

# Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction)

## **Specification**

NVQ/Competence-based qualification

First registration June 2013

Issue 2



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This specification is Issue 2. Key changes are listed in the summary table on the next page. We will inform centres of any changes to this issue. The latest issue can be found on the Pearson website: qualifications.pearson.com

This qualification was previously known as:

Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction) (QCF)

The QN remains the same.

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# Summary of Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction) specification Issue 2 changes

Summary of changes made between previous issue and this current issue	Section number
All references to QCF have been removed throughout the specification	
Definition of TQT added	1
Definition of sizes of qualifications aligned to TQT	1
TQT value added	2
GLH range removed and replaced with lowest GLH value for the shortest route through the qualification	2
Reference to credit transfer within the QCF removed	8
QCF references removed from unit titles and unit levels in all units	11
Guided learning definition updated	11

# Contents

Pur	pose of this specification	1
1 qua	Introducing Pearson Edexcel NVQ/Competence-based alifications	2
	What are NVQ/Competence-based qualifications?	2
	Sizes of NVQ/Competence-based qualifications	2
2	Qualification summary and key information	4
3	Qualification rationale	5
	Qualification objectives	5
	Relationship with previous qualifications	5
	Apprenticeships	5
	Progression opportunities	$\epsilon$
	Industry support and recognition	$\epsilon$
	Relationship with National Occupational Standards	6
4	Qualification structure	7
	Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction)	7
5	Programme delivery	17
	Elements of good practice	17
	Learner recruitment, preparation and support	17
	Training and assessment delivery	18
	Employer engagement	19
6	Centre resource requirements	20
7	Access and recruitment	21
	Prior knowledge, skills and understanding	21
	Access to qualifications for learners with disabilities or specific needs	21
8	Assessment	22
	Language of assessment	22
	Internal assessment	22
	Assessment requirements/strategy	23
	Types of evidence	24
	Appeals	25

	Dealing v	vith malpractice	25
	Reasonal	ple adjustments to assessment	25
	Special co	onsideration	25
9	Centre	recognition and approval	27
	Centre re	ecognition	27
	Approvals	s agreement	27
10	Quality	assurance of centres	28
11	Unit fo	rmat	29
	Unit title		29
	Unit refer	rence number	29
	Level		29
	Credit va	lue	29
	Guided le	earning hours	29
	Unit sum	mary	29
	Unit asse	ssment requirements/evidence requirements	29
	Learning	outcomes	30
	Assessme	ent criteria	30
	Unit 1:	Conforming to General Health, Safety and Welfare in the Workplace	31
	Unit 2:	Conforming to Productive Working Practices in the Workplace	36
	Unit 3:	Establishing Work Area Protection and Safety in the Workplace	40
	Unit 4:	Segregating the Area for Highways Works in the Workplace	47
	Unit 5:	Laying Modular Pavement in the Workplace	53
	Unit 6:	Setting Out Secondary Dimensional Work Control in the Workplace	60
	Unit 7:	Moving, Handling and Storing Resources in the Workplace	67
	Unit 8:	Installing Drainage in the Workplace	73
	Unit 9:	Locating and Protecting Utilities Apparatus and Substructures in the Workplace	81
	Unit 10:	Excavating Holes and Trenches – Manual Digging in the Workplace	88
	Unit 11:	Reinstating Excavation and Highway Surfaces in the Workplace	95
	Unit 12:	Laying Flexible Pavements in the Workplace	102
	Unit 13:	Pouring Concrete to Form Structures in the Workplace	108
	Unit 14:	Erecting and Striking Proprietary Formwork in the Workplace	115

	Unit 15:	Placing and Finishing Non-specialist Concrete in the Workplace	122
	Unit 16:	Laying Kerbs and Channels in the Workplace	128
	Unit 17:	Reinstating Ground Condition in the Workplace	134
	Unit 18:	Erecting and Dismantling Access/Working Platforms in the Workplace	140
	Unit 19:	Installing Street Ironwork in the Workplace	148
	Unit 20:	Providing Temporary Excavation Support in the Workplace	154
	Unit 21:	Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace	161
	Unit 22:	Preparing and Operating Ride-on Rollers to Compact Materials in the Workplace	169
	Unit 23:	Preparing to and Directing and Guiding the Movement of Vehicles, Plant or Machinery in the Workplace	176
	Unit 24:	Preparing for, and Arranging and Securing Plant for Transportation in the Workplace	187
	Unit 25:	Preparing and Operating Powered Units, Tools or Pedestrian Plant, Machinery or Equipment in the Workplace	196
	Unit 26:	Slinging and Hand Signalling the Movement of Suspended Loads in the Workplace	203
12	Further	information and useful publications	213
13	Profess	ional development and training	214
14	Contact	t us	216
Anı	nexe A: (	Consolidated Assessment Strategy for	
		on and the Built Environment	217

## Purpose of this specification

This specification sets out:

- the objectives of the qualification
- any other qualifications that a learner must have completed before taking the qualification
- any prior knowledge, skills or understanding which the learner is required to have before taking the qualification
- the combination of units that a learner must have completed before the qualification will be awarded and any pathways
- any other requirements that a learner must have satisfied before they will be assessed or before the qualification will be awarded
- the knowledge, skills and understanding that will be assessed as part of the qualification
- the method of any assessment and any associated requirements relating to it
- the criteria against which a learner's level of attainment will be measured (such as assessment criteria)
- assessment requirements and/or evidence requirements required as specified by the relevant Sector Skills Council/Standards Setting Body
- assessment requirements/strategy as published by the relevant Sector Skills Council/Standards Setting Body
- the Apprenticeship Framework in which the qualification is included, where appropriate.

## 1 Introducing Pearson Edexcel NVQ/Competence-based qualifications

#### What are NVQ/Competence-based qualifications?

National Vocational Qualifications (NVQs)/Competence-based qualifications are work-based qualifications that give learners the opportunity to develop and demonstrate their competence in the area of work or job role to which the qualification relates.

NVQs/Competence-based qualifications are based on recognised occupational standards for the appropriate sector. Occupational standards define what employees, or potential employees, must be able to do and know, and how well they should undertake work tasks and work roles. These standards are written in broad terms to enable employers and providers to apply them to a wide range of related occupational areas.

NVQs/Competence-based qualifications are outcomes-based with no fixed learning programme, therefore allowing flexible delivery to meet the individual learner's needs. At Level 2 and above, these qualifications are recognised as approved training and development courses for employees that have been in the workplace for some time or as a way of inducting, training and developing new entrants into the workplace. Qualifications at Level 1 can be used in Traineeships, which enables progression to entry level employment or to Apprenticeship programmes.

Learners will work towards their qualification in the workplace or in settings that replicate the working environment as specified in the assessment requirements. Colleges, training centres and/or employers can offer these qualifications as long as they have access to appropriate physical and human resources and have the necessary quality assurance systems in place.

#### Sizes of NVQ/Competence-based qualifications

For all regulated qualifications, Pearson specify a total number of hours that it is estimated learners will require to complete and show achievement for the qualification – this is the Total Qualification Time (TQT). The TQT value indicates the size of a qualification.

Within the TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

As well as TQT and GLH, qualifications can also have a credit value – equal to one tenth of TQT, rounded to the nearest whole number.

TQT and credit values are assigned after consultation with users of the qualifications.

NVQ/Competence-based qualifications are available in the following sizes:

- Award a qualification with a TQT value of 120 or less (equivalent to a range of 1–12 credits)
- Certificate a qualification with a TQT value in the range of 121–369 (equivalent to a range of 13–36 credits)
- Diploma a qualification with a TQT value of 370 or more (equivalent to 37 credits and above).

## 2 Qualification summary and key information

Qualification title	Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction)
Qualification Number (QN)	601/6179/6
Regulation start date	15/05/2015
Operational start date	01/06/2015
Approved age ranges	16-18
	19+
	Please note that sector-specific requirements or regulations may prevent learners of a particular age from embarking on this qualification. Please refer to the assessment requirements/strategy.
Credit value	41
Assessment	Portfolio of Evidence (internal assessment)
Total Qualification Time (TQT)	410
Guided learning hours	136
Grading information	The qualification and units are graded pass/fail.
Entry requirements	No prior knowledge, understanding, skills or qualifications are required before learners register for this qualification. However, centres must follow the Pearson Access and Recruitment policy (see Section 7, Access and Recruitment).
Funding	Qualifications eligible and funded for post-16- year-olds can be found on the funding Hub. The Skills Funding Agency also publishes a funding catalogue that lists the qualifications available for 19+ funding.

Centres will need to use the Qualification Number (QN) when they seek public funding for their learners. As well as a QN, each unit within a qualification has a unit reference number (URN).

The qualification title, unit titles and QN will appear on each learner's final certificate. Centres should tell learners this when recruiting them and registering them with Pearson. There is more information about certification in our *UK Information Manual*, available on our website.

## 3 Qualification rationale

#### **Qualification objectives**

The Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction) is for learners who work in, or who want to work in, the construction and built environment sector. The qualification is appropriate for employees in the construction and built environment sector working across a broad range of areas. It is designed to assess occupational competence in the workplace where learners are required to demonstrate skills and knowledge to a level required in the construction industry.

The qualification gives learners the opportunity to:

- develop and demonstrate competence in the construction and built environment sector, such as civil engineering operatives, concreters, construction operatives and highways maintenance/road workers
- develop technical skills and knowledge and understanding related to the specified job roles in construction and the built environment
- have existing skills recognised
- achieve a nationally-recognised Level 2 qualification
- develop personal growth and engagement in learning.

#### Relationship with previous qualifications

This qualification is a direct replacement for the Pearson Edexcel Level 2 NVQ in Highways Maintenance (Construction) (QCF), which has expired.

#### **Apprenticeships**

ConstructionSkills includes the Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction) as a component for the Intermediate Apprenticeship in Construction Civil Engineering.

#### **Progression opportunities**

This qualification allows learners to demonstrate competence in highways maintenance at a level required by the construction and built environment industry. Learners can progress across the level and size of the construction and the built environment competence and knowledge qualifications such as Civil Engineering Technician qualifications, or NVQs in Occupational Work Supervision or Construction Site Supervision. Alternatively learners can progress into general into other occupational areas such as team leading and management.

#### **Industry support and recognition**

This qualification is supported by ConstructionSkills, the Sector Skills Council for construction and the built environment.

#### **Relationship with National Occupational Standards**

This qualification is based on the National Occupational Standards (NOS), which were set and designed by ConstructionSkills.

## 4 Qualification structure

#### Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction)

The learner will need to meet the requirements outlined in the table below before the qualification can be awarded. Learners may choose to complete additional credits from Group AD, however these will not count towards the minimum credit required for the qualification.

This qualification provides the following eight pathways:

Minimum number of credits that must be achieved	41
Minimum number of credits that must be achieved at Level 2 or above	39
Number of mandatory credits that must be achieved for all pathways	5
Number of optional credits that must be achieved for all pathways	10
Pathway 1 – Modular Pavement Construction	26
Pathway 2 – Drainage Construction	26
Pathway 3 – Excavation and Reinstatement	34
Pathway 4 – Flexible Pavement Construction	26
Pathway 5 – Structural Concreting	40
Pathway 6 – Non-Structural Concreting	26
Pathway 7 – Laying Kerbs and Channels	26
Pathway 8 – General Building Operations	35

Unit	Unit reference number	Mandatory units for all pathways	Level	Credit	Guided learning hours
1	A/503/1170	Conforming to General Health, Safety and Welfare in the Workplace	1	2	7
2	J/503/1169	Conforming to Productive Working Practices in the Workplace	2	3	10
Unit	Unit reference number	Optional units for all pathways	Level	Credit	Guided learning hours
3	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	2	10	33
4	K/503/9622	Segregating the Area for Highways Works in the Workplace	2	12	40

Unit	Unit reference number	Pathway 1 (Modular Pavement Construction)	Level	Credit	Guided learning hours
5	J/503/9627	Laying Modular Pavement in the Workplace	2	14	47
6	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
Unit	Unit reference number	Pathway 2 (Drainage Construction)	Level	Credit	Guided learning hours
6	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23
8	Y/504/6775	Installing Drainage in the Workplace	2	19	63
Unit	Unit reference number	Pathway 3 (Excavation and Reinstatement)	Level	Credit	Guided learning hours
9	A/503/9639	Locating and Protecting Utilities Apparatus and Sub-structures in the Workplace	2	12	40
10	Y/503/9650	Excavating Holes and Trenches – Manual Digging in the Workplace	2	10	33
11	H/503/9442	Reinstating Excavation and Highway Surfaces in the Workplace	2	12	40
Unit	Unit reference number	Pathway 4 (Flexible Pavement Construction)	Level	Credit	Guided learning hours
6	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
12	Y/503/9440	Laying Flexible Pavements in the Workplace	2	14	47

Unit	Unit reference number	Pathway 5 (Structural Concreting)	Level	Credit	Guided learning hours
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
13	M/503/9637	Pouring Concrete to Form Structures in the Workplace	2	18	60
14	R/503/9663	Erecting and Striking Proprietary Formwork in the Workplace	2	17	57
Unit	Unit reference number	Pathway 6 (Non-structural Concreting)	Level	Credit	Guided learning hours
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
15	R/504/6774	Placing and Finishing Non-specialist Concrete in the Workplace	2	21	70
Unit	Unit reference number	Pathway 7 (Laying Kerbs and Channels)	Level	Credit	Guided learning hours
6	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
16	D/503/9634	Laying Kerbs and Channels in the Workplace	2	14	47
Unit	Unit reference number	Pathway 8 (General Building Operations)	Level	Credit	Guided learning hours
5	J/503/9627	Laying Modular Pavement in the Workplace	2	14	47
6	J/506/4673	Setting Out Secondary Dimensional Work Control in the Workplace	2	7	23
16	D/503/9634	Laying Kerbs and Channels in the Workplace	2	14	47

Unit	Unit reference number	Additional Unit Group	Level	Credit	Guided learning hours
7	F/503/1171	Moving, Handling and Storing Resources in the Workplace	2	5	17
11	H/503/9442	Reinstating Excavation and Highway Surfaces in the Workplace	2	12	40
14	A/600/8157	Reinstating Ground Condition in the Workplace	2	12	40
18	D/600/8281	Erecting and Dismantling Access/Working Platforms in the Workplace	2	8	27
19	M/503/9623	Installing Street Ironwork in the Workplace	2	9	30
20	K/503/9636	Providing Temporary Excavation Support in the Workplace	2	15	50
21	J/506/4642	Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace	2	16	53
22	R/506/4661	Preparing and Operating Ride-one Rollers to Compact Materials in the Workplace	2	16	53
23	A/506/4668	Preparing to and Directing and Guiding the Movement of Vehicles, Plant or Machinery in the Workplace	2	12	40
24	F/506/4669	Preparing for, and Arranging and Securing Plant or Machinery for Transportation in the Workplace	2	16	53
25	F/506/4672	Preparing and Operating Powered Units, Tools or Pedestrian Plant, Machinery or Equipment in the Workplace	2	7	23
26	R/506/3929	Slinging and Hand Signalling the Movement of Suspended Loads in the Workplace	2	10	33

# Unit endorsements for the Pearson Edexcel Level 2 NVQ Diploma in Construction Operations and Civil Engineering Services – Highways Maintenance (Construction)

#### Unit 3: Establishing Work Area Protection and Safety in the Workplace

The following endorsement is required (i.e. own area of work):

Highways Maintenance.

Plus one of the following endorsements:

- Modular pavement
- Laying kerbs and channels
- Drainage construction
- Structural concrete
- Non-structural concrete
- Excavation and reinstatement
- General building operations
- Flexible pavement construction.

#### Unit 4: Segregating the Area for Highways Works in the Workplace

The following endorsement is required (i.e. own area of work):

Highways Maintenance.

#### **Unit 5: Laying Modular Pavement in the Workplace**

The following endorsement is required (i.e. own area of work):

Highways Maintenance.

Plus one of the following endorsements:

- Block paving
- Brick paving
- Stone/Concrete setts
- Flags
- Natural stone rough cut
- Natural stone uniformly cut.

#### Unit 6: Setting Out Secondary Dimensional Work Control in the Workplace

Three of the following endorsements are required:

- Lines
- Levels
- Depths
- Areas
- Heights
- Angles.

#### Unit 8: Installing Drainage in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways Maintenance.

Plus two of the following endorsements:

- Pipework
- Inspection chambers
- Surface water systems
- Foul water systems.

## Unit 9: Locating and Protecting Utilities Apparatus and Sub-structures in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways maintenance.

#### Unit 10: Excavating Holes and Trenches – Manual Digging in the Workplace

The following endorsement is required (i.e. own area of work):

Highways maintenance.

#### Unit 11: Reinstating Excavation and Highway Surfaces in the Workplace

The following endorsement is required (i.e. own area of work):

Highways maintenance.

Plus two of the following endorsements:

- Sub-grades, sub-bases, road-bases
- Cold lay bituminous
- Warm lay bituminous
- Hot lay bituminous
- Concrete
- Modular.

