

Pearson Edexcel Level 2 NVQ Diploma in Piling Operations (Construction)

Specification

NVQ qualification

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Issue 2

Edexcel, BTEC and LCCI qualifications

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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 Piling Operations (Construction) (QCF)

The QN remains the same.

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Summary of Pearson Edexcel Level 2 NVQ Diploma in Piling Operations (Construction) Issue 2 changes

Summary of changes made between previous Issue 1 and this current Issue 2	Page Number
All references to QCF have been removed throughout the specification with the exception of documents from other organisations eg Assessment Guidance in an Annexe	Throughout
Definition of TQT added	2
Definition of sizes of qualifications aligned to TQT	3
TQT value added	4
GLH range removed and replaced with lowest GLH value for the shortest route through the qualification	4
QCF references removed from unit titles and unit levels in all units	32-272

Earlier issue(s) show(s) previous changes.

If you need further information on these changes or what they mean, contact us via our website at: qualifications.pearson.com/en/support/contact-us.html.

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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 qualifications

What are NVQ qualifications?

National Vocational Qualifications (NVQs) 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 are based on the National Occupational Standards (NOS) for the appropriate sector. NOS define what employees, or potential employees, must be able to do and know, and how well they should undertake work tasks and work roles. At Level 2 and above, these qualifications are recognised as the competence component of Apprenticeship Frameworks. Qualifications at Level 1 can be used in Traineeships, which are stepping-stones to Apprenticeship qualifications. NVQs qualifications can also be delivered as stand-alone for those who wish to take a work-based qualification.

NVQs qualifications are outcomes-based with no fixed learning programme – allowing flexible delivery that meets the individual learner's needs. They are suitable for those in employment or those who are studying at college and have a part-time job or access to a substantial work placement so that they are able to demonstrate the competencies that are required for work.

Most learners will work towards their qualification in the workplace or in settings that replicate the working environment as specified in the assessment requirements/strategy for the sector. Colleges, training centres and/or employers can offer these qualifications provided they have access to appropriate physical and human resources.

Sizes of NVQ/Competence-based qualifications

For all regulated qualifications, we specify a total number of hours that learners are expected to undertake in order 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, we identify the number of Guided Learning Hours (GLH) 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.

As well as guided learning, there may be other required learning that is directed by tutors or assessors. This includes, for example, 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 Piling Operations (Construction)
Qualification Number (QN)	601/6184/X
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	51
Assessment	Portfolio of Evidence (internal assessment)
Total Qualification Time (TQT)	510
Guided learning hours	170
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 <i>Section 7, Access and Recruitment</i>).
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 Piling Operations (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, for example as construction operatives
- 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 Edexcel Level 2 NVQ in Piling Operations, which has expired.

Progression opportunities

The Pearson Edexcel Level 2 NVQ Diploma in Piling Operations (Construction) allows learners to demonstrate competence in piling operations at a level required by the construction and built environment industry. Learners can progress across the level and size of the construction and built environment competence and knowledge qualifications for example to NVQs in Occupational Work Supervision and Construction Site Supervision. Alternatively, they may progress to other general 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) in construction and the built environment, which were set and designed by ConstructionSkills.

4 Qualification structure

Pearson Edexcel Level 2 NVQ Diploma in Piling Operations (Construction)

The learner will need to meet the requirements outlined in the table below before the qualification can be awarded.

This qualification provides the following two pathways:

- Pathway 1– Pearson Edexcel Level 2 NVQ Diploma in Piling Operations – Piling Rig Operator (Construction)
- Pathway 2 – Pearson Edexcel Level 2 NVQ Diploma in Piling Operations – Piling Operative (Construction).

Pearson Edexcel Level 2 NVQ Diploma in Piling Operations – Piling Rig Operator (Construction)

Number of credits that must be achieved	104
Number of credits that must be achieved at Level 2 or above	49
Learners may choose to take additional credit from Group Z, however, this will not count towards completion of the qualification	

Pearson Edexcel Level 2 NVQ Diploma in Piling Operations – Piling Operative (Construction)

Minimum number of credits that must be achieved	51
Minimum number of credits that must be achieved at Level 2 or above	49
Number of mandatory credits that must be achieved	44
Number of optional credits that must be achieved	7
Learners may choose to take additional credit from Group Z, however, this will not count towards completion of the qualification	

Unit	Unit reference number	Group A– mandatory units for both pathways	Level	Credit	Guided learning hours
1	Y/503/2522	Contributing to the piling operation in the workplace	2	24	80
2	R/506/3929	Slinging and hand signalling the movement of suspended loads in the workplace	2	10	33
3	A/503/1170	Conforming to general health, safety and welfare in the workplace	1	2	7
4	J/503/1169	Conforming to productive working practices in the workplace	2	3	10
5	F/503/1171	Moving, handling and storing resources in the workplace	2	5	17

Pathways

Unit	Unit reference number	Group P1 (Piling Rig Operator) Learners must achieve all 60 credits.	Level	Credit	Guided learning hours
6	J/600/7111	Carrying out checks and/or basic maintenance on plant or machinery in the workplace	2	8	27
7	H/506/6589	Operating piling rigs to construct and form in the workplace	2	52	173

Unit	Unit reference number	Group P2 (Piling Operative) Learners must achieve a minimum of 7 credits.	Level	Credit	Guided learning hours
8	T/503/2740	Allocating and monitoring the use of plant, machinery or equipment in the workplace	3	9	30
9	L/600/7112	Carrying out mud, slurry or fluid plant operations in the workplace	2	26	87
10	F/503/2546	Carrying out tremie operations in the workplace	2	26	87
11	T/503/3127	Guiding the piling rig for the formation of piles in the workplace	2	22	73
12	T/506/4619	Preparing and operating 180 degree excavators to extract and excavate ground and loose materials in the workplace	2	80	267
13	M/506/4621	Preparing and operating wheeled loading shovels to extract loose materials in the workplace	2	26	87
14	A/506/4623	Preparing and operating tracked loading shovels to extract ground and loose materials in the workplace	2	80	267
15	F/506/4624	Preparing and operating skid steer loaders to extract loose materials in the workplace	2	20	67
16	D/506/4629	Preparing and operating 360 degree excavators to extract ground, face and/or loose materials in the workplace	2	80	267
17	F/506/4672	Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace	2	7	23

Unit	Unit reference number	Group Z – Additional units Learners may choose to complete additional credit from this group, however, this will not count towards completion of the qualification.	Level	Credit	Guided learning hours
18	D/506/4601	Preparing and operating crawler cranes above 10 tonnes to lift and transfer loads in the workplace	2	80	265
19	K/506/4603	Preparing and operating mobile cranes to lift and transfer loads in the workplace	2	95	317
20	F/506/4607	Preparing and operating rough terrain mast-mounted forklifts to lift and transfer loads in the workplace	2	18	60
21	F/506/4610	Preparing and operating telescopic handlers to lift and transfer loads in the workplace	2	25	83
22	R/506/4613	Preparing and operating lorry loaders or knuckle booms to lift and transfer loads in the workplace	2	30	100
23	Y/506/4614	Preparing and operating skip handlers to lift and transfer loads in the workplace	2	18	60
24	H/506/4728	Preparing and operating 360 degree excavators to excavate ground in the workplace	2	80	267
25	F/506/4641	Preparing and operating truck-mounted boom concrete pumps to receive, pump and discharge materials in the workplace	2	70	233
26	J/506/4642	Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace	2	16	53
27	L/506/4643	Preparing and operating rear tipping dump trucks to receive, transport and discharge materials in the workplace	2	30	100
28	M/506/5087	Preparing and operating trailer-mounted concrete pumps to receive, pump and discharge materials in the workplace	2	18	60
29	R/506/4675	Erecting and dismantling plant - cranes and rigs - in the workplace	2	36	120

Unit endorsements for the Pearson Edexcel Level 2 NVQ Diploma in Piling Operations (Construction)

Unit 1: Contributing to the piling operation in the workplace

One of the following endorsements is required:

- Sheet piling
- Driven piling
- Rotary bored Kelly bar piling
- Driven cast-in-situ piling
- Sectional auger piling (mini piling)
- Continuous flight auger piling
- Displacement flight auger
- Slurry walling
- Tripod piling
- Vibro piling
- Diaphragm walling.

