Building Sites Part 2: Hazard Assessment

MISCELLANEOUS TOPICS

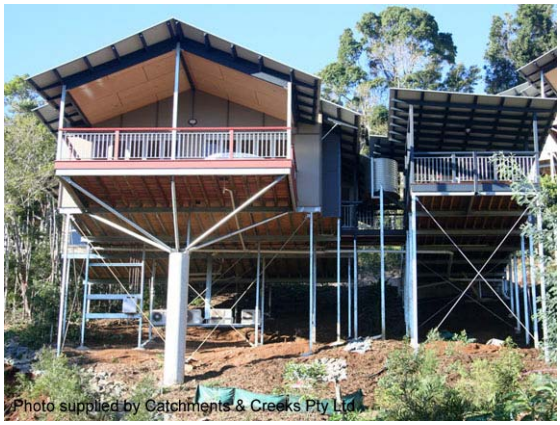

Photo 1 – Steep sites require appropriate building design

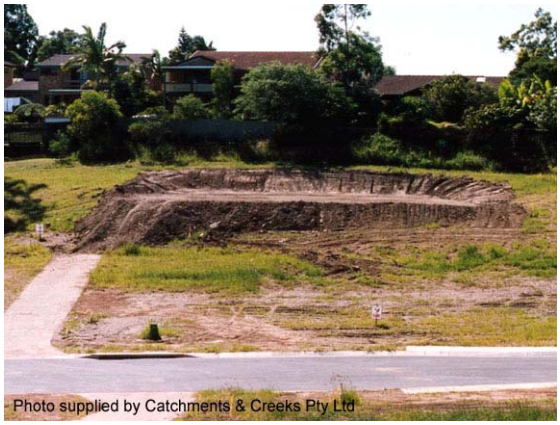

Photo 2 – Cut and fill building sites result in significant soil disturbance

Introduction

The preparation and approval of an Erosion and Sediment Control Plan (ESCP) is strongly recommended on all high-risk building sites. The erosion risk can be assessed through the use of an appropriate Hazard Assessment procedure, such as the attached *Erosion Hazard Assessment Form*.

It is noted that more than one plan may be required to adequately describe the proposed erosion and sediment control measures, or to describe the various building stages or drainage conditions that will exist on the building site.

Building sites assessed as having a low-risk are still required to take all reasonable and practicable measures to minimise environmental harm caused by on-site soil erosion and sediment runoff even if a form ESCP is not required. On low-risk sites, an ESCP may still need to be prepared to convey to site personnel the proposed erosion and sediment control measures.

Notes – Erosion Hazard Assessment Form

[1] Building sites steeper than 20% are generally considered high-risk sites independent of the total score.

[2] Where there is more than one type of soil within the proposed disturbance area, select the category with the highest point value.

[3] Total area of disturbance excludes the area occupied by the stabilised entry/exit pad provided the entry/exit pad is placed immediately upon initiation of site disturbance.

[4] The time from when the building site will first become vulnerable to erosion (i.e. initial soil disturbance) to the time the disturbed soil will be fully stabilised (e.g. grassing, mulched or covered with erosion control blankets).

[5] Based on average rainfall depths for various months of the year as supplied by the Bureau of Meteorology for the regulatory authority. The allocated points should be based on the anticipated worst month in which soil disturbance is expected to occur. Note that if there is no grass, vegetation, or mulch cover on more than 10% of the site's soil surface before building works are programmed to commence, then the time period shall start from the time this form is completed.

[6] Low-risk sites have a total score less than the 'critical hazard value'.

High-risk sites have a total score equal to, or greater than the 'critical hazard value'.

The recommended 'critical hazard value' = 11 points. Local authorities may choose to adopt an alternative 'critical hazard value' for any or all districts within their jurisdiction.

Erosion Hazard Assessment Form

Project Name: . . . . . .

. . . . . .

Site Address: . . . . . .

. . . . . .

. . . . . .

. . . . . **Date:** . . . . . .

Controlling Factors	Points	Score
Item 1 – Average slope of the whole site prior to building works: [1]		
• Slope < 3%	0	
• 3%, or less than 5%	1	
• 5%, or less than 10%	2	
• 10%, or less than 15%	4	
• Slope 15% or greater	5	
Item 2 – Soil type (of soil to be disturbed): [2]		
• Sandy soil/gravel	0	
• Sandy loam	1	
• Clay loam	2	
• Clay soil	2	
Item 3 – Total extent of site disturbance: [3]		
• Soil disturbance < $10m^2$	0	
• Soil disturbance of 10 to $100m^2$	1	
• Soil disturbance > $100m^2$	2	
Item 4 – Anticipated duration of soil disturbance: [4]		
• Duration < 2 weeks	0	
• 2 weeks, or less than 3 months	2	
• 3 months, or less than 6 months	4	
• Duration > 6 months	5	
Item 5 – Anticipated rainfall risk during soil disturbance: [5]		
• Low rainfall (average rainfall for any given month < 45mm)	0	
• Moderate rainfall (average rainfall for any given month: 46–100mm)	1	
• High rainfall (average rainfall for any given month: 101–225mm)	2	
• Very high rainfall (average rainfall for any given month: 226–1500mm)	3	
• Extreme rainfall (average rainfall for any given month > 1500mm)	4	
Item 6 – Runoff entering the site:		
• Score 1 point if stormwater runoff entering the site is not diverted around the soil disturbance.	1	
Total score [6]		