part 3.6.

E60.2

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;
- an area for a fire brigade pumping appliance to stand within 20m of each fire hydrant and 8m of each hydrant booster point.

E60.3

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.*

PO61

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.

E61

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 4.5 m from the sign.

PO62

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.

E62

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

Industrial uses

Ancillary office⁽⁵³⁾, administration functions and customer service components do not compromise the primary use of the site or industrial activities in the precinct.

E63

The combined area of ancillary non-industrial activities, including but not limited to offices⁽⁵³⁾ and administration functions, does not exceed 20% of the GFA or 200m², whichever is the lesser.

PO64

Ancillary retail or showroom⁽⁷⁸⁾ areas do not compromise the primary use of the site or industrial activities in the precinct and does not affect the viability, role or function of the region's centres network.

E64

The combined area for the display and retail sale of commodities, articles or goods resulting from the industrial processes on the site does not exceed 5% of the GFA or 100m², whichever is the lesser.

PO65

Buildings directly adjoining non-industrial zoned

- a. are compatible with the character of the adjoining area;
- b. minimise overlooking and overshadowing;
- c. maintain privacy;
- d. do not cause significant loss of amenity to neighbouring residents by way of noise, vibration, odour, lighting, traffic generation and hours of operation.

No example provided.

PO66

Low impact industry⁽⁴²⁾ or Service industry⁽⁷³⁾ activities:

- a. are only located on the periphery of the precinct;
- b. are only located on Collector, Sub-arterial or Arterial roads;
- do not constrain the function or viability of existing and future industrial uses in the precinct;
- d. do not generate excessive non-industrial traffic.

Note - Refer to Overlay map - Road hierarchy for road classifications.

No example provided.

PO6	7	No example provided.
High	impact industry ⁽³⁴⁾ activities:	
a.	are located at least 500m from a sensitive land use or sensitive zone;	
b.	do not compromise the function or viability of existing and future industrial uses in the precinct;	
C.	do not adversely impact on the amenity, health or safety of adjoining industrial workers or sensitive land uses.	
PO6	8	No example provided.
Non-industrial components of buildings (including offices and retail areas) are to be located at the road frontage to assist in activating the frontage and designed as high quality architectural features incorporating entry area elements such as forecourts, awnings and the architectural treatment of roof lines and fascias.		
Hon	ne based business ⁽³⁵⁾	
PO6	9	No example provided.
Hom	ne based business(s) ⁽³⁵⁾ :	
a.	is subordinate in size and function to the primary use on the site being residential;	
b. are of a scale and intensity that does not result in adverse visual or nuisance impacts on the residents in adjoining or nearby dwellings;		
C.	results in a vehicular and pedestrian traffic generation consistent with that reasonably expected in the surrounding area;	
d.	are suitably screened to ensure adverse visual impacts on the residents in adjoining or nearby dwellings are minimised;	
e.	sufficiently separated from adjoining properties so development does not result in adverse visual, noise, or nuisance impacts on adjoining residents.	
PO7	0	E70.1

On-site display and sales of goods is limited to the activities being undertaken from the site and does not result in:

Only goods grown, produced or manufactured on-site are sold from the site.

- the display and sale of goods being viewed a. from outside of the site:

overall development on the site having a

predominantly commercial appearance.

E70.2

Display of goods grown, produced or manufactured on-site are contained within a dwelling or on-site structure and the display of goods is not visible from the boundary of the site.

Caretaker's accommodation⁽¹⁰⁾

PO71

Development of Caretaker's accommodation (10):

- does not compromise the productivity of the use occurring on-site and in the surrounding
- b. is domestic in scale:
- provides adequate car parking provisions C. exclusive on the primary use of the site;
- is safe for the residents; d.
- has regard to the open space and recreation needs of the residents.

E71

Caretaker's accommodation⁽¹⁰⁾:

- has a maximum GFA is 80m²;
- b. does not gain access from a separate driveway to that of the industrial use;
- C. provides a minimum 16m² of private open space directly accessible from a habitable room;
- d. provides car parking in accordance with Schedule 7 - Car parking.

Sales office⁽⁷²⁾

PO72

Sales office⁽⁷²⁾ remain temporary in duration and demonstrates a relationship to the land or buildings being displayed or sold.

E72

A Sales office⁽⁷²⁾ is located on the site for no longer than 2 years.

Other Non-industrial uses

PO73

With the exception of Caretaker's accommodation⁽¹⁰⁾, residential and other sensitive land uses do not establish within the precinct.

No example provided.

PO74

Non-industrial uses:

are consolidated with existing non-industrial uses in the precinct;

No example provided.

6 Zones

- b. do not compromise the viability, role or function of the region's centres network;
- are not subject to adverse amenity impacts, or risk to health from industrial activities;
- do not constrain the function or viability of existing or future industrial activities in the surrounding area;
- e. are not located on Collector or Local roads.

Note - The submission of a Hazard and Nuisance Mitigation Plan may be required to justify compliance with this outcome.

Note - Refer to Overlay map - Road hierarchy for road classifications.

PO75

Traffic generated by non-industrial uses does not detrimentally impact upon the operation and functionality of the external road network.

No example provided.

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

PO76

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.

E76.1

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

- a. are enclosed within buildings or structures;
- 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.

E76.2

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.

PO77

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

E77

Access control arrangements:

 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.

PO78

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.

E78

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.

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.

PO79

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.

E79.1

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.

E79.2

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.

PO80

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.

E80

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.

PO81

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

E81

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.

PO82

E82.1

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;
- 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.

E82.2

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

E82.3

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.

E82.4

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.

E82.5

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

E82.6

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.

PO83

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

E83

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.

PO84

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.

E84

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.

PO85

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.

E85

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 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.

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

Vegetation clearing, ecological value and connectivity

PO86

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*.

No example provided.

* Editor's note - This is not a requirement for an environmental offset under the Environmental Offsets Act 2014.	
PO87	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; 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.	
Vegetation clearing and habitat protection	
PO88 Development ensures that the biodiversity quality	No example provided.
and integrity of habitats is not adversely impacted upon but maintained and protected.	
and integrity of habitats is not adversely impacted	No example provided.
and integrity of habitats is not adversely impacted upon but maintained and protected.	No example provided.
PO89 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 in a High Value Area or a Value Offset Area. Where development does result in the loss or degradation of habitat value, development 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	No example provided. 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	
POS	91	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	
POS	02	No example provided.
grou	elopment maintains or improves the quality of undwater and surface water within, and instream, of a site by:	
a.	ensuring an effective vegetated buffers and setbacks from waterbodies is retained to achieve natural filtration and reduce sediment loads;	
b. c.	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.	
POS	93	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.	
Veg	etation clearing and access, edge effects an	d urban heat island effects
POS	04	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. **PO95** 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; C. restoring, rehabilitating and increasing the size of existing patches of native vegetation; ensuring that buildings and access (public and d. vehicle) are setback as far as possible from environmental areas and corridors: 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 **PO96** 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 b. and green linkage opportunities; landscaping with local native plant species to C. 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 **PO97** No example provided. 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 Offset Act 2014, apply.