Unit 2: 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 – piling operative only.

Unit 6: Carrying out checks and/or basic maintenance on plant or machinery in the workplace

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

- Piling rig operator.

Unit 7: Operating piling rigs to construct and form in the workplace

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

- Piling rig operator.

Plus one of the following endorsements:

- Sheet piling
- Driven piling
- Continuous flight auger piling
- Rotary piling
- Tripod piling
- Vibro piling
- Diaphragm walling
- Mini piling.

Unit 8: Allocating and monitoring the use of plant, machinery or equipment in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Mobile crane
- Crawler crane
- Piling rig.

Unit 9: Carrying out mud, slurry or fluid plant operations in the workplace

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

- Piling operations.

Unit 11: Guiding the piling rig for the formation of piles in the workplace

One of the following endorsements required:

- Sheet piling
- Driven piling
- Rotary bored kelly bar piling
- Driven cast-in-situ piling
- Sectional auger piling (mini piling)
- Continuous flight auger piling
- Displacement flight auger
- Slurry walling
- Tripod piling
- Vibro piling
- Diaphragm walling.

Unit 12: Preparing and operating 180 degree excavators to extract and excavate ground and loose materials in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Excavator 180° crawler and wheeled below 5 tonne
- Excavator 180° crawler and wheeled above 5 tonne.

Unit 13: Preparing and operating wheeled loading shovels to extract loose materials in the workplace

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

- Piling operative.

Unit 14: Preparing and operating tracked loading shovels to extract ground and loose materials in the workplace

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

- Piling operative.

Unit 15: Preparing and operating skid steer loaders to extract loose materials in the workplace

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

- Piling operative.

Unit 16: Preparing and operating 360 degree excavators to extract ground, face and/or loose materials in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Excavator 360° below 10 tonne tracked
- Excavator 360° below 10 tonne wheeled
- Excavator 360° above 10 tonne tracked
- Excavator 360° above 10 tonne wheeled.

Unit 17: Preparing and operating powered units, tools or pedestrian plant, machinery or equipment in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Generators
- Pumps
- Pedestrian operated plant or machines
- Mixers
- Compressors
- Self-powered tools
- Oscillators
- Extractors.

Unit 18: Preparing and operating crawler cranes above 10 tonnes to lift and transfer loads in the workplace

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

- Piling operative.

Unit 19: Preparing and operating mobile cranes to lift and transfer loads in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Mobile crane blocked duties
- Mobile crane pick and carry duties only
- Mobile crane all duties.

Unit 20: Preparing and operating rough terrain masted forklifts to lift and transfer loads in the workplace

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

- Piling operative.

Unit 21: Preparing and operating telescopic handlers to lift and transfer loads in the workplace

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

- Piling operative

Plus one of the following endorsements:

- Telescopic handler industrial telescopic
- Telescopic handler up to 9 metres
- Telescopic handler all sizes
- Telescopic handler all sizes excluding 360°
- Telescopic handler all sizes including 360°.

Unit 22: Preparing and operating lorry loaders or knuckle booms to lift and transfer loads in the workplace

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

- Piling operative.

Plus one of the following endorsements required:

- Knuckle boom
- Lorry loader hook
- Lorry loader clamshell bucket
- Lorry loader hydraulic clamp.

Unit 23: Preparing and operating skip handlers to lift and transfer loads in the workplace

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

- Piling operative.

Unit 24: Preparing and operating 360 degree excavators to excavate ground in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Excavator 360° below 10 tonne tracked
- Excavator 360° below 10 tonne wheeled
- Excavator 360° above 10 tonne tracked
- Excavator 360° above 10 tonne wheeled.

Unit 25: Preparing and operating truck-mounted boom concrete pumps to receive, pump and discharge materials in the workplace

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

- Piling operative.

Unit 26: Preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Forward tipping dumper wheeled
- Forward tipping dumper tracked.

Unit 27: Preparing and operating rear tipping dump trucks to receive, transport and discharge materials in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Dump truck – articulated chassis up to 15 tonne
- Dump truck – articulated chassis all sizes
- Dump truck – rigid chassis up to 15 tonne
- Dump truck – rigid chassis up to 50 tonne
- Dump truck – rigid chassis all sizes wheeled
- Dump truck - rigid chassis tracked.

Unit 28: Preparing and operating trailer-mounted concrete pumps to receive, pump and discharge materials in the workplace

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

- Piling operative.

Unit 29: Erecting and dismantling plant - cranes and rigs - in the workplace

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

- Piling operative.

Plus one of the following endorsements:

- Mobile crane
- Crawler crane
- Piling rig.

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.
- 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: qualifications.pearson.com. 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 Edexcel 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 Edexcel 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 at qualifications.pearson.com.

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 defined 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:

Contributing to the piling operation in the workplace

Unit reference number: Y/503/2522

Level: 2

Credit value: 24

Guided learning hours: 80

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in contributing to the piling operation 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; and the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Build 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 one of the following endorsements: Sheet piling; Driven piling; Rotary bored Kelly bar piling; Driven cast-in situ piling; Sectional auger piling (mini piling); Continuous flight auger piling; Displacement flight auger; Slurry walling; Tripod piling; Vibro piling; Diaphragm walling.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when contributing to the piling operation	1.1	Interpret and extract relevant information from drawings, instructions, specifications, schedules, method statements, risk assessments and manufacturers' information			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements			
		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 style="list-style-type: none"> drawings, instructions, specifications, schedules method statements, risk assessments, manufacturers' information, tool box talks, daily briefings, certificates and permits 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when contributing to the piling operation	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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 			
		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			
		2.4	State the types of fire extinguishers available when contributing to piling operations and describe how and when they are used			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when contributing to the piling operation	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 contributing to the piling operation			
		3.2	<p>Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to contributing to the piling operation, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:</p> <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • local exhaust ventilation (LEV) 			
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instruction			
		3.4	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 activities			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to contribute to the piling operation	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> • plant • hand and/or powered tools, machinery 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when contributing to the piling operation	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Prevent damage and maintain a clean work space			
		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 within the allocated time when contributing to the piling operation	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to contribute to the piling operation to the required specification	7.1	Demonstrate the following work skills when contributing to the piling operation: <ul style="list-style-type: none"> measuring, communicating, preparing, positioning, fitting, securing, removing, cleaning and maintaining 			
		7.2	Install, or contribute to the installation of, bored and/or driven piles and/or specialist works to given working instructions, using one of the following methods: <ul style="list-style-type: none"> sheet piling driven piling rotary bored kelly bar piling driven cast-in-situ piling sectional auger piling (mini piling) continuous flight auger piling displacement flight auger slurry walling tripod piling vibro piling diaphragm walling 			
		7.3	Safely use materials, hand tools, machinery and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when contributing to the piling operation			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		7.5 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> install, or contribute to the installation of, piles using one of the following methods: sheet piling; driven piling; rotary bored kelly bar piling; driven cast-in-situ piling; sectional auger piling (mini piling); continuous flight auger piling; displacement flight auger piling; slurry walling; tripod piling; vibro piling; diaphragm walling use hand tools, machinery and ancillary equipment 			
		7.6 Describe the needs of other occupations and how to effectively communicate within a team when contributing to the piling operation			
		7.7 Describe how to maintain the tools, machinery and equipment used when contributing to the piling operation			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation for and the slinging and signalling of loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments, method statements (lift plans) and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, lift plans, work instructions, manufacturers' information, approved procedures and Codes of Practice 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which the slinging and signalling of loads is to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		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			
3	Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and slinging and signalling loads	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			
		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: <ul style="list-style-type: none"> • 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 			
		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: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Select the required quantity and quality of resources to prepare for and when slinging and signalling load	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: <ul style="list-style-type: none"> lifting accessories signalling and communication 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, quantity, length and area associated with the method/procedures to carry out slinging/signalling			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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 within the allocated time when preparing to and slinging and signalling loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to prepare to and sling and signal suspended loads for movement to the required specification	8.1	Demonstrate the following work skills when preparing to and slinging and signalling loads: <ul style="list-style-type: none"> 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 			
		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: <ul style="list-style-type: none"> balanced unbalanced loose bundled container drum a load where the machine operator cannot observe its full movement path 			

