8.3 Other development codes

8.3.1 Development works code

8.3.1.1 Application

This code applies to development identified as requiring assessment against the Development works code by the tables of assessment in Part 5 (Tables of assessment).

When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

8.3.1.2 Purpose

(1) The purpose of the Development works code is to:

(a) ensure all development is provided with appropriate infrastructure, parking spaces and services;

(b) ensure development manages stormwater and wastewater as part of the integrated total water cycle and in ways that help protect the environmental water values specified in the *Environmental Protection (Water) Policy 2009* and the Stormwater Management Design Objectives in the State Planning Policy;

(c) protect surface water and ground water; and

(d) ensure development is designed, constructed, operated and maintained to eliminate any adverse impacts on the environment and the amenity of the locality.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) development is adequately serviced by utility and access infrastructure including roads, water, waste water, power, telecommunications, stormwater management and waste management;

(b) the integrity and efficiency of utility and access infrastructure systems is maintained;

(c) environmental values of receiving waters are protected from adverse development impacts arising from stormwater quality and flow;

(d) environmental values of receiving waters are protected from waste water impacts;

(e) public health and safety are protected and damage or nuisance caused by stormwater is avoided;

(f) stormwater management works is designed to maintain or recreate natural hydrological processes and minimise run-off;

(g) the function, safety and efficiency of the transport network is optimised;

(h) development within close proximity to existing or future public passenger transport facilities supports an integrated approach to land use and transport integration;

(i) development provides adequate on site vehicular access and adequate parking and servicing facilities for vehicles and parking facilities for bicycles;

(j) access, parking, servicing and associated manoeuvring areas are designed to be safe, functional and meet the reasonable demands generated by the development;

(k) provision of safe and non-discriminatory public and pedestrian access is provided;

(l) works in public streets and spaces enhance the pedestrian amenity and improve streetscape appearance;

(m) earthwork does not impact adversely on the amenity of the site or the surrounding area and does not result in increased flooding, drainage and soil erosions problems on upstream and downstream property; and

(n) development provides for the storage of generated waste in an environmentally acceptable manner and waste storage facilities are functionally appropriate for users of the facilities.

8.3.1.3 Specific benchmarks for assessment

Table 8.3.1.3(a) — Accepted development subject to requirements and assessable development

Performance outcomes	Acceptable outcomes	Applicants response
Utility infrastructure and services		
PO1 Development is serviced by an adequate, safe and reliable supply of potable and general use water, connected to reticulated water supply where possible.	**AO1** Development is: (a) connected to Council's reticulated water supply network, including the installation of easily accessed water meters, in accordance with the *Development works Town plan policy*; or (b) if connection to Council's reticulated water supply network is not possible, a potable on site water supply is provided in accordance with the *Development works Town plan policy*.	
PO2 Development is serviced by appropriate waste water disposal infrastructure which ensures: (a) no adverse ecological impacts on the receiving environment; (b) cumulative impacts of onsite waste water treatment are considered in assessing the likely environmental impacts; (c) public health is maintained;	**AO2** Development is: (a) connected to Council's reticulated sewerage treatment system, in accordance with the Development works Town plan policy; or (b) if connection to Council's reticulated sewerage treatment system is not possible, waste water is treated in accordance with *Development works Town Plan Policy*.	

Performance outcomes	Acceptable outcomes	Applicants response
(d) the location, site area, soil type and topography is suitable for on site waste water treatment; and (e) the reuse of waste water does not contaminate any surface water or ground water.		
PO3 Electricity supply network and telecommunication service connections are provided to the site and are connected.	**AO3.1** The development is connected to electricity and telecommunications infrastructure in accordance with the standards of the relevant regulatory authority prior to the commencement of any use of the site.	
	AO3.2 Where not included in the development, provision is made for future telecommunications services (such as fibre optic cable) in accordance with the standards of the relevant regulatory authority.	
Stormwater management Editor's note–Refer also to the Stormwater management design objectives in the State planning policy.		
PO4 Stormwater management is designed and operated to ensure that adjoining land and upstream and downstream areas are not adversely affected through any ponding or changes in flows: (a) ensure that adjoining land and upstream and downstream areas are not adversely affected through any ponding or changes in flows; and (b) direct stormwater to a lawful point of discharge through competently designed and constructed outlet works in a manner that reflects the predevelopment status. Editor's note– Stormwater quality must meet the design objectives within the *Development works Town plan policy*.	**AO4.1** Development does not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties.	
	AO4.2 Stormwater (including roof and surface water) is conveyed to the kerb and channel or other lawful point of discharge in accordance with the requirements of the *Development works Town plan policy*.	
	AO4.3 Stormwater runoff from all impervious areas (roof, pavements, etc) are not permitted to flow or discharge over adjoining properties.	

