Engineering and Design Matrix

TransitLinX
Suburban Rail Loop East

Version 00 - May 2026

Electrical Networks

Current National Unit Of Competency	Over Head Wiring & 25kV – Designer	Over Head Wiring & 25kV – Checker	Over Head Wiring & 25kV – Independent Reviewer / Verifier	Over Head Wiring & 25kV – Approver	Substation & HV Power – Designer	Substation & HV Power – Checker	Substation & HV Power – Independent Reviewer / Verifier	Substation & HV Power – Approver	EMI/EMC – Designer	EMI/EMC – Checker	EMI/EMC – Independent Reviewer / Verifier	EMI/EMC – Approver	Earthing and Bonding – Designer	Earthing and Bonding – Checker	Earthing and Bonding – Independent Reviewer / Verifier	Earthing and Bonding – Approver	Traction Power – Designer	Traction Power – Checker	Traction Power – Independent Reviewer / Verifier	Traction Power – Approver
Rail Safety Worker			X	X			X	X			X	X			X	X			X	X
Tertiary Qualification - Masters or Bachelor Degree	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Record of Relevant Experience	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Endorsed Building Engineer Victoria																				
Experience																				
3 years																				
5 years	X				X				X				X				X			
10 years		X	X	X		X	X	X		X	X	X		X	X	X		X	X	X
15 years																				
20 years																				

Structures (Civil and Underground) / Tunnels

Current National Unit Of Competency	Buildings Requiring Building Surveyor/Certificates – Designer	Buildings Requiring Building Surveyor/Certificates – Lead Designer	Buildings Requiring Building Surveyor/Certificates – Checker	Buildings Requiring Building Surveyor/Certificates – Proof Engineer	Buildings Requiring Building Surveyor/Certificates – Independent Reviewer / Verifier	Buildings Requiring Building Surveyor/Certificates – Approver	Excluding Building Act – Proof Engineer	Excluding Building Act – Approver	Tunnels – Designer	Tunnels – Lead Designer	Tunnels – Checker	Tunnels – Proof Engineer	Tunnels – Independent Reviewer / Verifier	Tunnels – Approver
Rail Safety Worker				X	X	X	X	X				X	X	X
Tertiary Qualification - Masters or Bachelor Degree	X	X	X	X	X	X	x	x	X	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X	X	x	x	X	X	X	X	X	X
Record of Relevant Experience	X	X	X	X	X	X	x	x	X	X	X	X	X	X
Endorsed Building Engineer Victoria				X		X								
Experience														
3 years	X								X					
5 years		X	X							X	X			
10 years					X								X	
15 years				X		X	x	x				X		X
20 years														

Track (including Transit Space and all track related Civil infrastructure) / Wheel-Rail Interface & Wheel-Rail Lubrication / Surface Civil (excluding permanent way)

Current National Unit Of Competency	Track – Designer	Track – Lead Designer	Track – Checker	Track – Independent Reviewer / Verifier	Track – Approver	Wheel-Rail – Designer	Wheel-Rail – Lead Designer	Wheel-Rail – Checker	Wheel-Rail – Independent Reviewer / Verifier	Wheel-Rail – Approver	Surface Civil – Designer	Surface Civil – Checker	Surface Civil – Independent Reviewer / Verifier	Surface Civil – Approver
Rail Safety Worker				X	X				X	X			X	X
Tertiary Qualification - Masters or Bachelor Degree		X	X	X	X		X	X	X	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Record of Relevant Experience	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Endorsed Building Engineer Victoria														
Experience														
3 years	X										X	X	X	X
5 years						X								
10 years		X												
15 years			X	X	X		X							
20 years								X	X	X				

Building Services / Architectural

Current National Unit Of Competency	Building Services – Designer	Building Services – Lead Designer	Building Services – Checker	Building Services – Independent Reviewer / Verifier	Building Services – Approver	Architectural – Lead Designer	Architectural – Checker	Architectural – Independent Reviewer / Verifier	Architectural – Approver
Rail Safety Worker				X	X			X	X
Tertiary Qualification - Masters or Bachelor Degree	X	X	X	X	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X				
Record of Relevant Experience				X	X	X	X	X	X
Endorsed Building Engineer Victoria									
Experience									
3 years	X					X			
5 years		X	X				X	X	
10 years				X	X				X
15 years									
20 years									

Rolling Stock

Current National Unit Of Competency	Mechanical – Designer	Mechanical – Checker	Mechanical – Independent Reviewer / Verifier	Mechanical – Approver	Electrical – Designer	Electrical – Checker	Electrical – Independent Reviewer / Verifier	Electrical – Approver	Communications – Designer	Communications – Checker	Communications – Independent Reviewer / Verifier	Communications – Approver	Security – Designer	Security – Checker	Security – Independent Reviewer / Verifier	Security – Approver
Rail Safety Worker			X	X			X	X			X	X			X	X
Tertiary Qualification - Masters or Bachelor Degree	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X	X	X	X							1	1
Record of Relevant Experience	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Endorsed Building Engineer Victoria																
Experience																
3 years	X				X				X							
5 years		X				X				X			X	X	X	X
10 years			X	X			X	X			X	X				
15 years																
20 years																

Fire Safety

Current National Unit Of Competency	Designer	Lead Designer	Checker	Independent Reviewer / Verifier	Approver
Rail Safety Worker				X	X
Tertiary Qualification - Masters or Bachelor Degree	X	X	X	X	X
Professional Registered Engineer Victoria	X	X	X	X	X
Record of Relevant Experience	X	X	X	X	X
Endorsed Building Engineer Victoria		X	X	X	X
Experience					
3 years					
5 years	X				
10 years		X	X		
15 years					
20 years				X	X

Notes

Refer 'Rail Safety Worker' row for roles requiring Rail Industry Worker (RIW) card through the RIW program

Non-RSW min. qualifications and experience shown for Package Contractor information