

	<b>Inspection and Test Plan - Control and Supervision of the Works</b>	<b>Document #</b> <b>ITP-003</b> Revision : 02      14/04/2020
--	--	--

<b>Client:</b> <b>Yarra Trams</b>  <b>Project:</b>  <b>Contract No:</b>	<b>Construction Process:</b> <b>Electrical and Communication Conduit</b>  <b>Specifications:</b> Yarra Trams Infrastructure - Tram Track Construction Standard (CE-019-ST-0033) <b>Structure / Component:</b> Tram Tracks (Electrolysis, Platform Conduits) <b>Location:</b>	<b>Prepared by:</b> Name: <b>Aaron Hatch</b>  Signed : Date : 14/04/2022	<b>Reviewed by :</b> Name: <b>Damon Bromwich</b>  Signed : Date : 14/04/2022	<b>Approved by :</b> Name: <b>Shaun Kent</b>  Signed : Date : 14/04/2022
---	---	--	--	--

<b>Lot No:</b>	<b>Lot Details:</b>	<b>Lot Size/ Quantity:</b>
----------------	---------------------	----------------------------

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	Employees and sub contractors shall be issued with the most current and complete construction 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	PSP, EMP, TMP, JSEA, SWMS, WP	Visual Inspection	This ITP signed off	HP*	Fulton Hogan Engineer	N/A		N/A	
1.3	Materials	Per Batch	• Electrical supply conduit to be Orange and rigid HD UPVC of sizes as required. • Communications conduit to be White and rigid UPVC of either 32 or 50mm size or larger as required.	CE-019-ST-0033 cl 4.4.1 AS 2053	Verify	This ITP signed	HP*	Fulton Hogan Engineer	N/A		N/A	
2	Construction Works											
2.1	Survey set-out	As required	• Work is set out in accordance with drawings.	Work procedure	Verify	This ITP signed	HP*	Fulton Hogan Engineer	N/A		N/A	
2.2	Excavation and Trenching	Prior to Installation	• Minimum cover for underground conduits shall be 600mm • Open trenching only permitted in unpaved areas, line of trench to be at right angle to the track • Trench shall maintain a minimum clearance of 300mm from all existing services where possible	CE-019-ST-0033 cl 4.2.5 & 4.2.8	Verify	This ITP signed	WP	Fulton Hogan Engineer	N/A		N/A	
2.3	Installation of Conduits and pits	Each Lot	• Conduits in the same run shall be spaced 50mm by using clean sand to pack voids Conduit shall be embedded in not less than 50mm sand and covered by >50mm - 75mm< sand • Mechanical protection shall be provided by installation of polymeric cable or cover strip of thickness not less than 3mm, and of a material equivalent of UPVC conduit complying to AS 2053. Protective material shall be placed not less than 100mm above the conduit, and shall not be less than 150mm wide. • Conduits shall be joined male to female ends and sealed with approved adhesive immediately prior to joining. • Conduits shall not be subject to construction loadings • Bottom of lowest conduit shall maintain a minimum 100mm above pit floor • Conduits shall be capped with UPVC electrical caps	CE-019-ST-0033 cl 4.4	Visual inspection	This ITP signed	WP	Fulton Hogan Engineer/ YT	N/A		N/A	
2.4	Inspection of conduit installation	Each Lot	Laying of conduits and installation of pits shall be inspection by superintendent and conform to design drawings before any backfilling procedure is to commence	Work procedure	Visual Inspection	This ITP Signed	*HP	Fulton Hogan Engineer/YT	N/A		N/A	

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
2.5	Back Fill of Trenches	Each Lot	• Backfilling (for trenching or road crossings) - conduit trench shall be backfilled above marker tape with crushed rock or suitable excavated material and compacted to 90% standard compaction 150mm-200mm below sub base level, the last 150mm-200mm shall be compacted to 100% standard compaction using handheld mechanical plant	CE-019-ST-0033 cl 4.2.5	Verify	This ITP signed	IP	Fulton Hogan Engineer	N/A		N/A	
2.6	Installation of Draw Cords	Each Lot	Draw wire shall be provided for each conduit, with extra 3m length at each pit, material to be used shall be 6mm 'telstra rope'	CE-019-ST-0033 cl 4.4.6.2	Verify	This ITP signed	IP	Fulton Hogan Engineer	N/A		N/A	
2.7	Compaction	Each Lot	During compaction optimum moisture content of bedding and select fill is within 85% to 115% as provided by suppliers	CE-019-ST-0033 cl 4.2.8	Verify	This ITP signed	HP*	Fulton Hogan Engineer	N/A		N/A	

#### 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:        /        /

#### Legend

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