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|  | **Inspection and Test Plan - Control and Supervision of the Works** | **Document #**  **ITP-020**  Revision : 002 Date : 25/01/23 |

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| **Client:** | **Yarra Trams** | **Construction Process:** | Prepared by: | Reviewed by : | Approved by : |
| **Project:** |  | ***Exothermic Welding*** | Name: **Jarrod Rodrigues** | Name: **Damon Bromwich** | Name: **Shaun Kent** |
| **Contract No:** |  | **Specifications:** Yarra Trams Standard Drawings, Design Drawings, Eritch CADWELD Exothermic Welding Manual  **Structure / Component:** | Signed : | Signed : | Signed : |
|  |  | **Location:** | Date : 25/01/23 | Date : 25/01/23 | Date : 25/01/23 |

**Lot No: Lot Details: Lot Size/ Quantity:**

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| **Item No.** | **Task/Activity Description** | **Inspection / Controls and Verification Detail** | | | | | **HP/ WP/ AP/ IP/ TP/ SCP** | **Responsibility**  Project Engineer Site Engineer Superintendent Surveyor Foreman | **Checked by:** | | | |
| **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| **1** | **Preliminary Works** | | | | | | | | | | | |
| 1.1 | Check for correct documentation | Prior to commencing any  activity | Ensure that all employees and contractors are using the most current and complete set of drawings | Drawings and drawing registers | Visual inspection | This ITP signed off | **HP\*** | Fulton Hogan Engineer | N/A |  | N/A |  |
| 1.2 | Implementation of all measures and controls | Prior to commencing any activity | All necessary measures and controls are being implemented, that is: PSP, EMP, TMP, JSEA, SWMS & WP  Ensure that all employees and contractors involved  in the welding process have been inducted onto the relevant Hotworks permit | PSP, EMP, TMP, JSEA, SWMS, WP | Visual Inspection | This ITP signed off | **IP** | Fulton Hogan Engineer | N/A |  | N/A |  |
| 1.5 | Materials Check | Prior to commencing any activity | Ensure the materials and equipment gathered are for the correct type of connection being made.  Inspect the mould ID tag to ensure that it corresponds to the application, indicated by the following parameters:   1. Mould part number: 2. Conductor size: 3. Welding material required   Check to ensure the graphite mould is not worn or broken, which could cause leakage of molten weld metal during the reaction. Ensure a working fire extinguisher is available within 10 metres of the working area. | Eritech CADWELD  Exothermic Welding Manual Fig. 2, 3, 4 | Visual inspection | This ITP signed off | **HP\*** | Fulton Hogan Engineer | N/A |  | N/A |  |
| **2** | **Construction Works** | | | | | | | | | | | |
| 2.1 | Preparation | Each Weld | Ensure the position of the conductors being welded is correct.  Heat mould to ensure it is dry.  Strip & clean conductors, ensure they are dry & clean. | Design Drawings and Register | Visual inspection | This ITP signed off | **IP** | Fulton Hogan Engineer | N/A |  | N/A |  |

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| **Frequency** | **Acceptance Criteria** | **Reference Documents** | **Inspection / Test Method** | **Record of conformity** | **Client** | **Fulton Hogan** | **FH's Sub- contractor** | **Date** |
| 2.2 | Welding | Each Weld | Ensure conductors are correctly positioned in the mould, allowing the mould to close tightly.  Ensure welding material has been insected and is intact.  Ensure reaction is completed and molten material has solidified (allow 30 seconds post ignition) | Eritech CADWELD  Exothermic Welding Manual Fig. 2, 3, 4 | Verify | This ITP signed off | **IP** | Fulton Hogan Engineer | N/A |  | N/A |  |
| **3** | **Testing** | | | | | | | | | | | |
| 3.1 | Weld Review | Each lot | Ensure weld is inspected and that a quality connection has been made.All welds shall be inspected a Fulton Hogan engineer. | Eritech CADWELD  Exothermic Welding Manual  Fig. 2, 3, 4 | Verify | This ITP signed off | **TP** | Fulton Hogan Engineer | N/A |  | N/A |  |
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**Final Inspection**

The signature below verifies that this ITP has been completed in accordance with the FH’s Quality system Procedures and verifies lot compliance with specifications.

Print Name:

Position:

Signature:

Date:

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| ***Legend*** | | | | | |
| **HP** | Hold Point | Work shall not proceed past the HP until released by the Superintendent | **IP** | Inspection point | Formal Inspection to be done and recorded |
| **HP\*** | FH Hold Point | Work shall not proceed past the HP\* until released by FH | **TP** | Test Point | Product compliance test to be undertaken and recorded/reported |
| **WP** | Witness Point | An inspection which must be witnessed by the Superintendent | **SCP** | Survey conformance point | A qualified surveyor to check product/section/structure and report |
| **AP** | Approval Point | Written or verbal approval given by the Superintendent |  | | |