

SC6.1.3 Design and approvals phase

Guideline: Engineering constraints

The site and road layout resulting from consideration of social, environmental, traffic and development layout constraints may need to be modified to satisfy engineering constraints.

Although the engineering design of roads is the province of the Consulting Engineer, it is essential that the Surveyor, Landscape Architect or Planner preparing the development proposal plan be fully aware of the engineering constraints, stormwater drainage and road design requirements, to ensure that the road and lot layouts proposed are satisfactory in this respect. Major alterations to the development layout may otherwise be necessary to accommodate engineering constraints.

These engineering constraints include sewer alignments, drainage overland flow paths, vertical alignment, horizontal alignment and design speed of roads, reasonable access to allotments, connections to adjoining lands etc. The Consultant is responsible for providing a layout to suit these constraints.

Preliminary engineering design of roadworks, stormwater drainage and sewers is required at MCU/ROL to ensure that the proposed layout does accommodate all engineering constraints.

Prior to preparing the development layout plan, the Engineer should be consulted to ascertain if a layout already exists for the area in question and to ensure that the road network proposed will generally conform with the overall road hierarchy and open space plan envisaged by Council.

The advice of the Engineer should be sought early in the planning phase of development projects to ensure that engineering and environmental constraints, including conservation and heritage issues, are properly considered during the design phase. Developers and Consultants are to conform to design limitations and constraints imposed by:

- 1. the planning scheme and incorporated planning scheme policies;*
- 2. any State planning policies that have not been incorporated into the planning scheme;*
- 3. the Aboriginal Cultural Heritage Act and “cultural heritage duty of care guidelines” dealing with the recognition, protection and conservation of Aboriginal cultural heritage;*
- 4. the Building Act and associated Standard Building Regulation and Building Code of Australia dealing with the construction and on-site works for buildings;*
- 5. the Child Care Regulation dealing with home-based childcare;*
- 6. the Coastal Protection and Management Act and Coastal Protection and Management Regulation dealing with the protection and management of the coast;*
- 7. the Dangerous Goods Safety Management Act dealing with the storage of dangerous goods;*
- 8. the Electricity Act and Electricity Regulation dealing with the provision of electricity services;*
- 9. the Environmental Protection Act and associated regulations dealing with harmful contamination of air, water and soil;*
(Note: Where land to be developed may have been subject to contamination, then investigation and clearance in accordance with of the Environmental Protection Act would be prudent. This requirement does not relieve the Developer from ensuring contaminated land is not used for inappropriate developments.)
- 10. the Fisheries Act dealing with the protection of important fish habitat areas;*
- 11. the Mineral Resources Act dealing with mining (not to be integrated);*
- 12. the Nature Conservation Act dealing with the conservation of resources and other natural elements;*
- 13. the Plumbing and Drainage Act and Standard Plumbing and Drainage Regulation;*
- 14. the Queensland Heritage Act and the Aboriginal Cultural Heritage Act dealing with the protection of places having cultural heritage value;*
- 15. the Transport Infrastructure Act dealing with development impacting on State–controlled roads;*
- 16. the Vegetation Management Act dealing with the clearing of vegetation;*
- 17. the Water Act and Water Regulation dealing with the taking of or interfering with water;*
- 18. the Water Supply (Safety and Reliability) Act 2008 for the provision of water and sewerage infrastructure;*
- 19. the Workplace Health and Safety Act.*

When applicants and consultants respond to Council Information Requests, a written description of how each item of the request has been addressed is to accompany the response.

SC6.1.3.1 Standards for the provision of works

- (1) 0 states the Council's standards for the provision of infrastructure works associated with development including carrying out building work or operational work, reconfiguring a lot or making a material change of use.
- (2) The symbol '✓' indicates that the works identified in Column 1 are to be provided:
 - (a) before carrying out building work or operational work, reconfiguring a lot or making a material change of use that is assessable or self-assessable under the planning scheme; and,
 - (b) where the planning scheme identifies that the use or development requires the provision of works in accordance with this policy.
- (3) In this section:
 - (a) '1.2m wide', in relation to a footpath or footway, means a concrete footpath not less than 1.2 metres wide, or 2.5 metres wide where a combined footway/bikeway is required;
 - (b) 'full width', in relation to a footpath or footway means between the back of the kerb and the property line.

Table SC6. 1 Standards for the provision of works

COLUMN 1	COLUMN 2									COLUMN 3
Works	Planning Scheme Zone									Comments
	Principal Centre District Centre	Local Centre Specialised Centre Township – Refer Note 1	Community Purposes	Residential Living Character Residential Residential Choice	Industry	Rural	Rural Residential	Sport & Recreation Open Space Env. Mgmt. & Cons Limited Development	Tourist Accommodation	
minor system underground drainage	✓	✓	✓ (if in urban area)	✓	✓		✓ (where kerb & channel)		✓	to standards in SC6.1.7 Design standards
road pavement	✓	✓	✓ (if in urban area)	✓	✓	✓	✓	✓	✓	constructed from kerbs to centreline as per standards in SC6.1.7 Design standards
sealed surface	✓	✓	✓ (if in urban area)	✓	✓	✓	✓	✓	✓	to standards in SC6.1.7 Design standards
road drainage	✓	✓	✓	✓	✓	✓	✓	✓	✓	to standards in SC6.1.7 Design standards
kerb and channel	✓	✓	✓ (if in urban area)	✓	✓			✓	✓	to standards in SC6.1.7 Design standards
formed and graded pathway	✓	✓	✓	✓	✓		✓	✓	✓	to standards in SC6.1.7 Design standards
vehicle crossings over footway	✓	✓	✓	✓	✓	✓	✓	✓	✓	to standards in SC6.1.7 Design standards
concrete pathway (refer Note 2)	full width	1.2m wide		1.2m wide	1.2 m wide				full width	to standards in SC6.1.7 Design standards
reticulated water	✓	✓	✓ (if in urban area)	✓	✓		Special cases only		✓	to standards in WSA Codes (as modified by SC6.1.10 WSA Addenda
reticulated sewerage	✓	✓	✓ (if in urban area)	✓	✓				✓	to standards in WSA Codes (as modified by SC6.1.10 WSA Addenda

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Works	Planning Scheme Zone								Comments	
	Principal Centre District Centre	Local Centre Specialised Centre Township – Refer Note 1	Community Purposes	Residential Living Character Residential Residential Choice	Industry	Rural	Rural Residential	Sport & Recreation Open Space Env. Mgmt. & Cons Limited Development	Tourist Accommodation	
inter-allotment drainage	✓	✓	✓	✓	✓				✓	to standards in SC6.1.7 Design standards
street lighting	✓	✓	✓	✓	✓		Part		✓	to standards in SC6.1.7 Design standards

Note 1. In determining the Works required in the Township Zone the predominant characteristics of the particular township will be considered (for example, many townships do not have town water).

Note 2. Minimum pathway width in Tin Can Bay, Rainbow Beach and Cooloola Cove is 1.5m. High use or joint use pathways will be a minimum of 2.5m.

SC6.1.3.2 Design standards

- (1) SC6.1.7 Design standards of this policy contains the Council's design standards for works within the Council area.
- (2) SC6.1.10 WSA Addenda contains details of Council modifications to the Water Services Association of Australia (WSA) Codes in relation to water supply and sewerage infrastructure.