SHIRE OF BODDINGTON

PLANNING POLICY 6 - DEVELOPMENT IN FLOOD AFFECTED AREAS

1. Policy Statement

It is Council's policy to adopt a precautionary approach to flooding risks. To achieve this, the Council will require proponents seeking planning (development), subdivision, scheme amendment, structure plan, and development guide plan approval and other works to take account of flooding risk, including risks set out in the Shire of Boddington Floodplain Management Study.

2. Background and Issues

The Shire of Boddington Floodplain Management Study (to be called the "Flood Study") was prepared by Sinclair Knight Merz. The Flood Study consists of two documents:

- Shire of Boddington Floodplain Management Study Floodplain Management Strategy; and
- Shire of Boddington Floodplain Management Study Flood Modelling Report.

The Flood Study is a strategic document that has implications for development and related matters for areas in and around Boddington that are affected by flooding risk.

3. Definitions

In this policy, the following definitions apply:

Australian Height Datum (AHD) - Based on the mean sea level of Australia, a reference level to which the Flood Study has been prepared.

Average Recurrence Interval (ARI) – The average or expected period between exceedance of a given rainfall intensity or peak discharge (the likelihood of occurrence of a flood event).

Department of Water - Means the State Government's lead agency that is responsible for floodplain management strategies and floodplain advice and includes any other agency should it be renamed.

1 in 100 Year Flood Level - The 100 year average recurrence interval (ARI) flood level which is used as a basis for determining minimum building floor levels.

Freeboard - The height above a defined flood level which is used to provide a factor of safety in the setting of floor levels which, in this policy, is typically 0.5 metres (500mm) unless otherwise indicated.

Flood Fringe - The area of the floodplain which may be acceptable to fill subject to gaining relevant approvals.

Floodway - The area of the floodplain where significant flow or storage of water occurs during a flood event.

Hydraulic - The study of water flow in waterways, in particular, the evaluation of flow parameters such as water level and velocity.

Hydrology (hydrologic) - The study of the rainfall and runoff processes, in particular, the evaluation of peak flows, flow volumes and the derivation of hydrographs for a range of floods.

Minimum Building Floor Level - A minimum building floor level generally 0.5 metre (500mm) above the designated 100 year ARI flood level is set to achieve adequate flood protection to development.

Throughout this policy, "proponent" can refer to "developer" or "subdivider", while "proposal" can refer to "planning (development) application, subdivision application, scheme amendment request, structure plan request and development guide plan request or other works" where considered appropriate by Council.

4. Objectives

The objectives of this policy are to:

- clearly set out the Council's approach to development and subdivision in flood affected areas;
- provide guidance to developers, subdividers, landowners, the community, other stakeholders and the Shire administration to ensure new developments and subdivisions appropriately address flood risk as set out in the Flood Study;
- clarify the status of the Flood Study from the Council's perspective;
- take a long term strategic perspective relating to flood risks including ensuring that more intensive subdivision and development is not impacted by flooding;
- take a precautionary approach, in order to minimise flood risk to people, property and infrastructure, and require proponents to suitably justify why there should be a departure from this policy;
- ensure that new buildings achieve a finished floor level suitable to prevent water from flooding and/or a storm event having an average recurrence interval of 1 in 100 years from entering the building;
- support compatible development that recognises the floodplain coincides with areas of high conservation significance; and
- promote the sound use, management and tenure of the floodplain.

5. Application of the Policy

This policy applies to all areas of the municipality affected by flooding, including flood affected areas outside of the area covered by the Flood Study.

The Flood Study highlights there is also flooding risk outside of the areas identified in Appendix B of the Floodplain Management Strategy. Various properties, throughout the municipality, are subject to significant stormwater overland flow and/or inundation but have not yet been mapped using hydrologic and hydraulic modelling.

