

 DISTRICT COUNCIL OF TUMBLY BAY	POLICY# 7.10 A Guide for Developers POLICY AREA DEVELOPMENT	Version No:	2
		Issued:	Oct 2013
		Next Review:	Annually

Aims & Objectives

This policy is prepared to provide developers and their engineers with information on the expectations of the Council in relation to the provision of infrastructure necessary to fulfil the mandatory requirements of an approved land division.

Pre-Development Plan Consent

To assist Council staff with determining the suitability of proposed development, the following documentation is required to be provided with an application for land division:

- Site plan detailing:
 - Proposed road layout and intersections
 - Proposed road widths
 - Proposed traffic control devices
 - Locations of footpaths, bicycle paths and other pedestrian paths as appropriate
 - Locations of existing buildings, fences, power lines, vegetation and other structures or services on the land
 - Contours of the land and features such as creeks, dams, etc
- A concept stormwater management plan detailing:
 - The delineation and areas of sub-catchments impacting the development area
 - Existing site levels with proposed adjacent road, kerb and drainage invert levels
 - Proposed stormwater flow paths for the minor (ARI = 10yr) and major (ARI = 100yr) events
 - Layout of any proposed underground drainage system and details of the connection to Council's drainage system
 - A flooding risk assessment and report for properties near a watercourse or within an identified flood zone
- Where the Developer is required or proposes to undertake works outside of the development site, an Infrastructure Agreement will be required to be entered into by the Developer with the Council. The Developer will be responsible for meeting all reasonable costs of preparation of the agreement by Council's solicitor.
- A Land Management Agreement may be required to be entered into in order to control issues such as building location, retention of vegetation building standards etc. The Developer will be required to meet all costs associated with the development of the LMA.

Pre-Construction

- Developers are required to engage a professional and suitably qualified engineer to design and supervise construction of all engineering works associated with land division development.
- All drawings and specifications are to be approved by the Council in writing prior to the commencement of any construction works.
- The Developer is required to obtain all design approvals required from other parties, including SA Power Networks and SA Water for relevant infrastructure.
- The following final construction plans, specifications and related documents are required to be supplied by the developers engineer for approval by Council:
 - Road Layout and Geometry
 - Road Pavement Design Details
 - Parking and Driveway Plan
 - Electrical Reticulation Plan and Public Street Lighting Plan
 - Water Reticulation
 - Footpath Details
 - Linemarking, Signage and Traffic Control
 - Stormwater Management Plan detailing:
 - Impact of the Development on internal and external stormwater drainage network and preparation of a flood assessment report
 - Proposed stormwater measures to protect the site from a minor (ARI = 10yr) and major (ARI = 100yr) storm event
 - Measures to be used to ensure that stormwater runoff levels from an ARI = 10yr event is no greater post development to that which occurred prior to development.
 - Community Wastewater Management Scheme (CWMS) design drawings (Note: CWMS plans also require approval from the Department of Health)
 - Construction Environmental Management Plan

Post Construction

- Prior to acceptance of completed infrastructure, the Council will require the Developer to provide:
 - 'As constructed' data for all infrastructure that will become the property of Council that shall detail all levels and grades of roads and pipes, and detail the locations of all connection, flushing and inspection points, manholes and other elements, referenced to property boundaries
 - Certification of Practical Completion from the Superintending Engineer that all works have been completed in accordance with the approved plans and specifications
 - Certification from the Department of Health that the constructed CWMS infrastructure has met their approval
 - Test results for all infrastructure including:
 - Compaction tests in accordance with the approved specification
 - Pressure tests for all CWMS lines
- Council will require the Developer to enter into a bonding agreement for a 12 month defect period on all infrastructure works, with this agreement to be supported by the provision of security in the amount of 10% of the value of the works. This agreement

is to be entered into prior to the Council advising the Development Assessment Commission that it has no objection to the issuing of a Certificate in accordance with Section 51 of the Development Act 1993.

- All construction work shall be carried out under the supervision of a professional engineer, and certification of construction in accordance with approved plans and specifications shall be provided to Council prior to Council advising the Development Assessment Commission that its requirements have been met.
- The applicant shall provide a 12 month maintenance period on all works undertaken as part of this development, commencing from the date of issue of the Certificate of Practical Completion.
- The applicant shall provide 'as-constructed' drawings for all road, stormwater and CWMS infrastructure at the completion of works. These plans shall detail all levels and grades of roads and pipes, and detail the locations of all connection, flushing and inspection points, manholes and other elements, referenced to property boundaries.

