

Table C1 - New Geotechnical Planning Classes

Planning Class	Geology	Topographic Position	Slope Angle (degrees)	Description	Potential Geotechnical Issues			Typical requirements
					Slope Instability	Groundwater	Settlement due to poor soils	
C1	Hawkesbury Sandstone or Narrabeen Group	Plateau areas, ridge crests, and major spur slopes	<5	Generally shallow residual soils developed on bedrock. Some areas of fill.				Geotechnical report only required for excavations >1.5m or fills >1m
C2	Hawkesbury Sandstone	Flanking slopes	5 to 25	Colluvial and residual soils developed on Hawkesbury Sandstone. Minor detached sandstone blocks, occasional exposures of sandstone in cliffs and road cuts. Occasional fill areas associated with playing fields, roads and some developments.	X			Preliminary geotechnical assessment of site conditions required to determine whether a detailed geotechnical report is required.
C3	Hawkesbury Sandstone	Steeper slopes, generally near coastal areas or along the harbour foreshore, or adjacent to creeks and major gullies	>25	Colluvial soils and bouldery talus, with detached blocks of sandstone on steep escarpment areas, developed on Hawkesbury Sandstone.	X			Detailed geotechnical report required.
C4	Narrabeen Group	Flanking slopes	5 to 15	Colluvial and residual soils developed on Narrabeen Group. Minor detached sandstone blocks, occasional exposures of sandstone in cliffs and road cuts. Occasional fill areas associated with playing fields, roads and some developments.	X			Preliminary geotechnical assessment of site conditions required to determine whether a detailed geotechnical report is required.
C5	Narrabeen Group	Steeper slopes	>15	Colluvial & residual soils & bouldery talus, with detached blocks of sandstone on steeper escarpment areas, developed on Narrabeen Group.	X			Detailed geotechnical report required.
C6	Alluvial deposits and other soils	Alluvial flats and beach foredune areas		Unconsolidated marine and alluvial sands, often overlying deep marine sediments, with shallow groundwater tables.		X	X	Preliminary geotechnical assessment of site conditions and proposed development required to determine whether a detailed geotechnical or hydrogeological report is required.
C7	Hawkesbury Sandstone or Narrabeen Group	Coastal Cliff Zone – from within 20 m of the crest of a steep slope or cliff along the coast line between the Spit Bridge and Barrenjoey Head, extending down to water level		For areas along the coast line which have slopes greater than 45 degrees, a Coastal Cliff Zone has been designated which extends 20 m inland from the crest of the steep slope or cliff, and downslope to the mean water level.	X			Detailed geotechnical report required.

Note – If the subject site is mapped as being affected by more than one Planning Class, then a Preliminary Geotechnical Assessment shall be undertaken to determine which Planning Class is most appropriate for the site and whether additional geotechnical investigations and reports are required.