#### Unit 13: Pouring Concrete to Form Structures in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways maintenance.

Plus two of the following endorsements:

- Chute
- Elephant's trunk
- Skip
- Pump
- Mono-rail.

#### Unit 14: Reinstating Ground Condition in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways maintenance.

#### Unit 15: Placing and Finishing Non-specialist Concrete in the Workplace

Three of the following endorsements are required:

- Concrete slabs/bases
- Form slab edging
- Position reinforcement
- Form surface finish.

#### Unit 16: Laying Kerbs and Channels in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways maintenance.

Plus one of the following endorsements:

- Kerbs
- Channels.

## Unit 18: Erecting and Dismantling Access/Working Platforms in the Workplace

The following endorsement is required (i.e. own area of work):

Highways Maintenance.

Plus two of the following endorsements:

- Ladders/crawler boards
- Stepladders/platform steps
- Proprietary towers
- Trestle platforms
- Mobile scaffold towers
- Proprietary staging/podiums.

#### Unit 19: Installing Street Ironwork in the Workplace

The following endorsement is required (i.e. own area of work):

Highways Maintenance.

Plus one of the following endorsements:

- New
- Reinstatement.

#### Unit 20: Providing Temporary Excavation Support in the Workplace

The following endorsement is required (i.e. own area of work):

• Highways Maintenance.

Plus two of the following endorsements:

- Skeleton
- Open and close boarding
- Drag box
- Trench box
- Coffer dam
- Diaphragm wall
- Secant support.

# Unit 21: Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace

One of the following endorsements is required:

- Forward tipping dumper wheeled
- Forward tipping dumper tracked.

# Unit 23: Preparing to and Directing and Guiding the Movement of Vehicles, Plant or Machinery in the Workplace

Two of the following endorsements are required:

- Drive and operate
- Direct and guide movement
- · Direct and guide operations
- Slinger/signaller
- Raised loads.

Plus one or more of the following endorsements:

- Loader/securer Slinger Signaller non STGO, non LGV
- Loader/securer Slinger Signaller non STGO, LGV
- Loader/securer Slinger Signaller STGO
- Loader/securer movement guide marshaller non STGO, non LGV
- Loader/securer movement guide marshaller non STGO, LGV
- Loader/securer movement guide marshaller STGO
- Loader/securer plant driver non STGO, non LGV
- Loader/securer plant driver non STGO, LGV
- Loader/securer plant driver STGO.

# Unit 25: Preparing and Operating Powered Units, Tools or Pedestrian Plant, Machinery or Equipment in the Workplace

- One of the following endorsements is required:
- Generators
- Pumps
- · Pedestrian operated plant or machines
- Mixers
- Compressors
- Self-powered tools.

# Unit 26: Slinging and Hand Signalling the Movement of Suspended Loads in the Workplace

The following endorsement is required (i.e. own area of work):

• Slinger signaller – highways maintenance only.

## 5 Programme delivery

Centres are free to offer this qualification using any mode of delivery (for example full time, part time, evening only, distance learning) that meets learners' needs. Learners must be in employment or working with a training provider on a programme so that they can develop and demonstrate the occupational competence required.

Whichever mode of delivery is used, centres must make sure that learners have access to specified resources and to the sector specialists delivering and assessing the units. Centres must adhere to the Pearson policies that apply to the different modes of delivery. Our policy on *Collaborative arrangements for the delivery of vocational qualifications* can be found on our website.

There are various approaches to delivering a successful competence-based qualification. The section below outlines elements of good practice that centres can adopt in relation to learner recruitment, preparation and support, training and assessment delivery, and employer engagement.

#### **Elements of good practice**

#### Learner recruitment, preparation and support

Good practice in relation to learner recruitment, preparation and support includes the following.

- Providing initial advice and guidance, including work tasters, to potential learners to give them an insight into the relevant industry and the learning programme.
- Using a range of appropriate and rigorous selection methods to ensure that learners are matched to the programme best suited to their needs.
- Carrying out a thorough induction for learners to ensure that they completely understand the programme and what is expected of them. The induction should include, for example, the requirements of the programme, an initial assessment of current competency levels, assessment of individual learning styles, identification of training needs, an individual learning plan, details of training delivery and the assessment process. It is good practice to involve the employer in the induction process. This helps employers to understand what will be taking place during the programme and enables them to start building a relationship with the centre to support the effective delivery of the programme.
- Keeping in regular contact with the learner to keep them engaged and motivated, and ensuring that there are open lines of communication between the learner, the assessor, the employer and teaching staff.

#### **Training and assessment delivery**

Good practice in relation to training and assessment delivery includes the following.

- Offering flexible delivery and assessment to meet the needs of the employer and learner, through the use of a range of approaches, for example virtual learning environments (VLEs), online lectures, video, printable online resources, virtual visits, webcams for distance training, e-portfolios.
- Planning opportunities for the development and practising of skills on the job.
   On-the-job training presents an excellent opportunity to develop the learner's
   routine expertise, resourcefulness, craftspersonship and business-like attitude.
   It is therefore important that there is intentional structuring of practice and
   guidance to supplement the learning and development provided through
   engagement in everyday work activities. Learners need to have structured time
   to learn and practice their skills separate from their everyday work activities.
   Teaching and learning methods, such as coaching, mentoring, shadowing,
   reflective practice, collaboration and consultation, could be used in this
   structured on-the-job learning.
- Integrating the delivery and assessment of Personal, Learning and Thinking Skills (PLTS) and Employment Rights and Responsibilities (ERR) if the programme is being delivered as a part of an Apprenticeship. It is important that learners understand the relevance of these skills in the workplace and are aware of when and how they will be developing them.
- Developing an holistic approach to assessment by matching evidence to different assessment criteria, learning outcomes and units as appropriate, thereby reducing the assessment burden on learners and assessors. It is good practice to draw up an assessment plan that aligns the units with the learning process and the acquisition of knowledge and skills, and that indicates how and when the units will be assessed.
- Discussing and agreeing with the learner and employer suitable times, dates and work areas where assessment will take place. Learners and employers should be given regular and relevant feedback on performance and progress.

#### **Employer engagement**

Good practice in relation to employer engagement includes the following.

- Communicating with employers at the start of the programme to understand their business context and requirements so that the programme can be tailored to meet their needs.
- Working with the employer to ensure that learners are allocated a mentor in the workplace to assist them in the day-to-day working environment and to act as a contact for the assessor/tutor.
- Helping the employer to better understand their role in the delivery of the programme. It is important that employers understand that sufficient and relevant work must be given to learners in order to provide a culture of learning and to ensure that they are given every opportunity to participate in aspects of continuous professional development (CPD).

## **6** Centre resource requirements

As part of the approval process, centres must make sure that the resource requirements below are in place before offering the qualification.

- Centres must have the appropriate physical resources to support delivery and assessment of the qualification. For example, a workplace in line with industry standards, or a Realistic Working Environment (RWE), where permitted, as specified in the assessment requirements/strategy for the sector, equipment, IT, learning materials, teaching rooms.
- Where RWE is permitted, it must offer the same conditions as the normal, day-to-day working environment, with a similar range of demands, pressures and requirements for cost-effective working.
- Centres must meet any specific human and physical resource requirements outlined in the assessment requirements/strategy in *Annexe A*. Staff assessing learners must meet the occupational competence requirements within the overarching assessment requirements/strategy for the sector.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have appropriate health and safety policies, procedures and practices in place for the delivery and assessment of the qualification.
- Centres must deliver the qualification in accordance with current equality legislation. For further details on Pearson's commitment to the Equality Act 2010, please see Section 7, Access and recruitment. For full details on the Equality Act 2010, please go to www.legislation.gov.uk

#### 7 Access and recruitment

Our policy on access to our qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres must ensure that their learner recruitment process is conducted with integrity. This includes ensuring that applicants have appropriate information and advice about the qualification to ensure that it will meet their needs.

Centres should review applicants' prior qualifications and/or experience, considering whether this profile shows that they have the potential to achieve the qualification.

#### Prior knowledge, skills and understanding

No prior knowledge, understanding, skills or qualifications are required before learners register for this qualification.

# Access to qualifications for learners with disabilities or specific needs

Equality and fairness are central to our work. Pearson's Equality Policy requires all learners to have equal opportunity to access our qualifications and assessments and that our qualifications are awarded in a way that is fair to every learner.

We are committed to making sure that:

- learners with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve from undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

For learners with disabilities and specific needs, the assessment of their potential to achieve the qualification must identify, where appropriate, the support that will be made available to them during delivery and assessment of the qualification. Please see the information regarding reasonable adjustments and special consideration in *Section 8, Assessment*.

#### 8 Assessment

To achieve a pass for the full qualification, the learner must achieve all the units required in the stated qualification structure.

#### Language of assessment

Assessment of the internally assessed units may be in English, Welsh or Irish. If assessment is to be carried out in either Welsh or Irish then centres must inform Pearson at the point of learner registration.

A learner taking the qualification may be assessed in British or Irish Sign Language where it is permitted for the purpose of reasonable adjustment.

Further information on the use of language in qualifications is available in our policy document *Use of languages in qualifications policy,* available on our website.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*. Both documents are on our website.

#### **Internal assessment**

The units in this qualification are assessed through an internally and externally quality assured Portfolio of Evidence made up of evidence gathered during the course of the learner's work.

Each unit has specified learning outcomes and assessment criteria. To pass each unit the learner must:

- achieve all the specified learning outcomes
- satisfy all the assessment criteria by providing sufficient and valid evidence for each criterion
- prove that the evidence is their own.

The learner must have an assessment record that identifies the assessment criteria that have been met. The assessment record should be cross-referenced to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment. Suitable centre documentation should be used to form an assessment record.

It is important that the evidence provided to meet the assessment criteria for the unit and learning outcomes is:

**Valid** relevant to the standards for which competence is claimed

**Authentic** produced by the learner

**Current** sufficiently recent to create confidence that the same skill,

understanding or knowledge persist at the time of the claim

**Reliable** indicates that the learner can consistently perform at this level

**Sufficient** fully meets the requirements of the standards.

Learners can provide evidence of occupational competence from:

- current practice where evidence is generated from a current job role
- a **programme of development** where evidence comes from assessment opportunities built into a learning programme. The evidence provided must meet the requirements of the Sector Skills Council's assessment requirements/strategy.
- the Recognition of Prior Learning (RPL) where a learner can demonstrate that they can meet a unit's assessment criteria through knowledge, understanding or skills they already possess without undertaking a course of development. They must submit sufficient, reliable, authentic and valid evidence for assessment. Evidence submitted that is based on RPL should give the centre confidence that the same level of skill, understanding and knowledge exists at the time of claim as existed at the time the evidence was produced. RPL is acceptable for accrediting a unit, several units, or a whole qualification. Further guidance is available in our policy document Recognition of Prior Learning Policy and Process, available on our website
- a combination of these.

#### **Assessment requirements/strategy**

The assessment requirements/strategy for this qualification is included in *Annexe A*. It sets out the overarching assessment principles and the framework for assessing the units to ensure that the qualification remains valid and reliable. It has been developed by ConstructionSkills in partnership with employers, training providers, awarding organisations and the regulatory authorities.

#### Types of evidence

To achieve a unit, the learner must gather evidence that shows that they have met the required standard specified in the assessment criteria, Pearson's quality assurance arrangements (please see *Section 10*, *Quality assurance of centres*) and the requirements of the assessment requirements/strategy given in *Annexe A*.

In line with the assessment requirements/strategy, evidence for internally assessed units can take a variety of forms as indicated below:

- direct observation of the learner's performance by their assessor (O)
- outcomes from oral or written questioning (Q&A)
- products of the learner's work (P)
- personal statements and/or reflective accounts (RA)
- outcomes from simulation (S)
- professional discussion (PD)
- authentic statements/witness testimony (WT)
- expert witness testimony (EWT)
- evidence of Recognition of Prior Learning (RPL).

Learners can use the abbreviations in their portfolios for cross-referencing purposes.

Learners can also use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is not necessary for learners to have each assessment criterion assessed separately. They should be encouraged to reference evidence to the relevant assessment criteria. However, the evidence provided for each unit must clearly reference the unit being assessed. Evidence must be available to the assessor, the internal verifier and the Pearson standards verifier.

Any specific evidence requirements for a unit are given in the *Assessment* section of the unit.

Further guidance on the requirements for centre quality assurance and internal verification processes is available on our website at. Please see *Section 12, Further information and useful publications* for details.

#### **Appeals**

Centres must have a policy for dealing with appeals from learners. Appeals may relate to incorrect assessment decisions or unfairly conducted assessment. The first step in such a policy is a consideration of the evidence by a Lead Internal Verifier or other member of the programme team. The assessment plan should allow time for potential appeals after learners have been given assessment decisions.

Centres must document all learners' appeals and their resolutions. Further information on the appeals process can be found in the document *Enquiries and appeals about Pearson vocational qualifications policy*, which is available on our website.

#### **Dealing with malpractice**

Centres must have a policy for dealing with malpractice by learners. This policy must follow the *Pearson Assessment Malpractice Policy*, which is available on our website. Centres must report malpractice to Pearson, particularly if any units have been subject to quality assurance or certification.

#### Reasonable adjustments to assessment

Centres are able to make adjustments to assessments to take account of the needs of individual learners in line with the guidance given in the document *Pearson Supplementary Guidance for Reasonable Adjustment and Special Consideration in Vocational Internally Assessed Units*. In most instances, adjustments can be achieved by following the guidance; for example allowing the use of assistive technology or adjusting the format of the evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. Any reasonable adjustment must reflect the normal learning or working practice of a learner in a centre or working within the occupational area.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*.

Both documents are on our website.

#### **Special consideration**

Centres must operate special consideration in line with the guidance given in the document *Pearson Supplementary Guidance for Reasonable Adjustment and Special Consideration in Vocational Internally Assessed Units*. Special consideration may not be applicable in instances where:

- assessment requires the demonstration of practical competence
- criteria have to be met fully
- units/qualifications confer licence to practice.

Centres cannot apply their own special consideration; applications for special consideration must be made to Pearson and can be made only on a case-by-case basis. A separate application must be made for each learner and certification claims must not be made until the outcome of the application has been received.

Further information on special consideration can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational qualifications*.

Both of the documents mentioned above are on our website.

## 9 Centre recognition and approval

#### **Centre recognition**

Centres that have not previously offered Pearson vocational qualifications need to apply for and be granted centre recognition and approval as part of the process for approval to offer individual qualifications.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by a new qualification and the conditions for automatic approval are met.

Guidance on seeking approval to deliver Pearson vocational qualifications is available at qualifications.pearson.com.

#### **Approvals agreement**

All centres are required to enter into an approval agreement, which is a formal commitment by the head or principal of a centre, to meet all the requirements of the specification and any associated codes, conditions or regulations. Pearson will act to protect the integrity of the awarding of qualifications. If centres do not comply with the agreement, this could result in the suspension of certification or withdrawal of approval.

## 10 Quality assurance of centres

Quality assurance is at the heart of vocational qualifications. Centres are required to declare their commitment to ensuring quality and to giving learners appropriate opportunities that lead to valid and accurate assessment outcomes.

Centres must follow quality assurance requirements for standardisation of assessors and internal verifiers and the monitoring and recording of assessment processes. Pearson uses external quality assurance procedures to check that all centres are working to national standards. It gives us the opportunity to identify and provide support to safeguard certification and quality standards. It also allows us to recognise and support good practice.

Centres offering competence-based qualifications will usually receive two standards verification visits per year (a total of two days per year). The exact frequency and duration of standards verifier visits will reflect the centre's performance, taking account of the:

- number of assessment sites
- number and throughput of learners
- number and turnover of assessors
- number and turnover of internal verifiers.

For centres offering a full Pearson BTEC Apprenticeship (i.e. all elements of the Apprenticeship are delivered with Pearson through registration of learners on a BTEC Apprenticeship framework) a single standards verifier will normally be allocated to verify all elements of the BTEC Apprenticeship programme. Centres should make use of our one-click learner registration to access this facility. If a centre is also offering stand-alone NVQs/Competence-based qualifications in the same sector as a full BTEC Apprenticeship, the same standards verifier should be allocated. If a centre is also offering stand-alone BTEC qualifications in the same sector as a full BTEC Apprenticeship, a different quality assurance model applies.

In order for certification to be released, confirmation is required that the National Occupational Standards (NOS) for assessment and verification, and for the specific occupational sector are being met consistently.

For further details, please go to the NVQ Quality Assurance Centre Handbook, the BTEC Apprenticeships Quality Assurance Handbook and the Pearson Edexcel NVQs, SVQs and competence-based qualifications – Delivery Requirements and Quality Assurance Guidance on our website.

### 11 Unit format

Each unit has the following sections.

#### **Unit title**

This is the formal title of the unit that will appear on the learner's certificate .

#### Unit reference number

Each unit is assigned a unit reference number that appears with the unit title on the Register of Regulated Qualifications.

#### Level

All units and qualifications have a level assigned to them. The level assigned is informed by the level descriptors by Ofqual, the qualifications regulator.

