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LANDSLIDE SUSCEPTIBILITY

This policy applies to land that is affected by an Erosion Management Overlay Schedule 4 or Schedule 5.

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Policy basis

The Mornington Peninsula contains places that are susceptible to landslide and these especially occur along the coastline and creeks as well as in the steeper sloped inland areas. These places have been identified by the studies cited in the references to this Policy.

Inappropriate use and development, including vegetation removal, can exacerbate the risks to life, property and environment associated with these areas. Problems may include restricted usability; structural stability, cracking and rising damp. Changes in drainage patterns or the water table could also contribute to further instability with associated risks to water quality and the protection of indigenous flora and fauna.

This policy is based on the understanding that planning controls on the use and development of land can supplement building regulations to help prevent such problems from arising.

This policy, including the terms used (i.e. landslide, landslide inventory, risk) in the policy and the Schedules to the Erosion Management Overlay, is based upon the recommendations of the Australian Geomechanics Society and other studies as set out in the Policy references of this clause.

The policy builds on the State Planning Policy Framework and the Municipal Strategic Statement, in particular:

- Clause 15.01 Protection of catchments, waterways and groundwater
- Clause 21.07-1 Housing and Integrated Local Area Planning Objective 1.

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Objectives

- To ensure that the stability of the land does not deteriorate.
- To ensure that land in areas that are susceptible to landslide is only developed with proper regard to geotechnical hazard and risk assessment, including appropriate risk mitigation.

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Policy

It is policy:

- To guide development to that part of the land that presents the least risk, whether or not that land is inside or outside an Erosion Management Overlay.
- To discourage development if a geotechnical hazard and risk assessment shows that it has a risk (i.e. Loss of Life Risk for the person most at risk) that exceeds ‘1 in 100,000’ per annum. This does not apply to a change to an existing structure that does not increase the building footprint or result in an overall change to footing loads but only if it has a risk that does not exceed ‘1 in 10,000’ per annum.
- To discourage development if a geotechnical hazard and risk assessment shows that it has a moderate or higher risk of loss to property as calculated in accordance with table 1 to this clause.

Table 1 to Clause 22.20

Likelihood of risk		Consequences to property (with indicative approximate cost of damage as a percentage of the value of the property)				
	Indicative value of approximate annual probability	Catastrophic 200%	Major 60%	Medium 20%	Minor 5%	Insignificant 0.5%

Likelihood of risk		Consequences to property (with indicative approximate cost of damage as a percentage of the value of the property)				
Almost certain	1 in 10	Very high	Very high	Very high	High	Moderate (or Low if consequence < 0.1%)
Likely	1 in 100	Very high	Very high	High	Moderate	Low
Possible	1 in 1000	Very high	High	Moderate	Moderate	Very low
Unlikely	1 in 10,000	High	Moderate	Low	Low	Very low
Rare	1 in 100,000	Moderate	Low	Low	Very low	Very low
Barely credible	1 in a million	Low	Very low	Very low	Very low	Very low

- To ensure that pedestrian access to any accommodation and a reasonable amount of associated private open space is secured to the extent that loss of functionality is unlikely.
- To encourage all building and pavement stormwater runoff together with surface water and sub-surface groundwater, to be collected into flexible pipes, designed to prevent blockage, and connected to a stormwater pipe system.
- To ensure that all drainage infrastructure is designed by a qualified civil engineer.
- To ensure that all retaining structures are designed by a qualified structural engineer.
- To discourage soakage pits and absorption trenches.
- To discourage in-ground swimming pools and water tanks that are not appropriately engineered to mitigate risks.
- To discourage significant cut or fill of slopes.
- To discourage the removal of vegetation, including the removal of roots of any felled vegetation.
- To ensure that the geotechnical assessment that would normally be required by a Schedule to the Erosion Management Overlay is submitted prior to the granting of a planning permit.
- For the land specified in table 2 to this clause, to apply the additional policies specified opposite in the table.

Table 2 to Clause 22.20

Land	Additional policy
Land in proximity of Tanti Creek.	<ul style="list-style-type: none"> ▪ To encourage buildings to be setback at least 10 metres from the top of the creek bank. ▪ To encourage the creation of easements or reserves along each side of Tanti Creek to facilitate the maintenance of the creek banks. ▪ To encourage the development of a corridor of indigenous riparian vegetation along Tanti Creek.
Land situated east of The Esplanade, Flinders.	<ul style="list-style-type: none"> ▪ To discourage the location of buildings on the public land is east of The Esplanade but west of the beach.

Proposals that do not meet these criteria may still meet the objective of this policy.

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Decision guidelines

Before deciding on an application, the responsible authority will consider, as appropriate:

- The robustness of any risk assessment for the proposed development in relation to the particular geotechnical conditions.

- The existing or proposed use of the land and the purpose of the proposed buildings and works in relation to that use, in particular whether those buildings and works are essential for the reasonable conduct of that use.
- Whether any required site management plan or monitoring, inspection and maintenance regime should be brought to the attention of future owners through registration on the Certificate of Title.
- The qualifications, depth and relevance of experience, professional recognition and level of professional indemnity insurance of any geotechnical practitioner who has made a report or Declaration, including whether the practitioner is also a registered building practitioner.
- For complex cases, the need for a geotechnical practitioner to submit a Geotechnical Declaration Final Geotechnical Certificate that is generally consistent with Form G of Appendix D of the Australian Geomechanics Society, (2007c) Practice Note Guidelines for Landslide Risk Management, Vol. 42, No. 1, Australian Geomechanics, March 2007.

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Policy reference

- Australian Geomechanics Society (2007a) Guideline for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning. Australian Geomechanics Society, Australian Geomechanics, Vol 42, No1.
- Australian Geomechanics Society, (2007c) Practice Note Guidelines for Landslide Risk Management, Vol. 42, No. 1, Australian Geomechanics, March 2007.
- Lane Piper (2008), Geotechnical Assessment of Landslip Susceptibility and Investigation Zoning, Flinders Foreshore, Mornington Peninsula (Ref No: 27005Report01.2.doc), Mornington Peninsula Shire Council
- Lane Piper, Geotechnical Assessment of Slope Stability, Tanti Creek, Mornington, (23019Report01.7), March 2010, Mornington Peninsula Shire Council