6. Links to Town Planning Scheme and other documents

This policy relates to various requirements set out in the Shire of Boddington Town Planning Scheme No. 2 (TPS2), Council's Local Planning Strategy, State Planning Policies 2, 2.9 and 3.4 and the Flood Study.

7. Policy Provisions

7.1 General

7.1.1. The Council will adopt a precautionary approach to flooding risk in the floodway, the flood fringe and other flood affected areas. The "onus of proof" rests with the applicant to justify their proposal and associated flooding risks.

7.1.2 Subdivision and development in the floodway is generally not supported and will only be considered in exceptional circumstances, that are appropriately justified by the proponent, which may require the provision of technical details from a suitable professional to the satisfaction of Council.

7.1.3 The Council will use the latest version of the Flood Study to assess proposals. However, where there are variations between the Flood Study and this policy, this policy prevails.

7.1.4 The Council will make decisions based on the areas identified as floodway and flood fringe in the latest available Flood Study (specifically in Appendix B of the Floodplain Management Strategy).

7.1.5 The recommended minimum finished floor level will be determined using those set out in the Flood Study and then adding 500mm to the 1 in 100 year flood levels unless otherwise provided for in this policy.

7.1.6 The Council will require the minimum finished floor level to be certified by a licensed surveyor. This will be required as a condition of planning consent or subdivision approval.

7.1.7 The level of information required by the Council, including contour information and technical support, is required to be sufficient to meet the legal requirements of TPS2 and to enable the Council to appropriately determine the proposal and its impacts.

7.1.8 For land outside of the study area (set out in Appendix B of the Floodplain Management Strategy) that may have flooding risk, adjacent to waterways and overland flow paths, the Council will require the proponent to suitably demonstrate that their proposal addresses flooding risk to the satisfaction of Council.

7.1.9 No earthworks are permitted in the floodplain as set out by the Flood Study without the approval of Council. The Council will seek to ensure that any earthworks do not adversely impact on the hydraulic conveyance or flood storage.

7.1.10 Clearing of vegetation will generally not be permitted in the floodway or flood fringe unless suitably justified by the proponent and the clearing request is approved by the Department of Environment and Conservation and/or Council.

7.1.11 The Council seeks to ensure that essential services, which may include but are not limited to fire control panels, electrical switchboards and telephone services, are located above the 1 in 100 flood level with a freeboard of 0.5 metres.

7.1.12 If the proposal is located in a flood risk area, in the opinion of Council, where no hydrologic and hydraulic modelling data is available, the Council may require the proponent to engage a suitably qualified engineer to undertake an appropriate hydrologic and hydraulic assessment to the satisfaction of the Council and/or the

Department of Water. Where such an assessment is required, the assessment is to be submitted in a format which is compatible with the Department of Water's software to enable checking of data.

7.1.13 The Council will seek advice from the Department of Water and/or other agencies as appropriate on proposals.

7.1.14 The Council does not favour the use of levees. This is because there is the possibility that levees can be breached or overtopped in extreme storms, which can lead to an increase in damage and subsequently greater potential for damage, and there is no guarantee that the levees will remain with the land.

7.1.15 Landowners and servicing authorities should take all practical steps to address flooding risks subject to gaining necessary approvals.

7.2 Land within Floodways

7.2.1 Policy Statement

The Council will:

- prohibit and/or restrict further buildings, structures, development, site works, fencing and landfill which will adversely affect the flow of floodwaters, to the extent where upstream, adjoining and nearby flood levels will increase, or where the risk to people and property will increase;
- seek to ensure that any building development that is approved will not create any undue risk to life or property; and
- seek to ensure the floodway is appropriately managed.

7.2.2 Planning Applications (Development Applications)

The Council does not support planning applications and new or additional development, buildings and structures in the floodway unless otherwise provided for in this policy.

The Council requires proponent's to suitably locate proposed new development. Where the property subject to the Planning Application includes land located outside of the floodway, the Council will not approve a new building or structure on land within the floodway. This includes where the site is subject to a total redevelopment.

