



APPENDIX G

Example of Landslide Checklist

COMMENTARY ON PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

Table C12: Example Checklist for LRM Reports

Items	Check	Response: Yes, No, NA, NK	Comments/ Description (If used by the Regulator, then all except No answers require comment)
Site	Report Reference and date		
	Client's name		
	Site address		
	Date of site visit. Site visit by (name)		
	Weather conditions on date of visit		
Development	Will the proposed development have a degree of use or occupation by humans?		
	Does the development involve significant modification to the landscape, including cut and fill?		
	What is the landslide susceptibility classification for this slope/site? (Assuming the regulator has completed such zoning studies in accordance with AGS 2007a)		
	What is the landslide hazard or risk classification for this? (as above)		
Geology	What is the regional geology according to published maps?		
	Is the site located on surface fill or colluvium?		
	Has the geology been confirmed by inspection or investigation? If not – why not. If Yes – provide basis for confirmation.		
Geomorphology	Are there any indications of possible instability on the site or adjacent to it?		
	Does the site have distinct breaks in slope or benches?		
	Are there terracettes or other signs of creep on the site?		
	Are there signs of tunnel erosion, such as sinkholes or collapse of soils on the site?		
	Are there any tension cracks in the ground surface of the site?		
Adjacent Sites	Do adjacent sites show signs of slope instability as described above?		
	Do adjacent sites have non-retained cuts or fills close to boundaries?		
	Are there steep slopes, different geology or landforms on adjacent sites that may pose a threat to this site?		
	Will the proposed development threaten the stability of adjacent developments via cuts, fill or drainage?		
Slope	What is the overall (natural) slope of the site?		
	Are there changes (breaks) in the slope? Are these man made or natural?		
	What is the maximum slope of the site?		
	Is the slope in an area of development different to elsewhere (large sites)?		
Drainage	Does the site have deeply dissected drainage courses?		
	Is the site likely to receive significant surface water runoff from other sites upslope?		
	Does the site have dams, lakes, ponds, swamps, bogs, seeps or soaks?		
	Does the site receive drainage from road culverts or spoon drains?		
	Will any aspect of the development significantly modify the existing site drainage?		

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Items	Check	Response: Yes, No, NA, NK	Comments/ Description (If used by the Regulator, then all except No answers require comment)
Erosion	Are there any severe forms of erosion including tunnels or gullies on the site?		
	Do any existing cuts and fills show signs of erosion including loss of vegetative cover?		
	Do access tracks show erosion, scouring or signs of uncontrolled runoff?		
	Will the development have the potential to change the current conditions?		
Site Cuts and Fills	Are there existing cuts and/or fill areas on the site?		<i>(If Yes, attach site sketch showing location, extent, height and batter angles)</i>
	Are there any existing unsupported cuts or fills that exceed 1.0m in vertical height from toe to crest?		
	Are batter angles steeper than 1V:2H (or 26 degrees or 50%) for any existing cut or fill in soil materials?		
	Are batter angles steeper than 1V:1H (or 45 degrees or 100%) for any existing cut in rock?		
	Do existing cuts and fills have adequate surface or subsurface drainage? Provide details.		
	Were vegetation and topsoil removed prior to filling? If No, provide details.		
	Have suitable fill materials been used and have they been properly compacted (with evidence thereof)?		
	Do any existing cuts and fills show seepage? If Yes, show details on site plan.		
Retaining Walls	Are there any existing retaining walls on the site?		<i>(If Yes, attach site sketch showing location, extent, height, type, condition and slope of batter above)</i>
	Are timber or dry rock retaining walls used for any purpose other than minor landscaping of vertical height less than 1.0m?		
	Do existing retaining walls supporting major cuts and fills appear to be unengineered?		
	Do existing retaining walls show signs of distress or movement? If Yes, provide details.		
	Do existing retaining walls have adequate drainage above and below the wall? If No, provide details.		
Groundwater	Are there discharge areas such as springs, seeps, bogs, swamps or constantly wet areas on the site or adjacent to the site?		<i>(If Yes, provide site sketch showing location and extent)</i>
	Are there bores intersecting a shallow watertable on the site?		
	Any other evidence of high groundwater levels?		
Rock	Is rock exposed on the site?		
	Do any exposed cuts have rock strata that are dipping out of the slope?		
	Do any exposed rock faces show open joints or loose boulders? If yes, provide site sketch plan and details.		
Soil Profile	Do exposed faces or existing excavations show soil profiles exceeding 1.5m vertical height?		
	Do exposed faces or existing excavations show a mixture of soil and rock, which may be landslide debris or colluvium?		
	Does the soil profile show inconsistent colouring or interbedded layers of differing materials?		

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	Does the exposed profile show imported materials or fill?		
	Is there significant evidence of yabby holes or other burrowings?		
Vegetation	Has the natural vegetation been substantially cleared from the site?		
	Does the proposed development involve significant clearing of the site?		
	Are any of the plants species on site indicators of waterlogging (eg. spiny rush, swamp gums)?		
	Is revegetation work required?		
	Do existing trees and shrubs show signs of slope instability, such as tilting or bent trunks?		
	Does any existing vegetation show signs of isolated dieback or distress?		
	Will the removal of any vegetation cause increased erosion and degradation to the adjacent area?		
Effluent and Stormwater Disposal	What type of effluent disposal system is currently used? If on site disposal, show discharge area on site plan.		
	Provide details of current discharge point for stormwater. Show location on site plan.		
	Does the geology or stability of the site suggest that septic system absorption trenches are unsuitable?		
	Are there any signs of increased waterlogging or impact from effluent of adjacent sites?		
	Is a new point/area for stormwater discharge proposed? If so, give details and show location (and extent if dispersed on site) on site plan.		
	Is a new on site effluent disposal system proposed? If Yes, give details and show proposed disposal area on site plan.		
Slope Classification	Have landslide hazards been identified and shown on relevant plan or section?		
	Has the risk to property been assessed and is the result in accordance with the acceptance criterion?		
	Has the risk to life been assessed and is the result in accordance with the acceptance criterion?		
	What is recommended to maintain or reduce the landslide risk at this site? Are detailed requirements given?		
OTHER COMMENTS			

Assessed by: Date:

Company:

Note (1) Assessment must be completed by a suitably qualified geotechnical practitioner.

Note (2) Every clear box must be filled in with either Yes (Y), No (N), Not Applicable (NA) or Not Known (NK). Comments could cross reference to specific sections or page of the report.

Note (3) This checklist is intended to document the basic data to facilitate a landslide risk assessment in accordance with the requirements of a regulator's specific policy. The above table may require edits to be suited to local conditions and the requirements of the policy.

Note (4) A comment or full description is required for all Yes responses. Applicant should submit detailed responses in the attached report.

Acknowledgement: This table has been based on the checklist from Yarra Ranges Shire with their kind permission.