



National Track and Civil Matrix

Construct and Maintain Track / Operate and Maintain Plant

		Around The Track Personnel (Non-Construction/Maintenance -Other)	Around The Track Personnel (Construction/Maintenance)	Civil Mobile Plant Operator	Civil Trade Qualified Personnel	Rail Labourer	Ballast Unloader/Maintainer	Rail Lubricator	Vegetation Controller	Track Maintainer	Track Certifier	Track Examiner	Earthworker	Track Constructor	Turnout Constructor - Concrete	Turnout Constructor - Timber	Rail welder (Flashbutt Welding)	Rail welder (Aluminothermic)	Rail welder (Electric)	Rail Grinder - Rail only	Rail Grinder - Switches and Crossings	Rail adjuster	Rail Bound Plant Operator	Road-Rail Plant Operator	Ultrasonic Tester Track -Not Queensland Rail	Ultrasonic Tester Turnouts -Not Queensland Ra
	Rail Safety Worker (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Medical Requirements																									
NTC	Railway Medical Category 1 (Cat 1) Safety Critical (>60 = yearly; 50 - 60 = every 2 years; <50 = every 5 years)																						M	M		
NTC	Railway Medical Category 3 (Cat 3) Non Safety Critical (on commencement of duty; >40 = every 5 years)	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M			M	M
	Nat Comp Codes Competency Requirements (non rail specific)																									
CPCCOHS1001A	Work Safely in the construction industry (White Card)		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
	Licence or machine specific unit of competence (specify type) If HIGH RISK, licence is required even if unit is obtained - refer to following page			M*													#							M		
	Appropriate Trade Qualification Refer following page for full list				M(1)																					
	Certificate III / Trade in Engineering - Mechanical or equivalent Please ensure you have the appropriate unit of competency for your role: Level 3: AHCCHM303A Prepare and Apply Chemicals Level 3: AHCCHM304A Transport, Handle and Store Chemicals Please ensure you also comply with the local government licencing requirements in your state http://www.chemcert.org.au/State_legislation.html												M													
	Nat Comp Codes TLI Certificate II - Rail Infrastructure																									
TLIF2080	Safely access the rail corridor Rail Operators have specific access requirements, therefore if you have obtained this unit of competence from a training provider not endorsed by the rail operator you may require further training.	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIW2001	Operate under track protection rules					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIB1028	Maintain and use hand tools					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLID1001	Shift materials safely using manual handling methods					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIE1003	Participate in basic workplace communications					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIF1001	Follow occupational health and safety procedures					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIF2010	Apply fatigue management strategies					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIB2085	Apply track fundamentals						M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIU2008	Apply environmental procedures to rail infrastructure					M	M	M		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
TLIB2092	Operate minor mechanical equipment									M	M	M		M	M	M				M	M	M				M
TLIB2097	Install and maintain guard rails									M	M	M		M	M	M										
TLIB2121	Maintain rail joints									M	M	M		M	M	M										
TLIS2030	Carry out track ballasting						M			M	M	M		M	M	M										
TLIS2031	Install railway sleepers									M	M	M		M	M	M										
TLIS2044	Carry out rail installation									M	M	M		M	M	M	M	M								
TLIS2034	Install and repair rail fastening systems									M	M	M		M	M	M	M	M								
	Nat Comp Codes TLI Certificate III - Rail Infrastructure																									
TLIB3094	Check and repair track geometry										M			M	M	M										
TLIB3095	Check and repair points and crossings										M				M	M										
TLIB3099	Examine track infrastructure										M	M														