The Council may require proponents to include a report/assessment from a suitably qualified engineer, who holds appropriate professional indemnity insurance, addressing risk management, solutions and certifying the proposed development from an agreed level of flood risk to the satisfaction of Council.

Planning consent for development in the floodway will not be granted unless:

- it is to replace an existing approved building or structure where the entire lot is located within the floodway and the existing building/structure is demolished or removed. Further, the proposed building/structure footprint is no greater and is designed to reduce flooding risk compared to the former building/structure, yet does not have a detrimental impact on other properties;
- the entire lot is located within the floodway and the proposed use is permitted by TPS2 (a "P" use);

- the change of use does not intensify the anticipated number of people on the site or generally increase risks in the opinion of Council; and
- the proponent demonstrates there is an over-riding public benefit and it is a temporary structure.

The use of appropriate housing forms to achieve the required floor levels and/or reduce flood risk, such as particular methods of construction and certain types of materials which are better suited to withstand the damaging effect of floodwaters, 2 storeys with habitable rooms on the first floor, or stumped houses, as opposed to filling of the site, should be considered by proponents.

Minor additions to existing dwellings that do not increase the habitable area at ground level, such as a veranda or patio, will be considered on their merit subject to confirmation from the Department of Water that the new development will not adversely affect the free flow of floodwaters.

Should Council issue planning consent, it may include conditions addressing, but not limited to, the following:

- the building/structure is set at a height to the Council's satisfaction, which typically will be a minimum of 0.5 metres above the 1 in 100 year flood level;
- a licensed surveyor confirms that the required floor level has been met;
- building materials are flood compatible, including building foundations being designed to withstand scouring and undermining by moving floodwaters. This may require a practicing engineer certifying that the building/structure can withstand fast-flowing waters to the standard set by Council;
- require a suitable drainage system (either subsoil and/of above ground) to be designed, installed and maintained by the property owner (to prevent impact on adjoining properties if filling occurs);
- all electrical services are located above the designated 1 in 100 year flood level;
- vehicular access and/or evacuation routes are designed for two-wheel drive vehicles to the satisfaction of Council;
- a notification is included on the Certificate of Title advising landowners in perpetuity of the flooding risks, with costs to be met by the proponent; and
- the proponent enters into a flood / erosion indemnity agreement with Council, with costs to be met by the proponent.

All Planning Applications proposing development in the floodway will be reported to Council for determination.

No Planning Application is required for structures such as swimming pools, air conditioning units, satellite dishes, rural style boundary fencing (which is not solid fencing) and other minor development as set out in TPS2 that presents limited flooding risk in the opinion of Council due to their location, lower cost to replace, the right to fence property boundaries and intended purpose.

7.2.3 Subdivision Applications

The Council will not support subdivision applications proposing new lots that are entirely within the floodway.

The Council will consider, on its merits, subdivision applications that suitably demonstrate that:

- each lot contains an area, outside of the floodway, that is appropriately sized and located for the anticipated use which includes appropriate setbacks to property boundaries; and
- vehicular access, between the public road system and the identified development area for each lot, will not be cut off in a major flood event.

The Council will support boundary adjustments (subdivision/amalgamation applications) provided that:

- each lot contains an area, outside of the floodway, that is appropriately sized and located for the anticipated use; and
- vehicular access, between the public road system and the identified development area for each lot, will not be cut off in a major flood event.

The Council will seek the inclusion of a condition, for any lot within the floodway, requiring that a notification is included on the Certificate of Title advising landowners in perpetuity of the flooding risks.