#### **Credit value**

All units have a credit value. When a learner achieves a unit, they gain the specified number of credits. The minimum credit value is 1 and credits can be awarded in whole numbers only.

### **Guided learning hours**

Guided Learning Hours (GLH) is the number of hours that a centre delivering the qualification needs to provide. Guided learning means activities that directly or immediately involve tutors and assessors in teaching, supervising, and invigilating learners, for example lectures, tutorials, online instruction and supervised study.

### **Unit summary**

This summarises the purpose of the unit and the learning the unit offers.

#### Unit assessment requirements/evidence requirements

The SSC/B set the assessment/evidence requirements. Learners must provide evidence according to each of the requirements stated in this section.

### **Learning outcomes**

The learning outcomes set out what a learner will know, understand or be able to do as the result of a process of learning.

#### **Assessment criteria**

Descriptions of the requirements a learner is expected to meet to demonstrate that a learning outcome has been achieved.

Unit 1: Conforming to General

Health, Safety and

Welfare in the

Workplace

Unit reference number: A/503/1170

Level: 1

Credit value: 2

**Guided learning hours: 7** 

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to general health, safety and welfare in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Learning outcomes		Asses	Assessment criteria		Portfolio reference	Date
1	Comply with all workplace health, safety and welfare	1.1	Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area			
	legislation requirements	1.2	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements			
		1.3	Comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment			
		1.4	State why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
		<ul><li>respiratory protective equipment (RPE)</li><li>local exhaust ventilation (LEV)</li></ul>	respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		1.5	State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions			
		1.6	State which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		1.7	State why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area			
		1.8	State how to comply with control measures that have been identified by risk assessments and safe systems of work			
2	Recognise hazards associated with the	2.1	Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures			
	workplace that have not been previously controlled and	2.2	List typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities			
	report them in	2.3	List the current Health and Safety Executive top ten safety risks			
	accordance with organisational procedures	2.4	List the current Health and Safety Executive top five health risks			
		2.5	State how changing circumstances within the workplace could cause hazards			
		2.6	State the methods used for reporting changed circumstances, hazards and incidents in the workplace			
3	Comply with organisational	3.1	Interpret and comply with given instructions to maintain safe systems of work and quality working practices			
	policies and procedures to contribute to	3.2	Contribute to discussions by offering/providing feedback relating to health, safety and welfare			
	health, safety and welfare	3.3	Contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures			
		3.4	Safely store health and safety control equipment in accordance with given instructions			
		3.5	Dispose of waste and/or consumable items in accordance with legislation			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		3.6	State the organisational policies and procedures for health, safety and welfare, in relation to:			
			dealing with accidents and emergencies associated with the work and environment			
			methods of receiving or sourcing information			
			reporting			
			stopping work			
			evacuation			
			fire risks and safe exit procedures			
			consultation and feedback			
		3.7	State the appropriate types of fire extinguishers relevant to the work			
		3.8	State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance			
4	Work responsibly to contribute to	4.1	Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare			
	workplace health, safety and welfare whilst carrying out	4.2	State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to:			
	work in the relevant		recognising when to stop work in the face of serious and imminent danger to self and/or others			
	occupational area		contributing to discussions and providing feedback			
			reporting changed circumstances and incidents in the workplace			
			complying with the environmental requirements of the workplace			

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
	4.3	Give examples of how the behaviour and actions of individuals could affect others within the workplace			
5 Comply with and support all organisational security arrangements and approved procedures	5.1	Provide appropriate support for security arrangements in accordance with approved procedures:  during the working day  on completion of the day's work  for unauthorised personnel (other operatives and the general public)  theft  State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resource			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 2: Conforming to

**Productive Working** 

**Practices in the** 

Workplace

Unit reference number: J/503/1169

Level: 2

Credit value: 3

**Guided learning hours: 10** 

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to productive working practices in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Communicate with others to establish productive work	1.1	Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively			
	practices	1.2	Describe the different methods of communicating with line management, colleagues and customers			
		1.3	Describe how to use different methods of communication to ensure that the work carried out is productive			
2	Follow organisational procedures to plan the sequence of work	2.1	Interpret relevant information from organisational procedures in order to plan the sequence of work			
		2.2	Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively			
		2.3	Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to:			
			using resources for own and other's work requirements			
			allocating appropriate work to employees			
			organising the work sequence			
			reducing carbon emissions			
		2.4	Describe how to contribute to zero/low carbon work outcomes within the built environment			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
3	Maintain relevant records in	3.1	Complete relevant documentation according to the occupation as required by the organisation			
	accordance with the organisational procedures	3.2	Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to:			
	procedures		job cards			
			worksheets			
			material/resource lists			
			time sheet			
		3.3	Explain the reasons for ensuring documentation is completed clearly and within given timescales			
4	Maintain good working relationships when conforming to productive working practices	4.1	Carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships			
		4.2	Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others			
		4.3	Describe how to maintain good working relationships, in relation to:			
			individuals			
			customer and operative			
			operative and line management			
			own and other occupations			
		4.4	Describe why it is important to work effectively with line management, colleagues and customers			

Le	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		4.5	Describe how working relationships could have an effect on productive working			
		4.6	Describe how to apply principles of equality and diversity when communicating and working with others			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

#### Unit 3: **Establishing Work Area**

**Protection and Safety** 

in the Workplace

**Unit reference number:** T/503/9560

Level: 2

Credit value: 10

**Guided learning hours:** 33

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in establishing work area protection and safety in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Plus against one other endorsement.

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, plans, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information			
	work and resources when establishing work area	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	protection and safety	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, plans, risk assessments, method statements, specifications, schedules, site inspection reports, manufacturers' information, regulations and official guidance associated with protecting work areas</li> </ul>			
2	Know how to comply with relevant legislation and official guidance when establishing work area protection and safety	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:  • in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when establishing work area protection and safety	3.1	Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when establishing work area protection and safety			
		3.2	Comply with information relating to specific risks to health when establishing work area protection and safety			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to establishing work area protection and safety, and the types, purpose and limitations of each type, the work situation and general			
			work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)  - lead exhaust ventilation (LEV)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	establish work area		safety and security barriers			
	protection and safety		protection and safety notices			
	Salety		temporary structures			
			signs and lighting			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length and area associated with the method/procedure to establish work area protection and safety, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Lea	rning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when establishing	5.3	Dispose of waste in accordance with current legislation			
	work area protection and safety	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work within the allocated time when establishing work area protection and safety	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
7	given contract information to establish work area	7.1	Demonstrate the following work skills when establishing work area protection and safety:  • measuring, setting out, positioning, assembling, constructing, securing and dismantling			
	protection and safety to the required specification	7.2	Install, maintain and remove temporary protection and safety arrangements for the work area, to given working instructions, relating to barriers/temporary structures and one of the following:  • protection and safety notices			
			safety lighting			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when establishing work area protection and safety			

Learnin	ng outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			<ul> <li>plan for the protection and the safety of the work and surrounding environment</li> </ul>			
			install, check and maintain the protection and safety equipment			
			dismantle and remove protection and safety equipment			
			install safety notices			
			install lighting systems			
			use hand tools, power tools and equipment			
			work at height			
			use access equipment			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when establishing work area protection and safety			
		7.7	Describe how to maintain the tools and equipment used when establishing work area protection and safety			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 4: Segregating the Area

for Highways Works in

the Workplace

Unit reference number: K/503/9622

Level: 2

Credit value: 12

**Guided learning hours: 40** 

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in segregating the area for highways works in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information			
	work and resources when segregating the area for	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	highways works	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, risk assessments, method statements, schedules, manufacturers' information, statutory regulations, current legislation, official guidance and Codes of Practice governing traffic management relating to the highways works</li> </ul>			
2	comply with relevant legislation and official equipment, with materials and substances, with	Describe their responsibilities regarding potential accidents and health hazards, whilst working:				
			equipment, with materials and substances, with movement/storage of materials and by manual handling and			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when segregating the area for highways works			
	segregating the area for highways works	3.2	Comply with information relating to specific risks to health when segregating the area for highways works			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to segregating the area for highways works, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	segregate the area		signs, lights, guards and portable traffic lights			
	for highways works		pedestrian and vehicular traffic control systems			
			tools and ancillary equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to segregate the area for highways works			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when segregating the area for highways works	5.3	Dispose of waste in accordance with current legislation			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when segregating the	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	area for highways		types of progress charts, timetables and estimated times			
	works		organisational procedures for reporting circumstances which will affect the work programme			
7	given contract information to segregating the area for highways	7.1	Demonstrate the following work skills when segregating the area for highways works:			
			<ul> <li>measuring, locating, setting out, positioning, assembling and removing</li> </ul>			
		7.2	Segregate the area for live highways works in compliance with recognised current legislation and official guidance and given working instructions, relating to the following:			
			access and egress to site			
			work activity and storage of resources			
			signs, lighting and guarding, portable traffic signals for traffic management control			
		7.3	Remove signs, lighting and guarding, portable traffic signals in compliance with recognised current legislation and official guidance			
		7.4	Safely use materials, tools and ancillary equipment			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.5	Safely store the materials, tools and equipment used when segregating the area for highways works			
	7.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		<ul> <li>plan for site safety, storage of materials and traffic management control around the highways works</li> </ul>			
		set out signs, traffic lights, guarding for traffic management control			
		check and maintain operation of traffic control equipment			
		dismantle and remove signs, traffic lights, guarding			
		use hand tools, power tools and equipment			
	7.7	Describe the needs of other occupations and how to effectively communicate within a team when segregating the area for highways works			
	7.8	Describe how to maintain the hand tools and/or portable power tools, ancillary equipment and traffic control equipment used when segregating the area for highways works			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 5: Laying Modular

Pavement in the Workplace

Unit reference number: J/503/9627

Level: 2

Credit value: 14

**Guided learning hours: 47** 

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in laying modular pavement in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Plus against one of the following:

- Block paving
- Brick paving
- Stone/concrete setts
- Flags
- Natural stone rough cut
- Natural stone uniformly cut.

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when laying modular pavement	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	modulai pavement	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations governing the laying of modular pavement			
2	comply with relevant legislation and official guidance when laying modular	2.1	Describe their responsibilities regarding potential accidents and health hazards whilst working:			
			<ul> <li>in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Lea	rning outcomes	Asses	Assessment criteria		Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when laying modular pavement			
	laying modular pavement	3.2	Comply with information relating to specific risks to health when laying modular pavement			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying modular pavement, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
		local exhaust ventilation (LEV)	local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials and components, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	lay modular		sand, graded granular material, lean mix concrete			
	pavement		blocks, stone setts, bricks, flags, natural stone			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to lay modular pavement, length and area associated with the method/procedures to carry out extracting operations using skid steer			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when laying	5.3	Dispose of waste in accordance with current legislation			
	modular pavement	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when laying modular pavement	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			types of progress charts, timetables and estimated times			
			<ul> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			
7	given contract information to lay modular pavement	7.1	Demonstrate the following work skills when laying modular pavement:			
			<ul> <li>measuring, marking out, cutting, laying, levelling, aligning, compacting and finishing</li> </ul>			
		7.2	Lay modular pavement manually and/or by machine to given working instructions, for one of the following:			
			block paving			
			brick paving			
			stone/concrete setts			
			natural stone rough cut (riven/cropped)			
			natural stone uniformly cut (sawn in dimension)			
			flags			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Asse	ssment criteria	Evidence type	Portfolio reference	Date
	7.4	Safely store the materials, tools and equipment used when laying modular pavement			
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		<ul> <li>confirm the type of block, brick, sett, flag and natural stone modular pavement</li> </ul>			
		set out the area and prepare ground and foundation for modular pavement construction			
		confirm substrate matches given specification			
		mark and cut modular paving			
		lay modular block, brick, sett, flag and natural stone pavements manually and/or by machine			
		<ul> <li>lay modular block, brick, sett, flag and natural stone pavement, domestic and/or commercial to the required design/pattern, levels and stability</li> </ul>			

Learning	outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			monitor work against specification(s)			
			<ul> <li>identify the differences between rigid (bound) and flexible (unbound) paving</li> </ul>			
			install kerbs, channels, edgings and drainage			
			lift modular paving for removal maintenance and repair			
			<ul> <li>maintain and repair modular paving to match existing design functions</li> </ul>			
			use hand tools, power tools and equipment			
		7.7	Describe the needs of other occupations and how to effectively communicate within a team when laying modular pavement			
		7.8	Describe how to maintain the tools and equipment used when laying modular pavement			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# **Unit 6:** Setting Out Secondary

**Dimensional Work** 

Control in the Workplace

Unit reference number: J/506/4673

Level: 2

Credit value: 7

**Guided learning hours: 23** 

### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in setting out secondary dimensional work control in the workplace within the relevant sector of industry.

### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

Lea	Learning outcomes As		ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to setting out dimensional control of the work	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and reference points			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, reference points and current regulations governing buildings and construction work			
2	Know how to comply with relevant legislation and official guidance to set out dimensional control of the work  2.1  2.2	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:				
			<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	sment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when setting out dimensional control of the work	3.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during setting out dimensional control of the work			
		3.2	Demonstrate compliance with given information and relevant legislation when setting out dimensional control of the work in relation to two or more of the following:			
			safe use of access equipment/working platforms			
			safe handling of materials			
			safe use and storage of materials, tools and equipment			
			specific risks to health			
		3.3	<ul> <li>Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to setting out dimensional control of the work, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:</li> </ul>			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
4	Select the required quantity and quality of resources to set out dimensional control of the work	4.1	Select resources associated with the work in relation to measuring tools and instruments, marking materials/components, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
			measuring tools and instruments			
			marking equipment			
			level and alignment tools			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to identify quantity of resources associated with the method/procedure to set out for secondary dimensional work control			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Prevent damage and maintain a clean work area			
	when setting out	5.3	Dispose of waste in accordance with current legislation			
	dimensional control of the work	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work within the allocated time when setting out dimensional control of the work	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the given contract	7.1	Demonstrate the following work skills when setting out dimensional control of the work:			
	information to set out dimensional control of the work		<ul> <li>transferring, transposing, levelling, measuring, marking, positioning, fixing and securing</li> </ul>			
	to the required specification	7.2	Use and maintain hand tools, measuring and marking equipment			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.3	Set out secondary dimensional control for the work to given working instructions for three or more of the following:			
		• line			
		• level			
		depth			
		• area			
		height			
		• angle			
	7.4	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		measure and set out secondary dimensional control for the work			
		measure, align and level to dimensional control requirements			
		<ul> <li>transfer and set out lines, angles and levels to dimensional control requirements</li> </ul>			
		recognise and determine when specific skills and knowledge are required and report accordingly			
		use hand tools, measuring and marking equipment			
		work at height			
		use access equipment			
	7.5	Describe how to calculate height, depth, angle, length and area associated with the method/procedure to set out secondary dimensional work control			

Le	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when setting out dimensional control of the work			
		7.7	Describe how to maintain the hand tools, measuring, marking and ancillary and equipment used to set out dimensional control of the work			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 7: Moving, Handling and

**Storing Resources in** 

the Workplace

**Unit reference number:** F/503/1171

Level: 2

Credit value: 5

**Guided learning hours: 17** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in moving, handling and storing resources in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Comply with given information when	1.1	Interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation			
	moving, handling and/or storing resources	1.2	Interpret the given information relating to the use and storage of lifting aids and equipment			
	resources	1.3	Describe the different types of technical, product and regulatory information, their source and how they are interpreted			
		1.4	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.5	Describe how to obtain information relating to using and storing lifting aids and equipment			
2	comply with relevant legislation and official guidance when moving, handling and/or storing	2.1	Describe their responsibilities under current legislation and official guidance whilst working:			
			<ul> <li>in the workplace, in confined spaces, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making the reports			
		2.4	State the appropriate types of fire extinguishers relevant to the work			
		2.5	Describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance			
3	Maintain safe working practices when moving, handling and/or storing resources	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources			
		3.2	Use lifting aids safely as appropriate to the work			
		3.3	Protect the environment in accordance with safe working practices as appropriate to the work			
		3.4	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.5	Describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		3.6	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			
4	Select the required quantity and	4.1	Select the relevant resources to be moved, handled and/or stored, associated with own work			
	quality of resources for the methods of work to move, handle	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to:  • lifting and handling aids			
	and/or store		<ul><li>container(s)</li></ul>			
	occupational resources		fixing, holding and securing systems			
		4.3	Describe how the resources should be handled and how any problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
5	Prevent the risk of damage to occupational	5.1	Protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures			
	resources and surrounding	5.2	Dispose of waste and packaging in accordance with legislation			
	environment when moving, handling and/or storing resources	5.3	Maintain a clean work space when moving, handling or storing resources			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when moving, handling and/or	6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:			
	storing resources		progress charts, timetables and estimated times			
			<ul> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			
7	given occupational resource information to move, handle	7.1	Demonstrate the following work skills when moving, handling and/or storing occupational resources:			
		rmation to  moving, positioning, storing, securing and/or using lift kinetic lifting techniques	<ul> <li>moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques</li> </ul>			
		7.2	Move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following:			
			sheet material			
			loose material			
			bagged or wrapped material			
			fragile material			
			tools and equipment			
			• components			
			• liquids			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources			
	7.4	Describe the needs of other occupations when moving, handling and/or storing resources			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 8: Installing Drainage in the Workplace