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.

PO98

Development does not increase the number of people living in the Extractive Resources separation area.

E98

One dwelling house⁽²²⁾ permitted per lot within separation area.

PO99

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⁾;
- c. 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.

E99

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);
- 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⁾;
- O. Tourist park⁽⁸⁴⁾.

PO100

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.

E100

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.

PO101

Development provides open space areas for passive recreation in a manner where impacts from key extractive/processing activities, particularly noise, is minimised.

E101

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 assessment criteria apply)

PO102

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:
 - i. locating the furthest distance possible from the transportation route;
 - ii. habitable rooms being located the furthest from the transportation route;
 - shielding and screening private outdoor recreation space from the transportation routes.

E102

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⁾;
- Short-term accommodation⁽⁷⁷⁾;
- p. Tourist park⁽⁸⁴⁾.

PO103

Development:

- does not adversely impact upon the efficient and effective transportation of extractive material along a transportation route;
- b. ensures vehicle access and egress along transportation routes are designed and located

E103.1

Development does not create a new vehicle access point onto an Extractive resources transport route.

E103.2

A vehicle access point is located, designed and constructed in accordance with Planning scheme policy - Integrated design.

- 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.

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 heritage impact assessment report 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.

PO104

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.

E104

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.

PO105

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.

PO106

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.

PO107

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.

E107

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)

PO108

Odour sensitive development is separated from Wastewater treatment plants so they are not adversely affected by odour emission or other air pollutant impacts.

E108

The following uses are not located 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⁾;

	o. Short-term accommodation ⁽⁷⁷⁾ ; p. Tourist park ⁽⁸⁴⁾ .
PO109	E109
Odour sensitive development is separated from landfill sites so they are not adversely affected by odour emission or other air pollutant impacts.	The following uses are not located within a Landfill 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⁾ ; l. Resort complex ⁽⁶⁶⁾ ; m. Retirement facility ⁽⁶⁷⁾ ; n. Rural workers' accommodation ⁽⁷¹⁾ ; o. Short-term accommodation ⁽⁷⁷⁾ ; p. Tourist park ⁽⁸⁴⁾ .
D0440	
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)	 E110 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)

PO111

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.

No example provided.

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)

PO112

Development within a High voltage electricity line buffer provides adequate buffers to high voltage electricity lines to protect amenity and health by ensuring development:

- a. is located and designed to avoid any potential adverse impacts on personal health and wellbeing from electromagnetic fields in accordance with the principle of prudent avoidance;
- is located and designed in a manner that maintains a high level of security of supply;
- c. is located and design so not to impede upon the functioning and maintenance of high voltage electrical infrastructure.

E112

Development does not involve the construction of any buildings or structures within a High voltage electricity line buffer.

PO113

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.

E113

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.

PO114

No example provided.

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.

PO115

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.

PO116

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.

No example provided.

PO117

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.

E117

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.

PO118

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.

E118

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.

PO119

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

E119.1

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.

E119.2

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.

PO120

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)

PO121

Development for a Park⁽⁵⁷⁾ ensures that the design and layout responds to the nature of the overland flow affecting the premises such that:

E121

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

- 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.

Riparian and wetland setbacks

PO122

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.

E122

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 figures

Figure 1 - Elimbah East MILE 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

6.2.7.4 Restricted industry precinct

6.2.7.4.1 Purpose - Restricted industry precinct

- The purpose of the code will be achieved through the following overall outcomes for the Restricted industry precinct:
 - a. A range of industrial activities are established in the precinct which are of a scale and intensity where the potential of adverse impacts on sensitive receptors requires a location significantly separated from incompatible activities.
 - b. The operation and viability of existing and future industrial activities is protected from the intrusion of incompatible uses.
 - c. Industrial development is located, designed and managed to:
 - i. maintain the health and safety of people;
 - ii. avoid significant adverse effects on the natural environment;
 - iii. minimise the possibly of adverse impacts on surrounding non-industrial uses.
 - Development has access to infrastructure and essential services and convenient access to major transport networks.
 - e. Development is designed to incorporate sustainable practices where possible, including water sensitive design and energy efficient building design.
 - f. Development achieves a high standard of industrial design and incorporates crime prevention through environmental design (CPTED) principles.
 - 9. High impact industry⁽³⁴⁾ activities do not result in detriment or danger to other development in the locality.
 - h. Development that is able to be accommodated in other locations does not establish in this precinct and reduce the limited supply of land available in this precinct.
 - i. Special industry ⁽⁷⁹⁾ does not establish within the precinct.
 - j. Extensions to existing Special industry (79) do not increase the scale and intensity of the use.
 - k. With the exception of Caretaker's accommodation ⁽¹⁰⁾, sensitive land uses, including all forms of residential development, do not occur within the precinct.
 - 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.
- m. Development does not cause a nuisance by way of aerosols, fumes, light, noise, odour, particles or smoke.
- n. 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.
- p. 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.
- q. Development in the Restricted industry precinct includes one or more of the following:

•	High impact industry ⁽³⁴⁾	Medium impact industry ⁽⁴⁷⁾	 Research and technology industry⁽⁶⁴⁾

r. Development in the Restricted industry precinct does not include any of the following:

			, p. 6661 de 666161 de 6	u, u	g.
•	Adult store ⁽¹⁾	•	Funeral parlour (30)	•	Parking station ⁽⁵⁸⁾
•	Agricultural supplies store ⁽²⁾	•	Garden centre (31)	•	Permanent plantation (59)
•	Air services ⁽³⁾	•	Hardware and trade supplies ⁽³²⁾	•	Place of worship (60)
•	Animal keeping ⁽⁵⁾	•	Health care services (33)	•	Relocatable home park ⁽⁶²⁾
•	Aquaculture ⁽⁶⁾	•	Home based	•	Renewable energy
•	Bar ⁽⁷⁾		business ⁽³⁵⁾		facility ⁽⁶³⁾
•	Brothel ⁽⁸⁾		Hospital ⁽³⁶⁾		Residential care facility (65)
•	Bulk landscape supplies		Hotel ⁽³⁷⁾ Indoor sport and	•	Resort complex (66)
			recreation (38)		Retirement facility (67)
	Cemetery ⁽¹²⁾	•	Intensive animal	•	Roadside stall ⁽⁶⁸⁾
•	Child care centre (13)		industry ⁽³⁹⁾	•	Rooming accommodation ⁽⁶⁹⁾
•	Club (14)		Intensive horticulture (40)	•	Rural industry ⁽⁷⁰⁾
•	Community care centre (15)		Landing ⁽⁴¹⁾	•	Rural workers'
•	Community residence (16)		Low impact industry ⁽⁴²⁾ Major electricity		accommodation (71)
•	Community use (17)		infrastructure (43)		Sales office ⁽⁷²⁾
•	Cropping ⁽¹⁹⁾	•	Major sport, recreation and entertainment		Shop ⁽⁷⁵⁾ Short-term
•	Detention facility (20)		facility (44)	•	accommodation (77)