The Council will apply the following approach to the management and tenure of the floodway:

- should the subdivision application be within or near the Boddington and Ranford townsites, in the opinion of Council, the Council may recommend to the Western Australian Planning Commission (WAPC) that the floodway be ceded to the Crown for conservation/drainage purposes free of cost. This will typically be requested if the subdivision application proposes residential lots and may include where the subdivision application proposes rural residential, tourist, commercial, industrial or possibly rural small holding uses. The condition will be requested to progressively improve community access to the foreshore and/or assist in conservation initiatives in the opinion of Council;
- rural small holding subdivisions will be assessed on their merits, although public access may be secured such as through an easement in favour of the Shire of Boddington or a public access way; and
- the Council will typically not seek to have the floodway portions of rural lots ceded to the Crown (generally this land will continue to be privately owned and managed) unless there is an overriding public benefit in the opinion of Council.

The Council may recommend to the WAPC that a condition be imposed regarding the preparation and implementation of a Foreshore Management Plan or other required strategy.

7.2.4 Scheme Amendments (Rezoning)

The Council will not support scheme amendment requests that propose to increase the intensification of land use and/or generally increase risks for areas within the floodway.

The Council may require the scheme amendment request and/or documentation to be supported by relevant studies and/or plans including addressing land management and conservation considerations.

Where the scheme amendment request also includes areas outside of the floodway, the Council may seek to ensure that the zoning and/or reservation of the floodway is appropriate to improve community access to the foreshore and/or assist in

conservation initiatives in the opinion of Council. The Council will typically apply the principles set out in section 7.2.3 on management and land tenure for the floodway.

The Council may require the proponent and/or suitable professional to identify the extent of flooding risk, for areas outside of Appendix B of the Floodplain Management Strategy, to the satisfaction of the Department of Water and the Council.

7.2.5 Other Works

The Council will seek to minimise locating infrastructure in the floodway. Where new or replacement infrastructure is located in a floodway, the Council will ensure its design takes account of the flood risk to adjoining and nearby properties so that is no worse than the current situation, or the flooding risk to adjoining and nearby properties is lowered.

The Council seeks the support of Commonwealth Government agencies, State Government agencies and servicing authorities to ensure that they design infrastructure to take account of flood risks, including on upstream, adjoining and nearby land owned by other parties. Further, they should ensure that their infrastructure is optimally located and designed to achieve suitable levels of service, having regard to the processes and policies of the administering government agency or servicing authority.

7.3 Land within the Flood Fringe

7.3.1 Policy Statement

The Council will seek to ensure that:

- development and subdivision will not create any undue risk to life or property;
- buildings, structures, development, site works, fencing and landfill will not adversely affect the flow of floodwaters, to the extent where upstream, adjoining and nearby flood levels will increase, or where the risk to people and property will increase; and
- the flood fringe is appropriately managed.

7.3.2 Planning Applications (Development Applications)

The Council will favourably consider Planning Applications, within the flood fringe, provided they meet minimum floor levels of 0.5m above the 1 in 100 year flood level (unless otherwise provided for in this policy) as specified on the plans accompanying the Flood Study. This is subject to other planning, servicing, environmental and landscape considerations being appropriately addressed to the satisfaction of Council.

Planning consent for new buildings and structures within in the flood fringe are required to meet the identified floor level set out in the Flood Study plus a freeboard of 0.5 metres (unless otherwise provided for in this policy). The Council will only consider variations to this where the proponent suitably justifies, to the satisfaction of Council, the following:

- it is an extension to an existing building where there are genuine constraints of integrating the proposed extension to the existing building;
- the recommended levels will result in a significant impact on the landscape, amenity and aesthetics of the locality;

- the proposed structure is a Class 10 building/structure as set out in the Building Code of Australia, not involving human habitation, where the Council will support a freeboard of 0.15m (150mm) above the 1 in 100 flood level; and
- the proponent demonstrates there is an over-riding public benefit and it is a temporary structure.

