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| Project Scope: **Drainage installation** | | | Ref: **RR-SEPD-BESS-ITP-005** |
| Project: **BESS** **Alinta Wagerup Peaking Power Station** | | | Revision: **01** |
| ITP Description: **Drainage installation** | | | |
| Work Pack number: **RR-SEPD-CI-SOW-005-00** | | | |
| Client: **SEPD** | | | |
|  | | | |
| Prepared By: | Sign & Date: 03/10/2024 | Reviewed & Approved By: | Sign & Date: 03/10/2024 |
| **Juan Orozco – Project Engineer** | A close up of a logo  Description automatically generated | **Ronan Egan – Project Manager** |  |
|  | | | |
| Reviewed & Approved By: | Sign & Date: 03/10/2024 | Reviewed & Approved By: | Sign & Date: 03/10/2024 |
| **Artur Krupinski - Project Controls** | A black text on a white background  Description automatically generated | **Craig Stein – Site Supervisor** |  |
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| Definitions | |
| Hold Point | A point beyond which a work process **must not proceed** without the nominated authority’s express authorization. |
| Witness Point | A point in a work process where the Contractor must give prior notice to the nominated authority and the option of attendance may be exercised by the nominated authority. |

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| Responsibility | | Method | | Frequency | | Verification Requirement | |
| SUP | Supervisor | I | Inspection | PW | Prior to works | HP | Hold Point |
| SE | Site Engineer | R | Review | PL | Per lot | WP | Witness Point |
| PE | Project Engineer | S | Survey |  |  | M | Milestone |
| SPE | Senior Project Engineer | T | Test |  |  | V | Verification |
| PM | Project Manager |  |  |  |  | NA | Not Available |
| SV | Surveyor |  |  |  |  |  |  |
| QM | Quality Manager |  |  |  |  |  |  |
| QR | Quality Representative |  |  |  |  |  |  |
| ER | Environmental Representative |  |  |  |  |  |  |
| IV | Independent Verifier |  |  |  |  |  |  |

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| **Contractor Name** | ROBAR Rentals | ITP no. | RR-SEPD-BESS-ITP-005-01 |
| **Responsible Engineer** | Juan Orozco | Work Pack no. | RR-SEPD-CI-SOW-005-00 |
| **Responsible Supervisor** | Craig Stein / Aidan Mulligan | | |
| **Location** |  | | |
| **Description** |  | | |

