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| **Table B.17 Design assessment checklist: attenuation storage tank** |
| **General information** |
| Site ID |  |
| Asset ID(s) |  |
| System location(s) and co-ordinates |  | Drawing reference(s) |  |
| Date of assessment |  | Specification reference(s) |  |
| System description: |  |

| **Check** | **Summary details** | **Acceptable (Y/N)** | **Comments/ remedial actions** |
| --- | --- | --- | --- |
| **Dimensions (Section 21.4)** |  |  |  |
| Length (m) |  |  |  |
| Width (m) |  |  |  |
| Depth to base – maximum and minimum (m) |  |  |  |
| Depth of cover over top of system – maximum andminimum (m) |  |  |  |
| Longitudinal base slope (1 in ?) |  |  |  |
| **Inflows (Section 21.9.1)** |  |  |  |
| Provide a description of the contributing catchmentland use and its size (m2) |  |  |  |
| Does the design include suitable silt Interception upstream of system? |  |  |  |
| Does the design include suitable inlet and/or conveyance system to manage design flows – provide flow rate of water through side of crates, through perforated pipes or similar? |  |  |  |
| **Outfall arrangements (Section 21.9.2)** |  |  |  |
| Provide details of any flow control systems, overflow arrangements, drain-down time and limiting discharge rate from system |  |  |  |
| Is the system designed to allow infiltration? If yes, attach infiltration assessment |  |  |  |
| Is a geomembrane required to prevent infiltration? If yes, give reason |  |  |  |
| Depth to maximum likely groundwater level (m) |  |  |  |
| **Storage (Section 21.5)** |  |  |  |
| Design return period(s) (years) |  |  |  |
| Maximum design water depth(s) and level(s) |  |  |  |
| Maximum design storage volume(s) (m3) (includetotal system volume, void ratio and available volume) |  |  |  |
| **Structural (Section 21.4)** |  |  |  |
| Confirm type of unit or structure to be used |  |  |  |
| Confirm assumed traffic or other design loadings used in design plus short-term and long-term performance |  |  |  |
| Confirm that calculations are provided to demonstrate acceptable structural capacity over the proposed system design life that are approved by a chartered engineer |  |  |  |
| Confirm that design and construction checklists, project roles and sign-off, designer evaluation form and product evaluation form in accordance with O’Brien *et al* (in press) have been provided |  |  |  |
| Are there any unusual geotechnical risks? If yes, state and confirm acceptable risk management measures are proposed |  |  |  |
| Has sufficient venting been provided to allow excess air pressure to be released when tank fills? |  |  |  |
| **Critical materials and product specifications (Section 21.9)** |
| Geomembrane |  |  |  |
| Geotextile (non-woven) |  |  |  |
| Topsoil |  |  |  |
| Other (including proprietary systems): |  |  |  |
| **Constructability (Section 21.12)** |
| Are there any identifiable construction risks? If yes, state and confirm acceptable risk management measures are proposed |  |  |  |
| **Maintainability (Section 21.13)** |
| Confirm that access for maintenance is acceptable and summarise details |  |  |  |
| Are there specific features that are likely to pose maintenance difficulties? If yes, identify mitigation measures required |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **System design acceptability** | **Summary details including any changes required** | **Acceptable (Y/N)** | **Date changes made** |
| Acceptable:Minor changes required:Major changes required/redesign: |  |  |  |