Learning outcomes		Assessment criteria	Evidence type	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: <ul style="list-style-type: none"> • balanced • unbalanced • loose • bundled • container • drum • a load where the machine operator cannot observe its full movement path 			
		8.6 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • 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 • 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		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>8.7 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • lift and transfer people • sling balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator • communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios) • confirm methods of communication • recognise blind-spots, potential crush zones and other limitations to driver visibility • consider the load characteristics including centre of gravity and lifting points to determine the method of slinging • determine and check the route of the load before and during the lift including distances, clearances and landing position 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids • 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) • guide and place suspended loads by recognised methods of communication and agreed operational procedures • 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: _____
(if sampled)

Date: _____

Unit 3: 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Comply with all workplace health, safety and welfare legislation requirements	1.1	Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area			
		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: <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • 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		Assessment criteria		Evidence type	Portfolio reference	Date
2	Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures	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			
		2.1	Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures			
		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			
		2.3	List the current Health and Safety Executive top ten safety risks			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Comply with organisational policies and procedures to contribute to health, safety and welfare	3.1	Interpret and comply with given instructions to maintain safe systems of work and quality working practices			
		3.2	Contribute to discussions by offering/providing feedback relating to 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			
		3.6	State the organisational policies and procedures for health, safety and welfare, in relation to: <ul style="list-style-type: none"> 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area	4.1	Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare			
		4.2	State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to: <ul style="list-style-type: none"> recognising when to stop work in the face of serious and imminent danger to self and/or others contributing to discussions and providing feedback reporting changed circumstances and incidents in the workplace complying with the environmental requirements of the workplace 			
		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: <ul style="list-style-type: none"> during the working day on completion of the day's work for unauthorised personnel (other operatives and the general public) theft 			
		5.2	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 4:

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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Communicate with others to establish productive work practices	1.1	Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively			
		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: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain relevant records in accordance with the organisational procedures	3.1	Complete relevant documentation according to the occupation as required by the organisation			
		3.2	Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to: <ul style="list-style-type: none"> • job cards • worksheets • material/resource lists • time sheet 			
		3.3	Explain the reasons for ensuring documentation is completed clearly and within given timescales			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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: <ul style="list-style-type: none"> • 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			
		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: _____
(if sampled)

Date: _____

Unit 5: 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Comply with given information when moving, handling and/or storing resources	1.1	Interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation			
		1.2	Interpret the given information relating to the use and storage of lifting aids and equipment			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when moving, handling and/or storing resource	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> 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 			
		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 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
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	<p>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:</p> <ul style="list-style-type: none"> • 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			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources	4.1	Select the relevant resources to be moved, handled and/or stored, associated with own work			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to: <ul style="list-style-type: none"> lifting and handling aids container(s) 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources	5.1	Protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Dispose of waste and packaging in accordance with legislation			
		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			
		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 moving, handling and/or storing resources	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given occupational resource information to move, handle and/or store resources to the required guidance	7.1	Demonstrate the following work skills when moving, handling and/or storing occupational resources: <ul style="list-style-type: none"> moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques 			
		7.2	Move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following: <ul style="list-style-type: none"> sheet material loose material bagged or wrapped material fragile material tools and equipment components liquids 			
		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: _____
(if sampled)

Date: _____

Unit 6:

Carrying out checks and/or basic maintenance on plant or machinery in the workplace

Unit reference number: J/600/7111

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 carrying out checks and/or basic maintenance on plant or machinery 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
- the ConstructionSkills Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the 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 carrying out checks and/or basic maintenance on plant or machinery 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 endorsement:

- Own occupational area of work.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Work safely at all times when carrying out checks and/or basic maintenance on plant or machinery	1.1	Comply with current legislation, Approved Codes of Practice and organisational procedures			
		1.2	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out checks and/or basic maintenance on plant or machinery			
		1.3	Explain why and when personal protective equipment (PPE) should be used, relating to the carrying out of checks and/or basic maintenance on plant or machinery, and the types, purpose and limitations of each type			
		1.4	Safely use, store and secure hand tools and ancillary equipment			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant health and safety legislation and official guidance when carrying out checks and/or basic maintenance on plant or machinery	2.1	Describe their responsibilities under current legislation and official guidance whilst working with: <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools, plant or machinery and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 			
		2.2	Describe the reasons for devising and complying with risk and COSHH assessments and how this can encourage safe working practices			
		2.3	Describe the organisational security procedures for tools, equipment and personal belongings			
		2.4	State what the accident reporting procedures are and who is responsible for making reports			
		2.5	State how hazards and 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		Assessment criteria		Evidence type	Portfolio reference	Date
3	Follow the relevant maintenance schedules for the required work when carrying out checks and/or basic maintenance on plant or machinery	3.1	Interpret and extract information from specifications, schedules, organisational procedures and manufacturers' information relating to the work being carried out			
		3.2	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented			
		3.3	Describe different types of checks and maintenance information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> specifications, schedules, manufacturers' information and organisational procedures 			
		3.4	Describe the organisational procedures to solve problems with the information and why it is important they are followed			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Carry out checks and/or basic maintenance activities within the limits of their personal authority in the specified sequence and agreed timescale	4.1	Demonstrate the following work skills when carrying out checks and/or basic maintenance on plant or machinery: <ul style="list-style-type: none"> replenishing, replacing, applying, lubricating, cleaning and securing 			
		4.2	Carry out operator checks and/or basic maintenance tasks on standard or specialised plant or machinery to given working instructions as directed by the employer/ supervisor or authorised person			
		4.3	Describe how to follow maintenance authorisation, apply safe work practices, follow procedures, report problems and establish the authority and responsibility needed to: <ul style="list-style-type: none"> clean and prepare areas and components for maintenance replenish fuels, lubricants, fluids and coolants replace parts recycle components fit fastening systems, pins, bolts, nuts, washers and consumable items complete functional checks in accordance with equipment operating and care and control procedures complete reports and records use hand tools and ancillary equipment 			
		4.4	Complete the checks and/or basic maintenance activities within the estimated allocated time and to the required standards and accuracy			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
		4.5	State the needs of other occupations and how to communicate within a team when carrying out checks and/or basic maintenance on plant or machinery			
		4.6	Describe how to maintain the tools and equipment used when carrying out checks and/or basic maintenance on plant or machinery			
5	Report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule when carrying out checks and/or basic maintenance on plant or machinery	5.1	Report problems and defects beyond their area of responsibility			
		5.2	Describe the different ways that problems with maintenance procedures and problems associated with resources can be reported			
6	Complete relevant maintenance records accurately and pass them on to the appropriate person when carrying out checks and/or basic maintenance on plant or machinery	6.1	Record and report maintenance tasks in accordance with organisational procedures and manufacturer's requirements			
		6.2	State the procedure to complete checks and maintenance records and what the reporting lines and procedures are within the organisation			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Dispose of waste materials in accordance with safe working practices and approved procedures when carrying out checks and/or basic maintenance on plant or machinery	7.1	Protect the work and its surrounding area from damage			
		7.2	Minimise damage and maintain a clean work space			
		7.3	Dispose of waste in accordance with legislation			
		7.4	Describe what the waste disposal procedures are, and how and why the disposal of waste should be carried out safely and how it is achieved			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 7: Operating piling rigs to construct and form in the workplace

