**Inspection and Test Plan – Water Relocation**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project no.** | | **CC-0374** | **Project name** | Pakenham Roads Upgrade | | **Date** | **29/08/2023** | | **Approved by** | Damian Hagebois |
| **ITP no.** | 1630-P200-SYM-QAC-ITP-0017 | | **Revision date** | 27/10/2023 | **Plant and equipment used** | | |  | | |
| **Lot no.** |  | | **Location (chainages, detailed description or marked up plan)** | | | | |  | | |

Attach Dockets, Certificates and QA Documents to ITP

|  |  |  |  |  | **Verification of acceptance by** | | | | | **Remarks/record (eg. Test frequency reports, certificates, checklist etc)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Symal** | | | **Superintendent** | |
| **Item no.** | **Activity** | **Ref docs** | **Acceptance criteria** | **Freq** | **Key** | **Resp** | **Initial/ date** | **Key** | **Sign/ date** |
| **1.0 Pre-start activities** | | | | | | | | | | | |
| **1.1** | Check Survey Set-out | IFC  Drawings | Ensure alignment set out has been completed and pegged or sprayed painted.  **Has all of the above been completed?**  **Yes □ No □** | Prior to start of works | H | SE |  |  |  |  |
| **2.0 Materials** | | | | | | | | | | | |
| **2.1** | Material Conformance | AS4130 | Assets installed are correct type, class & diameter as per design. Procured asset complies with AS4130 – Polyethylene pipes for pressure applications (as relevant) unless noted otherwise. | Each Lot | R | SE |  |  |  |  |
| **3.0 Depth of Cover** | | | | | | | | | | | |
| **3.1** | Depth of Cover Requirements – Design Check | VR Clause 706.03 | Cover requirements for water assets design comply with the following:   * Pavement surface to top of conduit minimum 1200 mm. * Invert of open drain to top of conduit minimum 750 mm. * Unpaved areas to top of conduit minimum 600 mm. * As per asset authority requirement for cover to other assets | Each Lot | S | SE |  |  |  |  |
| **4.0 Backfill of Excavated Trenches** | | | | | | | | | | | |
| **4.1** | Bedding / Embedment Material Properties | VR Clause 706.06  Table 706.061 | Bedding / embedment materials are to be uniform in composition and free from perishable matter. Further the size and plasticity index must comply with VR Table 706.061 (Figure 1 on page 4). | Each Lot | R | SE |  |  |  |  |
| **4.2** | Bedding / Embedment Placement | VR Clause 706.07 | Placement of bedding / embedment is to be as per VR 706.07 requirements below:   * No less than 25mm of compacted depth shall be placed below * Bedding shall be placed below, around, and above pipe * No less than 150mm of bedding shall be placed above | Each Lot | R | SE |  |  |  |  |
| **4.3** | Backfill Material Properties (under paved areas) | VR Clause  Table 706.061  VR Clause 706.08 | Backfill materials are to be uniform in composition and free from perishable matter. Further the size and plasticity index must comply with VR Table 706.061 (See Figure 1 on page 4). | Each Lot | R | SE |  |  |  |  |
| **4.4** | Backfilling placement and compaction (under paved areas) | VR Clause 706.08 & 706.09 | Backfilling placement and compaction is as per VR706.08 and VR706.09:   * Trench shall be backfilled up to the nominated or designed subgrade level with selected backfill material placed and compacted in layers not exceeding 150 mm loose thickness * Optimum Moisture Content between 85-115% as determined in the Modified compactive effort. * The number of tests per lot shall be three. * Backfill, the whole of which passes the 37.5 mm AS sieve, shall be compacted to a mean value of density ratio of not less than 97% * Noting density ratio shall be based on Standard compactive effort. * Considerations to be made to allow for Asset Owner Authority working restrictions, including vibratory restrictions. | Each Lot | R | SE |  |  |  |  |
| **5.0 Work Lot Close Out** | | | | | | | | | | | |
| **5.1** | Test Reports & Other QA Documents | VicRoads Specifications 706 | All Test reports received and reviewed. All required material dockets has been received and reviewed.  Any specific asset owner QA documents available to be submitted attached.  **Has all of the above been proven to meet and/or exceed minimum tested requirements?**  **Yes □ No □** | Each Lot | R | SE |  |  |  |  |
| **5.2** | As-built Information |  | Where applicable, as-built pickup or as constructed drawing been provided to the authority.  **Has all of the above been completed correctly**  **Yes □ No □ N/A □** | Each Lot | R | SE |  |  |  | Survey Conformance Report or as-built drawings to authority  **Yes□ No□** **N/A□** |
| **5.3** | Product Non-Conformance | CQMP | All Product Non-Conformance(s) recorded and closed (if applicable)  **Has all of the above been proven to meet and/or exceed minimum tested requirements?**  **Yes □ No □** | Each Lot | R | SE |  |  |  | NCR reports  **Yes□ No□** **N/A□** |
| **5.4** | Quality Representative to check the above criteria and records to confirm | CQMP  Lot Records | All above criteria met, and records identified attached.  **Has all of the above been proven to meet and/or exceed minimum tested requirements?**  **Yes □ No □** | Each Lot | R | SE |  |  |  | Completed Checklist (if applicable) and reports and other compliance records attached.  **Yes□ No□** **N/A□** |
| **5.5** | Authority Asset Install Acceptance |  | Audit and approval received from accredited SEW consultant. | Each Lot | R | SE |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Works complete (signer SE)** | |  | | | **Date works complete** | |  | | | |
| **Lot conforms (signer PE)** |  | | **Date lot closed** |  | | **NCR/s no. raised** | |  | **Date NCR closed for this lot** |  |

**Responsibility (Resp.) Key**: **PM**-Project Manager, **PE**-Project Engineer, **SE**- Site Engineer, **CS**-Civil Superintendent, **SS**-Site Supervisor, S**V**-Surveyor, **CR**-Client Representative,

**NA –** Nominated Authority

**Inspection Key: W –** Witness, **H –** Hold Point, **S –** Surveillance, **I –** Inspection, **R –** Review Point

**Figure 1.**

Table

Description automatically generated