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| Swale design assessment checklist |
| This list has been developed by Melbourne Water for use by Councils in assessing capital works and developer constructed swales. |

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| **Location** |  |
| **Catchment area (ha)** |  |
| **Swale 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 MUSIC? |  | Design report |
|  | **Hydraulics** |  |  |
| Concept | Station selected for IFD appropriate for location? |  | Design report |
| Functional | Longitundinal slope of swale invert between 1% to 4%? |  | Drawings |
| Functional | Manning's 'n' selected appropriate for proposed vegetation type? |  | Calculations |
| Functional | Overall flow conveyance system sufficient for design flood event? |  | Calculations |
| Detailed | Overflow pits provided where flow capacity exceeded? |  | Drawings |
| Functional | Velocities within swale cells will not cause scour? |  | Calculations |
| Detailed | Inlet to swale set down of at least 50 mm to prevent blocking with sediment? |  | Drawings |
| Functional | Maximum ponding depth and velocity will not impact on public safety (v x d <0.4)? |  | Calculations |
| Detailed | Maintenance access provided to invert of swale? |  | Drawings |
| **Design Stage** | **Plants** | **Y/N** | **Where to look** |
| Detailed | Plant species selected can tolerate periodic inundation and design velocities? |  | Detailed |
| Detailed | Plant species selected integrate with surrounding landscape design? |  | Detailed |