**Unit reference number: Y/504/6775** 

Level: 2

Credit value: 19

**Guided learning hours: 63** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing drainage in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against two of the following endorsements:

- Pipework
- Inspection chambers
- Surface water systems
- Foul water systems.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when installing drainage	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	a.a.mage	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, risk assessments, method statements, specifications, schedules, manufacturers' information and regulations governing the installation and construction of drainage systems</li> </ul>			
2	Know how to comply with relevant legislation and official guidance when installing drainage	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
			<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		outcomes Assessment criteria		Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing drainage			
	installing drainage	3.2	Comply with information relating to specific risks to health when installing drainage			
		by the principles of pro drainage, and the type	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing drainage, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	install drainage		pipes, fittings and ancillary components			
			pre-cast (metal, concrete, clay or plastic) components			
			bricks, blocks and sandbags			
			granular materials, aggregates, cement, concrete, mortars and sand			
			sealant materials (adhesives, compounds, solvents)			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install drainage			

Lea	arning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when installing	5.3	Dispose of waste in accordance with current legislation			
	drainage	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when installing drainage	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			<ul> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Lea	Learning outcomes		g outcomes Assessment criteria		Portfolio reference	Date
7	Comply with the given contract information to install drainage to	7.1	<ul> <li>Demonstrate the following work skills when installing drainage:</li> <li>measuring, marking out, laying, positioning, fitting, levelling, plumbing, aligning, securing and testing</li> <li>Install and test new and/or replacement, foul and/or surface water</li> </ul>			
	the required specification	7.2	<ul> <li>drainage for two of the following to given working instructions:</li> <li>pipework (e.g. clay, concrete, metal, or plastic)</li> <li>inspection chambers (e.g. brick, concrete, metal or plastic)</li> </ul>			
			<ul> <li>surface water systems (e.g. cells, culverts, high capacity, linear, balancing ponds, interceptors, recycling equipment, soak-a-ways, sustainable urban drainage systems)</li> </ul>			
			<ul> <li>foul water systems (e.g. cess pools, septic tanks, reed beds, treatment plants)</li> </ul>			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when installing drainage			

Lea	Learning outcomes		Assessment criteria		Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			excavate trenches and provide trench support			
			<ul> <li>confirm ground conditions, site and excavations are suitable for the drainage installation work</li> </ul>			
			prepare bedding for pipework			
			determine levels and gradients			
			identify the differences between surface and foul water drainage			
			<ul> <li>lay, position, level, plumb, align, fit, fix and secure new and replacement drainage systems</li> </ul>			
			<ul> <li>construct structures of a drainage system (storm alleviation, culverts, inspection chambers, lateral drains, overflows, sumps, filter drains, sustainable urban drainage systems)</li> </ul>			

Learning outcomes	Asses	Assessment criteria		Portfolio reference	Date
	7.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		<ul> <li>assemble pre-cast components (metal, concrete, clay and plastic) of a drainage system structure (inspection chambers, street iron work)</li> </ul>			
		connect and seal new systems to existing systems			
		conduct smoke, water, ball, air mandrel and close circuit television tests on drainage systems			
		work with plant and machinery			
		use hand tools, power tools and equipment			
		work at height and below ground level			
		use access equipment			
	7.7	Describe the needs of other occupations and how to effectively communicate within a team when installing drainage			
	7.8	Describe how to maintain the tools and equipment used when installing drainage			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 9: Locating and Protecting

Utilities Apparatus and Sub-structures in the

Workplace

Unit reference number: A/503/9639

Level: 2

Credit value: 12

**Guided learning hours: 40** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in locating and protecting utilities apparatus and substructures in the workplace within the relevant sector of industry.

#### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, survey information and manufacturers' information			
	work and resources when locating and protecting utilities	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	apparatus and sub- structure	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, organisational and manufacturers' information and regulations governing utilities</li> </ul>			
2	Know how to comply with	2.1	Describe their responsibilities regarding potential accidents and health hazards whilst working:			
	relevant legislation and official guidance when locating and protecting utilities apparatus and sub- structures		in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when locating and	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when locating and protecting utilities apparatus and sub-structures			
	protecting utilities apparatus and substructures	3.2	Comply with information relating to specific risks to health when locating and protecting utilities apparatus and sub-structures			
	Structures	3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to locating and protecting utilities apparatus and sub-structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, damage to utilities apparatus and substructures and other task-related hazards			
		3.6	Demonstrate the safe use of a fire extinguisher relevant to a typical fire associated with locating and protecting utilities apparatus and sub-structures as relevant to the operations			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials and components, tools and equipment, and electronic location instruments			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	locate and protect		electronic instruments			
	utilities apparatus and sub-structures		marking and protection materials			
	und Sub Structures		hand and/or powered tools and equipment			
			ancillary equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when locating and	5.3	Dispose of waste in accordance with current legislation			
	protecting utilities apparatus and substructures	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when locating and protecting	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	utilities apparatus		types of progress charts, timetables and estimated times			
	and sub-structures		organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the given contract	7.1	Demonstrate the following work skills when locating and protecting utilities apparatus and sub-structures:			
	information to locate and protect utilities apparatus	rotect • measi	<ul> <li>measuring, locating, marking out, positioning, protecting and securing</li> </ul>			
	and sub-structures to the required	ub-structures 7.2	Locate and protect sub-surface and/or overhead utilities apparatus to given working instructions, relating to:			
	specification		gas, fuel, electric, communications, water and sewage			
		7.3	Safely use materials, hand tools, portable power tools, ancillary equipment and electronic instruments			
		7.4	Safely store the materials, tools and equipment used when locating and protecting utilities apparatus and sub-structures			

Learning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		ensure electronic equipment is calibrated			
		identify utilities apparatus and sub-structures by electronic location, trial holes and visual			
		<ul> <li>confirm the type of service (gas, fuel, electric, communication, water, sewage)</li> </ul>			
		<ul> <li>confirm structures (foundations, manholes, inspection chambers, joint/junction boxes)</li> </ul>			
		confirm any natural environment (tree roots, natural watercourse)			
		mark the location of the service apparatus and sub-structures			
		<ul> <li>provide for the recognition and protection of the service apparatus, sub-structure, and the natural environment during operational activities</li> </ul>			
		use hand tools, power tools and equipment			
		work at height			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when locating and protecting utilities apparatus and sub-structures			
	7.7	Describe how to maintain the tools and equipment used when locating and protecting utilities apparatus and sub-structures			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 10: Excavating Holes and

**Trenches - Manual** 

Digging in the

Workplace

Unit reference number: Y/503/9650

Level: 2

Credit value: 10

**Guided learning hours: 33** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in excavating holes and trenches – manual digging in the workplace within the relevant sector of industry.

#### **Unit assessment requirements/evidence requirements**

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when excavating holes and trenches	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	by manual digging	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information, statutory and regulatory Codes of Practice for excavations and support of the excavations</li> </ul>			
2	Know how to comply with relevant legislation and official guidance when excavating holes and trenches by manual digging	mply with	Describe their responsibilities regarding potential accidents and health hazards whilst working:			
			in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when excavating holes and trenches by manual digging	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when excavating holes and trenches by manual digging			
		3.2	Comply with information relating to specific risks to health when excavating holes and trenches by manual digging			
		3.3 Explain why and we by the principles of holes and trenche limitations of each environment, in re-	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to excavating holes and trenches by manual digging and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	arning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials and components, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability limitations and defects associated with the resources in relation to:			
	excavate holes and		digging equipment for the excavation of holes and trenches			
	trenches by manual digging		hand and/or powered tools and ancillary equipment			
	manual digging	4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to excavate holes and trenches by manual digging			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when excavating	5.3	Dispose of waste in accordance with current legislation			
	holes and trenches by manual digging	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when excavating holes and trenches by manual digging	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			types of progress charts, timetables and estimated times			
			<ul> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			
7	Comply with the given contract	7.1	Demonstrate the following work skills when excavating holes and trenches by manual digging:			
	information to excavate holes and	• measurii	measuring, marking out, excavating and securing			
	trenches by manual digging to the required specification	7.2	Excavate holes and trenches in highway location and/or construction site to given working instructions			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when excavating holes and trenches by manual digging			

Learning outcomes	Asse	ssment criteria	Evidence type	Portfolio reference	Date
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		identify and confirm the type of surface and sub-surface composition			
		remove ironwork, modular components			
		excavate ground structures manually			
		guide excavating machine to excavate ground structures			
		avoid damage to service apparatus and sub-structures			
		identify and store excavated and reusable materials			
		position, secure and remove excavation supports			
		provide for access and egress			
		work with plant and machinery			
		use hand tools, power tools and equipment			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when excavating holes and trenches by manual digging			
	7.7	Describe how to maintain the tools and equipment used when excavating holes and trenches by manual digging			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 11: Reinstating Excavation

and Highway Surfaces

in the Workplace

Unit reference number: H/503/9442

Level: 2

Credit value: 12

Guided learning hours: 40

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in reinstating excavation and highway surfaces in the workplace within the relevant sector of industry.

### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against own occupational area of work, plus against two of the following endorsements:

- sub-grades, sub-bases, road-bases
- cold lay bituminous
- warm lay bituminous
- hot lay bituminous
- concrete
- modular.

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when reinstating excavation and	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	highway surfaces	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations governing excavations and reinstatement work on highways			
2	comply with relevant legislation and official guidance when reinstating		Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
			<ul> <li>in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	Assessment criteria		Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when reinstating excavation and highway surfaces	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when reinstating excavation and highway surfaces			
		3.2	Comply with information relating to specific risks to health when reinstating excavation and highway surfaces			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to reinstating excavation and highway surfaces, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	Learning outcomes		outcomes Assessment criteria		Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability limitations and defects associated with the resources in relation to:			
	reinstate excavation and		<ul> <li>new and re-usable materials, sub-base, road-base and pavement surface</li> </ul>			
	highway surfaces		cold-lay, warm lay and hot-lay bituminous materials			
			sands, jointing materials			
			concrete, blocks and flags			
			natural soil based materials			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to reinstate excavation and highway surfaces			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when reinstating	5.3	Dispose of waste in accordance with current legislation			
	excavation and highway surfaces	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when reinstating excavation and highway surfaces	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			<ul> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Lea	arning outcomes	outcomes Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to reinstate excavation and highway surfaces to the required specification	7.1	Demonstrate the following work skills when reinstating excavation and highway surfaces:  • backfilling, consolidating, laying, compacting, positioning, securing and finishing  Reinstate excavations and highway surfaces to given working instructions, relating to two of the following:  • sub-grades, sub-bases, road-bases  • cold lay bituminous  • warm lay bituminous  • hot lay bituminous  • concrete			
		7.3	<ul> <li>modular</li> <li>Safely use materials, hand tools, portable power tools and ancillary equipment</li> </ul>			
		7.4	Safely store the materials, tools and equipment used when reinstating excavation and highway surfaces			

Learning outcomes	Asses	Assessment criteria		Portfolio reference	Date
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		<ul> <li>confirm the type of ground structure for reinstatement (bituminous, concrete, modular, natural)</li> </ul>			
		<ul> <li>reinstate and compact backfill, sub-grades, sub-bases, road-bases pavement base for the relevant type of ground structure</li> </ul>			
		• protect service apparatus and sub-structures during reinstatement			
		<ul> <li>reinstate the relevant type of ground surface, pavement surface, specialist surface treatments, kerbs, edge restraints, street ironwork and pavement markings</li> </ul>			
		dispose of surplus materials			
		use hand tools, power tools and equipment			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when reinstating excavation and highway surfaces			
	7.7	Describe how to maintain the tools and equipment used when reinstating excavation and highway surfaces			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 12: Laying Flexible

Pavements in the

Workplace

Unit reference number: Y/503/9440

Level: 2

Credit value: 14

**Guided learning hours: 47** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in laying flexible pavements in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when laying flexible pavements	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	nexible pavements	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations governing the laying of flexible pavement</li> </ul>			
2	comply with relevant legislation and official guidance when laying flexible		Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
			<ul> <li>in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		outcomes Assessment criteria		Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when laying flexible pavements			
	laying flexible pavements	3.2	Comply with information relating to specific risks to health when laying flexible pavements			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying flexible pavements and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	arning outcomes	utcomes Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	lay flexible pavements		sub-base and bituminous surface materials, bitumen sealer and emulsion			
			hand and/or powered tools and ancillary equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to lay flexible pavements			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when laying	5.3	Dispose of waste in accordance with current legislation			
	flexible pavements	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when laying flexible pavements	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the	7.1	Demonstrate the following work skills when laying flexible pavements:			
	given contract information to lay flexible pavements		<ul> <li>measuring, marking out, laying, spreading, rolling, compacting and finishing</li> </ul>			
	to the required	7.2	Lay flexible pavement to given working instructions relating to:			
	specification		sub-base construction			
			bituminous surface material			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when laying flexible pavements			

Lea	Learning outcomes		Assessment criteria		Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			prepare the area for laying of flexible pavement			
			assess the suitability of flexible pavement materials			
			<ul> <li>lay, compact and finish sub-base and bituminous surface of the flexible pavement</li> </ul>			
			work with plant or machinery			
			use hand tools, power tools and equipment			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when laying flexible pavements			
		7.7	Describe how to maintain the tools and equipment used when laying flexible pavements			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 13: Pouring Concrete to

Form Structures in the

Workplace

Unit reference number: M/503/9637

Level: 2

Credit value: 18

**Guided learning hours: 60** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in pouring concrete to form structures in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Plus against two of the following:

- Chute
- Elephant's trunk
- Skip
- Pump
- Mono-rail.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when pouring concrete to form	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	structures	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations governing construction works</li> </ul>			
2	comply with relevant legislation and official guidance when pouring concrete to	2.1	Describe their responsibilities regarding potential accidents and health hazards whilst working:			
			in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when pouring concrete to form structures	3.1	Use health and safety control equipment and access equipment/working platforms safely to carry out the activity in accordance with current legislation and organisational requirements when pouring concrete to form structures			
		3.2	Comply with information relating to specific risks to health when pouring concrete to form structures			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to pouring concrete to form structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	pour concrete to		ready-mix concrete materials			
	form structures		<ul> <li>slump test equipment, skips, poker vibrator, tampers, floats and trowels</li> </ul>			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to pour concrete to form structures			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when pouring	5.3	Dispose of waste in accordance with current legislation			
	concrete to form structures	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when pouring concrete to form	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	structures		types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the given contract information to pour concrete to form structures to the required specification	7.1	Demonstrate the following work skills when pouring concrete to form structures:			
			<ul> <li>measuring, positioning, placing, spreading, vibrating, compacting and finishing</li> </ul>			
		7.2	Place, compact and finish structural concrete in horizontal and vertical formwork to given working instructions relating to two of the following placements:			
			• chute			
			elephant's trunk			
			• skip			
			• pump			
			mono-rail			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when pouring concrete to form structures			
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			assess and confirm suitability of concrete and area for placement			
			place concrete by chute, elephant's trunk, overhead skip, pumping			
			pour to correct levels and coverage of steel reinforcement			
			work with and around plant and machinery			
			support consistency testing			
			vibrate, compact, finish and cure the structural concrete			
			use hand tools, power tools and equipment			
			work at height			
			use access equipment			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when pouring concrete to form structures			
		7.7	Describe how to maintain the tools and equipment used when pouring concrete to form structures			

Learner name:	Date:	
Learner signature:	Date:	
Assessor signature:	Date:	
Internal verifier signature:	Date:	
(if sampled)		

# Unit 14: Erecting and Striking Proprietary Formwork

in the Workplace

Unit reference number: R/503/9663

Level: 2

Credit value: 17

**Guided learning hours: 57** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in erecting and striking proprietary formwork in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Le	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules, and manufacturers' and suppliers information			
	work and resources when erecting and striking proprietary	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	formwork	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, and manufacturers' and suppliers information</li> </ul>			
2	Know how to comply with	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
	relevant legislation and official guidance when erecting and striking proprietary		<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
	formwork	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when erecting and	3.1	Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when erecting and striking proprietary formwork			
	striking proprietary formwork	3.2	Comply with information relating to specific risks to health when erecting and striking proprietary formwork			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to erecting and striking proprietary formwork, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	erect and strike		proprietary formwork and associated items			
	proprietary formwork		tie systems			
	TOTTIWOTK		prop systems			
			protective coatings			
			fixtures and fittings			
			access equipment			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to erect and strike proprietary formwork			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when erecting and	5.3	Dispose of waste in accordance with current legislation			
	striking proprietary formwork	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		accordance with environmental responsib	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when erecting and striking	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	proprietary		types of progress charts, timetables and estimated times			
	formwork		organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the given contract	7.1	Demonstrate the following work skills when erecting and striking proprietary formwork:			
	information to erect and strike proprietary		<ul> <li>measuring, marking out, aligning, positioning, levelling, plumbing, securing, removing and storing</li> </ul>			
	formwork to the	7.2	Erect and strike proprietary formwork to given working instructions			
	required specification	7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.4	Safely store the materials, tools and equipment used when erecting and striking proprietary formwork			
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		<ul> <li>erect and strike proprietary formwork for walls, columns, beams, soffits, channels, ground slabs and bases</li> </ul>			
		attach and remove safe lifting provision			
		position, secure and remove prop and tie systems			
		apply release agents			
		move, clean, stack and store proprietary forms			
		work with plant and machinery			
		use hand tools, power tools and equipment			
		work at height			
		use access equipment			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when erecting and striking proprietary formwork			
	7.7	Describe how to maintain the tools and equipment used when erecting and striking proprietary formwork			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 15: Placing and Finishing