Unit reference number: H/506/6589

Level: 2

Credit value: 52

Guided learning hours: 173

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in operating piling rigs to construct and form 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of piling rigs to carry out constructing and forming operations	1.1	Interpret and extract information from method statements and drawings			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of piling rigs for construction and formation work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which constructing and forming operations using piling rigs are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupation			
		2.4	Describe how to organise resources prior to and during piling operation			
3	Know how to comply with relevant legislation and official guidance when carrying out constructing and forming operations using piling rig	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when carrying out constructing and forming operations using piling rigs	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 piling operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out constructing and forming operations using piling rigs in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • specific risks to health 			
		4.3	Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to piling rig use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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 instruction			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to carry out constructing and forming operations using piling rigs	5.1	Request and select resources associated with piling rigs in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and aids for piling • hand tools, ancillary equipment and/or accessories 			
		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 the piling work			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when constructing and forming with piling rigs	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedure			
		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 within the allocated time when carrying out constructing and forming operations with piling rigs	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to operate piling rigs to construct and form to the required specification	8.1	Demonstrate the following work skills when preparing for and constructing and forming using piling rigs: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, constructing and forming 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Operate piling rigs to construct and form to given working instructions			
		8.4	Shut down and secure piling rigs			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the piling rigs used for construction and formation operations carry out function checks for the construction and formation operation identify the area of the construction and formation work identify geological, environmental and material changes and report prepare, set up and adjust for operational requirements carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • carry out construction and formation work • recognise and determine when specific skills and knowledge are required and report accordingly • complete construction and formation work • be on the public highway • shut down and secure the piling rig • use hand tools, ancillary equipment and accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when carrying out piling operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and/or accessories used to carry out piling operation			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 8: Allocating and monitoring the use of plant and equipment in the workplace

Unit reference number: T/503/2740

Level: 3

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 allocating and monitoring the use of plant and equipment 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Confirm the plant, machinery or equipment for the workplace and allocate it to the operations	1.1	Identify and allocate the required type(s) of plant, machinery or equipment needed for the specific operations			
		1.2	Explain how to check the following types of plant, machinery or equipment in the workplace for condition and allocate to suitable operations: <ul style="list-style-type: none">• static and mobile• standard/non-standard• electro-mechanical and electronic• hand tools• consumables• health and safety equipment or instructions derived from risk assessments and method statements			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Identify and assess health and safety risks and implement working practices and other safeguards to minimise risks involving the use of plant, machinery or equipment	2.1	Assess any health and safety risks for the work being carried out			
		2.2	Implement safe working practices and other safeguards for the work being carried out			
		2.3	Carry out appropriate checks to ensure the operator holds the relevant authorisation to operate plant, machinery or equipment			
		2.4	Explain how to identify what health and safety risks there are, in relation to: <ul style="list-style-type: none"> • operators • other personnel in the workplace • members of the public • workplace visitors • owners of adjoining property • environment 			
		2.5	Explain the methods used to assess any health and safety risks for the working being carried out			
		2.6	Explain how to implement safe working practices and other safeguards to minimise risks			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Inform decision makers where plant, machinery or equipment is unsuitable for use in the workplace when allocating and monitoring	3.1	Advise relevant decision makers where plant, machinery or equipment is deemed unsuitable and suggest alternatives for the type of work			
		3.2	Explain methods that can be used to inform relevant decision makers when plant, machinery or equipment is unsuitable for use within the workplace, in regards to failing to meet: <ul style="list-style-type: none"> • operational efficiency • health and safety • competence requirements • authorisation • reliability • usage requirements 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Provide accurate instructions for the use of plant, machinery or equipment to operators when allocating and monitoring and ensure safe use	4.1	Instruct operators and users on the safe and correct use of plant, machinery or equipment using manufacturer's instructions and official guidance			
		4.2	Monitor the plant, machinery or equipment to ensure it is being used or operated safely in accordance with given instructions			
		4.3	Explain different methods and sources to provide accurate instructions for the use of plant, machinery or equipment to those using, or affected by, plant operations			
		4.4	Describe suitable ways of monitoring safe use of plant, machinery or equipment			
		4.5	Explain methods used to inform relevant decision makers when an operator is deemed unsuitable for the safe use of plant, machinery or equipment			
5	Inform decision makers promptly when plant, machinery or equipment is no longer required	5.1	Provide relevant information to decision makers on the return of plant, machinery or equipment promptly following the completion of the work			
		5.2	Explain the methods used to inform relevant decision makers when plant, machinery or equipment is no longer required			
		5.3	Summarise the types of information given to decision makers when arranging for the return of plant, machinery or equipment			
		5.4	Explain why decision makers should be informed promptly when plant, machinery or equipment is no longer required			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 9:

Carrying out mud, slurry or fluid plant operations in the work

Unit reference number: L/600/7112

Level: 2

Credit value: 26

Guided learning hours: 87

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out mud, slurry or fluid plant operations 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
- the ConstructionSkills 'Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the 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 carrying out mud, slurry or fluid plant operations 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 endorsement:

- Own occupational area of work.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out mud, slurry or fluid plant operation	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			
		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 style="list-style-type: none"> drawings, instructions, specifications, method statements, schedules and manufacturers' information 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out mud, slurry or fluid plant operations	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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 			
		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			
3	Maintain safe working practices when carrying out mud, slurry or fluid plant operations	3.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out mud, slurry or fluid plant operations			
		3.2	Explain why and when personal protective equipment (PPE) should be used, relating to carrying out mud, slurry or fluid plant operations 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carrying out mud, slurry or fluid plant operations	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> mud, slurry or fluid plant hand and/or powered tools and equipment 			
		4.2	Select resources associated with own work in relation to materials, components, fixings, tools, plant and ancillary 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 hazards associated with the resources and method of work			
		4.5	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to carry out mud, slurry or fluid plant operation			
5	Minimise the risk of damage to the work and surrounding area when carrying out mud, slurry or fluid plant operations	5.1	Protect the work and its surrounding area from damage			
		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			
		5.4	Dispose of waste in accordance with current legislation			
		5.5	State why the disposal of waste should be carried out in relation to the work			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Complete the work within the allocated time when carrying out mud, slurry or fluid plant operations	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> 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 carry out mud, slurry or fluid plant operations to the required specification	7.1	Demonstrate the following work skills when carrying out mud, slurry or fluid plant operations: <ul style="list-style-type: none"> preparing, setting up, connecting, checking, maintaining, mixing, monitoring, testing, pumping, cleaning, adjusting, and recording 			
		7.2	Install, operate and maintain mud, slurry or fluid plant to given working instructions in one of the following operations: <ul style="list-style-type: none"> piling tunnelling drilling 			

