| **Client** | | South32 | | | **ITP CHECKLIST FOR:**  **Stormwater Drainage Installation (R11 Ed 5 Rev 8)** | **Work Area:** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Contract No. #** | | CW2419130 | | |  | |
| **Workplace Name** | | Appin Mine Bulk Earthworks & Associated Civils | | | ITC 02 (ITP 02) | |
| **Approval by** | |  | | | Rev 0 | |
| **Lot No** | |  | | | **Underlying Lots:** | |
| Activity No.# | Description | | Requirements / Reference | Acceptance Criteria | | Inspection | Comments / Attachments |
| 1 | **Preparation works** | | WHSMP, Design DWGs | * Contact DBYD and complete excavation permit * Extent of works set out with survey pegs | |  |  |
| 2 | **Supply of Precast Concrete Members** | | R11 Cl 2.4.1 | * **HP:** Submission of certified product drawings and details of methods for manufacture, testing and installation, prior to the supply of precast concrete members subject to traffic and/or earth pressure loading, or water retaining structures with capacity greater than 25 000 litres | |  | * **HOLD POINT: \_\_\_\_\_\_\_** |
| 3 | **Certificates of Conformity** | | R11 Cl 2.6 | * **HP:** Certificate of Conformity (Pit / Headwall) * **HP:** Certificate of Conformity (Box Culverts) * Submission of certificate of conformity prior to incorporation in the works of any supplied manufactured drainage product | |  | * **HOLD POINT: \_\_\_\_\_\_\_** * **HOLD POINT: \_\_\_\_\_\_\_** |
| 4 | **Survey Set Out** | | R11 Cl 4.1.1 | * **HP:** Notification of set out of drainage system and any proposed design changes in locations and levels | |  | * **HOLD POINT: \_\_\_\_\_\_\_** |
| 5 | **Unable to meet Min. Grade** | | R11 Cl 4.2.1 | * **HP:** Notification that 0.5% minimum grade cannot be achieved for section(s) of open drains (if applicable) | |  | * **HOLD POINT: \_\_\_\_\_\_\_** |
| 6 | **Excavation** | | R11 Cl 4.3 | * **WP:** Excavation for Box Culvert installation and other drainage structures | |  | * **WITNESS POINT: \_\_\_\_\_\_\_** |
| 7 | **Unsuitable Foundation** | | R11 Cl 4.3.3  Table R11.2 | * **HP:** Replacement of inadequate foundation material (if applicable) * Notify the principal of any unsuitable foundation material on the base of the trench, or poor quality material on the sides of the trench. Replace and compact material in consultation with principal | |  | * **HOLD POINT: \_\_\_\_\_\_\_** |
| 8 | **Installation of Pipe** | | R11 Cl 4.4.1, Table R11.2 | * 95% compaction requirement for base of trench and layers around pipe * Material for pipe bedding and haunch zones is Type BH Select Fill * Material for pipe side and overlay zones is Type SO Select Fill | |  | * T166 / T173 Test Report |
| 9 | **Construction** | | R11 Cl. 4.7 | * **WP:** Construction of drainage structures other than box culverts | |  | * **WITNESS POINT: \_\_\_\_\_\_\_** |
| 10 | **Protective Measures** | | R11 Cl. 4.10, TfNSW G2 | * **HP:** Protective measures for pipes and box culvert structures from heavy construction plant or vehicles * If structures will be subject to heavy construction loading prior to completion, submit protective measures to principal for approval | |  | * **HOLD POINT: \_\_\_\_\_\_\_** |
| 11 | **Backfill and Compaction** | | R11 Cl. 4.9, R44 | * Above the pipe overlay, backfill with general fill material or other material accepted by principal * Backfill in 150mm layers unless directed otherwise by the principal * 95% compaction for general backfill, 102% compaction required if adjoining SMZ layer (R44) | |  | * T173 Test Report |
| 12 | **Completion** | | R11 Cl. 5.2 | * Survey pickup of asbuilt pit inverts (downstream and upstream) and pit locations. Survey report provided and any NCRs raised, changes picked up on WAE drawings | |  | * Survey Conformance Report |

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| --- | --- | --- | --- | --- | --- | --- |
| **REVIEW** | | | | | | |
| Any non-conformances? | YES | NO | Nos: | Closed Out | YES | NO |
| All work has been satisfactorily completed | | | YES | | NO | |
| Name | | | Signature | | Date | |
| **QA ENGINEER / SPE / PE SIGN OFF** | | | | | | |
| Name | | | Signature | | Date | |