•	Dual occupancy ⁽²¹⁾	•	Market (46)	•	Showroom ⁽⁷⁸⁾
•	Dwelling house ⁽²²⁾	•	Motor sport facility (48)	•	Special industry ⁽⁷⁹⁾
•	Dwelling unit (23)	•	Multiple dwellings ⁽⁴⁹⁾	•	Theatre ⁽⁸²⁾
•	Educational establishment (24)	•	Nature-based tourism (50)	•	Tourist attraction (83)
•	Environment facility (26)	•	Nightclub entertainment facility (51)	•	Tourist park ⁽⁸⁴⁾
•	Extractive industry (27)	•	Non-resident workforce	•	Veterinary services (87)
	Food and drink outlet (28)		accommodation (52)	•	Warehouse ⁽⁸⁸⁾
		•	Office (53)	•	Wholesale nursery (89)
	• Function facility ⁽²⁹⁾	•	Outdoor sales ⁽⁵⁴⁾	•	Winery ⁽⁹⁰⁾
		•	Outdoor sport and recreation ⁽⁵⁵⁾		

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

6.2.7.4.2 Criteria for assessable development

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part E, Table 6.2.7.4.1 as well as the 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 E—Criteria for assessable development - Restricted industry precinct

Table 6.2.7.4.1 Assessable development - Restricted industry precinct

Per	formance outcomes	Examples that achieve aspects of the Performance Outcomes						
	General criteria							
Site	Site cover							
PO'	1	No example provided.						
	cover is limited to a proportion of a site that ures:							
a.	A sufficient number and type of vehicle parking spaces are provided on the site to meet the parking demands and expectations of the proposed use;							
 Any type of vehicle expected to visit the site on a regular basis is able to access and leave the site in a forward direction with clear manoeuvring on the site; 								
c. setbacks to boundaries maximise the efficient use of the site while ensuring positive interfaces with public space or sensitive land uses;								
d. Areas of landscaping are provided to soften the built form and hard stand impacts of development whilst providing areas of natural space on a site.								
Bui	lding height							
PO	2	E2						
The height of buildings is in keeping with the predominant industrial character of the precinct and does not cause adverse amenity impacts on surrounding sensitive land uses and zones.		Building height does not exceed the maximum height identified on Overlay map - Building heights.						
Set	backs							

PO₃

Street boundary setbacks:

- a. minimise building bulk and visual dominance from the street;
- b. provide areas for landscaping at the front of the site;
- allow for customer parking to be located at the front of the building;
- d. Provide opportunities for dense landscaping to screen at maturity any visibility of development of a site from the Bruce Highway.

E3

Buildings maintain a minimum setback of:

- a. 6m to the primary frontage (other than the Bruce Highway);
- b. 3m to the secondary frontage;
- c. 5m to land not included in the Industry zone;
- d. 10m to a boundary adjoining the Bruce Highway.

PO4

Side and rear boundary setbacks maintain views, privacy, access to natural light and the visual amenity of adjoining sensitive land uses.

E4

Where a development adjoins general residential zoned land, the building is setback a minimum of 3m from the property boundary with dense landscaping installed along the boundary to provide screening of the development with a mature height of at least 3m.

Note - Refer to Planning scheme policy - Integrated design for determining acceptable levels of landscaping for screening purposes.

Building appearance and design

PO5

Where fronting an arterial or sub-arterial road, or visible from a Park⁽⁵⁷⁾ or centre zoned lot, buildings provide a high level of architectural design which adds visual interest to the streetscape and reduces the perceived bulk of the building, by incorporating:

- a. a range of building materials, colours and features;
- b. facade articulation along street frontages;
- c. design features to promote customer entry points;
- d. materials that are not highly reflective.

No example provided.

Staff recreation area

PO6

E6

Staff are provided with adequate and amenable break/dining facilities to suit the nature of the activities on-site.

Where the nature of the activities on-site do not allow staff to eat in their work environment, the development provides an on-site recreation area for staff that:

- a. Includes adequate seating, tables and rubbish bins for the number of staff on-site;
- b. is adequately protected from the weather;
- c. is safely accessible to all staff;
- d. is separate and private from public areas;
- e. is located away from a noisy or odorous activity.

Landscaping

PO7

Landscaping is provided on-site to:

- visually soften the built form, areas of hardstand, storage areas and mechanical plant associated with the on-site processes;
- b. complement the existing or desired streetscape;
- minimise the impact of industrial development on adjoining lots not zoned for industrial purposes.

E7

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

Fencing

PO8

The provision of fencing on street frontages does not dominate the streetscape or create safety issues.

Note - The following example illustrates an acceptable design response to this outcome.



E8

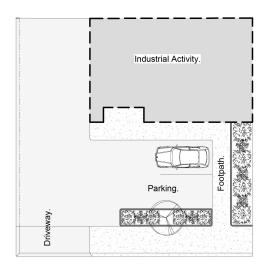
Where fencing is provided on the street frontage, fence sections between columns or posts have a minimum transparency of 70% spread evenly across its total surface area.

Public access

PO9

The use has a safe, clearly identifiable public access separated from service and parking areas.

Note - The following diagram illustrates an acceptable design response to this outcome.



E9.1

Pedestrian linkages are provided from the street and customer car parking areas directly to the main entrance of the building.

E9.2

The public access is separated from industrial service areas.

Movement network

PO10

Development maintains, contributes to or provides for interconnected street, pedestrian and cyclist networks.

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

No example provided.

Car parking

PO11

Car parking is provided on-site to meet the anticipated demands of employees and visitors and avoid adverse impacts on the external road network.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E11

Car parking is provided in accordance with Schedule 7 - Car parking.

PO12

E12

The design of car parking areas:

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

All car parking areas are designed and constructed in accordance with AS2890.1 Parking facilities Part 1: Off-street car parking.

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.

PO13

- 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.
- b. 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.

E13.1

Minimum bicycle parking facilities are provided at a rate of 1 bicycle parking space for every 3 vehicles parking spaces required by Schedule 7 – Car parking.