**Non-specialist Concrete** 

in the Workplace

Unit reference number: R/504/6774

Level: 2

Credit value: 21

**Guided learning hours: 70** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in placing and finishing non-specialist concrete in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against three of the following endorsements:

- Concrete slabs/bases
- Form slab edging
- Position reinforcement
- Form surface finish.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when placing and finishing non-	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	specialist concrete	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, risk assessments, method statements, specifications, schedules, manufacturers' information and current regulations associated with placing and finishing non-specialist concrete</li> </ul>			
2	Know how to comply with	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
	relevant legislation and official guidance when placing and finishing non-		<ul> <li>in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
	specialist concrete	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when placing and finishing non-specialist concrete			
	placing and finishing non- specialist concrete	3.2	Comply with information relating to specific risks to health when placing and finishing non-specialist concrete			
	specialist concrete	3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to placing and finishing non-specialist concrete, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	place and finish non-specialist		<ul> <li>concrete, fabric reinforcement, timber, plywood, proprietary slab edgings and fixings</li> </ul>			
	concrete		hand tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to place and finish non-specialist concrete			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when placing and	5.3	Dispose of waste in accordance with current legislation			
	finishing non- specialist concrete	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when placing and finishing non-	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	specialist concrete		types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			
7	given contract information to place and finish	7.1	Demonstrate the following work skills when placing and finishing non- specialist concrete:			
			<ul> <li>measuring, marking out, laying, compacting, finishing, positioning and securing</li> </ul>			
	non-specialist concrete to the required	7.2	Lay and finish concrete to given working instructions for three of the following:			
	specification		concrete slabs/bases (footing, oversites or paths)			
			form slab edging			
			position reinforcement			
			form surface finish (tamped, floated, brushed and trowelled)			
		7.3	Safely use materials, hand tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when placing and finishing non-specialist concrete			

Learning outcomes		sessment criteria	Evidence type	Portfolio reference	Date
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		handle, transport and test concrete			
		transport, lay, compact, cure and protect concrete with tamped, floated, brushed and trowelled finishes			
		cure and protect			
		place fabric reinforcement			
		concrete mix ratios (volume and gauge boxes)			
		place concrete into formwork and shuttering			
		form slab edging			
		work with plant and machinery			
		use hand tools and ancillary equipment			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when placing and finishing non-specialist concrete			
	7.7	Describe how to maintain the tools and equipment used when placing and finishing non-specialist concrete			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 16: Laying Kerbs and

Channels in the Workplace

Unit reference number: D/503/9634

Level: 2

Credit value: 14

**Guided learning hours: 47** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in laying kerbs and channels in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Plus against one of the following:

- Kerbs
- Channels.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessment, method statements, specifications, schedules and manufacturers' information			
	work and resources when laying kerbs and channels	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, , manufacturers' information and regulations for laying kerbs and channels</li> </ul>			
2	Know how to comply with	2.1	Describe their responsibilities regarding potential accidents and health hazards whilst working:			
	relevant legislation and official guidance when laying kerbs and		in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			
	channels	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when laying kerbs and channels			
	laying kerbs and channels	3.2	Comply with information relating to specific risks to health when laying kerbs and channels			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to laying kerbs and channels, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:	ed to:		
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials and components, and tools and equipment			Date
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	lay kerbs and		sand, cement, aggregates, additives			
	channels		kerbs and channels			
			hand and/or powered tools and ancillary equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to lay kerbs and channels			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when laying kerbs	5.3	Dispose of waste in accordance with current legislation			
	and channels	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when laying kerbs and channels	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	Ref 55 and enamies		types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			
7	7 Comply with the given contract	7.1	Demonstrate the following work skills when laying kerbs and channels:			
	information to lay kerbs and channels to the required		<ul> <li>measuring, marking out, cutting, positioning, levelling, aligning, compacting and finishing</li> </ul>			
	specification	7.2	Lay kerbs and/or channels to given working instructions			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when laying kerbs and channels			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			identify different types of kerbs or channels			
			<ul> <li>set out the area and prepare ground and foundation for laying kerbs or channels</li> </ul>			
			lay and align kerbs or channels to the required specifications			
			mark and cut kerbs and channels			
			monitor work against specification			
			use hand tools, power tools and equipment			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when laying kerbs and channels			
		7.7	Describe how to maintain the tools and equipment used when laying kerbs and channels			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 17: Reinstating Ground

Condition in the

Workplace

Unit reference number: A/600/8157

Level: 2

Credit value: 12

**Guided learning hours: 40** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in reinstating ground condition in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills 'Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of reinstating ground condition to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information			Date
	relating to the work and resources when reinstating	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	ground condition	1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules and manufacturers' information</li> </ul>			
2	Know how to comply with	2.1	Know how to comply with relevant legislation and official guidance when reinstating ground condition			
	relevant legislation and official guidance when reinstating ground	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
	condition	2.3	State what the accident reporting procedures are and who is responsible for making reports			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
3	Maintain safe working practices when reinstating	3.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when reinstating ground condition			
	ground condition	3.2	Explain why and when personal protective equipment (PPE) should be used, relating to reinstating ground condition, and the types, purpose and limitations of each type			
	3.3	3.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			
4	Select the required quantity and quality of resources for the methods of work to reinstate ground	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  • flags, blocks, edging, aggregates, cement, black top, top soil, seeds  • hand and/or powered tools and equipment			
	condition	4.2	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used			
		4.4 Outline potential hawork	Outline potential hazards associated with the resources and method of work			
		4.5	Describe how to calculate quantity and area associated with the method/procedure to reinstate ground condition			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of	5.1	Protect the work and its surrounding area from damage			
	damage to the work and	5.2	Minimise damage and maintain a clean work space			
	surrounding area when reinstating ground condition	5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.4	Dispose of waste in accordance with legislation			
		5.5	State why the disposal of waste should be carried out in relation to the work			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when reinstating ground	6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to:			
	condition		types of progress charts, timetables and estimated times			
			organisational procedures for reporting circumstances which will affect the work programme			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
7	Comply with the given contract	7.1	Demonstrate the following work skills when reinstating ground condition:			
	information to reinstate ground condition to the		<ul> <li>measuring, marking out, laying, bedding, positioning, securing and finishing</li> </ul>			
	required specification	7.2	Reinstate ground conditions to contractor's working instructions for at least two of the following:			
			• flag			
			• block			
			• concrete			
			black top surfaces			
			cultivated and grassed areas			
		7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			place and compact sub-grade and sub-base			
			form levels			
			<ul> <li>reinstate hard landscaping of flag, block, concrete and black top surfaces</li> </ul>			
			reinstate cultivated and grassed areas			
			use hand tools, power tools and equipment			
		7.4	Safely use and store hand tools, portable power tools and ancillary equipment			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.5	State the needs of other occupations and how to communicate within a team when reinstating ground condition			
		7.6	Describe how to maintain the tools and equipment used when reinstating ground condition			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 18: Erecting and

Dismantling
Access/Working
Platforms in the

Workplace

Unit reference number: D/600/8281

Level: 2

Credit value: 8

**Guided learning hours: 27** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in erecting and dismantling access/working platforms in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills 'Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of erecting and dismantling access/working platforms to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsements:

Own occupational area of work

Plus two or more of the following:

- Ladders/crawler boards
- Step ladders/platform steps
- Proprietary towers
- Trestle platforms
- Mobile scaffold towers
- Proprietary staging/podiums.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information	1.1	Interpret and extract information from specifications, method statements, risk assessments and manufacturers' information			
	relating to the work and resources when erecting and	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	dismantling access/working platforms	1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			specifications, current legislation, method statements, risk assessments and manufacturers' information			
2	Know how to comply with	2.1	Describe their responsibilities under current legislation and official guidance whilst working:			
	relevant legislation and official guidance when erecting and		<ul> <li>in the workplace, at height, in confined areas, with tools and equipment, with movement/storage of materials and by manual handling</li> </ul>			
	dismantling access/working platforms	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	State what the accident reporting procedures are and who is responsible for making reports			

Lea	arning outcomes	ing outcomes Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when erecting and dismantling	3.1	Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when erecting and dismantling access/working platforms			
	access/working platforms	3.2	Explain why, when and how personal protective equipment (PPE) should be used, relating to erecting and dismantling access/working platforms, and the types, purpose and limitations of each type			
		3.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			
4 Select the required quantity and quality of resources for the methods of work to erect and dismantle access/working platforms	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  Iadders/crawler boards  stepladders/platform steps  trestles  proprietary staging/podiums  proprietary towers  mobile scaffold towers  protection equipment and notices  tools and ancillary equipment				
		4.2	Select resources associated with own work in relation to materials, components, tools and equipment			
		4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		4.4	Outline potential hazards associated with the resources and method of work			
		4.5	Describe how to calculate quantity of equipment required associated with the method/procedure to erect and dismantle access equipment/working platforms			
5	Minimise the risk of	5.1	Protect the work and its surrounding area from damage			
	damage to the work and surrounding area when erecting and dismantling	5.2	Minimise damage and maintain a clean work space			
		5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
	access/working platforms	5.4	Dispose of waste in accordance with legislation			
	piationnis	5.5	State why the disposal of waste should be carried out in relation to the work			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when erecting and dismantling access/working platforms	6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to:			
			<ul> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
7	7 Comply with the given contract information to erect and dismantle access/ working platforms	7.1	Demonstrate the following work skills when erecting and dismantling access/working platforms:  • moving, positioning/erecting, securing, checking, dismantling and			
			Erect, dismantle and store two of the following access equipment to			
	to the required specification		given access regulations:  • ladders/crawler boards			
			stepladders/platform steps			
			proprietary towers			
			trestle platforms			
			mobile scaffold towers			
			proprietary staging/podiums			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		provide protection to the work area			
		establish a base for equipment			
		<ul> <li>erect proprietary access equipment to manufacturer's instructions suitable for the work</li> </ul>			
		erect non-proprietary access equipment suitable for the work			
		place protective screens and notices			
		check/monitor equipment during the period of use			
		dismantle and store access equipment			
		use tools and equipment			
		work at height			
	7.4	Safely use and store materials, hand tools and ancillary equipment			
	7.5	State the needs of other occupations and how to communicate within a team when erecting and dismantling access/working platforms			
	7.6	Describe how to maintain the tools and equipment used when erecting and dismantling access/working platforms			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# Unit 19: Installing Street

**Ironwork in the Workplace** 

Unit reference number: M/503/9623

Level: 2

Credit value: 9

**Guided learning hours: 30** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing street ironwork in the workplace within the relevant sector of industry.

# Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

Own occupational area of work.

Plus against one of the following:

- New
- Reinstatement.

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when installing street ironwork	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	Street Honwork	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations for street ironwork fixtures</li> </ul>			
2	comply with relevant legislation and official guidance when installing street	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
			<ul> <li>in the workplace, below ground level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	Assessment criteria		Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when	3.1	Use health and safety control equipment safely to carry out the activity in accordance with current legislation and organisational requirements when installing street ironwork			
	installing street ironwork	3.2	Comply with information relating to specific risks to health when installing street ironwork			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to installing street ironwork, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	install street		sand, cement, mortar, patent epoxy resin-based materials			
	ironwork		access covers and frames, gully grates and frames			
			hand and/or powered tools and equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity and size associated with the method/procedure to install street ironwork			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when installing	5.3	Dispose of waste in accordance with legislation			
	street ironwork	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when installing street	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	ironwork		types of progress charts, timetables and estimated times			
			<ul> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			
7	Comply with the	7.1	Demonstrate the following work skills when installing street ironwork:			
	given contract information to install street		- measuring, marking out, positioning, fitting, levelling, aligning and securing			
	ironwork to the required	7.2	Install street ironwork to new and/or reinstatement situations to given working instructions relating to the following:			
	specification		access covers and frames			
			gully grates and frames			
		7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when installing street ironwork			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
			<ul> <li>locate the area/position where the street ironwork is to be installed</li> </ul>			
			confirm the street ironwork, fixing and bedding requirements			
			position, fit, align and secure the street ironwork			
			protect ironwork during curing			
			use hand tools, power tools and equipment			
			use ancillary equipment			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when installing street ironwork			
		7.7	Describe how to maintain the tools and equipment used when installing street ironwork			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

# **Unit 20: Providing Temporary**

Excavation Support in

the Workplace

Unit reference number: K/503/9636

Level: 2

Credit value: 15

**Guided learning hours: 50** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in providing temporary excavation support in the workplace within the relevant sector of industry.

# Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

• Own occupational area of work.

Plus against two of the following:

- Skeleton
- Open and close boarding
- Drag box
- Trench box
- Coffer dam
- Diaphragm wall
- Secant support.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, risk assessments, method statements, specifications, schedules and manufacturers' information			
	work and resources when providing temporary	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	excavation support	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, risk assessments, method statements, manufacturers' information and regulations governing construction works and support of excavations</li> </ul>			
2	2 Know how to comply with relevant legislation and official guidance when providing temporary	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:			
			<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
	excavation support	2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when providing	3.1	Use health and safety control equipment and access equipment/working platforms safely to carry out the activity in accordance with current legislation and organisational requirements when providing temporary excavation support			
	temporary excavation support	3.2	Comply with information relating to specific risks to health when providing temporary excavation support			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to providing temporary excavation support, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Select the required quantity and	4.1	Select resources associated with own work in relation to materials, components and fixings, and tools and equipment			
	quality of resources for the methods of work to	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:			
	provide temporary excavation support		<ul> <li>poling boards, walings, struts, wedges, soldiers, steel struts and trench sheets</li> </ul>			
			proprietary systems			
			ancillary fixing devices			
			hand and/or powered tools and ancillary equipment			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to provide temporary excavation support			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when providing	5.3	Dispose of waste in accordance with legislation			
	temporary excavation support	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when providing	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	temporary		types of progress charts, timetables and estimated times			
	excavation support		organisational procedures for reporting circumstances which will affect the work programme			
7	given contract	7.1	Demonstrate the following work skills when providing temporary excavation support:			
	information to provide temporary excavation support		<ul> <li>measuring, marking out, preparing, positioning, fitting, supporting, fixing, securing, dismantling and removing</li> </ul>			
	to the required specification	7.2	Provide and remove temporary excavation support to given working instructions, relating to two of the following support frameworks:			
			• skeleton			
			open and close boarding			
			drag box			
			trench box			
			coffer dam			
			diaphragm wall			
			secant support			

Learning outcomes	Asse	ssment criteria	Evidence type	Portfolio reference	Date
	7.3	Safely use materials, hand tools, portable power tools and ancillary equipment			
	7.4	Safely store the materials, tools and equipment used when providing temporary excavation support			
	7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:			
		assess the excavated area and select suitable temporary support for the excavation			
		<ul> <li>provide for safe access and egress around the temporary excavation support</li> </ul>			
		construct/erect/install temporary excavation support			
		work with and around plant and machinery			
		<ul> <li>inspect and maintain the integrity and safety of the temporary support structure</li> </ul>			
		dismantle and remove the excavation support structure			
		use hand tools, power tools and equipment			
		work at height and in confined spaces			
		use access equipment			
	7.6	Describe the needs of other occupations and how to effectively communicate within a team when providing temporary excavation support			
	7.7	Describe how to maintain the tools and equipment used when providing temporary excavation support			

Learner name:	Date:	
Learner signature:	Date:	
Assessor signature:	Date:	
Internal verifier signature:	Date:	
(if sampled)		

Unit 21: Preparing and

Operating Forward
Tipping Dumpers to
Receive, Transport and
Discharge Materials in

the Workplace

Unit reference number: J/506/4642

Level: 2

Credit value: 16

**Guided learning hours: 53** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating forward tipping dumpers to transport and discharge materials in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