Earthworks		
PO5 Earthworks are undertaken in a manner that: (a) prevents any worsening of soil erosion or water quality on the site, any adjoining land, or land upstream or downstream of the site; (b) produces stable landforms and structures; (c) maintain natural landforms where possible; (d) minimise the height of any batter faces; (e) does not unduly impact on the amenity or privacy for occupants of the site or on adjoining land or on the amenity of the streetscape; (f) does not result in the contamination of land or water; and (g) avoids risk to people and property.	**AO5.1** Earthworks comply with the *Development works Town plan policy.*	
	AO5.2 The extent of filling or excavation does not exceed 40% of the site area or 500m^2, whichever is lesser.	
	AO5.3 Excavating or filling is no greater than 1m in height or depth.	
	AO5.4 Batters have a maximum slope of 25%, are terraced at every rise of 1.5m and each terrace has a depth of 0.75m.	
	AO5.5 No contaminated material is used as fill.	
PO6 Retaining walls are designed to minimise visual impact through: (a) setbacks from any boundary; and (b) being stepped or terraced to accommodate landscaping.	**AO6.1** The combined height of any retaining walls and fences does not exceed 2m.	
	AO6.2 A retaining wall is set back at least half the height of the wall from any boundary of the site.	
	AO6.3 Retaining walls over 1.5m are stepped 0.75m for every 1.5m in height, terraced and landscaped.	
	AO6.4 Design and construction of retaining walls over 1m in height are certified by a Registered Professional Engineer of Queensland.	
PO7 The excavation, filling or laying of pipes within the vicinity of electricity supply infrastructure must not create damage or hazard. Editor's note–Development involving filling, excavation or laying of metal pipes on land contiguous to electricity	**AO7.1** Excavation or filling does not occur within: (a) 10m of any tower, pole, foundation, ground anchorage or stay supporting electric lines or associated equipment; (b) 5m of a substation site boundary; (c) 2m of a padmount substation; or	

supply infrastructure should be referred to the relevant electricity entity for safety advice on the proposed development.	(d) 1m of a padmount transformer or an underground cable.	
	AO7.2 The laying of metal pipes does not occur within: (a) 5m of any pole, tower, foundation, ground anchorage or stay supporting electric lines or associated equipment; (b) 15m of any substation site boundary; or (c) 5m of, and parallel to, an electric line shadow.	
Parking and access		
PO8 Development includes the provision of adequate and convenient car parking on site to satisfy the anticipated requirements of the land use or activity.	**AO8** Car parking is provided in accordance with Table 8.3.1.3(b)–Car parking requirements.	
PO9 Development provides end of trip facilities for people engaging in active transport (bicycle and pedestrian): (a) to meet the needs of users and promote active modes of travel; (b) at convenient, easily identifiable, safe locations; and (c) in locations that do not obstruct vehicular, bicycle or pedestrian movement paths.	**AO9** Development provides cycling and pedestrian end of trip facilities, in accordance with the requirements of the *Development works Town plan policy.*	
PO10 Access driveways are designed and constructed to: (a) provide convenient access to the site and maintain the safety and efficiency of the road; (b) minimise conflicts with traffic and pedestrians; and (c) are constructed to a standard that is appropriate to the location and to meet the anticipated volume and type of traffic.	**AO10.1** Access driveways are designed and constructed in accordance with the relevant *Development works Town plan policy.*	
	AO10.2 Access driveways allow vehicles (with the exception of Dwelling house and Dual occupancy) to enter and exit the site in a forward gear.	

