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| Sediment pond design assessment checklist |
| This list has been developed by Melbourne Water for use by Councils in assessing capital works and developer constructed sediment ponds. |

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| **Location** |  |
| **Catchment area (ha)** |  |
| **Pond area (m2)** |  |
| **Minor flood (m3/s)** |  |
| **Major flood (m3/s)** |  |

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| **Design stage** | **Treatment** | **Y/N** | **Where to look** |
| Concept | Treatment performance verified by calculations? Pond is not over-sized? |  | Design report |
|  | **Basin configuration** |  |  |
| Functional | Inlet pipe or structure sufficient for maximum design flow (minor and/or major flood event)? |  | Calculations |
| Concept | Sediment basin designed to capture 95% of coarse particles ≥ 125 µm diameter for the peak three month ARI flow |  | Calculations |
| Functional | Scour protection provided at inlet? |  | Drawings |
| Detailed | Velocity through sediment basin during the peak 100 year ARI event is ≤ 0.5 m/s |  | Calculations |
| Functional | Configuration of basin (aspect, depth and flows) allows settling of particles >125 µm? |  | Drawings |
| Concept | Basin sediment storage capacity sufficient for cleanout frequency of 3 to 5 years? |  | Calculations |
| Concept | Sediment accumulation zone is assumed to be 500 mm below normal water level (NWL) |  | Calculations |
| Detailed | Public access to inlet zone prevented through vegetation or other means? |  | Drawings |
| Detailed | Batter slopes shallow or safety bench provided in case of accidental entry into basin? |  | Drawings |
| Detailed | Maintenance access provided as access track and either hard-stand from which all of sediment basin can be accessed or access to base of sediment basin? |  | Drawings |
| Functional | Dedicated sediment dewatering area is provided |  | Drawings |
| Functional | Gross pollutant protection measures provided on inlet structures? |  | Drawings |
| Functional | Freeboard provided above extended detention depth? |  | Drawings |
| **Design Stage** | **Hydraulic structures** | **Y/N** | **Where to look** |
| Detailed | Outlet pit perimeter capacity >= design discharge of outlet pipe? |  | Calculations |
| Detailed | Riser diameter sufficient to convey Q3 month flows when operating as a “glory hole” spillway? |  | Calculations |
| Detailed | Maintenance drain provided |  | Drawings |
| Detailed | Discharge pipe has sufficient capacity to convey the maintenance drain flows or Q1 flows (whichever is higher)? |  | Calculations |
| Detailed | Protection against clogging or blockage of orifice provided for outlet structure? |  | Drawings |