Learning outcomes		Assessment 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: <ul style="list-style-type: none"> • prepare the area allocated for the plant and ancillary equipment • set up, assemble and check the integrity of plant and ancillary equipment, including the connection of hoses, valves and items of plant for delivery, extraction, recycling and disposal of mud, slurry or fluids • mix mud, slurry or fluids in accordance with manufacturer's recommendations • monitor the pumping process and make appropriate adjustments in order to maintain operational efficiency • test the viscosity and density of the mud, slurry or fluid • complete records of the process • use hand tools, power tools, plant and ancillary equipment 			
		7.4 Safely use and store hand tools, plant and ancillary equipment			
		7.5 State the needs of other occupations and how to communicate within a team when carrying out mud, slurry or fluid plant operation			
		7.6 Describe how to maintain the tools, plant and equipment used when carrying out mud, slurry or fluid plant operations			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 10: Carrying out tremie operations in the workplace

Unit reference number: F/503/2546

Level: 2

Credit value: 26

Guided learning hours: 87

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out tremie operations 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out tremie operations	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			
		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: – drawings, instructions, specifications, schedules, method statements, risk assessments, manufacturers' information, concrete pour records, tool-box talks, daily briefings, certificates and permits			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out tremie operations	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> 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 			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when carrying out tremie operations	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 carrying out tremie operations			
		3.2	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to carrying out tremie operations, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • local exhaust ventilation (LEV) 			
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.4	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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carrying out tremie operations	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> tremie systems concrete hand and/or powered tools, machinery 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 determine quantity, length, volume and wastage associated with the method/procedure to carry out tremie operation			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when carrying out tremie operations	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Minimise damage and maintain a clean work space			
		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 within the allocated time when carrying out tremie operations	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to carry out tremie operations to the required specification	7.1	Demonstrate the following work skills when carrying out tremie operations: <ul style="list-style-type: none"> measuring, cleaning, inspecting, preparing, assembling, fitting, sampling or inspecting, positioning, placing, monitoring, extracting and removing 			
		7.2	Place concrete using tremie systems, to given working instructions, during one of the following piling operations: <ul style="list-style-type: none"> cast-in-situ piling diaphragm walling 			
		7.3	Safely use materials, hand tools, machinery and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when carrying out tremie operations			
		7.5	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> contribute to the construction of specialist works by placing concrete using tremie systems for cast-in-situ piling or diaphragm walling handle displaced fluids guide lifting appliances use hand tools, power tools, machinery and ancillary equipment 			
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when carrying out tremie operations			
		7.7	Describe how to maintain the tools, machinery and equipment used when carrying out tremie operations			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 11:

Guiding the piling rig for the formation of piles in the workplace

Unit reference number: T/503/3127

Level: 2

Credit value: 22

Guided learning hours: 73

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in guiding the piling rig for the formation of piles 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; and the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Build 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 one of the following endorsements: Sheet piling; Driven piling; Rotary bored Kelly bar piling; Driven cast-in situ piling; Sectional auger piling (mini piling); Continuous flight auger piling; Displacement flight auger; Slurry walling; Tripod piling; Vibro piling; Diaphragm walling.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when guiding the piling rig for the formation of piles	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			
		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 style="list-style-type: none"> drawings, instructions, specifications, schedules, method statements, risk assessments, manufacturers' information, tool-box talks, daily briefings, certificates and permits 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when guiding the piling rig for the formation of piles	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> 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 			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when guiding the piling rig for the formation of piles	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when guiding the piling rig for the formation of piles			
		3.2	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to guiding the piling rig for the formation of piles, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • local exhaust ventilation (LEV) 			
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions			
		3.4	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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to guide the piling rig for the formation of piles	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> plant, hand tools and/or powered tools, machinery 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 determine quantity, length and area associated with the method/procedure to guide the piling rig for the formation/installation of piles			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when guiding the piling rig for the formation of piles	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Minimise damage and maintain a clean work space			
		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 within the allocated time when guiding the piling rig for the formation of piles	6.1	Demonstrate completion of the work within the allocated time			
		6.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to guide the piling rig for the formation of piles to the required specification	7.1	Demonstrate the following work skills when guiding the piling rig for the formation of piles: <ul style="list-style-type: none"> • measure, position, secure, align, level and adjust 			
		7.2	Guide and monitor the piling rig for the formation and/or installation of piles to given working instructions, using one of the following methods: <ul style="list-style-type: none"> • sheet piling • driven piling • rotary bored kelly bar piling • driven cast-in-situ piling • sectional auger piling (mini piling) • continuous flight auger piling • displacement flight auger • slurry walling • tripod piling • vibro piling • diaphragm walling 			
		7.3	Safely use materials, hand tools, machinery and ancillary equipment			
		7.4	Safely store the materials, tools and equipment used when guiding the piling rig for the formation of piles			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>7.5 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> • identify the sequence of work • ensure piling rig is positioned in accordance with setting-out points • guide, align, level and check the bore or drive position for one of the following methods: sheet piling, driven piling, rotary bored kelly bar piling, driven cast-in-situ piling, sectional auger piling (mini piling), continuous flight auger piling, displacement flight auger piling, slurry walling, tripod piling, vibro piling and diaphragm walling 			
		<p>7.6 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> • monitor and adjust the rake of the hole or pile • record information • fit and remove piling rig ancillaries • prepare, position and place reinforcement steel and/or other components • use hand tools and ancillary equipment • work at height 			
		<p>7.7 Describe the needs of other occupations and how to effectively communicate within a team when guiding the piling rig for the formation of piles</p>			
		<p>7.8 Describe how to maintain the tools, machinery and equipment used when guiding the piling rig for the formation of piles</p>			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 12: Preparing and operating 180 degree excavators to extract and excavate ground and loose materials in the workplace

Unit reference number: T/506/4619

Level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating 180 degree excavators to extract and excavate 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of 180 degree excavators for extracting and excavating operations	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of 180 degree excavators for extraction and excavation work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting and excavating operations using 180 degree excavators are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during extracting and excavating operations using 180 degree excavators			
3	Know how to comply with relevant legislation and official guidance when carrying out extracting and excavating operations using 180 degree excavators	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out extracting and excavating operations using 180 degree excavator	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 extracting and excavating operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out extracting and excavating operations using 180 degree excavators in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 180 degree excavator use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out extracting and excavating operations using 180 degree excavators	5.1	Request and select resources associated with 180 degree excavators in relation to consumables, materials, attachments, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction/excavation aids • 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			
		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 extracting and excavating operations using 180 degree excavator			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and extracting and excavating materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and extracting and excavating materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to extract materials using 180 degree excavators to the required specification	8.1	Demonstrate the following work skills when preparing for and extracting and excavating loose materials and ground using 180 degree excavators: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, extracting, excavating, forming, removing and loading 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate 180 degree excavators to given working instructions <ul style="list-style-type: none"> extract loose materials and/or different types of ground load and/or stockpile loose materials and ground excavate different types of ground 			
		8.4	Shut down and secure 180 degree excavators			

