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P3	ISSUED FOR DISCUSSION	13.08.19	PA	-			
P2	ISSUED FOR DA	07.09.18	PA	-			
P1	ISSUED FOR DRAFT DA	17.08.18	PA	-			
Rev	Description	Date	By	App			

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SWMP Commentary, Detailed Calculations

Note: These "Detailed Calculation" spreadsheets relate only to high erosion hazard lands as identified in figure 4.6 or where the designer chooses to use the RUSLE to size sediment basins. The "Standard Calculation" spreadsheets should be used on low erosion hazard lands as identified by figure 4.6 and where the designer chooses not to run the RUSLE in calculations.

1. Site Data Sheet

Site Name: Catholic Healthcare Lewisham 2021757

Site Location: Catholic Healthcare Lewisham

Precinct: Hospital

Description of Site:

Site area	Site						Remarks
Total catchment area (ha)	0.123						
Disturbed catchment area (ha)	0.62						

Soil analysis

% sand (fraction 0.02 to 2.00 mm)							Soil texture should be assessed through
% silt (fraction 0.002 to 0.02 mm)							mechanical dispersion only. Dispersing
% clay (fraction finer than 0.002 mm)							agents (e.g. Calgon) should not be used
Dispersion percentage							E.g. enter 10 for dispersion of 10%
% of whole soil dispersible							See Section 6.3.3(e)
Soil Texture Group							See Section 6.3.3(c), (d) and (e)

Rainfall data

Design rainfall depth (days)	5						See Sections 6.3.4 (d) and (e)
Design rainfall depth (percentile)	80						See Sections 6.3.4 (f) and (g)
x-day, y-percentile rainfall event	29.7						See Section 6.3.4 (h)
Rainfall intensity: 2-year, 6-hour storm	11						See IFD chart for the site

RUSLE Factors

Rainfall erosivity (R -factor)	2630						Automatic calculation from above data
Soil erodibility (K -factor)	0.019						RUSLE data can be obtained from Appendixes A, B and C
Slope length (m)	152						
Slope gradient (%)	4.3						
Length/gradient (LS -factor)	1.5						
Erosion control practice (P -factor)	1.3						
Ground cover (C -factor)	1						

Calculations

Soil loss (t/ha/yr)	97						
Soil Loss Class	1						See Section 4.4.2(b)
Soil loss (m ³ /ha/yr)	75						
Sediment basin storage volume, m ³	8						See Sections 6.3.4(i) and 6.3.5 (e)

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Project Name

CATHOLIC HEALTH CARE
LEWISHAM, NSW

Drawing Title

SEDIMENT AND EROSION
CONTROL DETAILS

Designed

SK

Drawn

PA

Scale

Date

Nov 2016

Sheet

Project Director Approved

Date

North

Project Ref

20 2175701C

Drawing No

C007

Rev

P3

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