

2. Sediment Basin Type D

Basin Name	Sub-catchment or Name of Structure						Notes
							Must be same as site area on Worksheet 1
Total Catchment Area (ha)							Total catchment area - from Worksheet 1. Autofilled.
Rainfall Data							
Design rainfall depth (no of days)							Assume 5 days. Pg B.35 (IECA, 2018)
Basin design life							Refer to Table B28, page B.36 (IECA, 2018)
Design rainfall depth (percentile)							Refer to Table B28, page B.36 (IECA, 2018)
K1							Refer to Table B28, page B.36 (IECA, 2018)
K2							Refer to Table B28, page B.36 (IECA, 2018)
Default rainfall depth R (y%, 5 day)							Enter one or the other here: either a default rainfall depth (Table B29 or B30, pages B.37 to B.38) or calculate using BOM data
Rainfall intensity (1 yr, 120 hr) - (mm/hr)							
R (y%, 5 day) using rainfall intensity							Equation B36 (IECA, 2018)
Adopted Rainfall Depth R (y%, 5 day)							Adopted Rainfall Depth
Volumetric Runoff Coefficient							
Soil Hydrologic Group							Refer to Table B31 (IECA). Note that coefficients apply only to pervious surfaces with low to medium gradients. Clays compacted by construction equipment should adopt Cv of 1. Loamy soils compacted by construction equipment should adopt coefficient no less than Group D soils therefore additional 5% to Group D.
Cv							Refer to Table B31 (IECA)
Settling Zone							
Basin settling (water) volume (m ³)							Equation B35 (IECA)
Storage Zone Dimensions							
Soil loss (t/ha/yr)							Calculated on worksheet 1
Sediment density (t / m ³)							Generally sediment has a density of 1.3 t / m ³
Soil loss (m ³ /ha/yr)							Based on sediment density above
Put an X here to use 50% of water zone							Fill in one or the other - either an X or nominate the number of months. Refer to Page B.40 (IECA)
Storage (soil) zone design (months)							
Basin storage (soil) volume (m ³)							Refer to Page B.40 (IECA). Adopts disturbed area from Worksheet 1
Summary of Type D Basin Dimensions							
Basin Name							
Volume of settling zone (m ³)							Equation B35 (IECA)
Basin storage (soil) volume (m ³)							Refer to Page B.40 (IECA)
Sediment basin total volume (m ³)							