Learning outcomes		Assessment criteria	Evidence type	Portfolio reference	Date
		<p>8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the 180 degree excavator used for the extraction and excavation operation • carry out function checks for the extraction and excavation operation • prepare, set up and adjust for operational requirements • identify the area to be extracted/excavated • 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • extract, excavate, remove and load materials safely and securely • form stockpiles • be on the public highway • shut down and secure 180 degree excavator • 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 extracting and excavating operation			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to extract and excavate materials			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of wheeled loading shovels for extracting operations	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of wheeled loading shovels for extraction work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting operations using wheeled loading shovels are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during extracting operations using wheeled loading shovels			
3	Know how to comply with relevant legislation and official guidance when carrying out extracting operations using wheeled loading shovels	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out extracting operations using wheeled loading shovels	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 extracting operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out extracting operations using wheeled loading shovels in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 wheeled loading shovel use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using wheeled loading shovels	5.1	Request and select resources associated with wheeled loading shovels in relation to consumables, materials, attachments, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction aids • 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			
		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 extracting operations using wheeled loading shovels			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and extracting materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and extracting materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> 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 extract materials using wheeled loading shovels to the required specification	8.1	Demonstrate the following work skills when preparing for and extracting loose materials using wheeled loading shovels: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, extracting, forming, removing and loading 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate wheeled loading shovels to given working instructions to: <ul style="list-style-type: none"> extract loose materials load and/or stockpile loose materials 			
		8.4	Shut down and secure wheeled loading shovels			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the wheeled loading shovel used for the extraction operation carry out function checks for the extraction operation prepare, set up and adjust for operational requirements identify the area to be extracted 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • recognise and determine when specific skills and knowledge are required and report accordingly • extract, remove and load materials safely and securely • form stockpiles • be on the public highway • shut down and secure the wheeled loading shovel • 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 extracting operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to extract material			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 14:

Preparing and operating tracked loading shovels to extract ground and loose materials in the workplace

Level: 2

Guided learning hours: 267

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating tracked loading shovels to extract materials in the workplace within the relevant sector of industry.

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

- 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.

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Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of tracked loading shovels for extracting operation	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of tracked loading shovels for extraction work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting operations using tracked loading shovels are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during extracting operations using tracked loading shovels			
3	Know how to comply with relevant legislation and official guidance when carrying out extracting operations using tracked loading shovels	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out extracting operations using tracked loading shovels	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 extracting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out extracting operations using tracked loading shovels in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 tracked loading shovel use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using tracked loading shovels	5.1	Request and select resources associated with tracked loading shovels in relation to consumables, materials, attachments, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction aids • 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			
		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 extracting operations using tracked loading shovels			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and extracting materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and extracting materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to extract materials using tracked loading shovels to the required specification	8.1	Demonstrate the following work skills when preparing for and extracting loose materials and ground using tracked loading shovels: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, extracting, forming, removing and loading 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate tracked loading shovels to given working instructions <ul style="list-style-type: none"> extract ground, face and/or loose materials load and/or stockpile loose materials 			
		8.4	Shut down and secure tracked loading shovels			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the tracked loading shovel used for the extraction operation carry out function checks for the extraction operation prepare, set up and adjust for operational requirements identify the area to be extracted 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • recognise and determine when specific skills and knowledge are required and report accordingly • extract, remove and load materials safely and securely • form stockpiles • be on the public highway • shut down and secure the tracked loading shovel • 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 extracting operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to extract material			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 15: Preparing and operating skid steer loaders to extract loose materials in the workplace

Unit reference number: F/506/4624

Level: 2

Credit value: 20

Guided learning hours: 67

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating skid steer loaders to extract 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of skid steer loaders for extracting operations	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of skid steer loaders for extraction work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting operations using skid steer loaders are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during extracting operations using skid steer loaders			
3	Know how to comply with relevant legislation and official guidance when carrying out extracting operations using skid steer loaders	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out extracting operations using skid steer loaders	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 extracting operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out extracting operations using skid steer loaders in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 skid steer loader use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using skid steer loaders	5.1	Request and select resources associated with skid steer loaders in relation to consumables, materials, attachments, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction aids • 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			
		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 extracting operations using skid steer loaders weight, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and extracting material	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and extracting materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to extract materials using skid steer loaders to the required specification	8.1	Demonstrate the following work skills when preparing for and extracting loose materials using skid steer loaders: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, extracting, forming, removing and loading 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate skid steer loaders to given working instructions <ul style="list-style-type: none"> extract loose materials load and/or stockpile loose materials 			
		8.4	Shut down and secure skid steer loaders			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the skid steer loader used for the extraction operation carry out function checks for the extraction operation prepare, set up and adjust for operational requirements identify the area to be extracted 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • recognise and determine when specific skills and knowledge are required and report accordingly • extract, remove and load materials safely and securely • form stockpiles • be on the public highway • shut down and secure the skid steer loader • 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 extracting operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to extract material			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 16:

Preparing and operating 360 degree excavators to extract ground, face and/or loose materials in the workplace

Unit reference number: D/506/4629

Level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating 360 degree excavators to extract 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of 360 degree excavators for extracting operations	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of 360 degree excavators for extraction work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting operations using 360 degree excavators are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team member			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during extracting operations using 360 degree excavators			
3	Know how to comply with relevant legislation and official guidance when carrying out extracting operations using 360 degree excavators	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out extracting operations using 360 degree excavator	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 extracting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out extracting operations using 360 degree excavators in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 360 degree excavators use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using 360 degree excavators	5.1	Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction aids • 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			
		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 extracting operations using 360 degree excavators			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and extracting materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and extracting materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to extract materials using 360 degree excavators to the required specification	8.1	Demonstrate the following work skills when preparing for and extracting ground and/or loose materials using 360 degree excavators: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, extracting, forming, removing and loading 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate 360 degree excavators to given working instructions <ul style="list-style-type: none"> extract from a face, loose materials and/or ground load and/or stockpile extracted loose materials 			
		8.4	Shut down and secure 360 degree excavators			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the 360 degree excavator used for the extraction operation carry out function checks for the extraction operation prepare, set up and adjust for operational requirements identify the area to be extracted 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • extract, remove and load materials and commodities safely and securely • form stockpiles • be on the public highway • shut down and secure the 360 degree excavator • 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 extracting operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to extract material			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 17:

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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of powered units, tools or pedestrian plant, machinery or equipment	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			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, legislation, Codes of Practice, manufacturers' information and operating instructions 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance to prepare and use powered units, tools or pedestrian plant, machinery or equipment	2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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 			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Maintain safe and healthy working practices when preparing for and using powered units, tools or pedestrian plant, machinery or equipment	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: <ul style="list-style-type: none"> • safe use of access equipment • safe handling of materials • safe use and storage of materials, tools and equipment • 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 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: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources to prepare for and sustain powered units, tools or pedestrian plant, machinery or equipment	4.1	Select resources associated with the type of work in relation to fuel/power source, lubricants and consumables			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • power source/fuels • consumables, lubricants 			
		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, length, area and wastage associated with the method/procedures to operate powered units, tools or pedestrian plant, machinery or equipment			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when preparing to and using powered units, tools or pedestrian plant, machinery or equipment	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		5.2	Minimise damage and maintain a clean work space			
		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 within the allocated time when preparing to and using powered units, tools or pedestrian plant, machinery or equipment	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: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to operate powered units, tools or pedestrian plant, machinery or equipment to the required specification	7.1	Demonstrate the following work skills when using powered units, tools or pedestrian plant, machinery or equipment: <ul style="list-style-type: none"> starting, stopping, replenishing, controlling and cleaning 			
		7.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		7.3	Disassemble and/or clean powered unit, tools or pedestrian plant, machinery or equipment			
		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: <ul style="list-style-type: none"> 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 recognise the characteristics of the plant, machinery and equipment identify specific operating and safety requirements for the task and work recognise and determine when specific skills and knowledge are required and report accordingly 			

Learning outcomes		Assessment 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: <ul style="list-style-type: none"> • 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 18:

Preparing and operating crawler cranes (above 10 tonnes) to lift and transfer loads in the workplace