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.

E13.2

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 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.

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.

E13.3

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.

E13.4

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	2 closet pans, plus 1 sanitary compartment for every 60 bicycle parking	1, plus 1 for every 60 bicycle parking spaces

		provided thereafter	spaces provided thereafter	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:

- 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

PO14

Service areas, including loading/unloading facilities, plant areas and outdoor storage areas, are screened from the direct view from land not included in the Industry zone and sub-arterial and arterial roads.

Note - If landscaping is proposed for screening purposes, refer to Planning scheme policy - Integrated design for determining acceptable levels.

No example provided.

Waste

PO15

E15

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.

Environmental impacts

PO16

Where a use is not an environmentally relevant activity under the Environmental Protection Act, the release of any containment that may cause environmental harm is mitigated to an acceptable level.

E16

Development achieves the standard listed in Schedule 1 Air Quality Objectives, Environmental Protection (Air) Policy 2008.

Lighting

PO17

Lighting is directed and shielded to not cause unreasonable disturbance to any person on adjoining land.

E17

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day

Noise

PO18

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 outcome. Noise impact assessments are to be prepared in accordance with Planning scheme policy - Noise.

No example provided.

PO19

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

E19.1

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

E19.2

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

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.

- 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'.

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

PO20

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

zones.

E20.1

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:
 - 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 E20.1 (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.

E20.2

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:
 - 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 E20.2 (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.

E20.3

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:

- 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:
 - 14kPa overpressure;
 - ii. 12.6kW/m2 heat radiation.

If criteria E20.3 (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.

PO21

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.

E21

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.

PO22

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.

E22

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.

PO23

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.

E23.1

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.

E23.2

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.

Emissions into Brisbane operational airspace

PO24

Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in Brisbane airport's operational airspace.

Note - Refer to State Planning Policy December 2013 mapping to identify Brisbane airport's operational airspace

E24.1

Development does not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3m per second.

E25.2

Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m per second is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

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

PO25

- 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

PO26

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

PO27

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.

PO28

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.

E28.1

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

E28.2

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

E28.3

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

PO29

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

E29.1

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.

E29.2

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.

E29.3

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.

E29.4

Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.

Note - Pavements are to be designed by an RPEQ.

E29.5

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

PO30

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.

E30

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.

PO31

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.

E31.1

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.

E31.2

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 layout and design

PO32

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;

No example provided.

- d. stormwater drainage paths and treatment facilities;
- e. efficient public transport routes;
- f. utility services location;
- g. emergency access and waste collection;
- 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.

PO33

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;

E33.1

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.

E33.2

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.

- 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.

E33.3

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

PO34

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.

E34

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:
 - 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.

PO35

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.

E35

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

PO36

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.

E36.1

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

E36.2

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.

E36.3

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

PO37

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

E37.1

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.

E37.2

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.

E37.3

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.

E37.4

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.

PO38

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.

E38

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

PO39

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. **PO40** 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. **PO41** 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). **PO42** E42

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.

PO43

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

PO44

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

No example provided.

PO45

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;

E45.1

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;
- 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.

E45.2

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.

E45.3

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.

E45.4

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.

PO46 E46

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.

PO47

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
- 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.

E47.1

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.

E47.2

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.

E47.3

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.

E47.4

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.

E47.5

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.

E47.6

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

PO48

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.

E48

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.

PO49

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).

E49

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

PO50

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.

E50.1

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.

E50.2

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

Note - No burning of cleared vegetation is permitted.

- 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.

PO51

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

E51

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.

PO52

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

PO53

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;

E53.1

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.

E53.2

- 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.

E53.3

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

E53.4

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

E53.5

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.).

E53.6

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.

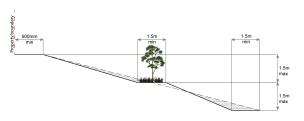
PO54

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

E54

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

Figure - Embankment



PO55 E55.1

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.

E55.2

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.

PO56

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.

PO57

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.

PO58

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.

E58

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

- 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
 - 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.

PO59

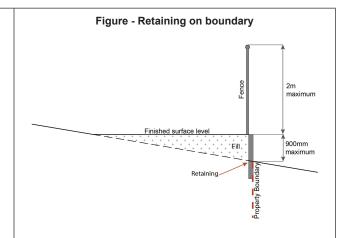
All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

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

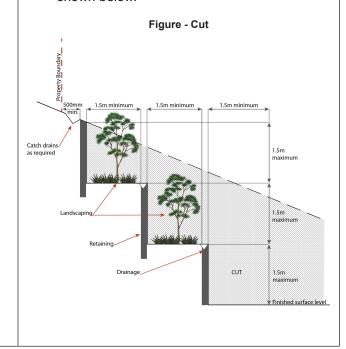
E59

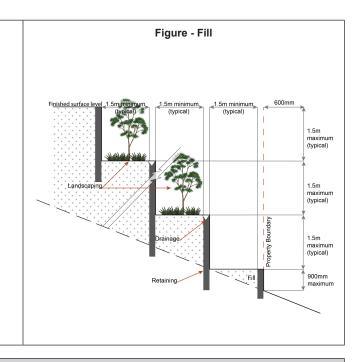
Earth retaining structures:

- 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.

PO60

Development incorporates a fire fighting system that:

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

E60.1

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.

E60.2

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.

E60.3

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.

PO61

E61

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.

PO62

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.

E62

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

Industrial Land Uses		
PO63	E63	
Ancillary office ⁽⁵³⁾ , administration functions, retail sales, showroom ⁽⁷⁸⁾ and customer service components do not compromise the primary use of the site or other industrial activities in the precinct, or affect the viability, role or function of the region's centres network.	The combined area of ancillary non-industrial activities, including but not limited to administration and retail functions, does not exceed 10% of the GFA or 200m², whichever is the lesser.	
PO64	No example provided.	
High impact industry ⁽³⁴⁾ uses maintain a minimum separation of at least 500m from a sensitive land use. Note - Separation distance is to be measured in a straight line, in accordance with the State policy.		
PO65	No example provided.	
Special industry ⁽⁷⁹⁾ uses do not establish within the restricted industry precinct.		
PO66	No example provided.	
Uses that can be readily accommodated within other zones or precincts do not compromise the availability of land within the restricted industry precinct. Note - Low impact industry ⁽⁴²⁾ , Medium impact industry ⁽⁴⁷⁾ , Service industry ⁽⁷³⁾ and Warehouse ⁽⁸⁸⁾ land uses are considered to be able to be readily accommodated within other precincts of the Industry Zone.		
Caretaker's accommodation ⁽¹⁰⁾		
PO67	E67	
Development of Caretaker's accommodation ⁽¹⁰⁾ :	Caretaker's accommodation ⁽¹⁰⁾ :	
 a. does not compromise the productivity of the use occurring on-site and in the surrounding area; b. is domestic in scale; c. provides adequate car parking provisions 	 a. has a maximum GFA is 80m²; b. does not gain access from a separate driveway to that of the industrial use; 	
exclusive on the primary use of the site;		

- d. is safe for the residents;
- e. has regard to the open space and recreation needs of the residents.
- provides a minimum 16m² of private open space directly accessible from a habitable room;
- d. provides car parking in accordance with Schedule 7 Car parking.

