

	<b>Inspection and Test Plan - Control and Supervision of the Works</b>	<b>Document #</b> <b>ITP-008</b> Revision : 2      Date : 21/03/2024
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<b>Client:</b> Yarra Trams <b>Project:</b> Victoria Street - Elizabeth to Swanston <b>Contract No:</b> 8B5000	<b>Construction Process:</b> <i>Hot Mix Asphalt</i> <b>Specifications:</b> VicRoads Standard Specification – Section 407 <b>Structure / Component:</b> Pavement <b>Location:</b>	<b>Prepared by:</b> Name: <b>Cedric Guico</b>  Signed : Date : 17/07/2024	<b>Reviewed by :</b> Name: <b>Rocky Sam</b>  Signed : Date : 17/07/2024	<b>Approved by :</b> Name: <b>Shaun Kent</b>  Signed : Date : 17/07/2024
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<b>Lot No:</b>	<b>Lot Details:</b>	<b>Lot Size/ Quantity:</b>
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Item No.	Task/Activity Description	Inspection / Controls and Verification Detail										Responsibility		Checked by:			
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity	HP/ WP/ AP/ IP/ TP/ SCP	Project Engineer Site Engineer Superintendent Surveyor Foreman	Client	Fulton Hogan	FH's Sub-contractor	Date					
1	<b>Construction Works</b>																
1.1	Submission of Mix Design	Prior to commencing paving	Ensure the correct mix design has been registered and is approved by Superintendent prior to laying mix according to standard track structure drawings	VicRoads Spec. Cl.407.09	Correspondance of receival of mix design	Superintendent approval Completed ITP	HP	Site Engineer/ Asphalt Supervisor / Superintendent									
1.2	Site Inspection and Base Condition	Prior to commencing paving	Surface on which asphalt is to be placed is essentially dry and free from puddles and defects (holes, cracks, unstable material and edge irregularities) and loose materials.	407.17 AS2150 10.1 AS2150 10.3	Visual Inspection	ITP Signed	WP	Site Engineer/ Asphalt Supervisor	N/A								
1.3	Ambient Conditions for Placing	Prior to commencing paving	The majority of the surface area to be paved has a temperature greater than or equal to the following: Base & Intermediate Courses: 5°C for conventional binders or 10°C for PMBs & Class 600 Wearing Courses: 10°C for conventional binders or 15°C for PMBs	VicRoads Spec Cl.407.17	Verify	Thermometer	IP	Site Engineer/ Asphalt Supervisor	N/A								
1.4	Planning of Joints	Prior to commencing paving	Runs to be marked to ensure placement of joints satisfy the following unless otherwise approved by the Client: Transverse Joints Offset from layer to layer by at least 2m Longitudinal Joints Offset from layer to layer by at least 150mm and be within 300mm of the lane line or centre of lane. Wearing course shall be on lane lines.	VicRoads Spec Cl.407.21 (b) & (c) Pavement Drawings	Measure and mark out runs by tape measure or survey	Paving Plan	WP	Project Engineer/ Asphalt Supervisor	N/A								
1.5	Longitudinal Joints with existing Pavement	Prior to commencing paving	Where new pavement abuts an existing pavement, the existing pavement shall be removed in steps to achieve an offset from layer to layer of not less than 150mm. Depth of step to be cut to the full depth of each individual layer.	VicRoads Spec Cl.407.21 (c) Project Specs. Section 3040.06 (d)(vii)	Visual Inspection	ITP Signed	WP	Project Engineer/ Asphalt Supervisor	N/A								
2	<b>Asphalt Placement works</b>																

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2.1	Tack Coat (CRS 60 emulsion)	Prior to commencing paving	Tack coat (CRS 60 emulsion) to be sprayed in a uniform film over the surface to be paved at a rate of 0.15-0.30 L/m2 of residual binder (60% bitumen) or 0.30 to 0.60 litres/m2 (30% bitumen content). This rate is to be doubled on joints and chases. Tack coat must be allowed to turn from brown to black before paving. NOTE: Tack coat is not required on clean, freshly placed asphalt or primed surfaces or when the layer to be placed exceeds 50mm unless directed by the Client	Vicroads Spec 407.19 AS2150 11	Visual Inspection	Spray area	WP	Site Engineer/ Asphalt Supervisor	N/A		N/A	
2.2	Commencement of Placing	Prior to commencing Paving	The placement of asphalt on the sub-base or granular base for a new pavement or for an overlay of an existing bituminous surfaced pavement shall not commence until the consent to proceed is obtained from the Client.	VicRoads Spec Cl.407.23	Visual Inspection	ITP Signed	HP	Site Engineer/ Asphalt Supervisor / Superintendent				
2.3	Mix Design Confirmation	Each lot	Check correct mix design as per pavement design has been delivered prior to laying mix. Asphalt wearing and base layer mixes must abide to IFC drawings and be as specified in standard tram track drawings.	VicRoads Spec. Cl.407.09 STD_T9010	Visual Inspection & Delivery Docket	Delivery docket Completed ITP	HP*	Site Engineer/ Asphalt Supervisor	N/A			
2.4	Delivery of Mix	Each load	Asphalt is not segregated, binder is not separated or does not contain uncoated particles and the temperature from mixing plant is not more than 175°C.	VicRoads Spec Cl.407.20 Table 407.111	Visual Inspection	Delivery Docket	WP	Site Engineer/ Asphalt Supervisor	N/A			
2.5	Traceability	Each lot	Ability to locate asphalt test results placed in three dimensions i.e. start/end chainage, offset/lane and layer	Fulton Hogan Quality Plan	Verify	Daily Lot Record	IP	Site Engineer/ Asphalt Supervisor	N/A			
2.6	Layer Thickness and Level Control	Regularly during paving	Thickness of asphalt layer conforms to asphalt thickness on drawings or specifications	VicRoads Spec Cl.407.27 (a) & (b) Drawings	Verify	Dips using ruler or dip stick	WP	Site Engineer/ Asphalt Supervisor	N/A			
2.7	Surface Finish of Wearing Course	During paving and after final roll	The finished surface of asphalt wearing course shall be of uniform appearance, free of dragged areas, cracks, open textured patches and roller marks	VicRoads Spec Cl.407.29 (a)(i)	Visual Inspection	ITP Signed	WP	Site Engineer/ Asphalt Supervisor	N/A			
2.8	Alignment of layers not placed against concrete edge	During paving and at completion of work	The edge of asphalt layers shall not be more than 50mm inside nor more than 100mm outside, the designed offset from centreline or design line. The rate of change of offset of the edge of layer shall not be greater than 25mm in 10m	VicRoads Spec Cl.407.29 (a)(iv) Drawings	Visual Inspection	ITP Signed	IP	Site Engineer/ Asphalt Supervisor	N/A			
3	Testing											

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3.1	Compaction	Per Lot	For wearing course layers <50mm, if characteristic density ratio is: 94.0% or greater Accept lot 91.0% to 93.9% Lot may be accepted at reduced rate Wearing course shall be tested at a frequency of 6 per lot, where the lot is either of 4000m <sup>2</sup> or one days production	VicRoads Spec Table 407.271	Verify	Test Report	TP	Site Engineer/ FH Lab Technician	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					
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			