Unit reference number: D/506/4601

Level: 2

Credit value: 80

Guided learning hours: 265

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating crawler cranes (above 10 tonnes) to lift and transfer loads 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of crawler cranes to lift, transfer and place load	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of crawler cranes to lift and transfer loads 			
2	Organise with others the sequence and operation in which lifting operations using crawler cranes are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during lifting operations with crawler cranes			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads using crawler crane	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			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out lifting operations using crawler crane	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 lifting operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out lifting operations using crawler cranes in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 crawler crane use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using crawler cranes	5.1	Request and select resources associated with crawler cranes in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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, pressure, quantity, length and area associated with the method/procedures to carry out lifting operations with crawler cranes, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using crawler cranes to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using crawler cranes: <ul style="list-style-type: none"> checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, set up and operate crawler cranes above 10 tonnes to lift, transfer and place a variety of loads to given working instructions			
		8.4	Shut down and secure crawler cranes			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the crane for the lifting and transferring operation identify valid certification for maintenance, inspection and thorough examination lift and transfer people carry out function checks for lifting and transferring loads prepare, set up and reconfigure for various loads and locations carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the crane • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of mobile cranes to lift, transfer and place loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of mobile cranes to lift and transfer loads 			
2	Organise with others the sequence and operation in which lifting operations using mobile cranes are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during lifting operations with mobile cranes			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads using mobile cranes	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out lifting operations using mobile cranes	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 lifting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out lifting operations using mobile cranes in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 mobile crane use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using mobile cranes	5.1	Request and select resources associated with mobile cranes in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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, pressure, quantity, length and area associated with the method/procedures to carry out lifting operations with mobile cranes, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using mobile cranes to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using mobile cranes: <ul style="list-style-type: none"> checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, set up and operate mobile cranes to lift, transfer and place a variety of loads to given working instructions			
		8.4	Shut down and secure mobile cranes			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the crane for the lifting and transferring operation identify valid certification for maintenance, inspection and thorough examination lift and transfer people carry out function checks for lifting and transferring loads prepare, set up and reconfigure for various loads and locations carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the crane • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 20: Preparing and operating rough terrain masted forklifts to lift and transfer loads in the workplace

Unit reference number: F/506/4607

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 preparing and operating rough terrain masted forklifts to lift and transfer loads 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of rough terrain masted forklifts to lift, transfer and place loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of rough terrain masted forklifts to lift and transfer loads 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which rough terrain masted forklift operations are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during forklift operations			
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads with rough terrain masted forklifts	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out forklift operations with rough terrain masted forklifts	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 forklift operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out forklift operations using rough terrain masted forklifts in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 rough terrain masted forklift use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out forklift operations using rough terrain masted forklifts	5.1	Request and select resources associated with rough terrain masted forklifts in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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 forklift operations with rough terrain masted forklifts			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using rough terrain masted forklifts to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using rough terrain masted forklifts: checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare and operate rough terrain masted forklifts to lift, transfer and place a variety of loads to given working instruction			
		8.4	Shut down and secure rough terrain masted forklifts			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • identify the characteristics of the machine for the forklift operation • identify valid certification for maintenance, inspection and thorough examination • lift and transfer people • carry out function checks for lifting and transferring loads • prepare, set up and reconfigure for various loads and locations • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the rough terrain masted forklift • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 21: Preparing and operating telescopic handlers to lift and transfer loads in the workplace

Unit reference number: **F/506/4610**

Level: 2

Credit value: 25

Guided learning hours: 83

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating telescopic handlers to lift and transfer loads 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of telescopic handlers to lift, transfer and place loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of telescopic handlers to lift and transfer loads 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which lifting operations using telescopic handlers are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during telescopic handler operations			
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads using telescopic handlers	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out lifting operations using telescopic handlers	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 lifting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out telescopic handler operations in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 telescopic handler use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out telescopic handler operations	5.1	Request and select resources associated with telescopic handlers in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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 lift and transfer loads using telescopic handlers, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using telescopic handlers to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using telescopic handlers: – checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, set up and operate telescopic handlers to lift, transfer and place a variety of loads to given working instructions			
		8.4	Shut down and secure telescopic handlers			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • identify the characteristics of the telescopic handler for the lifting and transferring operation • identify valid certification for maintenance, inspection and thorough examination • lift and transfer people • carry out function checks for lifting and transferring loads • prepare, set up and reconfigure for various loads and locations • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the telescopic handler • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Preparing and operating lorry loaders or knuckle boom cranes to lift and transfer loads in the workplace

Guided learning hours: 100

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating lorry loaders/knuckle boom cranes to lift and transfer loads in the workplace within the relevant sector of industry.

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

- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of lorry loaders/knuckle booms to lift, transfer and place loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 and current regulations governing the operation of lorry loaders/knuckle boom to lift and transfer loads			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which lifting operations using lorry loaders/knuckle booms are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during lifting operations with lorry loaders/knuckle boom			
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads using lorry loaders/knuckle booms	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out lifting operations using lorry loaders/knuckle booms	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 lifting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out lifting operations using lorry loaders/knuckle booms in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 lorry loader/knuckle boom use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using lorry loaders/knuckle boom	5.1	Request and select resources associated with lorry loaders/knuckle booms in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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, pressure, quantity, length and area associated with the method/procedures to carry out lifting operations with lorry loaders/knuckle booms, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using lorry loaders/knuckle booms to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using lorry loaders/knuckle booms: <ul style="list-style-type: none"> checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, set up and operate lorry loaders/knuckle booms to lift, transfer and place a variety of loads to given working instructions.			
		8.4	Shut down and secure lorry loaders/knuckle booms			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the lorry loader/knuckle boom for the lifting and transferring operation identify valid certification for maintenance, inspection and thorough examination lift and transfer people carry out function checks for lifting and transferring loads prepare, set up and reconfigure for various loads and locations carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the lorry loader/knuckle boom • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 23: Preparing and operating skip handlers to lift and transfer loads in the workplace

Unit reference number: Y/506/4614

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 preparing and operating skip handlers to lift and transfer loads 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of skip handlers to lift, transfer and place loads	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of skip handlers to lift and transfer loads 			
2	Organise with others the sequence and operation in which lifting operations using skip handlers are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during lifting operations with skip handlers			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads using skip handlers	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out lifting operations using skip handlers	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 lifting operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out lifting operations using skip handlers in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and equipment • safe use and storage of lifting accessories • 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 skip handler use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using skip handlers	5.1	Request and select resources associated with skip handlers in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting accessories • 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			
		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 lifting operations with skip handlers			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and lifting and transferring loads	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and lifting and transferring loads	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using skip handlers to the required specification	8.1	Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using skip handlers: <ul style="list-style-type: none"> checking, adjusting, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, set up and operate skip handlers to lift, transfer and place a variety of loads to given working instruction			
		8.4	Shut down and secure skip handlers			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the skip handler for the lifting and transferring operation identify valid certification for maintenance, inspection and thorough examination lift and transfer people carry out function checks for lifting and transferring loads prepare, set up and reconfigure for various loads and locations carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area identify characteristics, type, weight and position of loads for lifting and transferring 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability, security and release • attach and remove guide ropes and aids • be on the public highway • shut down and secure the skip handler • use hand tools and ancillary equipment • use, handle and store lifting accessories 			
		8.7 Describe the needs of other occupations and how to effectively communicate within a team when preparing for and lifting and transferring loads			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to lift and transfer loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 24: Preparing and operating 360 degree excavators to excavate ground in the workplace