Roads, Kerbing and Footpaths

The following requirements apply where a Developer proposes to create new road(s):

- All new roads created by land division within townships shall be bitumen sealed, constructed with concrete kerb and water table and provided with a footpath to at least one road verge.
- New roads created within rural living zones shall be bitumen sealed, and at least one verge shall provide a suitably level and surfaced path to provide for off-carriageway movement of pedestrians.
- The road and road related infrastructure are to be contained within a road reserve of width no less than 15m.
- The applicant shall provide all necessary engineering survey, design plans and specifications for the construction of all proposed roads and footpaths to the satisfaction of Council. After approval of these drawings and specifications by Council, the work shall be carried out by the applicant and at their expense, in accordance with the drawings and specifications and to the satisfaction of Council.
- All proposed roads shown on the application are to be a minimum of:
 - Residential subdivision 8.0m sealed and kerbed on both sides
 - Rural Living/Rural land division 7.0m sealed plus 1.0m unsealed shoulders
- Roads that service commercial or industrial areas or that provide a collector function within the road network shall be designed to suit the specific requirements of the road, taking into account the needs of all road users including heavy vehicles, pedestrians and cyclists.
- Road verges on both sides of a kerbed carriageway shall be shaped to provide a minimum width of 2m adjacent the kerb with a 2.0% crossfall towards the top of kerb.

S:\GDS20FUNCTIONS\Governance\Policies & Procedures\Policy Manual - Oct 2011\7 Development\Word Version\7.10 Guide for developers v2.doc

*Electronic version on the Intranet is the controlled version. Printed copies are considered uncontrolled.
Before using a printed copy, verify that it is the current version*

Batters into allotments are to be no steeper than 1 in 6. Road verges (where no constructed footpath is provided) are to be finished with compacted crusher fines to the satisfaction of Council.

- Road verges on both sides of an un-kerbed carriageway shall have a batter slope of no greater than 1:6.
- All kerbing shall be rollback mountable style kerb.
- Roads shall be designed and constructed generally in accordance with the requirements of the current version of the Austroads Guide to Road Design to the satisfaction of Council.
- Road Pavements shall be designed in accordance with the current version of the Austroads Guide to Pavement Design to the satisfaction of Council
 - Pavement materials shall conform to the requirements of Part 215 of the DPTI Master Specification named Supply of Pavement Materials.
 - Basecourse PM1/20QG
 - Sub-Base PM2/20QG or PM2/40QG
- Road surfacing shall be specified to be either 2-coat spray seal or hotmix to the satisfaction of Council. All cul-de-sacs shall be surfaced with a minimum 30mm AC10 hotmix.
- A 1.5m wide footpath of concrete or block paving construction with a crossfall of not greater than 2.0% shall be provided on one side of all proposed roads. The side for footpath construction shall be agreed with Council prior to construction. All footpaths must be provided with kerb ramps in accordance with AS1428.4.
- The developer shall provide safe and convenient access, in accordance with the requirements of the current version of the Austroads Guide to Road Design and to the satisfaction of Council, from each allotment delineated on the Plan of Division to the carriageway of any existing or proposed road. All access on the low side of the road are to make provision for a vehicle standing area to provide adequate visibility and allow appropriate approach to the edge of carriageway.
- Two galvanised kerb adaptors are to be provided to facilitate the disposal of stormwater from the property for all allotments that drain towards the street. Kerb adaptors are to be cast into the curb approximately 1.5m from the boundary line with each adjoining property. Where a footpath is installed, a 100mm diameter 'Sewer Grade' UPVC pipe with galvanized pipe cover is to be provided under the footpath, with a minimum grade of 1% towards the kerb.
- The developer shall provide a street name sign at the threshold of all new roads. All roads shall be named in consultation with Council and in accordance with Council Policy 3.01 Road Names.
- All necessary signs, traffic control devices and pavement marking shall be provided in accordance with AS1742.

Public Lighting

- Public street lighting shall be required on all proposed roads within residential sub divisions, and at all new intersections with existing roads. Street lighting is not required for land divisions within the Rural Living, General Farming and Water Protection Zones.
- Public lighting is to be designed and installed to satisfy at a minimum the requirements for P5 lighting standard in accordance with AS1158. Luminaires shall be Compact Fluorescent 42W in accordance with ETSA specifications, or such other luminaire as required by the Council.

Stormwater

- The applicant shall provide a detailed Stormwater Management Plan, including all necessary engineering survey, design plans and specifications for the site.
 - The Stormwater Management Plan shall demonstrate:
 - adequate conveyance of a minor (ARI = 10years) and major (ARI = 100years) rainfall event.
 - strategies to ensure the post-development peak runoff flow is no greater than the pre-development peak runoff flow*
 - strategies to manage the entry of litter and pollution from the development entering the stormwater network
- The Council supports the implementation of Water Sensitive Urban design techniques to reduce peak flows and maintain and improve quality of stormwater.