Should Council issue planning consent, it may include conditions addressing, but not limited to, the following:

- the building/structure is set at a height to the Council's satisfaction, which typically will be a minimum of 0.5 metres above the 1 in 100 year flood level;
- a licensed surveyor confirms that the required floor level has been met;
- building materials are flood compatible, including building foundations being designed to withstand scouring and undermining by moving floodwaters. This may require a practicing engineer certifying that the building/structure can withstand fast-flowing waters to the standard set by Council;
- require a suitable drainage system (either subsoil and/of above ground) to be designed, installed and maintained by the property owner (to prevent impact on adjoining properties if filling occurs);
- all electrical services are located above the designated 1 in 100 year flood level;
- vehicular access and/or evacuation routes are designed for two-wheel drive vehicles to the satisfaction of Council;
- a notification is included on the Certificate of Title advising landowners in perpetuity of the flooding risks, with costs to be met by the proponent; and
- the proponent enters into a flood / erosion indemnity agreement with Council, with costs to be met by the proponent.

All Planning Applications proposing development in the flood fringe, below the required flood level set out in the flood study plus a freeboard of 0.5 metres (other than a Class 10 building/structure as set out in the Building Code of Australia), will be reported to Council for determination.

7.3.3 Subdivision Applications

The Council will consider, on its merits, subdivision applications in the flood fringe that suitably demonstrate that:

- each lot contains an area, outside of the floodway, that is appropriately sized and located for the anticipated use; and
- vehicular access, between the public road system and the identified development area for each lot, will not be cut off in a major flood event.

The above is subject to the proponent suitably addressing other planning, servicing, environmental and landscape considerations to the satisfaction of Council.

The Council will recommend to the WAPC that a subdivision condition be imposed on residential, rural residential (building envelope and vehicular access), tourist, commercial and industrial lots requiring the land to be suitably filled to meet the minimum floor level set in the Flood Study plus a freeboard of 0.5 metres, along with the land being suitably drained. Where this condition is imposed by the WAPC, the Council will not issue clearance of the Deposited Plan until proposed lots and/or approved development footprints/building envelopes are suitably filled and drained.

For rural small holding and rural subdivisions, the Council will likewise require each proposed lot to have:

- an area, outside of the floodway, that is appropriately sized and located for the anticipated use; and
- vehicular access, between the public road system and the identified development area for each lot, will not be cut off in a major flood event.

The Council will typically not require the development footprint/building envelope of proposed rural small holding and rural lots to be filled prior to the creation of titles. However, the Council will require suitable notification to prospective purchasers and/or successors being included on the Certificate of Title to state that the lot is impacted by flooding, the approved building envelope location (or building exclusion area) and the minimum floor level as set out by the Flood Study and this policy.

7.3.4 Scheme Amendments (Rezoning)

The Council will consider, on its merits, scheme amendment requests in the flood fringe provided the proponent can that demonstrate that each proposed lot:

- contains an area, outside of the floodway, that is appropriately sized and located for the anticipated use; and
- has vehicular access, between the public road system and the identified development area for each lot, will not be cut off in a major flood event.

The above is subject to the proponent suitably addressing other planning, servicing, environmental and landscape considerations to the satisfaction of Council.

The Council may require the scheme amendment request and/or documentation to be supported by relevant studies and/or plans including addressing land management, tenure and conservation considerations.

7.3.5 Other Works

Where new or replacement infrastructure is located in the flood fringe, the Council will ensure its design takes account of the flood risk to adjoining and nearby properties so that is no worse than the current situation, or the flooding risk to adjoining and nearby properties is lowered.

The Council seeks the support of Commonwealth Government agencies, State Government agencies and servicing authorities to ensure that they design infrastructure to take account of flood risks, including on upstream, adjoining and nearby land owned by other parties. Further, they should ensure that their infrastructure is optimally located and designed to achieve suitable levels of service, having regard to the processes and policies of the administering government agency or servicing authority.

8. Approval Authorisation

Authority to implement the policy will be delegated to the Chief Executive Officer, other than as outlined in this policy.

9. Final Adoption

Final adoption of the policy was resolved by Council on 24 February 2009.