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TLIB3100	Visually inspect track infrastructure										M	M														
TLIB3102	Adjust rail																					M				
TLIC2058	Travel medium or heavy self-propelled on-track equipment NOTE: If travelling outside the possession area, you may need additional competencies - please check with operator.																						M(2)			
	Propel and operate light on-track equipment NOTE: If travelling outside the possession area, you may need additional competencies - please check with operator.																						M(2)			
TLIC3045	Operate road/rail vehicle																							M		
TLIS2027	Install and maintain surface track drainage												M													
TLIS3025	Implement ballast unloading						M							M	M	M										
TLIS3026	Implement track maintenance and construction													M	M	M										
TLIS3045	Install turnouts														M	M										
TLIS3040	Construct concrete-steel points and crossings																									
TLIS3041	Construct timber-composite points and crossings															M										
TLIS3037	Install and repair rail earthworks												M													
TLIW2012	Grind rails																				M					
TLIW3013	Grind switches and crossings																									
TLIW3035	Heat and cut materials using oxy-LPG equipment for the rail industry																	M	M							
TLIW3015	Weld rail using aluminothermic welding process																	M								
TLIW0036	Apply electric welding process to rail																		M							
TLIW3016	Weld rail using flashbutt welding process																M									
TLIS3010	Test rail using ultrasonic equipment																								M	M
TLIS3011	Test rail using non-destructive testing equipment																									M
Nat Comp Codes	TLI Other																									
RIICCM208A or D	Carry out basic levelling												M													
TLIS2012	Install and service rail lubrication equipment							M																		
TLIB1093	Clean equipment and restore worksite							M																		
TLIC2054	Access rail track to run track vehicle within defined worksite																						M	M		
Nat Comp Codes	Plant operator competencies - can hold any one or more																									
TLIW2028	Identify the principles of ballast cleaning operations																									M*
TLIW2029	Identify the principles of ballast regulator operations																									M*
TLIW2030	Identify the principles of dynamic track stabiliser operations																									M*
TLIW2031	Identify the principles of self-propelled rail grinder operations																									M*
TLIW2032	Identify the principles of tamping machine operations																									M*
	Competency requirements (conditional by operator)																									
	ARTC																									
	ARTC National Contractor Induction	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
	Drug and Alcohol Screen																									



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MTM Metro Contractor Safety Recertification (MCSR); OR MTM Safely Access Rail Corridor; OR MTM Safeworking certificate or Recertification	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
QR Operate under track protection rules Apply fatigue management strategies	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	N/A	N/A
V/Line – Contractor V/Line Contractor Induction	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
TfNSW Medical every 5 years Drug and Alcohol Screen TfNSW Induction (RISI) TfNSW Validation for clearance to work. Card-holder data collection and use authority form Australian Residency or Visa Check	#	#	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available	role not yet available
DPTI PTS Rail Safety Awareness Course UETTDREL14B Work Safely near live electrical apparatus as a non-electrical worker	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
Notes:																									
M* = Must hold the machine specific competency or licence relevant to operations and/or state based requirement.																									
* = Must hold Workcover / Worksafe High Risk License for Task.																									
(1) = Must hold the appropriate trade or licence for tasks being conducted.																									
(2) = Must hold one of the UOC depending on machine size i.e. over/under 10T.																									
# = Conditional operator requirement.																									
The information contained in this matrix is for reference only and could be subject to change from the Rail Transport Operators.																									

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Licencing and Trade Details



High Risk Roles	NON High Risk roles
National - Dogman National - Elevated Work Platform Operator>11M National - Forklift Operator National - Mobile Plant Operator (concreting) (note: class code PB Concrete-placing Boom Operation) National - Operator Crane/Hiab>10T National - Operator Non-slewing mobile cranes (>3T) National - Operator Slewing Mobile Crane >100T National - Operator Slewing Mobile Crane up to 100T National - Operator Slewing Mobile Crane up to 20T National - Operator Slewing Mobile Crane up to 60T National - Rigger National - Scaffolder National - Telehandler Non-slewing >3T National - Telehandler Slewing >3T	National - Backhoe Operator National - Bobcat/Skid Steer National - Dozer National - Drilling Rig Operator - Air** National - Drilling Rig Operator - Core** National - Drilling Rig Operator - Directional** National - Dump Truck National - Elevated Work Platform Operator<11M National - Excavator Operator National - Front End Loader Operator National - Grader Operator National - Operator Crane/Hiab<10T National - Roller Operator National - Telehandler <3T National - Tip Truck