162

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
	preparation and use of forward tipping dumpers to	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	carry out transporting and discharging	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
	operations	1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of forward tipping dumpers</li> </ul>			
2	Organise with	2.1	Organise the work according to given information or instructions			
	others the sequence and	2.2	Describe how to communicate ideas between team members			
	operation in which transporting and discharging operations using forward tipping dumpers are to be carried out	2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during transporting and discharging operations			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
3	Know how to comply with	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:			
	relevant legislation and official guidance when carrying out transporting and discharging operations using forward tipping		<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
	dumpers	3.3	Explain what the accident reporting procedures are and who is responsible for making reports			
4	Maintain safe and healthy working practices when preparing for and carrying out transporting and discharging operations using forward tipping	4.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out transporting and discharging operations using forward tipping dumpers in relation to two or more of the following:			
	dumpers		safe use and storage of plant or machinery			
			safe use and storage of tools and equipment			
			specific risks to health			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		4.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to forward tipping dumper use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		4.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		4.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
5	Request and select the required quantity and	5.1	Request and select resources associated with forward tipping dumpers in relation to consumables, materials, tools, ancillary equipment and/or accessories			
	quality of resources to prepare for and carry out	5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
	transporting and		consumables, lubricants and fuels			
	discharging operations using		attachments and load coverings			
	forward tipping		hand tools, ancillary equipment and accessories			
	dumpers	5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		5.5	Describe any potential hazards associated with the resources and methods of work			
		5.6	Describe how to identify weight, quantity, pressure, length and area associated with the method/procedures to carry out transporting and discharging operations, length and area associated with the method/procedures to carry out extracting operations using skid steer			
6	Minimise the risk of damage to the	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	6.2	Minimise damage and maintain a clean work space			
	when preparing to	6.3	Dispose of waste in accordance with current legislation			
	and transporting and discharging materials	6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		6.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when preparing to and transporting and discharging materials using forward tipping dumpers	7.1	Demonstrate completion of the work within the allocated time  Describe the purpose of the work programme and describe why deadlines should be kept in relation to:  • types of progress charts, timetables and estimated times  • organisational procedures for reporting circumstances which will affect the work programme			
8	Comply with the given contract information to receive, transport and discharge materials using	8.1	Demonstrate the following work skills when preparing for and transporting and discharging materials using forward tipping dumpers:  • checking, adjusting, communicating, manoeuvring, positioning, receiving, depositing, transporting, discharging and cleaning			
for dur req	forward tipping 8.2	Use and maintain hand tools, ancillary equipment and/or accessories				
	dumpers to the required specification	8.3	Prepare to, position, set up and operate forward tipping dumpers to receive, transport and discharge loads to given working instructions			
		8.4	Shut down and secure forward tipping dumpers			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		identify the characteristics of the forward tipping dumpers used for transporting and discharging work			
		carry out function checks to receive, transport and discharge loads			
		<ul> <li>identify characteristics, type and volume of loads to receive and transport</li> </ul>			
		prepare, set up and adjust for operational requirements			
		<ul> <li>carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area</li> </ul>			
		<ul> <li>recognise and determine when specific skills and knowledge are required and report accordingly</li> </ul>			
	8.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		identify the area for discharging			
		<ul> <li>check to avoid damage to structures and utilities service apparatus</li> </ul>			
		receive, transport and discharge materials safely and securely			
		be on the public highway			
		shut down and secure the forward tipping dumper			
		use hand tools, ancillary equipment and accessories			

Le	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		8.7	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out transporting and discharging operations			
		8.8	Describe how to maintain the plant and machinery, hand tools and ancillary equipment used for transporting and discharging operations			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 22: Preparing and

Operating Ride-on Rollers to Compact

Materials in the

Workplace

Unit reference number: R/506/4661

Level: 2

Credit value: 16

**Guided learning hours: 53** 

## **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating ride-on rollers to compact materials in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant Rule of Combination (RoC). Please refer to the RoC applicable to the qualification/occupational area in which the candidate is being assessed.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
	preparation and use of ride-on rollers to carry out	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	compacting operation	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of ride-on rollers for compaction work			
2	Organise with	2.1	Organise the work according to given information or instructions			
	others the sequence and	2.2	Describe how to communicate ideas between team members			
	operation in which compacting	2.3	Organise and communicate with team members and other associated occupations			
	operations using ride-on rollers are to be carried out	2.4	Describe how to organise resources prior to and during compacting operations using ride-on rollers			

Learning outcomes		nes Assessment criteria		Portfolio reference	Date
Know how to comply with	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:			
and official guidance when carrying out	<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>				
operations using ride-on rollers	ations using 3.2 Describe the organisational security pro	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
	3.3	Explain what the accident reporting procedures are and who is responsible for making reports			
Maintain safe and healthy working practices when preparing for and	4.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during compacting operations			
carrying out compacting operations using ride-on rollers  4.2	4.2	Demonstrate compliance with given information and relevant legislation when carrying out compacting operations using ride-on rollers in relation to two or more of the following:			
		safe use and storage of tools and equipment			
	Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using	Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using  4.1	Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  A.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  • in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting  3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative  Explain what the accident reporting procedures are and who is responsible for making reports  Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during compacting operations  4.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  • in the workplace, below ground level, in confined spaces, at height hazards and substances, with movement/storage of materials and by manual handling and mechanical lifting  • in the workplace, confined spaces, at height height hazards and substances, with movement/storage of materials and by manual handling	Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations  Maintain safe and healthy working practices when preparing for and carrying out compacting operations  Maintain safe and healthy working practices when preparing for and carrying out compacting operations  Maintain safe and healthy working practices when preparing for and carrying out compacting operations  Maintain safe and healthy working practices when preparing for and carrying out compacting operations  Maintain safe and healthy working practices when preparing for and carry out the activity in accordance with legislation and organisational requirements during compacting operations  Maintain safe and healthy working practices when preparing for and carry out the activity in accordance with legislation and organisational requirements during compacting operations  Maintain safe and healthy working practices when preparing for and carry out the activity in accordance with legislation and organisational requirements during compacting operations  Maintain safe and healthy working practices when preparing for and carry out the activity in accordance with legislation and organisational requirements during compacting operations  Maintain safe and healthy working practices	Know how to comply with relevant legislation and official guidance when carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers  Maintain safe and healthy working practices when preparing for and carrying out compacting operations using ride-on rollers of safe use and storage of plant or machinery  as a bescribe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  a in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, and

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		4.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to ride-on roller use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		4.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		4.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
5	Request and select the required quantity and	5.1	Request and select resources associated with ride-on rollers in relation to consumables, materials, tools, ancillary equipment and/or accessories			
	quality of resources to prepare for and carry out	5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
	compacting		consumables, lubricants and fuels			
	operations using ride-on rollers		attachments and compaction operational aids			
	Tide off folicis		hand tools, ancillary equipment and accessories			
		5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		5.5	Describe any potential hazards associated with the resources and methods of work			
		5.6	Describe how to identify weight, pressure, quantity, length and area associated with the method/procedures to carry out compaction work using ride-on rollers, length and area associated with the method/procedures to carry out extracting operations using skid steer			
6	Minimise the risk of damage to the	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	6.2	Minimise damage and maintain a clean work space			
	when preparing for	6.3	Dispose of waste in accordance with current legislation			
	and compacting materials	6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		6.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
7	Complete the work	7.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when preparing to and	7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	compacting		types of progress charts, timetables and estimated times			
	materials		organisational procedures for reporting circumstances which will affect the work programme			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
8	Comply with the given contract	ontract	Demonstrate the following work skills when preparing for and compacting materials using ride-on rollers:			
	information to compact materials using ride-on		checking, adjusting, communicating, manoeuvring, positioning and compacting			
	rollers to the	8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
	required specification	8.3	Prepare for, position, set up and operate ride-on rollers to compact a variety of materials, in various locations, to given working instructions			
		8.4	Shut down and secure ride-on rollers			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			identify the characteristics of the ride-on roller used for compaction operations			
			carry out function checks for compaction operations			
			identify the area for the compaction work			
			prepare, set up and adjust for operational requirements			
		and security of the work and surroundir	carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area			
			identify geological, environmental and material changes and report			
			check to avoid damage to structures and utilities service apparatus			
			recognise different compaction methods			
			recognise and work compaction patterns			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		8.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			<ul> <li>recognise and determine when specific skills and knowledge are required and report accordingly</li> </ul>			
			compact materials safely and securely			
			complete compaction work			
			be on the public highway			
			shut down and secure the ride-on roller			
			use hand tools, ancillary equipment and accessories			
		8.7	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out compacting operations			
		8.8	Describe how to maintain the plant and machinery, hand tools and ancillary equipment used to compact materials			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 23: Preparing to and

**Directing and Guiding** 

the Movement of Vehicles, Plant or

Machinery in the

Workplace

Unit reference number: A/506/4668

Level: 2

Credit value: 12

**Guided learning hours: 40** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to and directing and guiding the movement of vehicles, plant or machinery in the workplace.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments, plant and vehicle movement plans and manufacturers' information			
	preparing to, and directing and guiding the movement of vehicles, plant or machinery	ecting and assessments and method statements				
		1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, method statements, risk assessments, plant and vehicle movement plans, manufacturers' information and Codes of Practice for the direction and guidance of vehicles, plant and machinery</li> </ul>			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
2	Organise with	2.1	Organise the work according to given information or instructions			
	others the sequence and	2.2	Describe how to communicate ideas between team members			
	operation in which directing and	2.3	Organise and communicate with team members and other associated occupations			
	guiding the movement of vehicles, plant or machinery is to be carried out	2.4	Describe how to organise resources prior to and during directing and guiding vehicles, plant or machinery			
3 Know how to comply with relevant legislation and official guidance when directing and guiding the movement of vehicles, plant or machinery	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  • in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting				
	movement of vehicles, plant or	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing to,	4.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when directing and guiding vehicles, plant or machinery			
	directing and guiding the movement of vehicles, plant or	4.2	Demonstrate compliance with given information and relevant legislation when directing and guiding the movement of vehicles, plant or machinery in relation to two or more of the following:			
	machinery		safe use and storage of tools			
			safe use and storage of equipment			
			specific risks to health			
		4.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to directing and guiding vehicles, plant or machinery, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		4.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		4.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
5	Select the required quantity and quality of	5.1	Select resources associated with directing and guiding vehicles, plant or machinery in relation to hand tools, ancillary equipment and signalling and communication equipment			
	resources to prepare to, and direct and guide the movement of	5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
	vehicles, plant or		signalling and communication equipment			
	machinery		barriers, cones, signs			
			lighting equipment			
			hand tools and ancillary equipment			
		5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		5.5	Describe any potential hazards associated with the resources and methods of work			
		5.6	Describe how to identify weight/bearing pressures, quantity, length and area associated with the method/procedures for directing and guiding the movement of vehicles, plant and machinery, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Lea	arning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	6.2	Minimise damage and maintain a clean work space			
	when preparing to	6.3	Dispose of waste in accordance with current legislation			
	and directing and guiding the movement of vehicles, plant or	6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
	machinery	6.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
7	Complete the work	7.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when preparing to, and	7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	directing and guiding the movement of vehicles, plant or machinery		<ul> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to prepare to, and direct and guide the movement of vehicles, plant or	8.1	<ul> <li>Demonstrate the following work skills when preparing to, and directing and guiding vehicles, plant or machinery:</li> <li>measuring, gauging, estimating, interpreting, judging, explaining, preparing, commanding, directing, guiding, indicating, informing, instructing, signing, positioning, moving, securing, signalling and relaying</li> </ul>			
machinery to the	8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
required specification	pecification unloaded vehicles, including articulated vehicles and plant	Prepare to, and direct and guide the movement of loaded and unloaded vehicles, including articulated vehicles and plant or machinery (wheeled or tracked) to given working instructions, relating to the following:			
		hand signals			
		hand signalling equipment			
		verbal/electronic communication equipment			

Learning outcomes	Asse	ssment criteria	Evidence type	Portfolio reference	Date
	8.4	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		identify the differences between directing and guiding movement, directing and guiding operations and slinging and signalling			
		interpret a work management plan and vehicle movement plan			
		identify the hierarchy of traffic control measures and pedestrian separation			
		organise and ensure the maintenance of holding areas, routes, exclusion zones, markers and signs			
		<ul> <li>assess and determine the movement of vehicles, plant and machinery, to include own position of safety, visibility, ground conditions and features, proximity hazards and weight limits</li> </ul>			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			<ul> <li>recognise and react to changing conditions, ground, environment, weather, light, numbers and types of vehicles, plant and machinery</li> </ul>			
			<ul> <li>liaise with, convey and collect information from and to, drivers and operators</li> </ul>			
			<ul> <li>recognise and utilise movement aids (camera's, mirrors, audio and visual warnings, etc.)</li> </ul>			
			recognise blind-spots, potential crush zones and other limitations to driver visibility			
			recognise the requirements of directing and guiding the movement of vehicles, plant and machinery onto and from public highways			
			recognise the requirements of working on public highways			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		8.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			direct and guide different vehicle types and size e.g. height, weight length, width, tracked, wheeled and articulated			
			assess and determine the movement of loads, including unloading, discharging and loading requirements			
			direct and guide vehicles, plant and machinery across rough or uneven terrain			
			<ul> <li>check the integrity of load securing equipment and stability of loads, prior to commencement of movements and on arrival, prior to release</li> </ul>			
			<ul> <li>signal and communicate following recognised and agreed operational procedures</li> </ul>			
			recognise and determine when specific skills and knowledge are required and report accordingly			
			use hand tools and ancillary equipment			
		8.7	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and directing and guiding vehicles, plant or machinery			
		8.8	Describe how to maintain the hand tools, ancillary equipment, and signalling and communication equipment used to direct and guide vehicles, plant or machinery			

Learner name:	Date:	
Learner signature:	Date:	
Assessor signature:	Date:	
Internal verifier signature:	Date:	
(if sampled)		

Unit 24: Preparing for, and

**Arranging and Securing** 

**Plant for** 

Transportation in the

Workplace

Unit reference number: F/506/4669

Level: 2

Credit value: 16

**Guided learning hours: 53** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing for, and arranging and securing plant for transportation in the workplace within the relevant sector of industry.

#### Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and manufacturers' information			
	preparation of, and arranging and securing plant or	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	machinery for transportation	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, method statements, lift plans, risk assessments, manufacturers' information and current regulations governing the arrangement and security of plant or machinery for transportation</li> </ul>			
2	Know how to comply with relevant legislation and official guidance when arranging and securing plant or machinery for transportation	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:  • in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when preparing for and arranging and securing plant or machinery for transportation	3.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when arranging and securing plant or machinery for transportation			
		3.2	Demonstrate compliance with given information and relevant legislation when arranging and securing plant or machinery for transportation in relation to two or more of the following:			
			<ul><li>safe use of access equipment</li><li>safe use, storage and handling of materials</li></ul>			
			<ul> <li>safe use and storage of tools and equipment</li> </ul>			
			specific risks to health			
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to arranging and securing plant or machinery for transportation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
4	Select the required quantity and quality of	4.1	Select resources associated with the work in relation to materials, components, fixings, tools and equipment, lifting accessories and load restraint equipment			
	resources to prepare for, and arrange and secure plant or machinery for transportation	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:  • lifting accessories and load restraint equipment, steel wire rope, chain, fabric, web hooks, shackles, clamps, netting and sheeting			
			<ul> <li>hand tools and ancillary equipment</li> </ul>			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to identify weight, bearing, pressure, quantity, length and area associated with the method/procedure to carry out the work			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when preparing for	5.3	Dispose of waste in accordance with current legislation			
	and arranging and securing plant or machinery for transportation	5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
	transportation	5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work within the allocated time when preparing to, and	6.1	Demonstrate completion of the work within the allocated time			
		6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	arranging and		types of progress charts, timetables and estimated times			
	securing plant or machinery for transportation		organisational procedures for reporting circumstances which will affect the work programme			
7	Comply with the given contract information to prepare to, and arrange and secure	7.1	Demonstrate the following work skills when preparing to, and arranging and securing plant or machinery for transportation:			
			<ul> <li>measuring, gauging, calculating, selecting, fitting, configuring, testing, balancing, adjusting, securing, positioning and removing</li> </ul>			
		7.2	Use and maintain hand tools, ancillary equipment, lifting accessories and load restraint equipment			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.3	Prepare for, and arrange plant, machinery or associated equipment for transportation to given working instructions by at least two of the following methods:			
			<ul> <li>driving and operating the following types of plant: wheeled machinery, tracked machinery and rolling machinery onto the transport (non-operational activities)</li> </ul>			
			<ul> <li>suspended loads by slinging and signalling; at least three of the following: balanced, unbalanced, loose, bundled, containers, drums (slinging and signalling)</li> </ul>			
			<ul> <li>by directing and guiding the operations of lifting plant (not craneage), e.g. lift truck, excavator</li> </ul>			
			directing and guiding machine operators (movement)			
			driving transport into plant or machinery on hydraulic jack legs or suspended from a gantry (raised loads)			
		7.4	Secure plant, machinery or associated equipment for safe movement			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			determine vehicle capacity			
			determine weights and sizes (height, length, width) of plant and machinery to be loaded			
			check loading and unloading areas			
			<ul> <li>recognise the requirements to drive and operate plant and machinery for loading and unloading under no load conditions</li> </ul>			
			<ul> <li>recognise the requirements to sling and signal loads for transportation</li> </ul>			
			recognise the requirements to direct and guide the operations of plant or machinery for loading and unloading			
			recognise the requirements to direct and guide the movement of vehicles, plant and machinery for loading and unloading			
			recognise the requirements to load equipment using hydraulic jacks and supports			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	7.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		<ul> <li>ensure load is prepared for transportation, secured, restrained, immobilised, hydraulic systems locked, articulation and slew systems locked</li> </ul>			
		differentiate between load restraint equipment and lifting accessories			
		recognise proximity hazards			
		<ul> <li>select and use suitable lifting accessories and load restraint equipment</li> </ul>			
		arrange and secure loads			
		<ul> <li>recognise and determine when specific skills and knowledge are required and report accordingly</li> </ul>			
		confirm balance, stability and correct weight distribution			
		<ul> <li>check stability and weight distribution of load prior to releasing securing restraints and lifting accessories</li> </ul>			
		load and unload on a public highway			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		7.7	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:  • identify and mark overhangs			
			<ul> <li>remove and store lifting accessories and load restraint equipment on completion of loading and unloading</li> </ul>			
			<ul><li>use hand tools and ancillary equipment</li><li>use access equipment</li></ul>			
			work at height			
		7.8	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and arranging and securing plant or machinery for transportation			
		7.9	Describe how to maintain the hand tools, ancillary equipment, lifting accessories and load restraint equipment used to arrange and secure plant or machinery for transportation			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 25: Preparing and

**Operating Powered** 

**Units, Tools or** 

Pedestrian Plant,

Machinery or

**Equipment in the** 

Workplace

Unit reference number: F/506/4672

Level: 2

Credit value: 7

**Guided learning hours: 23** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace within the relevant sector of industry.

## Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment and in accordance with:

- · the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of powered units, tools or	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	pedestrian plant, machinery or equipment	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, method statements, risk assessments, legislation, Codes of Practice, manufacturers' information and operating instructions</li> </ul>			

Lea	arning outcomes	Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:			
	relevant legislation and official guidance to prepare and use powered units, tools or pedestrian plant, machinery or equipment		<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe and healthy working practices when preparing for and using powered units, tools or pedestrian plant, machinery or	3.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when using powered units, tools or pedestrian plant, machinery or equipment			
		3.2	Demonstrate compliance with given information and relevant legislation when using powered units, tools or pedestrian plant, machinery or equipment in relation to two or more of the following:			
	equipment		safe use of access equipment			
			safe handling of materials			
			safe use and storage of materials, tools and equipment			
			specific risks to health			

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		3.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to powered units, tools or pedestrian plant, machinery or equipment use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		3.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		3.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
4	Select the required quantity and	4.1	Select resources associated with the type of work in relation to fuel/power source, lubricants and consumables			
	quality of resources to prepare for and sustain powered	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
	units, tools or		power source/fuels			
	pedestrian plant, machinery or		consumables, lubricants			
	equipment	4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		4.5	Describe any potential hazards associated with the resources and methods of work			
		4.6	Describe how to identify quantity, length, area and wastage associated with the method/procedures to operate powered units, tools or pedestrian plant, machinery or equipment			
5	Minimise the risk of damage to the	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
	work and surrounding area	5.2	Minimise damage and maintain a clean work space			
	when preparing to and using powered units, tools or pedestrian plant, machinery or equipment	5.3	Dispose of waste in accordance with current legislation			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6	Complete the work	6.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when preparing to and using powered units, tools or pedestrian plant, machinery or equipment	6.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
			<ul> <li>types of progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme</li> </ul>			

Lea	Learning outcomes		arning outcomes Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract	7.1	Demonstrate the following work skills when using powered units, tools or pedestrian plant, machinery or equipment:				
	information to operate powered		starting, stopping, replenishing, controlling and cleaning				
	units, tools or	7.2	Use and maintain hand tools, ancillary equipment and/or accessories				
	pedestrian plant, machinery or equipment to the	7.3	Disassemble and/or clean powered unit, tools or pedestrian plant, machinery or equipment				
	required specification	7.4	Return powered unit, tools or pedestrian plant, machinery or equipment to a safe operational condition on completion of work				
		7.5	Disassemble and/or clean powered unit, tools or pedestrian plant, machinery or equipment				
		7.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:				
			prepare, position and set up for work				
			secure accessories and tool attachments				
			carry out pre-use and function checks to manufacturers' and suppliers' information/ and procedures				
			complete pre-start and post stop checks				
			<ul> <li>recognise the characteristics of the plant, machinery and equipment</li> </ul>				
		identify specific operating and safety and work	identify specific operating and safety requirements for the task and work				
			recognise and determine when specific skills and knowledge are required and report accordingly				

Lea	Learning outcomes		ssment criteria	Evidence type	Portfolio reference	Date
		7.7	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			operate, use and control			
			monitor and maintain			
			replenish consumables			
			close down and secure			
			disassemble and clean			
			use access equipment			
			transport and store			
		7.8	Describe the needs of other occupations and how to effectively communicate within a team when preparing for and using powered units, tools or pedestrian plant, machinery or equipment			
		7.9	Describe how to maintain the hand tools, portable power tools, powered units, pedestrian plant, machinery and ancillary equipment used for the work			

Learner name:	Date:
Learner signature:	Date:
Assessor signature:	Date:
Internal verifier signature:	Date:
(if sampled)	

Unit 26: Slinging and Hand

Signalling the Movement of

Suspended Loads in the

Workplace

Unit reference number: R/506/3929

Level: 2

Credit value: 10

**Guided learning hours: 33** 

#### **Unit summary**

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in slinging and hand signalling the movement of suspended loads in the workplace within the relevant sector of industry.

This unit is designed for those undertaking slinger/signaller duties in a secondary or part-time role in support of a learner's main occupation. Other units of competence exist for those undertaking slinging and signalling as a main occupation.

# Unit assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments, method statements (lift plans) and manufacturers' information			
	preparation for and the slinging and signalling of loads	1.2	Comply with information and/or instructions derived from risk assessments and method statements			
	Signaling of loads	1.3	Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		1.4	Describe different types of information, their source and how they are interpreted in relation to:			
			<ul> <li>drawings, specifications, schedules, method statements, risk assessments, lift plans, work instructions, manufacturers' information, approved procedures and Codes of Practice</li> </ul>			
2	Organise with	2.1	Organise the work according to given information or instructions			
	others the sequence and	2.2	Describe how to communicate ideas between team members			
	operation in which the slinging and signalling of loads is to be carried out	2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and when slinging and signalling of loads			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:			
	relevant legislation and official guidance to carry out slinging and signalling of loads		<ul> <li>in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting</li> </ul>			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			
4	Maintain safe and healthy working practices when preparing for and	4.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when slinging and signalling loads			
	slinging and signalling loads	4.2	Demonstrate compliance with given information and relevant legislation when carrying out the slinging and signalling of loads in relation to at least three of the following:			
			safe use and storage of tools and equipment			
			safe use, storage and handling of lifting accessories			
			safe use of access equipment			
			specific risks to health			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
		4.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:			
			collective protective measures			
			personal protective equipment (PPE)			
			respiratory protective equipment (RPE)			
			local exhaust ventilation (LEV)			
		4.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions			
		4.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities			
5	Select the required quantity and quality of resources to prepare for and when slinging and	5.1	Select resources associated with slinging/signalling in relation to lifting accessories/aids, hand tools and ancillary equipment			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:			
	signalling load		Iifting accessories			
			signalling and communication equipment			
			hand tools and ancillary equipment			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		5.3	Describe how the resources should be used correctly, and how problems associated with the resources are reported			
		5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources			
		5.5	Describe any potential hazards associated with the resources and methods of work			
		5.6	Describe how to identify weight, quantity, length and area associated with the method/procedures to carry out slinging/signalling			
6	Minimise the risk of damage to the work and surrounding area when preparing to and slinging and signalling loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Prevent damage and maintain a clean work space			
		6.3	Dispose of waste in accordance with current legislation			
		6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions			
		6.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
7	Complete the work	7.1	Demonstrate completion of the work within the allocated time			
	within the allocated time when preparing to and	7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:			
	slinging and		types of progress charts, timetables and estimated times			
	signalling loads		organisational procedures for reporting circumstances which will affect the work programme			

Lea	rning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
i	Comply with the given contract information to prepare to and sling and signal suspended loads for movement to the required specification	8.1	<ul> <li>Demonstrate the following work skills when preparing to and slinging and signalling loads:</li> <li>measuring, gauging, estimating, calculating, fitting, fixing, testing, balancing, interpreting, inspecting, judging, explaining, preparing, indicating, informing, instructing, signing, positioning, adjusting, configuring, moving, securing, signalling and relaying</li> </ul>			
		8.2	Use and maintain lifting accessories, lifting aids and equipment			
		8.3	Inspect and prepare lifting accessories prior to slinging			
		8.4	Prepare to and attach suspended loads to lifting equipment, using appropriate lifting accessories and load securing methods, to given working instructions for three of the following:			
			balanced			
			unbalanced			
			• loose			
			bundled			
			container			
			• drum			
			a load where the machine operator cannot observe its full movement path			

Learning outcomes	Asse	Assessment criteria		Portfolio reference	Date
	8.5	Guide, move and place suspended loads to specified destinations, using hand signals, to given working instructions for three of the following:			
		balanced			
		unbalanced			
		• loose			
		bundled			
		• container			
		• drum			
		<ul> <li>a load where the machine operator cannot observe its full movement path</li> </ul>			
	8.6	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		<ul> <li>identify the differences between: slinging and signalling, directing and guiding movement of vehicles, plant and machinery, and directing and guiding operations of plant and machinery not being used for lifting operations</li> </ul>			
		confirm the authority, duties and responsibilities allocated			
		identify characteristics of lifting equipment and lifting accessories			
		identify and interpret valid certification for maintenance, inspection and thorough examination			

Learning outcomes		Asses	ssment criteria	Evidence type	Portfolio reference	Date
		8.7	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
			lift and transfer people			
			sling balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator			
			<ul> <li>communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios)</li> </ul>			
			confirm methods of communication			
			<ul> <li>recognise blind-spots, potential crush zones and other limitations to driver visibility</li> </ul>			
			consider the load characteristics including centre of gravity and lifting points to determine the method of slinging			
			<ul> <li>determine and check the route of the load before and during the lift including distances, clearances and landing position</li> </ul>			

Learning outcomes	Asses	ssment criteria	Evidence type	Portfolio reference	Date
	8.8	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:			
		<ul> <li>select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids</li> </ul>			
		identify rejection criteria for removing lifting accessories from service			
		recognise and determine when specific skills and knowledge are required and report accordingly			
		attach lifting accessories and sling loads securely			
		ensure balance and stability of loads			
		attach and use load guidance equipment (tag lines)			
		<ul> <li>guide and place suspended loads by recognised methods of communication and agreed operational procedures</li> </ul>			
		land and position loads safely and securely			
		remove and store lifting accessories			
		use hand tools and ancillary equipment			
	8.9	Describe the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads			
	8.10	Describe how to maintain the lifting accessories, lifting aids and signalling and communication equipment used to sling and signal loads			

Learner name:	Date:	
Learner signature:	Date:	
Assessor signature:	Date:	
Internal verifier signature:	Date:	
(if sampled)		

### 12 Further information and useful publications

To get in touch with us visit our 'Contact us' pages:

- Edexcel, BTEC and Pearson Work Based Learning contact details: qualifications.pearson.com/en/support/contact-us.html
- books, software and online resources for UK schools and colleges: www.pearsonschoolsandfecolleges.co.uk

### Key publications

- Adjustments for candidates with disabilities and learning difficulties, Access and Arrangements and Reasonable Adjustments, General and Vocational qualifications (Joint Council for Qualifications (JCQ))
- Supplementary guidance for reasonable adjustments and special consideration in vocational internally assessed units (Pearson)
- General and Vocational qualifications, Suspected Malpractice in Examination and Assessments: Policies and Procedures (JCQ)
- Equality Policy (Pearson)
- Recognition of Prior Learning Policy and Process (Pearson)
- UK Information Manual (Pearson)
- Pearson Edexcel NVQs, SVQs and competence-based qualifications Delivery Requirements and Quality Assurance Guidance (Pearson)

All of these publications are available on our website: qualifications.pearson.com

Further information and publications on the delivery and quality assurance of NVQ/Competence-based qualifications are available at our website on the Delivering BTEC pages. Our publications catalogue lists all the material available to support our qualifications. To access the catalogue and order publications, please go to the resources page of our website.

### 13 Professional development and training

### **Professional development and training**

Pearson supports UK and international customers with training related to our qualifications. This support is available through a choice of training options offered on our website.

The support we offer focuses on a range of issues, such as:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing learner-centred learning and teaching approaches
- building in effective and efficient quality assurance systems.

The national programme of training we offer is on our website. You can request centre-based training through the website or you can contact one of our advisers in the Training from Pearson UK team via Customer Services to discuss your training needs.

### Training and support for the lifetime of the qualifications

**Training and networks:** our training programme ranges from free introductory events through sector-specific opportunities to detailed training on all aspects of delivery, assignments and assessment. We also host some regional network events to allow you to share your experiences, ideas and best practice with colleagues in your region.

**Regional support:** our team of Regional Quality Managers, based around the country, are responsible for providing quality assurance support and guidance to anyone managing and delivering NVQs/Competence-based qualifications. The Regional Quality Managers can support you at all stages of the standard verification process as well as in finding resolutions of actions and recommendations as required.

To get in touch with our dedicated support teams please visit our website.

**Online support**: find the answers to your questions by browsing over 100 FAQs on our website or by submitting a query using our Work Based Learning Ask the Expert Service. You can search the database of commonly asked questions relating to all aspects of our qualifications in the work-based learning market. If you are unable to find the information you need, send us your query and our qualification or administrative experts will get back to you. The Ask the Expert service is available on our website at: qualifications.pearson.com

### **Online forum**

Pearson Work Based Learning Communities is an online forum where employers, further education colleges and workplace training providers can seek advice and clarification about any aspect of our qualifications and services, and share knowledge and information with others. The forums are sector specific and cover business administration, customer service, health and social care, hospitality and catering and retail. The online forum is available on our website at: qualifications.pearson.com

### 14 Contact us

We have a dedicated Account Support team, across the UK, to give you more personalised support and advice. To contact your Account Specialist:

**Email**: wblcustomerservices@pearson.com

**Telephone**: 0844 576 0045

If you are new to Pearson and would like to become an approved centre, please contact us by:

**Email**: wbl@pearson.com **Telephone**: 0844 576 0045

### **Complaints and feedback**

We are working hard to give you excellent service. However, if any element of our service falls below your expectations, we want to understand why, so that we can prevent it from happening again. We will do all that we can to put things right.

If you would like to register a complaint with us, please email wblcomplaints@pearson.com.

We will formally acknowledge your complaint within two working days of receipt and provide a full response within seven working days.

# Annexe A: Consolidated Assessment Strategy for Construction and the Built Environment

Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional. Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

### **Introduction**

This assessment strategy provides principles and guidance to awarding organisations so the assessment of units and qualifications with NVQ in the Qualifications and Credit Framework (QCF) title and SVQs is valid, effective and consistent, and has credibility across the Construction and Built Environment sector. This is a consolidated ConstructionSkills Assessment Strategy covering construction and the built environment – craft, supervisory, technical, managerial and professional NVQ and SVQ units and qualifications. This assessment strategy is one of the strands of the ConstructionSkills' Construction Qualification Strategy.

These principles are in addition to the requirements that awarding organisations must meet for the delivery of NVQ and SVQ units and qualifications as required by the qualification regulators' documentation.

This consolidated assessment strategy provides the overarching principles as systems may vary from one awarding organisation to another. Awarding organisations must consistently put these principles into practice.

Appendix A provides guidance to help awarding organisations incorporate relevant parts of these principle requirements in their documentation.

Appendix B provides a list of sub annexes relevant to specific NVQ or SVQ qualifications and units, these sub annexes contain additional information for awarding organisations where National Working Groups or Awarding Body Fora have identified the need for specific clarification. Clarification may be about the terminology of the content of the unit (ref. section 2.1), or specific occupational expertise requirements for assessors and verifiers (ref. section 4).

Awarding organisations must make this Strategy and the relevant annexes available to assessors, verifiers and candidates.

### **Principles**

### 1 External quality control of assessment

- 1.1 Awarding organisations must use risk management for external quality control of assessment. They must evaluate all external verification reports and other data relating to assessment centres. Awarding organisations must address any risks relating to quality control, considering the sector assessment strategy requirements for:
  - workplace evidence
  - the use of simulation
  - the occupational competence of assessors and verifiers.

