# BESS Alinta Wagerup Peaking Power Station

*Field Inspection Checklist – Drainage installation*

# Document Number: **RR-SEPD-BESS-FIC-005**

# Document Information

|  |  |
| --- | --- |
| **Checklist title** | **Drainage installation** |
| **Checklist No** | RR-SEPD-BESS-FIC-005 |
| **Lot Description** |  |
| **Revision no.** | 01 |
| **Revision Date (DD/MM/YYYY)** |  |
| **Description of Changes** | First Issue |

# Document Review

|  |  |  |  |
| --- | --- | --- | --- |
| **Prepared by:** | | | |
| **Responsibility** | **Name** | **Signature** | **Date (DD/MM/YYYY)** |
| **Drafted by (Engineer)** | Juan Orozco | A close up of a logo  Description automatically generated | 13/03/2025 |
| **Reviewed by (Supervisor)** | Craig Stein | A close up of a signature  Description automatically generated | 13/03/2025 |
| **Approved by (Manager)** | Artur Krupinski |  | 14/03/2025 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Part 1 – Preliminaries (photos where applicable)** | | | | | | |
| **Inspection/Test item** | | **Acceptance Criteria** | **Specifications/Drawings Reference** | **(Yes/No/NA)** | **Initial & Date** | |
| **ROBAR** | **SEPD** |
| 1.1 | Review of approved construction drawings and specifications | All drawings and specifications approved and up to date | WBS-SS-CI-SPC-006 |  |  |  |
| 1.2 | Verification of permits | All relevant permits (GDA/GDP) in place | GDA/GDP |  |  |  |
| 1.3 | Site access and safety preparation | Site access cleared and made safe | WBS-SS-CI-SPC-006 |  |  |  |
| 1.4 | Safety inductions and toolbox talks | All personnel inducted; safety briefings completed | Induction record |  |  |  |
| 1.5 | Environmental controls in place | Dust, noise, and sediment barriers installed and functioning | SEPD environmental requirements |  |  |  |
| **Part 2 – Excavation and trenching (photos where applicable)** | | | | | | |
| **Inspection Acceptance** | | **Acceptance Criteria** | **Specifications/Drawings Reference** | **(Yes/No/NA)** | **Initial & Date** | |
| 2.1 | Trench depth and width comply with design | Set-out verified and matches IFC drawings | Site IFC Drawings  AS/NZS 3500 |  |  |  |
| 2.2 | Stable trench walls (benching, battering) | Trenches deeper than 1.5m require benching, or battering unless certified by a geotechnical engineer. | WBS-SS-CI-SPC-006  AS 4744 |  |  |  |
| 2.3 | Pipes inspected for defects before installation | Material certs from manufacturer and visual inspection  Material to align with design drawings and load rating | Manufacturer certifications |  |  |  |
| 2.4 | No water accumulation in trenches | No standing water or excessive moisture inside the trench. | AS/NZS 3500 |  |  |  |
| 2.5 | Exclusion zones around excavation established | Proper barricades and signage placed around excavation area. | AS 1742 |  |  |  |
| 2.6 | Spoil stockpiles located at least 1m from trench edges | Stockpiles away from excavation to maintain safety of batters | WBS-SS-CI-SPC-0006 |  |  |  |
| 2.7 | Access and egress (ladders, steps) provided for trenches deeper than 1.2m | Access and egress for each trench. | WHS |  |  |  |
| **Part 3 – Bedding & Pipe Installation (photos where applicable)** | | | | | | |
| **Inspection Acceptance** | | **Acceptance Criteria** | **Specifications/Drawings Reference** | **(Yes/No/NA)** | **Initial & Date** | |
| 3.1 | Correct bedding material used (sand, gravel, etc.) | Material complies with particle size, moisture content, MMDD | WBS-SS-CI-SPC-0006 Test material results |  |  |  |
| 3.2 | Bedding compacted to required density | Layers placed in maximum 300mm (loose) thickness | WBS-SS-CI-SPC-0006 |  |  |  |
| 3.3 | Pipes and materials inspected for defects before installation | Installed to design grade ±10mm and alignment within 5mm tolerance. | AS/NZS 3500 |  |  |  |
| 3.4 | Pipes laid at correct grade and alignment | Levels and grading match design tolerances (+/- 20mm) | WBS-SS-CI-SPC-0006, Survey Report |  |  |  |
| 3.5 | Correct pipe jointing method used (rubber ring, solvent weld, etc.) | Joints must be fully engaged and sealed per manufacturer specifications | Manufacturer specifications |  |  |  |
| **Part 4 – Backfilling and compaction (photos where applicable)** | | | | | | |
| **Inspection Acceptance** | | **Acceptance Criteria** | **Specifications/Drawings Reference** | **(Yes/No/NA)** | **Initial & Date** | |
| 4.1 | Initial backfill material placed evenly around pipes | Site-won material approved by geotechnical engineer | Geotechnical report  AS/NZS 3725 |  |  |  |
| 4.2 | No large rocks or debris in backfill | No rocks or debris in backfill | WBS-SS-CI-SPC-0006 |  |  |  |
| 4.3 | Backfilling in controlled layers (300mm lifts) | Backfill in uniform layers of maximum 300mm thickness | WBS-SS-CI-SPC-0006  Drainage drawings |  |  |  |
| 4.4 | Backfill shall be placed to a depth of 300mm above collars of pipes or conduits | Minimum 300mm above collars of pipes | WBS-SS-CI-SPC-0006 |  |  |  |
| 4.5 | Compaction tests performed and passed (Proctor Density, NDM, etc.) | Compacted to 93% MMDD | WBS-SS-CI-SPC-0006  AS 1289  TQ # 66 |  |  |  |
| 4.6 | Surface reinstated as per project specs (concrete, asphalt, topsoil) | Backfill to match existing ground levels with ±10mm tolerance. | IFC drawings |  |  |  |
| **Part 5 – Final inspections and acceptance (photos where applicable)** | | | | | | |
| **Inspection Acceptance** | | **Acceptance Criteria** | **Specifications/Drawings Reference** | **(Yes/No/NA)** | **Initial & Date** | |
| 5.1 | Air pressure test | The pipe system must not lose more than a defined amount of pressure within the test duration.  PVC - 25 kPa (3.5 psi) – pressure drop ≤3.5 kPa (0.5 psi) in 5 min.  Concrete - 25-50 kPa (3.5-7.0 psi) – pressure drop ≤10% drop in 5 min. | WBS-SS-CI-SPC-0006  AS 4033.2 |  |  |  |
| 5.1 | As-built survey verification | As-built levels and layout match design | As-Built Drawings  Survey Report |  |  |  |
| 5.2 | Removal of temporary works | All temporary structures, barriers, and access points removed | Site inspection |  |  |  |
| 5.3 | Final inspection sign-off | All drainage activities completed and accepted | WBS-SS-CI-SPC-0006 |  |  |  |

# Document Sign-off

|  |  |  |  |
| --- | --- | --- | --- |
| **Prepared by:** | | | |
| **Responsibility** | **Name** | **Signature** | **Date (DD/MM/YYYY)** |
| **ROBAR (NER Engineer)** |  |  |  |
| **SEPD (Engineer)** |  |  |  |