

**Recommended Qualification Structure
for
Construction and Civil Engineering Operations
(Construction)
Level 2**

This structure has been recommended by employers and stakeholders from the above occupational area for organisations to form the basis of academic capability and competence outcomes. Qualifications with a competence outcome at the above level must have units derived from the following National Occupational Standards (NOS) and consist of the mandatory/optional groups as stated for the individual option route.

MANDATORY (all option routes)

- VR641 v2 Conform to general workplace health, safety and welfare
- VR642 v1 Conform to productive work practices
- VR360 v5 Install, maintain and remove work area protection and safety equipment

PLUS ONE OF THE FOLLOWING OPTIONAL ROUTES

Construction and Civil Engineering Operations Option Routes:

Modular Pavement Construction Option Route (Total 6)

Mandatory

- VR367 v3 Lay modular pavement
- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment
- VR401 v2 Set out secondary dimensional work control

Laying Kerbs and Channels Option Route (Total 6)

Mandatory

- VR368 v3 Lay preformed kerbs and channels
- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment
- VR401 v2 Set out secondary dimensional work control

Drainage Construction Option Route (Total 6)

Mandatory

- VR370 v5 Install, maintain and remove temporary excavation support
- VR401 v2 Set out secondary dimensional work control
- VR639 v4 Install drainage

Structural Concreting Option Route (Total 6)

Mandatory

- VR225 v2 Place and compact concrete
- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment

Plus one other from the Construction and Civil Engineering Operations option list below

Concreting Option Route (Total 6)

Mandatory

- VR45 v4 Place and finish concrete
- VR640 v3 Erect and strike proprietary formwork

Plus one other from the Construction and Civil Engineering Operations option list below

Construction Operations Option Route (Total 6)

Mandatory

- VR643 v1 Move, handle and store resources

Plus optional (one from the following)

- VR225 v2 Place and compact concrete
- VR639 v4 Install drainage

Plus one other from the Construction and Civil Engineering Operations option list below

General Construction Option Route (Total 4)

Optional (one from the following)

- VR45 v4 Place and finish concrete
- VR639 v4 Install drainage

Excavation and Reinstatement Option Route (Total 7)

Mandatory

- VR172 v2 Reinstatement ground condition
- VR373 v6 Form and finish excavations manually

Plus optional (two from the following)

- VR372 v4 Identify and mark the location of utilities apparatus and sub-structures
- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment
- VR760 v1 Control, direct and guide the operation of plant or machinery
- VR782 v1 Locate and excavate to expose buried utility services

Excavation Option Route (Total 6)

Mandatory

- VR373 v6 Form and finish excavations manually

Plus optional (two from the following)

- VR372 v4 Identify and mark the location of utilities apparatus and sub-structures
- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment
- VR760 v1 Control, direct and guide the operation of plant or machinery
- VR782 v1 Locate and excavate to expose buried utility services

Reinstatement Option Route (Total 5)

Mandatory

- VR172 v2 Reinstatement ground condition

Plus optional (one from the following)

- VR400 v2 Operate powered units, tools or pedestrian plant, machinery or equipment
- VR760 v1 Control, direct and guide the operation of plant or machinery

Construction and Civil Engineering Operations Option List:

VR36 v3	Prepare, mix and distribute concrete and mortars
VR172 v2	Reinstate ground condition
VR225 v2	Place and compact concrete
VR250 v3	Erect and dismantle access/working platforms
VR361 v4	Cut, drill and shape construction related materials
VR362 v4	Lay, place or apply construction related materials
VR363 v4	Prepare and mix construction related materials
VR370 v5	Install, maintain and remove temporary excavation support
VR372 v4	Identify and mark the location of utilities apparatus and sub-structures
VR391 v2	Operate plant or machinery to receive and transport loads
VR394 v2	Operate plant or machinery to compact
VR400 v2	Operate powered units, tools or pedestrian plant, machinery or equipment
VR643 v1	Move, handle and store resources
VR760 v1	Control, direct and guide the operation of plant or machinery
VR763 v1	Install, construct, maintain, dismantle and remove temporary works
VR782 v1	Locate and excavate to expose buried utility services

Unit endorsements for Construction and Civil Engineering Operations Level 2

Where industry requests; qualifications can be endorsed to show an option route and the type of resources and/or activities that relate to the unit. Listed below are the endorsements that can apply for units derived from the following NOS.

NOS	Endorsement
VR172	Three of the following: Backfill (excavated materials) Backfill (new materials) Compact Hard top surfaces Cultivated and grassed areas
VR225	Three of the following: Chute; Elephant's trunk; Skip; Pump; Mono-rail; Manually
VR250	Own area of work (i.e. Construction and Civil Engineering Operations) Plus two or more of the following: Ladders/crawler boards Step ladders/platform steps Proprietary towers Trestle platforms Mobile scaffold towers Proprietary staging/podiums
VR360	One of the following: Protection and safety notices Safety lighting
VR361	Four of the following: Composites Plastic Masonry Vitreous clay Metal Timber and timber based Cementitious Bituminous Geotextiles
VR362	Three of the following: Top soil or subsoil Granular fill Cohesive fill Concrete Cementitious Bituminous Geotextiles

NOS	Endorsement
VR363	Two of the following: Cementitious Resins Adhesives Bonding agents Colourings Waterproof coatings Grouts Pre-mixed compounds
VR367	One of the following: Block paving Brick paving Stone/Concrete setts Flags

NOS	Endorsement
	Natural stone rough cut Natural stone uniformly cut
VR370	One of the following: A proprietary system Open and closed support systems Piling systems Bespoke support systems
VR391	One of the following: Forward tipping dumper wheeled Forward tipping dumper tracked
VR394	Ride-on roller
VR400	One of the following: Generators Pumps Pedestrian operated plant or machines Mixers Compressors Self-powered tools
VR401	Three of the following: Lines Levels Depths Areas Heights Angles
VR639	One of the following: Inspection chambers Surface water systems Foul water systems Surround pipe with specified materials Place backfill to trench using given work instructions for both compacted and free drainage materials
VR760	Operations Guide Banksman
VR763	Own area of work (i.e. Construction and civil engineering operations) Plus four of the following: Protective screens, hoardings and covers Access and egress routes Supports Supporting structures Removal equipment Diverting equipment Site facilities Stabilisation

Note: Where industry requests an Awarding Organisation to further endorse a unit, the Awarding Organisation must first seek approval from the Standards Setting Body to ensure the endorsement is appropriate to the unit.