High Risk Licences	Trade roles
Erect and dismantle restricted height scaffolding* Licence to erect, alter and dismantle scaffolding - advanced level.* Licence to erect, alter and dismantle scaffolding - intermediate level.* Licence to erect, alter and dismantle scaffolding- basic level* Licence to operate a non-slewing mobile crane (greater than 3 tonnes)* Licence to operate a slewing mobile crane (over 100 tonnes)* Licence to operate a slewing mobile crane (up to 100 tonnes)* Licence to operate a slewing mobile crane (up to 20 tonnes)* Licence to operate a slewing mobile crane (up to 60 tonnes)* Licence to operate a vehicle loading crane (capacity 10 meter tonnes and above) * Licence to perform dogging (DG)* Licence to perform rigging advanced level (RA)* Licence to perform rigging basic level (RB)* Licence to perform rigging intermediate level (RI)*	National - Auto electrician National - Boilermaker National - Bricklayer National - Carpenter National - Electrician National - Electronic Trades National - Fitter National - Form worker National - Mechanic National - Plumber National - Refrigeration National - Sheet Metal Worker

NOTES:

*It is the individual's responsibility to ensure that state licensing and trade requirements are held before work is carried out.

**the units of competency required for the Drilling Rig Operator roles are optional based on what type of work is being undertaken. However at least one of these requirements must be met. The choices include:

1. Drilling Rig Operator - Air

- RIINHB304D Conduct Air Drilling

2. Drilling Rig Operator - Core

- RIINHB307D Conduct Conventional Core Drilling

3. Drilling Rig Operator - Directional

- RIINHB323D Conduct Horizontal Directional Drilling,

No licence required to operate an undertrack/road bore machine.

Must be able to provide proof of competency that you have been working in that capacity i.e.

- Letter from company; or
- Internal training; etc.

4. RIIOGD403D Conduct Drilling Operations (Optional for each of these 3 roles)

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Role examples (A-Z)



NOTE: These are to be used as a guide only. If you are unsure which role applied to you, please seek clarification from the operator with whom you propose to work as to what role is required for your intended duties. It is the individual's responsibility to ensure that the appropriate role is held before work is carried out.