PO11 Vehicle movement areas (including internal driveways, access aisles, manoeuvring areas, car parks and service bays) are designed to ensure: (a) a gradient appropriate for the type of vehicles; (b) effective stormwater drainage; (c) clearly marked and signed spaces; (d) convenience and safety for drivers and pedestrians; and (e) adequate dimensions to meet user requirements, including access and egress for emergency vehicles.	**AO11** Manoeuvring, queuing, loading and unloading areas, and parking areas are: (a) designed and constructed in accordance with the Development works Town plan policy; and (b) certified by a Registered Professional Engineer of Queensland.	
PO12 Footpaths in the road reserve are provided along all road frontages and are paved in durable and stable materials matching any adjacent development footpaths.	**AO12** Footpaths are: (a) provided for the full width and length of all road frontages; (b) designed and constructed in accordance with the requirements of the Development works Town plan policy; and (c) certified by a Registered Professional Engineer of Queensland.	
PO13 Pedestrian access to buildings: (a) do not obstruct pedestrian movement (or form physical clutter) on public footpaths; (b) are not visually overbearing (or form visual clutter) in the streetscape; and (c) provide safe, efficient and convenient access including wheelchair access.	**AO13** Steps, escalators, ramps and lifts are: (a) located wholly within the site; and (b) setback a minimum of 1.5m from the front boundary.	
Acoustic and air quality		
PO14 Development minimises potential conflicts with, or impacts on, other uses having regard to vibration, odour, dust or other emissions.	**AO14** Development achieves the air quality design objectives set out in the *Environmental Protection (Air) Policy 2008, as amended.* Editor's note–To achieve compliance, development is planned, designed and managed to ensure emissions from	

	activities achieve the appropriate acoustic objectives (measured at the receptor dB(A)).	
PO15 Development prevents or minimises the generation of any noise so that: (a) nuisance is not caused to adjoining premises or other nearby sensitive land uses; and (b) desired ambient noise levels in residential areas are not exceeded.	**AO15** Development achieves the noise generation levels set out in the *Environmental Protection (Noise) Policy 2008, as amended*.	
PO16 Development adjacent to State controlled roads or Council controlled arterial road minimise nuisance caused by noise, vibration and dust emissions.	**AO16** Development complies with the requirements of the Department Main Roads - Road Traffic Noise Management Code of Practice and the *Environmental Protection (Noise) Policy 2008*.	
Lighting		
PO17 External lighting is provided in urban areas to ensure a safe environment.	**AO17** Technical parameters, design, installation, operation and maintenance of outdoor lighting complies with the requirements of *AS4282 – Control of the Obtrusive Effects of Outdoor Lighting.*	
Waste management		
PO18 Development: (a) minimises waste generation (including construction, demolition and operational waste); and (b) provides adequate facilities on site for the storage of waste and recyclables.	**AO18** Waste storage and management arrangements are sited, screened and designed in accordance with the *Development works Town plan policy.*	
PO19 Development is designed to allow for safe and efficient servicing of waste and recycling containers through: (a) a development layout that facilitates direct and unobstructed servicing of waste and recycling containers; and	**AO19** Waste and recycling collection services are provided in accordance with the *Development works Town plan policy.*	

(b) minimising the potential for nuisances to be caused by way of noise and odour.		
For all assessable development		
General		
PO20 Where buildings and structures are located on multiple lots, these are amalgamated to form one lot.	No acceptable outcome specified.	
Wastewater management		
PO20 Wastewater is managed to: (a) avoid wastewater discharge to any waterway; or (b) if wastewater discharge to waterways cannot be practically avoided, discharge is minimised to an acceptable level by re-use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater. Editor's note–Wastewater is defined in accordance with *Environmental Protection (Water) Policy 2009*, schedule 2). A wastewater management plan (WWMP) is prepared by a suitably qualified person and addresses: (i) wastewater type; and (ii) climatic conditions; and (iii) water quality objectives (WQOs); and (iv) best-practice environmental management.	No acceptable outcome specified.	
PO21 Wastewater discharge maintains ecological processes, riparian vegetation, waterway integrity, and downstream ecosystem health including: (a) protecting applicable water quality objectives for the receiving waters; (b) managing soil disturbance or altering natural hydrology in coastal areas; and (c) avoiding or minimising the release of nutrients of concern.	No acceptable outcome specified.	

