



LANDSLIDE ZONING METHODOLOGY for State of Tasmania (AUSTRALIA) (for domestic buildings only)

GENERAL SURVEY OF AREA ($\approx 600\text{km}^2$)

TOPOGRAPHIC
Contours.
Vertical air photos.
Oblique air photos.
Orthophotos.

GEOLOGIC
Rock types
relations
aquifers and springs.
Colluvium.

GEOMORPHIC
Slope angle classes.
Slope types.
Slope complexity and history.
Vegetation and climate.

DESCRIPTIVE ZONES
normally advisory for planning purposes.

FIVE CLASSES (on maps or air photos 1:5 000, 1:10 000)

- I Stable ground hard rocks.
- II Flat ground soft rocks.
- III Sloping ground soft rocks potential instability.
- IV Fossil (inactive) failures, old instability.
- V Active failures, new instability.

RECOMMENDATION PROCESS

- a. identification of owners
- b. meeting of objectors.
- c. re-examination
- d. proclamation
- e. endorsement of title.

SPECIFIC DETAIL OF FAILURES
(each $< \approx 4\text{ km}^2$)

	ACTIVE	FOSSIL (inactive)
surface	Topography	Topography
	Slope	Slope
	Geology	Geology
	Activity	Age
subsurface	Borehole sections	
	Water conditions.	
	Soil samples.	
	Temporal changes.	
laboratory	Consistency tests.	
	Strength parameters.	
	Water analysis.	

STABILITY ANALYSIS and BACK ANALYSIS
(Bishop, Skempton and Delory)

EFFECTS

- Modifies planning schemes
- Influences land values.
- Warns intending builders and purchasers.
- Warns inhabitants.
- Protects landscape
- Prevents loss

PROSCRIPTIVE ZONES
under Tasmanian Statute (Local Government Act (N°2) 1973)

- "B" new building restricted by special regulations.
- "A" new building prohibited except for specially licenced cases.

EFFECTS

- Modifies planning schemes
- Influences land values.
- Limits intending purchasers.
- Warns inhabitants.
- Protects landscape
- Prevents loss

A N A L Y S I S

S Y N T H E S I S

Empirical relative risk methods.

precise decision in this area dependant on additional investigation.

Figure 3

REDUCE TO 255 mm