Sales office⁽⁷²⁾

PO68

Sales office⁽⁷²⁾ remain temporary in duration and demonstrates a relationship to the land or buildings being displayed or sold.

E68

A Sales office⁽⁷²⁾ is located on the site for no longer than 2 years.

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

PO69

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.

E69.1

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.

E69.2

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.

PO70

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

E70

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.

PO71

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

E71

All equipment which produces audible or non-audible sound is housed within a fully enclosed building incorporating sound control measures sufficient to

- 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.

ensure noise emissions meet the objectives as set out in the Environmental Protection (Noise) Policy 2008.

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.

PO72

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.

E72.1

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.

E72.2

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.

PO73

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.

E73

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.

PO74

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

E74

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.

PO75

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;

E75.1

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.

E75.2

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

- 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.

E75.3

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.

E75.4

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.

E75.5

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

E75.6

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.

PO76

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

E76

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.

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.

E77

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.

PO78

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;
- protects the environmental and ecological values and health of receiving waters;
- protects buildings and infrastructure from the effects of acid sulfate soils.

E78

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 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;
- 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.

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

Vegetation clearing, ecological value and connectivity

PO79

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.

PO80

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- retaining habitat trees;
- b. providing contiguous patches of habitat;

No example provided.

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 **PO81** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO82** 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; 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. **PO83** No example provided. Development ensures safe, unimpeded, convenient and ongoing wildlife movement and habitat connectivity by: a. providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure; C. providing replacement and rehabilitation planting d. to improve connectivity. Vegetation clearing and soil resource stability **PO84** No example provided.

Development d	loes not:	
b. leave clea	coil erosion or land degradation; ared land exposed for an unreasonable time but is rehabilitated in a timely	
Vegetation cle	earing and water quality	
PO85		No example provided.
	naintains or improves the quality of nd surface water within, and f a site by:	
setbacks finatural filt b. avoiding of maintain filt c. adopting of from enter used for a	an effective vegetated buffers and from waterbodies is retained to achieve tration and reduce sediment loads; or minimising changes to landforms to hydrological water flows; suitable measures to exclude livestock ring a waterbody where a site is being animal husbandry ⁽⁴⁾ and animal activities.	
PO86		No example provided.
a. minimising b. minimising c. maximising d. incorpora	ninimises adverse impacts of a-off on water quality by: g flow velocity to reduce erosion; g hard surface areas; ng the use of permeable surfaces; ting sediment retention devices; g channelled flow.	
Vegetation clearing and access, edge effects and urban heat island effects		
PO87		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.		
PO88		No example provided.
effects' on ecol a. providing vegetation	ninimises potential adverse 'edge logical values by: dense planting buffers of native n between a development and	
b. retaining p	ental areas; patches of native vegetation of greatest size where located between a nent 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.

PO89

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 forest canopy.

No example provided.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO90

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 Offset 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.

PO91

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.

E91

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.

PO92

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.

PO93

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.

PO94

E94

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:

- 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.

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.

PO95	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. 	
PO96	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; 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.	
PO97	No example provided.

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.

PO98

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.

E98

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.

PO99

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.

E99

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.

PO100

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

E100.1

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.

E100.2

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.

PO101

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over: No example provided.

- 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⁾

PO102

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.

E102

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

PO103

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.

E103

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.

6.2.7.5 Marine industry precinct

6.2.7.5.1 Purpose - Marine industry precinct

- The purpose of the code will be achieved through the following overall outcomes for the Marine Industry Precinct:
 - a. Development in the precinct supports the continued viability of waterfront-based industry in the region, through the co-location of Port services, Marine industry and related activities which support industry and its supply chain.
 - b. Development in the precinct avoids land-use activities which:
 - i. compromise or sterilise existing or future waterfront based industrial activities in the precinct;
 - ii. undermine the investment made in waterfront and marine infrastructure, including marinas and access roads:
 - iii. occupy large land areas and do not require waterfront access.
 - c. Development for non-industrial uses including Caretaker's accommodation, Food and drink outlets and community activities may be established in the precinct where they require access to a navigable waterway or provide support or complementary services to maritime activities.
 - d. The scale, character and built form of development has a high standard of commercial and industrial design which reflects the maritime character of the precinct and incorporates crime prevention through environmental design (CPTED) principles.
 - e. Development is located, designed and managed to maintain the health and safety of people, avoid significant adverse effects on the natural environment and minimise the possibility of adverse impacts on nearby non-industrial uses.
 - f. Development has access to infrastructure and essential services and convenient access to major transport routes.
 - g. Sensitive land uses in the precinct do not compromise existing or future industrial activities.
 - h. Special industry does not establish within the precinct.
 - i. Service industry, Warehouse, Low impact industry and Medium impact industry uses only occur in the precinct where:
 - i. there is a direct nexus with maritime activities occurring in the precinct;
 - ii. Involving manufacturing, repair, processing, storage or maintenance activities associated with watercraft or seafood:
 - iii. appropriate separation distances are maintained to sensitive land uses.
 - j. Built form including height of buildings used for the storage or repair of medium to large scale vessels contribute to a high standard of amenity and are sensitively located to minimise any adverse impacts on adjoining properties.
 - k. Development incorporates best practice responses to the environmental constraints and values of it's location adjacent to coastal areas and waterways.
 - I. Development does not compromise the safe and efficient operation of adjacent waterways.