Stormwater management		
PO22 Stormwater management systems: (a) implement Water Sensitive Urban Design (WSUD) principles that: (i) protect natural systems and waterways; (ii) allow for the detention of stormwater instead of rapid conveyance; (iii) minimise impervious areas; (iv) utilise stormwater to conserve potable water; (v) integrate stormwater treatment into the landscape; (vi) ensure water quality values are protected; (b) must be economically maintained for the life of the system; (c) provide for safe access and maintenance; and (d) maintain natural drainage lines and adequate filtering and settlement of sediment for the protection of watercourses, wetlands from point sources and non-point source stormwater discharges.	**AO22** Stormwater management systems are designed and constructed in accordance with the *Development works Town plan policy.* Editor's note–A site Stormwater Quality Management Plan (SQMP) is prepared in accordance with *Development works Town plan policy*.	
PO23 Development allows for sufficient site area to accommodate an effective stormwater management system.	No acceptable outcome specified.	
PO24 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to: (a) existing capacity of stormwater infrastructure and ultimate catchment conditions; (b) discharge for existing and future upstream development; and	No acceptable outcome specified.	

(c) protecting the integrity of adjacent and downstream development.		
PO25 Major stormwater drainage network elements are designed and constructed with the capacity to control stormwater flows under normal and minor system blockage conditions for the applicable defined flood event ensuring there is no damage to property or hazards for motorists.	**AO25** Stormwater infrastructure is designed in accordance with the requirements of the *Development works Town plan policy.*	
PO26 Reconfiguration of lots includes stormwater management measures in the design of any road reserve, streetscape or drainage networks to: (a) minimise impacts on the water cycle; (b) protect waterway health by improving stormwater quality and reducing site run-off; and (c) avoid large impervious surfaces.	No acceptable outcome specified.	
PO27 Construction activities for the development avoids or minimise adverse impacts on stormwater quality by: (a) achieving the post construction stormwater management design objectives for pollution load reductions for Western Queensland (TSS 85% TP 60% TN 45% and 90% Gross pollutants) and or In lieu of modelling, the default bio-retention treatment area of 1.5 per cent of the contributing catchment area; and (b) the waterway stability management design objective: limit the peak 1-year ARI event discharge within the receiving waterway to the pre-development peak1-year ARI discharge. An Erosion and Sediment Control Plan (ESCP) is prepared by a suitably qualified person that demonstrates:	**AO27** Stormwater quality achieves the stormwater design objectives of the *Development works Town plan policy.*	

(a) erosion and sediment control practices (including any proprietary erosion and sediment control products) are designed, installed, constructed, operated, monitored and maintained, and any other erosion and sediment control practices are carried out in accordance with local conditions; or (b) how stormwater quality will be managed in accordance with an acceptable regional or local guideline so that target contaminants are treated to a design objective at least equivalent of this Performance outcome.		
Earthworks		
PO28 Earthworks associated with roads: (a) maintain the efficiency of the road network; (b) do not adversely impact upon residents or road infrastructure; and (c) do not obstruct access to the site.	No acceptable outcome specified.	
PO29 Development in the Rural zone and Rural residential zone manages soil erosion and sedimentation by: (a) avoiding land clearing or earthworks in the riparian corridor to a designated stream; (b) minimising the extent of disturbance on, or the stabilisation of slopes steeper than 10%; and (c) managing and controlling surface drainage by using natural flow paths.	No acceptable outcome specified.	
PO30 Any disturbed areas within the site are to be progressively rehabilitated through appropriate earthworks and involve the: (a) grading and reshaping of the disturbed areas to provide controlled and stable drainage flow paths;	No acceptable outcome specified.	