- 1.2 The monitoring and standardisation of assessment decisions must be achieved by robust and strong internal and external verification systems that meet the requirements of the qualification regulators' documentation.
- 1.3 Awarding organisations must be members of the sector's Built Environment Awarding Body Forum, of which the qualification regulators are members. Members will be expected to provide feedback on National Occupational Standards (NOS), NVQ or SVQ units and qualifications, including aspects informing incremental change.
- 1.4 The Forum will, in respect of this strategy:
  - build on the good relationships with awarding organisations
  - provide opportunities to identify and address particular issues of external quality control
  - contribute to improving quality and consistency
  - support awarding organisations to monitor assessment centres' performance to identify areas and levels of risk
  - provide information and statistics about take-up and completion, as well as trends and developments that can be used by ConstructionSkills and awarding organisations to identify any problem areas and agree remedial action
  - discuss matters concerning quality assurance, as well as providing the opportunity to identify issues arising from implementation of NOS and related vocational qualifications
  - inform the continuous improvement of NOS, and awards derived from them
  - identify and share best practices to build a whole industry approach to pursue excellence in education and work-based learning and assessment process to achieve competence.
- 1.5 Awarding organisations and their partners, assessment centres, verifiers and assessors must maintain robust and transparent operational arrangements. They must preserve independence in assessment, certification and quality assurance processes. Awarding organisations must ensure clear separation of their NVQ/SVQ assessment responsibilities from their industry, training, membership, certification, accreditation and commercial interests and resolve any conflicts of interest.
- 1.6 Where e-assessment is used, it must meet the requirements of the qualification regulators' documentation.

### 2 Aspects to be assessed through performance in the workplace

2.1 Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant.

ConstructionSkills' National Working Groups will specify any exceptions to this position (see section 3).

- 2.2 Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:
  - questioning the candidate
  - recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
  - performance evidence
- 2.3 A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence. Annex A suggests standard evidence notes for awarding organisations.

## 3 How simulated working conditions may be used to assess competence

- 3.1 Simulations (designed situations for producing artificially generated evidence) may only be used where candidates are prevented from gathering direct evidence from the workplace in the normal way because:
  - there are hazards
  - it is difficult to distinguish individual performance in team situations
  - circumstances occur infrequently or long term results are involved
  - confidentiality is important
  - there are organisational constraints.
- 3.2 Any instances where simulation is considered to be acceptable as an alternative (to direct workplace evidence) means of generating evidence, will be determined by the relevant ConstructionSkills National Working Group and stated in the unit. Annex A suggests standard evidence notes for awarding organisations.
- 3.3 The ConstructionSkills National Working Group will determine and specify on the required realistic working environment and context to be adopted. This could include appropriate:
  - tools, equipment and instruments
  - materials
  - types of contingencies
  - standards and quality specifications
  - real timescales
  - quantities of work
  - physical conditions
  - relationships with people
  - types of interaction
  - communication methods and media
  - information and data.

- 3.4 Where simulated evidence is stated as acceptable in the unit, the circumstances and requirements for the simulation needs to be confirmed by discussions between the candidate and the assessor, and which are then agreed by the internal and external verifiers.
- 3.5 Where other Standard Setting Bodies' units are imported into a ConstructionSkills suite, the evidence requirements of the originating body will be adopted and specified.

### 4 Occupational expertise requirements for assessors and verifiers

- 4.1 Awarding organisations must ensure that **assessors**:
- 4.1.1 have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed. This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of:
  - curriculum vitae and employer endorsement
  - references
  - possession of a relevant NVQ/SVQ, or vocationally related qualification
  - corporate membership of a relevant professional institution
  - interview

(The verification process must be recorded and available for audit)

- 4.1.2 have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements
- 4.1.3 only assess in their acknowledged area of occupational competence
- 4.1.4 have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and this Assessment Strategy (this document)
- 4.1.5 are prepared to participate in training activities for their continued professional development
- 4.1.6 hold, or are working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):
  - Level 3 Award in Assessing Competence in the Work Environment
  - Level 3 Certificate in Assessing Vocational Achievement
  - SVQ (SCQF level) Assessing Competence in the Work Environment
  - SVQ (SCQF level) Assessing Vocational Achievement

or hold one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In Scotland, approval for exemptions must be obtained from the Scottish Qualifications Authority.

- 4.2 Awarding organisations must ensure that **internal verifiers**:
- 4.2.1 have sufficient, verifiable, relevant up to date experience, knowledge and understanding of the occupational working area at, or above, the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about assessors' assessment processes and decisions. Internal verifiers' experience, knowledge and understanding could be verified by a combination of:
  - curriculum vitae and employer endorsement
  - references
  - possession of a relevant NVQ/SVQ, or vocationally related qualification
  - corporate membership of a relevant professional institution
  - interview

(The verification process must be recorded and available for audit)

- 4.2.2 have expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements
- 4.2.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)
- 4.2.4 are prepared to participate in training activities for their continued professional development
- 4.2.5 hold, or are working towards, a qualification as listed in 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):
  - Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice
  - Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice
  - SVQ(SCQF level) in the Internal Quality Assurance of the Assessment Process and Practice
  - SVQ (SCQF level) in Leading the Internal Quality Assurance of Assessment Process and Practice

or hold one of the following

- VI Conduct internal quality assurance of the assessment process
- D34 Internal verify the assessment process

Holders of V1/D34 must quality assure to the reviewed National Occupational Standards (NOS) for Learning and Development.

It is strongly recommended that within the role of Internal Quality Assurance one of the following qualifications is held.

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement

- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

or one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence
- 4.3 Awarding organisations must ensure that **external verifiers**:
- 4.3.1 the occupational working area at, or above, the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about internal verification and assessment processes and decisions. External verifiers' experience, knowledge and understanding could be verified by a combination of:
  - curriculum vitae and employer endorsement
  - references
  - possession of a relevant NVQ/SVQ, or vocationally related qualification
  - corporate membership of a relevant professional institution
  - interview

(The verification process must be recorded and available for audit)

- 4.3.2 have sufficient expertise so they have an up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements
- 4.3.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)
- 4.3.4 are prepared to participate in training activities for their continued professional development
- 4.3.5 hold, or are working towards, a qualification as listed in 'Assessing and Assuring Quality of Assessment', either in the Qualifications and Credit Framework (QCF), or the Scottish Credit and Qualifications Framework (SCQF):
  - Level 4 Award in the External Quality Assurance of the Assessment Process and Practice
  - Level 4 Certificate in Leading the External Quality Assurance of Assessment
  - SVQ (SCQF level) in the External Quality Assurance of the Assessment Process and Practice
  - SVQ (SCQF) in Leading the External Quality Assurance of Assessment or hold one of the following
  - V2 Conduct external quality assurance of the assessment process
  - D35 Externally verify the assessment process

Holders of V2/D35 must quality assure to the reviewed National Occupational Standards (NOS) for Learning and Development.

It is strongly recommended that within the role of External Quality Assurance one of the following qualifications is held at Level 3 and Level 4.

#### Level 3:

- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Certificate in Assessing Vocational Achievement
- SVQ (SCQF level) Assessing Competence in the Work Environment
- SVQ (SCQF level) Assessing Vocational Achievement

### or one of the following

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

#### Level 4:

- Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice
- SVQ(SCQF level) in the Internal Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF level) in Leading the Internal Quality Assurance of Assessment Process and Practice
- VI Conduct internal quality assurance of the assessment process
- D34 Internal verify the assessment process

#### 4.4 Selection and appointment of assessors and verifiers

All applicants should be advised that they may be interviewed. Applicants' CVs should be profiled against the activities and range of the NVQ/SVQ(s) they will assess/verify to check that the applicant has the relevant current experience, knowledge and understanding of the occupational working area:

- at, or above, the level they will be assessing
- of sufficient depth to credibly verify judgements and assessments
- to uphold the integrity of the NOS and this Consolidated Assessment Strategy.

All assessors should have experience as well as, not in lieu of, qualifications. Where there seem to be gaps in a potentially suitable applicant's experience and knowledge, the applicant should be interviewed. Successful applicants' CVs, profiling, reasons for not needing to interview and interview records should be available for audit.

### **Appendix B1**

## Additional Information to the Consolidated Assessment Strategy from the National Working Group for Controlling Lifting Operations

### Part A: Clarification and guidance notes

This additional information has been produced to ensure consistency in interpreting the occupational expertise requirements for assessors as described in paragraph 4.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate relevant parts of the assessment strategy principles' requirements in their documentation for the Controlling Lifting Operations units and qualifications with NVQ in the QCF title and SVQs.

## Additional requirements for assessors of planning and supervising lifting operations

Assessors must be competent and have an up-to-date working knowledge of the occupation and sector. Assessors must have had active involvement in lifting operations and on each endorsement for which they wish to assess. The awarding body must ensure that all assessors are competent on each endorsement for which they intend to assess.

### **Supplementary guidance**

In order to meet contractual and regulative requirements, many sectors of industry require lift planners and supervisors to possess certification from recognised industry approved bodies. The awarding body should ideally encourage all assessors to hold appropriate registration cards or certificates to support industry initiatives for a qualified workforce.

Where lifting experience was gained within the armed forces, applicants for assessor status should ideally gain external work experience within industry, or be able to demonstrate knowledge of relevant industry working practices outside the armed forces.

Part B: Clarification on standards (NOS) content terminology

Various sectors of industry, supported by the Health and Safety Executive, requested national occupational standards for the safety critical occupations of lift planner and lift supervisor. Standards from the suite of National Occupational Standards for Construction Site Supervision and Construction Site Management were identified by the National Working Group (NWG) as conveniently defining the job roles of planner and supervisor.

Certain standards (NOS), however, use terminology particular to, or make reference to, the construction sector, limiting the scope of the standards. Clarification of NOS terminology has been produced (Annex B1, page ii), by the NWG, for awarding organisations, which provides interpretation and meaning of selected words that are used in lifting operations within other industrial sectors. Provision of this clarification further avoids a proliferation of new standards.

Awarding organisations need to ensure that candidates, employers, assessment centres, assessors and those involved in the verification process for this qualification are informed of the clarification of NOS terminology for planning and supervising lifting operations.

### Clarification of NOS terminology for controlling lifting operations

**'construction operations'** Includes lifting operations within other sectors of

industry.

**'decision-makers'** This refers to the client, customer or their

representative, senior/contracts manager, project team, consultants or in VR 705 the lift planner.

'ensure notice has been given to all the people who will be affected'

This means as dictated by the lift plan.

'lines' 'levels', 'angles' Thi

This includes load levels, ground levels, lines for placing loads and lifting accessory angles.

'near neighbours'

This can include other structures and a workforce

in a different part of the project.

'organise and control the site'

The lifting activity and the immediate surrounding

area.

'position, align and/or level the work'

This refers to items being moved and placed and the equipment used to attach and move the loads.

'produce clear requests for plant, equipment or machinery'

This means those specified by the lift plan.

'place and maintain

notices'

This means ensuring that the correct notices (for the lifting activity) are in place prior to the commencement of the lifting activity, and checked throughout the duration of the activity.

throughout the duration of the activity.

'plan how the work will be undertaken'

`programmes and

schedules'

This means as dictated by the lift plan.

This refers to either component parts of, or the

complete lift plan.

**`project'** A lifting operation that is taking place within an

overall contract, project or work activity.

**'project plan'** This refers to either component parts of, or the

complete lift plan.

**'site'** A lifting operation that is taking place within an

overall contract, project or work activity.

**'site plan'**This refers to either components part of, or the

complete lift plan.

**'vehicular access'**This can comprise of all forms of transport,

including waterborne and airborne craft.

### **Appendix B2**

## Additional Information to the Consolidated Assessment Strategy from the Awarding Body Forum for Plant Operations

### Clarification and guidance notes

### Aspects to be assessed through performance in the workplace

This additional information has been produced to ensure consistency in aspects to be assessed through performance in the workplace as described in paragraph 2.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate the guidance into their assessment methodology for Plant Operations units and qualifications with NVQ in the QCF title and SVQ in the SCQF.

### Additional requirements for assessment in the workplace

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This direct evidence must be met using a combination of the following methods.

- direct observation by the assessor
- witness testimony by an expert witness related to the occupational area
- professional discussion.

Workplace evidence must be supported by the required evidence of knowledge and understanding gained from at least three month's work-based experience.

### Occupational expertise requirements for assessors

This additional information has been produced to ensure consistency in interpreting the occupational expertise requirements for assessors as described in paragraph 4.1 of the ConstructionSkills' Consolidated Assessment Strategy. This should help awarding organisations incorporate relevant parts of the assessment strategy principles' requirements in their documentation for Plant Operations units and qualifications with NVQ in the QCF title and SVQs.

Additional requirements for assessors of plant operations

Assessors must be competent and have an up-to-date working knowledge of the occupation and sector. Assessors must have had active involvement in plant operations and on each endorsement for which they wish to assess. The awarding organisation must ensure that all assessors are competent on each endorsement for which they intend to assess in accordance with requirements of the qualification regulators' guidance for England, Northern Ireland, Scotland and Wales.

### Supplementary guidance

In order to meet contractual and regulative requirements, many sectors of industry require operators of plant and equipment to possess certification from recognised industry approved bodies. The awarding organisation should ideally encourage all assessors to hold appropriate registration cards or certificates to support industry initiatives for a qualified workforce.

Where plant operating experience was gained within the armed forces, applicants for assessor status should ideally gain external work experience within industry, or be able to demonstrate knowledge of relevant industry working practices outside the armed forces.

### **Appendix C**

#### Guidance on the use of simulation

#### Introduction

National Occupational Standards (NOS) are developed by Sector Skills Councils (SSCs) and describe the level of occupational competence required of a particular job role. NOS are then used to build National and Scottish Vocational Qualifications (N/SVQs) that are competence based qualifications and demand assessment in a workplace environment.

Assessment of N/SVQs through simulation is indicated where the achievement of valid and reliable assessment calls for evidence of performance under workplace conditions, but where it will be difficult to assess through normal working practice. This will usually apply as a result of one or more of the following constraints:

- activities which are inherently hazardous and where mistakes made in carrying them out would pose unacceptable risks to the candidate, other people, animals or property (e.g. electricity and gas sectors, fire service etc.)
- the costs incurred would be unacceptably high if mistakes were made during an activity and a candidate would therefore be required to 'prove' competence before progressing onto the actual work (e.g. handling rare or precious objects)
- situations where the qualities and outcomes of the candidate's behaviour are almost impossible to distinguish from those of their peers or colleagues, making authenticity uncertain (e.g. in some teamwork contexts)
- activities or situations which are sufficiently rare (e.g. where processes, such as a 'shut-down', may only occur on an annual basis)
- when the collection and/or review of evidence of workplace performance would intrude unacceptably on personal privacy or confidentiality, or would significantly alter the nature of an interaction or relationship (e.g. in some health care settings)
- a requirement to work with new techniques and/or work practices which may not be available in all workplaces.
- Where permitted, simulation can take one or a combination of the two following forms:
- the candidate is presented with an activity to perform using equipment and/or in a location which replicates that found in the workplace
- the candidate is presented with a situation to which they must respond; taking and playing the role they would expect to play in the workplace.

It is a SSC's responsibility to define the acceptability of evidence from simulation in the context of National Occupational Standards (NOS) and National and Scottish Vocational Qualifications (N/SVQs). The ConstructionSkills Consolidated Assessment Strategy provides this guidance.

### Guidance on the acceptable use and characteristics of simulation within N/SVQs during the current economic climate

Due to the current economic climate and its impact on construction industry apprentices, ConstructionSkills as the SSC for construction has agreed that there can be some flexibility around the use of simulation when assessing construction craft NVQs. This is set out as follows and applies up until the end of December 2011.

In situations where a displaced or employed apprentice (this does not apply to full-time learners) will not be able to demonstrate evidence in the workplace within an acceptable time span, Awarding Bodies can arrange with their centres to apply the following principles.

- 1 Units cannot be assessed using simulation alone there must be some supporting work-based evidence.
- 2 A centre's strategy for simulation must be examined and approved by the external verifier.
- 3 The location and environment of simulation must be agreed with the internal verifier prior to taking place, and must be checked by the internal verifier.
- 4 The **nature of the contingency** and the **physical environment must be realistic** and candidates should not be given any indication as to exactly what contingencies they may come across.
- 5 All simulations must be planned, developed and documented by the centre in a way that ensures the simulation correctly reflects what the unit seeks to assess, and all simulations must follow these documented plans.
- 6 There should be a range of simulation to cover the same aspect of the unit so that the risk of candidates successfully colluding is reduced.
- 7 All simulation must reflect the urgency with which the activity would normally be carried out and the normal time needed to complete it, including the usual complexity of factors affecting the activity.
- 8 All simulation should involve the same personnel as would normally be included (e.g. bricklayer, supervisor, labourer etc.) and also similar realistic facilities.
- 9 Any instances of insufficient work-based evidence must be supported by adequate supplementary evidence which might include questioning; interviews with professional discussion; work projects; case studies; special assignments; self-testimony.

ConstructionSkills would strongly recommend that centres explore strategies with the candidate's employers for obtaining work-based evidence before considering the use of simulation. Examples might include using Group Training Associations, thereby carrying out real jobs within the college/training centre and/or involvement with community projects.

Group Training Association (GTA) is the government term for a training group which also shares apprentices. The GTA model is where a number of like-minded employers come together to create a separate business entity, which sources appropriate training and delivers apprenticeships by providing work experience across the range of engaged businesses.

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