

## **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

<b>NOS</b>	<b>Endorsement</b>
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 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

NOS	Endorsement
	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.