- m. Development in the Scarborough Harbour:
 - i. incorporates a range of waterfront industrial and related commercial activities which support the continued growth of the harbour;
 - ii. may include activities which do not require waterfront access or have a nexus with Marine industry, only where these activities enhance the competitive advantage of the Marine industry cluster and ensure the area is an attractive place to work and do business;
 - iii. may only incorporate sensitive land uses where these uses are appropriately separated from existing and future industrial activities and do not compromise the long-term development of the harbour.
- 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 Marine industry precinct includes one or more of the following:

•	Aquaculture -if in a building	•	Environment facility	•	Marine industry	
	· ·	•	Food and drink outlet - if	•	Port services	
•	Caretaker's accommodation		a maximum GFA of 100m ²	•	Sales office	
•	Emergency services	•	Landing			

t. Development in the Marine industry precinct does not include any of the following:

•	Adult store	•	Extractive industry	•	Parking station
•	Agricultural supplies store	•	Function facility	•	Permanent plantation
_		•	Funeral parlour	•	Place of worship
•	Air services - if not in Scarborough Harbour	•	Garden centre	•	Relocatable home park
•	Animal husbandry	•	Health care services	•	Renewable energy facility

• ,	Animal keeping	•	Hospital	•	Residential care facility
•	Bar	•	Hotel	•	Resort complex
•	Brothel	•	Indoor sport and recreation	•	Retirement facility
•	Cemetery	•	Intensive animal industry	•	Roadside stall
•	Child care centre	•	Intensive horticulture	•	Rooming accommodation
	Club - if not in Scarborough Harbour	•	Major electricity	•	Rural industry
•	Community care centre		infrastructure	•	Rural workers' accommodation
•	Community residence	•	Major sport, recreation and entertainment facility	•	Shopping centre
•	Community use	•	Motor sport facility	•	Short-term accommodation - if not in
•	Crematorium	•	Multiple dwelling		Scarborough Harbour
•	Cropping	•	Nature-based tourism	•	Showroom
•	Detention facility	•	Non-resident workforce accommodation	•	Special industry
•	Dual occupancy	•	Nightclub entertainment	•	Theatre
	Dwelling house		facility	•	Tourist park
	Dwelling unit	•	Office	•	Veterinary services
	Educational establishment	•	Outdoor sport and recreation	•	Wholesale nursery
				•	Winery

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

6.2.7.5.2 Criteria for assessable development

Where development is categorised as assessable development - code assessment in the Table of Assessment, and located in a precinct, the assessment benchmarks are the criteria set out in Part F, Table 6.2.7.5.1 as well as the 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 F—Criteria for assessable development - Marine industry precinct

Table 6.2.7.5.1 Assessable development - Marine industry precinct

Performance outcomes	Examples that achieve aspects of the Performance Outcomes		
General criteria			

Development in the Marine industry precinct gene	rally
PO1	No example provided.
Development in the precinct is for marine-based industrial activities or commercial activities which have a direct nexus with maritime activities in the precinct.	
PO2	E2
Development does not compromise the role of Scarborough harbour providing public facilities for boat launching and access to deep water.	Development does not obstruct existing public access to boat launching facilities.
PO3	No example provided.
Watercraft traffic generated by the development remains within the capacity of the adjacent waterways and and navigational facilities.	
Site cover	
PO4	No example provided.
Site cover is limited to a proportion of a site that ensures:	
 A sufficient number and type of vehicle parking spaces are provided on the site to meet the parking demands and expectations of the proposed use; 	
 Any type of vehicle expected to visit the site on a regular basis is able to access and leave the site in a forward direction with clear manoeuvring on the site; 	
c. setbacks to boundaries maximise the efficient use of the site while ensuring positive interfaces with public space or sensitive land uses;	
d. Areas of landscaping are provided to soften the built form and hard stand impacts of development whilst providing areas of natural space on a site.	
Building height	
PO5	E5
The height of buildings is in keeping with the predominant marine industrial character of the precinct and does not cause adverse amenity impacts on sensitive land uses and zones.	Building height does not exceed the maximum height identified on Overlay map - Building heights.

Setbacks PO6 E6 Street boundary setbacks: Buildings maintain a minimum setback of: minimise building bulk and visual dominance 6m to the street frontage (other than the Bruce from the street: Highway); h. provide areas for landscaping at the front of the b. 3m to the secondary street frontage; site; C. 10m to a boundary adjoining the Bruce Highway. allow for customer parking to be located at the front of the building. **PO7 E7** Building setbacks allow access to the waterway and Buildings are setback 4m from the waters edge, do not compromise future marine industries and port measured from the top edge of bank. services from accessing the waters edge. **PO8 E**8 Side and rear boundary setbacks maintain views, Where a development adjoins general residential zoned privacy, access to natural light and the visual amenity land, the building is setback a minimum of 3m from the of adjoining sensitive land uses. property boundary with dense landscaping installed along the boundary to provide screening of the development with a mature height of at least 3m. Note - Refer to Planning scheme policy - Integrated design for determining acceptable levels of landscaping for screening purposes. **Building appearance and design PO9** No example provided. Buildings on highly visible sites incorporate a high standard of industrial design and construction, which adds visual interest to the streetscape and reduces the perceived bulk of the building from the street. Staff recreation **PO10** E10 Staff are provided with adequate and amendable Where the nature of the activities on-site do not allow break/dining facilities to suit the nature of the activities staff to eat in their work environment, the development on-site. provides an on-site recreation area for staff that: Includes adequate seating, tables and rubbish а bins for the number of staff on-site; b. is adequately protected from the weather;

6 Zones

- c. is safely accessible to all staff;
- d. is separate and private from public areas;
- e. is located away from a noisy or odorous activity.

Landscaping

PO11

Landscaping is provided to:

- visually soften the built form, areas of hardstand, storage areas and mechanical plant associated with the on-site processes;
- b. complement the existing or desired streetscape;
- minimise the impact of industrial development on adjoining lots not zoned for industrial purposes.

E11

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

Fencing

PO12

The provision of fencing on street frontages does not dominate the street or create safety issues.

Note - The following example illustrates an acceptable design response to this outcome.



E12

Where fencing is provided on the street frontage, fence sections between columns or posts have a minimum transparency of 70% spread evenly across its total surface area.

Public access

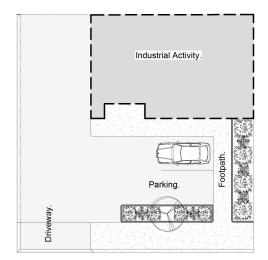
PO13

The use has safe, clearly identifiable public access separated from service and parking areas.

E13.1

Pedestrian linkages are provided from the street and customer car parking areas directly to the main entrance of the building.

Note - The following example illustrates an acceptable design response to this outcome.



E13.2

The public access is separated from industrial service areas.

Movement network

PO14

Development maintains, contributes to or provides for interconnected street, pedestrian and cyclist networks.

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

No example provided.

Car parking

PO15

Car parking is provided on-site to meet the anticipated demand for employees and visitors and avoid adverse impacts on the external road network.

Note - Refer to Planning scheme policy - Integrated transport assessment for guidance on how to achieve compliance with this outcome.

E15

Car parking is provided in accordance with Schedule 7 - Car parking.

PO16

The design of car parking areas:

does not impact on the safety of the external road network;

E16

All car parking areas are designed and constructed in accordance with Australian Standard AS2890.1 Parking facilities Part 1: Off-street car parking.