*Where this criteria cannot be satisfied, the applicant will be required to identify the impact on downstream watercourses and infrastructure, and to develop measures to mitigate these impacts. The Developer will be required to enter into a Development Agreement for the completion of all works external to the development site.

- Stormwater drainage pipes and culverts shall generally be of reinforced concrete in accordance with the following criteria:
 - Minimum pipe diameter 375mm
 - Minimum culvert size 450 x 300
 - Minimum grade 0.5%
 - Clear cover over pipes or culverts minimum 600mm or in accordance with manufacturers specification.
- Where gravity drainage of allotments to the road watertable cannot be achieved, the applicant shall provide all engineering survey, design plans and specification for the installation of rear of allotment sub-surface drainage. Rear of allotment drainage shall have a minimum pipe diameter of 150mm (Class DWV) and each allotment shall be provided with a grated inlet pit at the lowest corner of the allotment.
- The applicant shall provide engineering certification that the flow path for the major storm event (ARI = 100yr) is contained within reserves or the road reserve and not enter private property unless within a defined drainage easement. A drainage

S:\GDS20FUNCTIONS\Governance\Policies & Procedures\Policy Manual - Oct 2011\7 Development\Word Version\7.10 Guide for developers v2.doc

*Electronic version on the Intranet is the controlled version. Printed copies are considered uncontrolled.
Before using a printed copy, verify that it is the current version*

easement shall be provided to Council of sufficient width to contain the spread of expected floodwaters from a 100 year average recurrence interval rainfall event.

Easements

- Easements in favour of Council are to be provided wherever necessary to provide for stormwater or effluent infrastructure. Easements for single services shall have a minimum width of 3m, and easements containing two services shall have a minimum width of 4m.

Open Space

- Within the Tumby Bay township, open space requirements under the Development Act are met via the payment of the amount established by Regulation to the Council's Open Space Fund.
- Any reserves proposed to be created as land division and vested with Council shall be subject to acceptance by resolution of the Council. Where a proposed reserve is accepted by Council the following conditions will apply.
- Drainage reserves will not be accepted as public open space.
- The reserve is to be landscaped at the applicant's expense using an appropriate selection of native trees and shrubs in accordance with a Landscaping and Irrigation Plan approved by the Council. The reserve shall be provided such that open surfaces are suited to mowing maintenance with a ride on lawn mower, with grades no greater than 1 in 6.
- Fencing shall be erected along the shared boundaries of any proposed allotment with existing or proposed Council reserve. Such fencing shall be 1800mm capped Colourbond or equivalent fencing with posts and rails 'facing into the allotment'. Any other fencing design requires Council approval. The type and particulars of fencing shall be detailed in a plan and approval in writing from Council is required prior to the erection of such fencing.

Native Vegetation

- Where any new or existing road reserve contains stands of any vegetation (native or other) the developer is responsible for all costs relating to any application for approval to remove the Native Vegetation, any required revegetation programme and the removal and disposal all approved vegetation to the satisfaction of the Council.

Community Wastewater Management Schemes

Within townships serviced by a Community Wastewater Management Scheme (CWMS):

- The applicant shall provide all necessary engineering survey, design drawings and specifications for the construction of common effluent drainage works required to connect each allotment to Council's Community Wastewater Management Scheme.

- After approval of these drawings and specifications by Council and the Department of Health, the work shall be carried out by the applicant and at their expense, in accordance with the drawings and specifications and to the satisfaction of Council.
- Pump station infrastructure for the CWMS shall be designed to be consistent with the Council's existing pump stations, so far as pump type and manufacturer, telemetry equipment and electrical control systems.
- The Developer is required to contribute an augmentation fee as set by Council Policy 10.6 CWMS Connections and Wastewater Disposal payable per allotment connected to Council's CWMS, at the rate applicable in the year that the land division is completed and infrastructure is accepted by Council.
- In the event that the treatment or storage capacity of Council's CWMS is insufficient for the proposed development, requiring significant upgrade to treatment plants or lagoons, the Council may require the Developer to meet these costs in lieu of the per allotment augmentation charge. Any such works will be subject to an Infrastructure Agreement entered into between Council and the Developer.

Other Services

- The Developer will be required to provide electricity, water and communications services to all allotments in accordance with plans and arrangements with the relevant authorities and pay all the relevant augmentation costs.
- The Developer must ensure that all services are placed underground in common trenches, generally in accordance with the requirements of 'Services in Streets – A Code for the Placement of Infrastructure in New and Existing Streets'.

Strategic Link:

Delegation:
 Manager Environmental Services
 Works Manager

Documentation: Nil

Authority: Adopted by Council: 8/10/13 {Motion No 17c/102013}
 Reviewed by Council: 10/11/2015 {Motion 7c/112015}

Certified Copy by Chief Executive Officer or approved Delegate	
SIGNED:	Date: ____/____/____