Role	Examples
Around The Track Personnel (Construction/Maintenance)	This role is used for the following types of workers in the rail corridor: Graffiti Removal, General Civil Labouring / Maintenance activities outside the Danger Zone (equivalent to the general civil construction labourer), Apprentices/Trainees, Engineers/Project Managers etc required to access the rail corridor (they must also hold their Engineering/Project Managers RIW role), Surveyors, Tractor Operators, Truck Drivers and Water Cart Operators.
Around The Track Personnel (Non-Construction/Maintenance -Other)	Auditors (inc Safety), Cleaners, Customer Service Agents (inc Platform Coordinators); Environmental Officers, ie. Arborist or Ecologist, Photographers, Operational roles such as Drivers, Network Operations Supervisors; Planners; Property type roles (selected); Safety Officers or Security Guards.
Ballast Unloader	Requires the skills and knowledge to carry out ballast unloading.
Civil Mobile Plant Operator	Mobile plant operators drive and operate heavy machinery used to level, excavate, load and move earth, rock and other material.
Civil Trade Qualified Personnel	A trade qualified person is someone who has completed an apprenticeship and received a certificate of proficiency from the relevant regulatory body.
Earthworker	Supervise the installation and repair rail of earthworks in accordance with safeworking, regulatory and organisational requirements. It includes determining job requirements, undertaking trenching, establishing track formation and minor trackside earthworks, and completing documentation in accordance with specifications.
Rail adjuster	Adjust rail in accordance with safeworking and regulatory requirements and workplace procedures. It includes identifying and determining the requirements for rail adjustment, undertaking rail adjustment, and completing all required documentation.
Rail Bound Plant Operator	Track maintenance machines or items of plant which under normal conditions cannot be removed from the track
Rail Grinder - Rail only	Is a person who grinds rail welds and faults. It includes determining job requirements, grinding weld and/or weld repair, grinding rail to repair surface defects, and completing all required documentation.
Rail Grinder - Switches and Crossings	Is a person who grinds switches and crossings to repair welds and repairing of surface profile of switches and crossings in service.
Rail Labourer	This is a generic labouring role for those working in the Danger Zone on or about the track, ie. Rail Clipping, Rail Laying, Re-Sleepering. Individuals holding this role would normally work under the supervision of specific Track Worker roles, like Track Maintainers.
Rail Lubricator	Requires the skills and knowledge to install and service rail lubrication equipment, install lubrication equipment, servicing and monitoring, removing lubrication equipment, and completing all required documentation
Rail welder (Aluinothermic)	Rail welder encompasses several roles including: aluinothermic, flashbutt, and Hedkote. This category also includes heat & cut materials using oxy-LPG equipment
Rail welder (Electric)	Rail welder encompasses several roles including: aluinothermic, flashbutt, and Hedkote. This category also includes heat & cut materials using oxy-LPG equipment
Rail welder (Flashbutt Welding)	Rail welder encompasses several roles including: aluinothermic, flashbutt, and Hedkote. This category also includes heat & cut materials using oxy-LPG equipment
Road-Rail Plant Operator	A rolling stock vehicle which can operate under its own power, both on and off rail, and which can transition from one mode of operation to the other. Road rail vehicles may or may not have the ability to travel on a public highway, and may or may not be road registered.
Track Certifier	The Track Construction Certifier must be able to identify and measure both scope of work and quality of track construction work. Requires the knowledge and skill to identify the relevant construction specification and determine whether the track meets that specification and standard. It includes knowledge of the Inspection and Test Plan processes and to understand when hold points and witness points are required. In addition the certifier needs to know the maintenance standards for the track so that any outstanding work can be defined with the appropriate train operating restriction until all remedial work is completed.
Track Constructor	Requires the skills and knowledge to implement construction activities including planning work, implementing construction, dealing with maintenance and construction problems.
Track Examiner	Examine track and right of way infrastructure including preparing for examination, examining track and right of way, analysing examination results, and reporting findings.
Track Maintainer	Implement track maintenance, conduct mandatory systematic inspection, examination, condition monitoring and functional checks on the rail infrastructure and take appropriate action to ensure rail infrastructure is in a safe operational condition, including recording and reporting of defective infrastructure to maintain a valid defect recording system.
Turnout Constructor - Concrete	Requires the skills and knowledge to implement turnout construction activities including planning work, implementing construction, dealing with maintenance and construction problems.
Turnout Constructor - Timber	Requires the skills and knowledge to implement turnout construction activities including planning work, implementing construction, dealing with maintenance and construction problems.
Ultrasonic Tester Track - Not QR	Involves test plain rail and field welds using ultrasonic equipment. It includes determining test requirements, conducting testing using hand directed equipment, conducting visual examination and measurement of welds, identifying and classifying defects, and completing all required documentation.
Ultrasonic Tester Turnouts - Not QR	Includes above role requirements as well as: test switches, crossings and other special components in turnouts using ultrasonic and other nondestructive testing equipment. It includes determining test requirements, conducting ultrasonic testing using hand directed equipment, and conducting nondestructive testing.
Vegetation Controller	Controlling vegetation

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Currency Requirements



NOTE: These are to be used as a guide only. If you are unsure which currency period applies to you, please seek clarification from the operator with whom you propose to work. It is the individual's responsibility to ensure that the appropriate currency is held before work is carried out.

Roles with currency requirements	Comments
Rail Bound Plant Operator	TfNSW - 2 years (TLIC2058A)
Rail Grinder	ARTC - 2 years (Grind Rail)
Rail Welder (and other roles that include the following units)	
Heat and cut materials using oxy-LPG equipment for the rail industry	ARTC/Queensland Rail/V_Line - 2 years
Weld rail using aluminothermic welding process -	ARTC/Queensland Rail/V_Line - 2 years TfNSW - 1 year
Carry-out electric welding process to rail	ARTC/Queensland Rail/V_Line - 2 years TfNSW - 1 year
Weld rail using flashbutt welding process carry-out electric welding process to rail	ARTC/Queensland Rail/V_Line - 2 years
Track Certifier and Track Examiner (and other roles that include the following units)	
Check and repair track geometry	ARTC/TfNSW - 2 years
Examine track infrastructure	ARTC/TfNSW - 2 years
Visually inspect track infrastructure	ARTC/TfNSW - 2 years
Adjust rail	ARTC/TfNSW - 2 years
Patrol track	TfNSW – 2 years
Maintain and certify track	TfNSW – 2 years
Maintain and certify turnouts	TfNSW – 2 years
Examine structures	TfNSW – 2 years
Structures assessment	TfNSW – 2 years
Vegetation Controller	Metro/Line - 5 years
Ultrasonic Tester Turnouts	TfNSW - 1 year