(b) construction of drainage paths which divert high velocity flows away from disturbed areas; (c) re-spreading of stored topsoil stripped from the site prior to commencement of construction works; and (d) planting of the disturbed area with native species of grasses, ground covers and trees and placing mulch in between on the surface. Editor's note–Applicants may be required to engage specialists to prepare a rehabilitation plan.		
Land use and transport integration		
PO31 Development: (a) supports a road hierarchy which facilitates efficient movement of all transport modes; and (b) appropriately integrates and connects with surrounding movement networks. Editor's note–Refer to the road hierarchy identified on map AM1.	No acceptable outcome specified.	
PO32 Development provides direct and safe access to public passenger transport facilities.	**AO32** Any through-site pathway connections to public passenger transport facilities are provided in accordance with Austroads guide to road design—Part 6A: Pedestrian and cyclist paths.	
Road design		
PO33 Roads providing access to the site are provided, constructed and maintained to a standard which is adequate for the traffic type and volume likely to be generated by the activities on site.	**AO33** Roadworks are provided in accordance with the requirements of the *Development works Town plan policy.*	
PO34 Street lighting and signs are provided to ensure the safety of both vehicles and pedestrians, and to facilitate access and movement.	**PO34** Street lighting and signage comply with the requirements of the *Development works Town plan policy.*	

Acoustic and air quality		
PO35 Utility services and service structures attached to buildings, do not adversely impact on the acoustic or visual amenity of the surrounding area and are: (a) located as far from sensitive land uses, road frontage boundaries and public open spaces as practical; (b) acoustically shielded and visually screened so as not to be audible or visible from adjoining and nearby sites, public open spaces and roads.	No acceptable outcome specified.	

Table 8.3.1.3(b)—Car parking requirements

Use	Car parking rate requirements
Multiple dwelling	1.5 spaces per dwelling
Short-term accommodation	1 space per rooming units plus 1 space per 2 employees
Rooming accommodation	1 space per rooming units plus 1 space per 3 rooming units for visitor
Retirement facility	1 space dwelling plus 1 space per 2 employees
Tourist park	1 space per van site or tent site, plus 1 space per 2 employees
Relocatable home park	1 space per relocatable home
Child care centre	1 space per employee plus passenger set down area for 4 vehicles
Adult store Bar Food and drink outlet Nightclub entertainment facility	1 space per $15m^2$ of total use area

Use	Car parking rate requirements
Service industry Shop Shopping centre Theatre	
Office	1 space per 30m^2 GFA
Agricultural supplies store Bulk landscape supplies Garden centre Hardware and trade supplies Outdoor sales Showroom Wholesale nursery	1 space per employee and 1 space per 100m^2 GFA
Car wash	2 spaces per bay, AND queuing space within the site for 4 vehicles using or awaiting use of each washing bay
Hotel	1 space per 15m^2 GFA area plus 1 space per 2 employees
Veterinary service	1 space per 25m^2 GFA
Health care services	1 space per 20m² of GFA and 1 space for ambulance vehicle pick-up and set down
Cemetery Crematorium	1 space per 2 employees, plus 1 space per 2 seats in an auditorium or chapel situated on the premises
Funeral parlour	1 space per 2 employees, plus 1 space per 2 seats in an auditorium or chapel
Community care centre	1 space per 20m^2 of GFA
Community use	1 space per 2 employees, including volunteers, plus 1 space per 50m^2 GFA

Use	Car parking rate requirements
Place of worship	1 space per 10 seats
High impact industry Low impact industry Medium impact industry Research and technology industry Rural industry Special industry Warehouse	1 space per 100m^2 of total use area
Transport Depot	1 space per employee
Animal keeping Intensive animal industry	1 space per employee
Winery	1 space per 25m² of GFA
Detention facility	1 space per 2 employees plus 1 space per 20 inmates or residents
Any other use not listed in this table	Sufficient spaces to accommodate the amount of vehicle traffic likely to be generated by the particular use