- b. ensures the safety of pedestrians at all times;
- c. 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.

PO17

- 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

E17.1

Minimum bicycle parking facilities are provided at a rate of 1 bicycle parking space for every 3 vehicles parking spaces required by Schedule 7 – Car parking.

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.

E17.2

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.

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.

E17.3

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.

E17.4

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

PO18

Service areas, including loading/unloading facilities, plant areas and outdoor storage areas, are screened from the direct view from land not included in the Industry zone and sub-arterial and arterial roads.

Note - If landscaping is proposed for screening purposes, refer to Planning scheme policy - Integrated design for determining acceptable levels.

No example provided.

Waste

PO19

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

E19

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

Environmental impacts

PO20

E20

Where a use is not an environmentally relevant activity under the Environmental Protection Act, the release of any containment that may cause environmental harm is mitigated to an acceptable level.

Development achieves the standard listed in Schedule 1 Air Quality Objectives, Environmental Protection (Air) Policy 2008.

PO21

Development does not adversely impact surrounding ecological system features, including:

- a. Water quality;
- b. Air quality;
- c. Soil quality;
- d. Disturbance to marine habitat.

E21.1

The development does not discharge pollutants into adjacent waterways.

E21.2

The development does not cause an environmental nuisance or harm to marine habitat.

E21.3

Where involving a marina, the development is capable of providing sewer facilities for the disposal of sewage, liquid waste and contaminated bilge water.

Lighting

PO22

Lighting is directed and shielded to not cause unreasonable disturbance to any person on adjoining land.

E22

Artificial lighting on-site is directed and shielded in such a manner as not to exceed the recommended maximum values of light technical parameters for the control of obtrusive light given in Table 2.1 of Australian Standard AS 4282 (1997) Control of Obtrusive Effects of Outdoor Lighting.

Note - "Curfewed hours" are taken to be those hours between 10pm and 7am on the following day

Noise

PO23

Noise generating uses do not adversely affect existing 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.

PO24

E24.1

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.

E24.2

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.

Emissions into Brisbane operational airspace

PO25

Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in Brisbane airport's operational airspace.

Note - Refer to State Planning Policy December 2013 mapping to identify Brisbane airport's operational airspace.

E25.1

Development does not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3m per second.

E25.2

Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3m per second is designed and constructed to mitigate adverse impacts of emissions upon operational airspace.

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'.

Terms used in this section are defined in State '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:
 - 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 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:
 - 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 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;
 - 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 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

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.

E27

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:

- 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.

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

No example provided.

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. 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. **PO33** E33.1 The layout of the development does not compromise: The development provides for the extension of the road network in the area in accordance with Council's the development of the road network in the area; road network planning. b. the function or safety of the road network; E33.2 the capacity of the road network. C. The development does not compromise future road widening of frontage roads in accordance with the relevant standard and Council's road planning. Note - The road hierarchy is mapped on Overlay map -Road hierarchy. E33.3 The development layout allows forward vehicular access to and from the site. **PO34** E34.1 Safe access is provided for all vehicles required to Site access and driveways are designed, located and access the site. constructed in accordance with: where for a Council-controlled road and a. associated with a Dwelling house: 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;
- 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.

E34.2

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.

E34.3

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.

E34.4

Access driveways, manoeuvring areas and loading facilities are constructed with reinforced concrete road pavements. Concrete is to be designed in accordance with rigid road pavement design principles.

Note - Pavements are to be designed by an RPEQ.

E34.5

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

PO35

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.

E35

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.

PO36

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.

E36.1

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.

E36.2

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

PO37

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; No example provided.

- safe and convenient pedestrian and cycle movement;
- 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.

PO38

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;

E38.1

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.

E38.2

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.

6 Zones

- 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 upgraded road intersections and along road frontages wherever practicable.

E38.3

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

PO39

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.

E39

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.
- 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;
- 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.

PO40

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.

E40

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

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.

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.

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

PO41

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.

E41.1

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

E41.2

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.

E41.3

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

PO42

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

E42.1

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.

E42.2

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.

E42.3

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.

E42.4

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.

PO43

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.

E43

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

PO44

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.

No example provided.

PO45

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.

No example provided.

PO46

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.

No example provided.

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).

PO47

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.

E47

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.

PO48

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

PO49

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

No example provided.

PO50

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;
- 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.

E50.1

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.

E50.2

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.

E50.3

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.

E50.4

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.

PO51

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

E51

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

PO52

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.

E52.1

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.

E52.2

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.

E52.3

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.

E52.4

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.

E52.5

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.

E52.6

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

PO53

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.

E53

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.

PO54

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).

E54

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

PO55

The clearing of vegetation on-site:

 is limited to the area of infrastructure works, building areas and other necessary areas for the works; and

E55.1

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.

 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.

E55.2

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.

PO56

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

E56

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.

PO57

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

PO58

E58.1

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;
- h. excavation (cut) and fill and impacts on the amenity of adjoining lots (e.g. residential).

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.

E58.2

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

E58.3

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

E58.4

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

E58.5

All fill placed on-site is:

- a. limited to that area 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.).

E58.6

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.

PO59

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

E59

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

Figure - Embankment

PO60

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.

E60.1

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.

E60.2

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.

PO61

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.

PO62

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.

PO63

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.

E63

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

- 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.

PO64

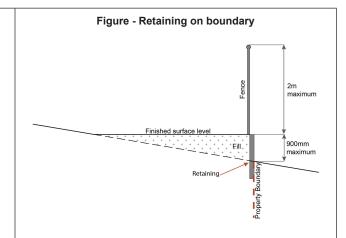
All earth retaining structures provide a positive interface with the streetscape and minimise impacts on the amenity of adjoining residents.

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

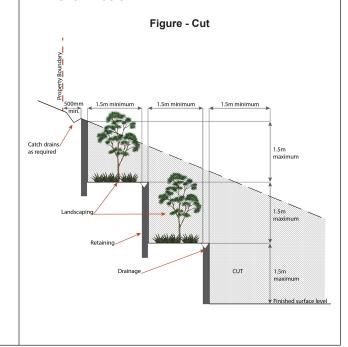
E64.1

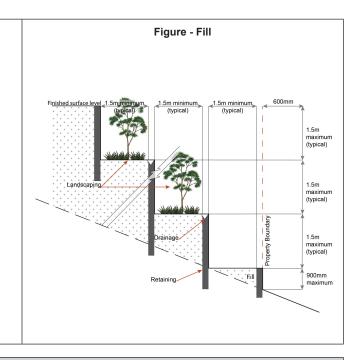
Earth retaining structures:

- 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.

PO65

Development incorporates a fire fighting system that:

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

E65.1

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.