| Item no. | Inspection/Test Point | Responsibility | Specification Reference | Conformance Criteria Summary | Method | Frequency | Reviewer | Hold/Witness Point Requirements | | | Records or Checklist Document Number |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ROBAR | SEPD | Client |
| Section 1: Preliminaries & Permits | | | | | | | | | | | |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 1.1 | Collect and verify information (Site boundary, utilities, survey map, design drawings) | SE/PE | WBS-SS-CI-SPC-0006 | Results included in work pack | R | PW |  | V | NA | NA | IFC Drawings |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 1.2 | Permit approval (GDA/GDP) | SE/PE | WBS-SS-CI-SPC-0006 | Approved excavation permit (GDP) prior to commencing works | R | PW |  | HP | HP | NA | RR-SEPD-CI-SOW-002-01 |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 1.3 | Site set-out | SE/PE | WBS-SS-CI-SPC-0006 | Verify levels, site boundaries, and physical bounds per IFC drawings | R | PW |  | V | NA | NA | IFC Drawings |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 1.4 | Sediment control plan | SE/PE | WBS-SS-PM-PLN-0024  WAE230103-03-003 TM Rev0 | Sediment control measures in place | R | PW |  | V | NA | NA | SEPD environment-al plan |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 1.5 | Dust control plan | SE/PE | PP3 section 1.5 and section 4.1 | Dust control measures in place | R | PW |  | V | NA | NA | SEPD environment-al plan |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
| Section 2: Materials | | | | | | | | | | | |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 2.1 | Import fill material inspection | SE/PE | WBS-SS-CI-SPC-0006 | Material certificate and test report for particle size distribution, moisture content, MMDD | R | PW |  | V | V | NA | Material certificates |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 2.2 | Verify suitable foundation material (compaction >95% MMDD) | SE/PE | WBS-SS-CI-SPC-0006 | Geotechnical test results showing compliance | R | PW |  | HP | HP | NA | Test results |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 2.3 | Quality documentation RCP & precast drainage pits | SE/PE | WBS-SS-CI-SPC-0006 | Supplier’s quality system certifications  Product of compliance to AS 4058, AS 3500, AS 3996. (Load rating & liner shall align with design drawings) | R | PW |  | HP | HP | NA | Supplier’s documents |
|  |  |  |  |
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|  |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 2.4 | Delivery acceptance of RCP | SE/PE | WBS-SS-CI-SPC-0006  AS/NZS 4058 | Acceptability of defects of RCP’s.  Fibre RCPs shall be rejected if fractures and cracks wider than 0.1 mm and deeper than 0.3 mm are present. | R | PW |  | HP | HP | NA | Delivery dockets |
|  |  |  |  |
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| Section 3: Construction | | | | | | | | | | | |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.1 | Excavated trench | SE/PE | WBS-SS-CI-SPC-0006 | Inspection following excavation of trench. Wacker plate to be use for compacting base. | I | PL |  | V | V | NA | IFC Drawings |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.2 | Bedding | SE/PE | WBS-SS-CI-0006 | Material to be compacted at 100mm depth minimum. | I | PL |  | V | V | NA | IFC Drawings |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.3 | Placement of concrete pipes | SE/PE | WBS-SS-CI-SPC-0006  IFC drawings | Placed and joint in accordance with the manufacturer’s specifications  Female ends upstream and lifting holes uppermost. Lifting holes in pipes shall be filled with plugs provided by pipe manufacturer | T | PL |  | HP | HP | NA | This ITP |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.4 | As-built survey prior to backfilling | SE/PE | WBS-SS-CI-0006 | Variation of reduced level of invert from specified level:  Whitin +/- 10 mm of specified position. Invert of structure shall not impede the gravity flow of water into or from structure | I | PL |  | V | V | NA | Survey report |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.5 | Installation of precast drainage structures | SE/PE | WBS-SS-CI-SPC-0006  AS 3500  Design drawings | Inspection pit cover to be installed flush with the final surface  Where precast drainage structure is used, the external joint with pipe shall be strengthened with a concrete fill circling the joint. | T | PL |  | HP | HP | NA | Test results  NER engineer specifications |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 3.6 | Trench/Precast drainage item backfill | SE/PE | WBS-SS-CI-SPC-0006  PPR | Unless specified otherwise, backfill layers shall be maximum 300 mm layers. | S | PL |  | V | V | NA | Compaction report |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
| Section 4: Final Inspection | | | | | | | | | | | |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 4.1 | Air pressure test | SE/PE | WBS-SS-CI-SPC-0006  AS 4033.2 | 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. | S | PL |  | V | V | NA | WBS-SS-CI-ITP-920049 |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 4.2 | Finish level compliance with design drawings | SE/PE | WBS-SS-CI-SPC-0006 | As-built drawings. | S | PL |  | V | V | NA | WBS-SS-CI-ITP-920049 |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |
|  | | Remarks / NCR No. / HP No. / RFI No. / Notice Date | | | | | | | | | |
| 4.3 | Final Inspection Checklist (FIC) completion | SE/PE | WBS-SS-CI-SPC-0006 | Signed FIC | R | PL |  | V | V | NA | WBS-SS-CI-ITP-920049 |
| Date |  |  |  |
| Name |  |  |  |
| Signature |  |  |  |

**Document sign-off**

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| --- | --- | --- | --- | --- |
|  | Close-out | | | |
| Company | Name | Position | Signature | Date (DD/MM/YYYY) |
| ROBAR (NER Engineer) |  |  |  |  |
| SEPD |  |  |  |  |