**Inspection and test plan – Mass block retaining wall construction**

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| **Project no.** | | CC-0388 | | | **Project name** | Shoalhaven Area Remediation of Multiple Slips | | | | | **Date** | |  | | **Approved by** |  |
| **ITP no.** | SYM-0388-ITP-006 | | | | **Revision no.** | B | **Revision date** | | 18/05/2023 | **Plant and equipment used** | | | |  | | |
| **Site no.** |  | | | | **Location (chainages, detailed description or marked up plan)** | | | | | | |  | | | | |
| **Layer thickness** | | |  | **Estimated qty** | |  | |

Attach Dockets, Certificates and QA Documents to ITP

|  |  |  |  |  | | **Verification or test by** | | | | | **Remarks / record (eg. test frequency, reports, certificates, checklist etc)** |
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|  |  |  |  |  | | **Symal Infrastructure** | | | **Shoalhaven City Council** | |
| **Item no.** | **Activity** | **Ref docs** | **Acceptance criteria** | **Acceptance** | | **Key** | **Resp.** | **Initial/date** | **Key** | **Sign date** |
| **1.0 General** | | | | | | | | | | | |
| **1.1** | Block Material Type | IFC Drawings | Blocks to be correct size and approved prior to placement.  1m (W) x 1m (H) x 1m (L) | Yes  No  N/A | | H |  |  | H |  |  |
| **1.2** | Concrete Core Fill Mix | IFC Drawings | Core fill material shall be minimum 25 MPa concrete  Material properties meet project specification, AS 3600, AS 1379. | Yes  No  N/A | | H |  |  | H |  |  |
| **2.0 Footing completion** | | | | | | | | | | | |
| **2.1** | Set out | IFC Drawings | Extents and levels correct to relevant drawings | Yes  No  N/A | | H |  |  | S |  |  |
| **2.2** | Footing complete and approved | IFC Drawings | Retaining Wall Footing completed in line with Drawings and Specification | Yes  No  N/A | | H |  |  | H |  |  |
| **3.0 Retaining wall construction** | | | | | | | | | | | |
| **3.1** | Steel reinforcement | IFC Drawings | Steel reinforcement to be placed as per design drawings with the correct amount of cover. | Yes  No  N/A | | H |  |  | H |  |  |
| **3.2** | Setout and positioning correct | IFC Drawings | Setout of block courses correct to line and level. Wall shall be generally straight and true. | Yes  No  N/A | | H |  |  | S |  |  |
| **3.3** | Blockwork jointing | IFC Drawings | Expansion joints to be installed in accordance with Construction Drawings/ Manufacturer Spec using correct materials. | Yes  No  N/A | | W |  |  | S |  |  |
| **3.4** | Blockwork installation | IFC Drawings | Blocks shall be installed in accordance with the details of the Civil Drawings/ Manufacturer Spec. | Yes  No  N/A | | S |  |  | S |  |  |
| **3.5** | Core filling | TfNSW R53 CL.3.3.4 | Concrete shall be transported, handled and placed to prevent segregation, loss or leakage of materials.  Concrete to be tamped/vibrated to increase density and prevent voids, honeycombing or surface defects. | Yes  No  N/A | | S |  |  | W |  |  |
| **3.6** | Strength testing | TfNSW R53 Annexure L  AS 1379 | Samples to be taken from chute. Each sample shall consist of two cylinder specimens for 28 day testing. | No. of samples | Volume of concrete (m3) | S |  |  | S |  | Test report |
| 2 | <50 |
| 3 | 50-100 |
| 4 | 101-250 |
| 5 | >250 |
| **3.7** | Capping Block | IFC Drawings | Capping Block is installed along top block of retaining Wall | Yes  No  N/A | | S |  |  | S |  |  |
| **4.0 Backfill** | | | | | | | | | | | |
| **4.1** | Non-Woven Geotextile | IFC Drawings | Install 1 layer of Bidim A34 (or equivalent) non-woven geotextile. Ensure geotextile is properly anchored | Yes  No  N/A | | W |  |  | W |  |  |
| **4.2** | Backfill | IFC Drawings | Install rock fill comprising max 200mm particle size well graded rock.  Symal’s Geotechnical Engineer to detail the maximum installation slope of backfill material | Yes  No  N/A | | S |  |  | S |  |  |
| **5.0 Subsoil** | | | | | | | | | | | |
| **5.1** | Subsoil Drainage Pipe | IFC Drawings | DN100 Socked Subsoil Drainage Pipe installed at base of wall before backfill.   * Discharge through face of wall at 25m centres   Provide clear out riser to surface | Yes  No  N/A | | W |  |  | W |  |  |
| **5.2** | Subsoil Aggregate | IFC Drawings | Install subsoil layer min. 200mm wide from rear face of wall before backfill.   * Aggregate to be nominal 20mm in dimension.   Wrapped in approved Geotextile. | Yes  No  N/A | | S |  |  | S |  |  |
| **5.0 Conformance check** | | | | | | | | | | | |
| **5.1** | Tolerances | TfNSW R53 CL.4.3 | Surface Level: the top surface level must be as per design levels or as approved. | Yes  No  N/A | | S |  |  | S |  |  |
| 5.2 | NCR Closeout | Contract Documents | All defects have been rectified and NCR’s closed out and Site is accepted | Yes  No  N/A | | H |  |  | S |  |  |

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| Works complete (sign SS) |  | |  | Date works complete | | |  | |
| Site conforms (sign PE) |  | |  | Date Site closed | | |  | |
| NCR no. raised |  | |  | Date NCR closed for this Site | | |  | |
| **Site acceptance:** | | | | | | | | |
| Symal Infrastructure representative name | |  | | |  | Client representative name | |  |
| Symal Infrastructure representative signature | |  | | |  | Client representative signature | |  |

**Responsibility (resp.) key: PM –** Project Manager**, PE –** Project Engineer**, SE –** Site Engineer**, SS –** Site Supervisor

**Inspection key: W –** Witness, **H –** Hold Point, **S -** Surveillance