E65.2

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.

E65.3

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.

PO66

E66

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.

PO67

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.

E67

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

Industrial land uses					
PO68	E68				
Ancillary office, administration functions, retail sales and customer service components do not compromise the primary use of the site or marine activities in the precinct.	The combined area of ancillary non-industrial activities, including but not limited to administration and retail functions, does not exceed 10% of the GFA or 200m², whichever is the lesser.				
PO69	No example provided.				
Buildings directly adjoining non-industrial zoned land					
 a. are compatible with the character of the adjoining areas; 					
b. minimise overlooking and overshadowing;					
c. maintain privacy;					
 do not cause significant loss of amenity to neighbouring residents by way of noise, vibration, odour, lighting, traffic generation and hours of operation. 					
PO70	No example provided.				
Medium impact industry ⁽⁴⁷⁾ uses only establish in the precinct where:					
not constraining the function or viability of existing or future uses in the precinct;					
 not adversely affecting the amenity, health or safety of employees and visitors of the surrounding uses; 					
c. not adversely affecting the amenity, health or safety of nearby sensitive land uses.					
Note - Separation distances are to be measured in a straight line, in accordance with the State policy.					
PO71	No example provided.				
Non-industrial components of buildings (including offices and retail areas) are designed as high quality architectural features and incorporate entry area elements such as forecourts, awnings and the architectural treatment of roof lines and fascias.					
Non-industrial uses					

PO72	No example provided.
Non-industrial components of buildings (including offices and retail areas) are to be located at the road frontage to assist in activating the frontage and designed as high quality architectural features incorporating entry area elements such as forecourts, awnings and the architectural treatment of roof lines and fascias.	
PO73	No example provided.
With the exception of Caretaker's accommodation ⁽¹⁰⁾ , residential and other sensitive land uses do not establish within the precinct.	
PO74	No example provided.
Non-industrial uses:	
are consolidated with existing non-industrial uses in the precinct;	
b. do not compromise the viability, role or function of the region's centres network;	
c. are not subject to adverse amenity impacts or risk to health from industrial activities;	
 do not constrain the function of viability of existing of future industrial activities in the surrounding area. 	
Note - The submission of a Hazard and Nuisance Mitigation Plan may be required to justify compliance with this outcome.	
Note - An Economic Impact Assessment may be required to demonstrate compliance with part of the outcome/s above. Refer to Planning scheme policy - Economic impact assessment for information required.	
PO75	No example provided.
Traffic generated by non-industrial uses does not detrimentally impact the operation and functionality of the external road network.	
PO76	No example provided.
The design of non-industrial buildings in the precinct:	

- 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);
- incorporates architectural features within the building facade at the street level to create human scale (e.g. awnings).

PO77

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 and adjoining sites.

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

E77.1

The main entrance to the building is clearly visible from and addresses the primary street frontage.

E77.2

Where the building does not adjoin the street frontage, a dedicated and sealed pedestrian footpath is provided between the street frontage and the building entrance.

Caretaker's accommodation⁽¹⁰⁾

PO78

Development of Caretaker's accommodation (10):

- a. does not compromise the productivity of the use occurring on-site and in the surrounding area;
- b. is domestic in scale;
- c. provides adequate car parking provisions exclusive on the primary use of the site;
- d. is safe for the residents;
- e. has regard to the open space and recreation needs of the residents.

E78

Caretaker's accommodation (10):

- a. has a maximum GFA is 80m²;
- b. does not gain access from a separate driveway to that of the industrial use;
- provides a minimum 16m² of private open space directly accessible from a habitable room;
- d. provides car parking in accordance with Schedule 7 Car parking.

Sales office⁽⁷²⁾

PO79

Sales office⁽⁷²⁾ remain temporary in duration and demonstrates a relationship to the land or buildings being displayed or sold.

E79

A Sales office⁽⁷²⁾ is located on the site for no longer than 2 years.

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

PO80

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

- 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 e. 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;
- landscaped; h.
- i. otherwise consistent with the amenity and character of the zone and surrounding area.

E80.1

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

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

E80.2

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.

PO81

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

E81

Access control arrangements:

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

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; or
- meet the objectives as set out in the b. Environmental Protection (Noise) Policy 2008.

E82

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.

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.

PO83

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.

E83.1

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.

E83.2

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.

PO84

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.

E84

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.

PO85

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

E85

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.

PO86

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;

E86.1

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.

E86.2

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

E86.3

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

- h. landscaped;
- otherwise consistent with the amenity and character of the zone and surrounding area.
- a. reduce recognition in the landscape;
- b. reduce glare and reflectivity.

E86.4

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.

E86.5

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

E86.6

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.

PO87

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

E87

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.

PO88

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.

E88

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.

PO89

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.

E89

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 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;
- 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.

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

Vegetation clearing, ecological value and connectivity

PO90

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.

PO91

Development provides for safe, unimpeded, convenient and ongoing wildlife movement and establishes and maintains habitat connectivity by:

- retaining habitat trees;
- b. providing contiguous patches of habitat;

No example provided.

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 **PO92** No example provided. Development ensures that the biodiversity quality and integrity of habitats is not adversely impacted upon but maintained and protected. **PO93** 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; 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. **PO94** No example provided. Development ensures safe, unimpeded, convenient and ongoing wildlife movement and habitat connectivity by: a. providing contiguous patches of habitat; avoiding the creation of fragmented and isolated patches of habitat; providing wildlife movement infrastructure; C. providing replacement and rehabilitation planting d. to improve connectivity. Vegetation clearing and soil resource stability **PO95** 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	
PO96		No example provided.
Development maintains or improves the quality of groundwater and surface water within, and downstream, 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.	
PO	97	No example provided.
	welopment minimises adverse impacts of imwater 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		
PO98 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.		No example provided.
PO99		No example provided.
	velopment minimises potential adverse 'edge octs' 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.

PO100

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 forest canopy.

No example provided.

Vegetation clearing and Matters of Local Environmental Significance (MLES) environmental offsets

PO101

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 Offset 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.

PO102

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.

E102

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.

PO103

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
- 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.

PO104

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.

PO105

E105

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.

DO400

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.

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.

PO106		No example provided.
Development:		
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.	
PO107		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.		
	te - Reporting to be prepared in accordance with Planning teme policy – Flood hazard, Coastal hazard and Overland v.	
PO108		No example provided.

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.

PO109

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.

E109

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.

PO110

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.

E110

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.

PO111

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

E111.1

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.

E111.2

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.

PO112

Development protects the conveyance of overland flow such that an easement for drainage purposes is provided over: No example provided.

- 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⁾

PO113

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.

E113

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

PO114

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.

E114

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.