Unit reference number: **H/506/4728**

Level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating 360 degree excavators to excavate ground 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of 360 degree excavators to carry out excavating operations	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of 360 degree excavators for excavation work 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which excavating operations using 360 degree excavators are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during excavating operations using 360 degree excavators			
3	Know how to comply with relevant legislation and official guidance when carrying out excavating operations using 360 degree excavators	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			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out excavating operations using 360 degree excavators	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 excavating operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out excavating operations using 360 degree excavators in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 360 degree excavator use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out excavating operations using 360 degree excavators	5.1	Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, 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: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and excavation aids • 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			
		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 quantity, weight, length and area associated with the method/procedures to carry out excavating operations using 360 degree excavators, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and excavating materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and excavating materials	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to excavate materials using 360 degree excavators to the required specification	8.1	Demonstrate the following work skills when preparing for and excavating ground using 360 degree excavators: checking, adjusting, communicating, operating, manoeuvring, positioning, excavating, measuring and removing			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, position, set up and operate 360 degree excavators to given working instructions to: <ul style="list-style-type: none"> excavate a variety of ground load or stockpile excavated loose materials 			
		8.4	Shut down and secure 360 degree excavators			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the 360 degree excavator used for excavating operations carry out function checks for excavation work identify the area to be excavated prepare, set up and adjust for operational requirements 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 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • excavate accurately to line and level • form stockpiles • use equipment to gauge and measure • be on the public highway • excavate, remove and load materials safely and securely • shut down and secure the 360 degree excavator • 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 for and carrying out excavating operations			
		8.8 Describe how to maintain the plant and machinery, hand tools, ancillary equipment and accessories used to excavate materials			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 25: Preparing and operating truck-mounted boom concrete pumps to receive, pump and discharge materials in the workplace

Unit reference number: F/506/4641

Level: 2

Credit value: 70

Guided learning hours: 233

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating truck-mounted boom concrete pumps to pump 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of concrete pumps to carry out pumping and discharging operations	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of truck-mounted boom concrete pumps 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which pumping and discharging operations using concrete pumps are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during concrete pumping operations			
3	Know how to comply with relevant legislation and official guidance when carrying out pumping and discharging operations using concrete pumps	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out pumping operations using concrete pumps	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 concrete pumping operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out pumping operations using truck-mounted boom concrete pumps in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 concrete pump use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out pumping operations using concrete pumps	5.1	Request and select resources associated with concrete pumps in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and load coverings • 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			
		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 concrete pumping operations			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and pumping materials using concrete pumps	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and pumping and discharging materials using concrete pumps	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to receive, pump and discharge materials using concrete pumps to the required specification	8.1	Demonstrate the following work skills when preparing for and pumping and discharging materials using concrete pumps: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, receiving, depositing, pumping, discharging and cleaning 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare to, position, set up and operate truck-mounted boom concrete pumps to receive, pump and discharge materials, at various locations, to given working instruction			
		8.4	Shut down and secure concrete pumps			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the concrete pump used for pumping and discharging work carry out function checks to receive, pump and discharge materials identify characteristics, type and volume of loads to receive, pump and discharge prepare, set up and adjust for operational requirements carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • identify the area for pumping • check to avoid damage to structures and utilities service apparatus • receive, and pump and discharge materials safely and securely • be on the public highway • shut down and secure the concrete pump • 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 pumping and discharging operations			
		8.8 Describe how to maintain the plant and machinery, hand tools and ancillary equipment used pumping and discharging operations			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 26:

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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of forward tipping dumpers to carry out transporting and discharging operations	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of forward tipping dumpers 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which transporting and discharging operations using forward tipping dumpers are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		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			
3	Know how to comply with relevant legislation and official guidance when carrying out transporting and discharging operations using forward tipping dumpers	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out transporting and discharging operations using forward tipping dumpers	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: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 forward tipping dumper use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using forward tipping dumpers	5.1	Request and select resources associated with forward tipping dumpers in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and load coverings • 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			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and transporting and discharging materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 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			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to receive, transport and discharge materials using forward tipping dumpers to the required specification	8.1	Demonstrate the following work skills when preparing for and transporting and discharging materials using forward tipping dumpers: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, receiving, depositing, transporting, discharging and cleaning 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		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			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the forward tipping dumpers used for transporting and discharging work carry out function checks to receive, transport and discharge loads identify characteristics, type and volume of loads to receive and transport prepare, set up and adjust for operational requirements carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area recognise and determine when specific skills and knowledge are required and report accordingly 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • identify the area for discharging • check to avoid damage to structures and utilities service apparatus • 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 			
		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 27: Preparing and operating rear tipping dump trucks to receive, transport and discharge materials in the workplace

Unit reference number: L/506/4643

Level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating rear tipping dump trucks 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of rear tipping dump trucks to carry out transporting and discharging operations	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, and current regulations governing the operation of rear tipping dump trucks 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which transporting and discharging operations using rear tipping dump trucks are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		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			
3	Know how to comply with relevant legislation and official guidance when carrying out transporting and discharging operations using rear tipping dump trucks	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out transporting and discharging operations using rear tipping dump trucks	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 rear tipping dump trucks in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 rear tipping dump truck use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using rear tipping dump trucks	5.1	Request and select resources associated with rear tipping dump trucks in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and load coverings • 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			
		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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and transporting and discharging materials	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and transporting and discharging materials using rear tipping dump trucks	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to receive, transport and discharge materials using rear tipping dump trucks to the required specification	8.1	Demonstrate the following work skills when preparing for and transporting and discharging materials using rear tipping dump trucks: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, receiving, depositing, transporting, discharging and cleaning 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare to, position, set up and operate rear tipping dump trucks to receive, transport and discharge materials to given working instructions			
		8.4	Shut down and secure rear tipping dump trucks			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the rear tipping dump trucks used for transporting and discharging work carry out function checks to receive and transport loads identify characteristics, type and volume of loads to receive and transport prepare, set up and adjust for operational requirements carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area recognise and determine when specific skills and knowledge are required and report accordingly 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • identify the area for discharging • check to avoid damage to structures and utilities service apparatus • receive, transport and discharge materials safely and securely • be on the public highway • shut down and secure the rear tipping dump truck • 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 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 28:

Preparing and operating trailer-mounted concrete pumps to receive, pump and discharge materials in the workplace

Unit reference number: M/506/5087

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 preparing and operating trailer-mounted concrete pumps to pump 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
- 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 and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation and use of concrete pumps to carry out pumping and discharging operations	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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, and current regulations governing the operation of trailer-mounted concrete pumps			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which pumping and discharging operations using concrete pumps are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during concrete pumping operations			
3	Know how to comply with relevant legislation and official guidance when carrying out pumping and discharging operations using concrete pumps	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when preparing for and carrying out pumping operations using concrete pumps	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 concrete pumping operation			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out pumping operations using trailer-mounted concrete pumps in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant or machinery • safe use and storage of tools and 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 concrete pump use, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out pumping operations using concrete pumps	5.1	Request and select resources associated with concrete pumps in relation to consumables, materials, tools, ancillary equipment and/or accessories			
		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments, pumping and discharging aids • 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			
		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 concrete pumping operations			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when preparing to and pumping materials using concrete pumps	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when preparing to and pumping and discharging materials using concrete pumps	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to receive, pump and discharge materials using concrete pumps to the required specification	8.1	Demonstrate the following work skills when preparing for and pumping and discharging materials using concrete pumps: <ul style="list-style-type: none"> checking, adjusting, communicating, manoeuvring, positioning, receiving, depositing, pumping, discharging and cleaning 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare to, position, set up and operate trailer-mounted concrete pumps to receive, pump and discharge materials, at various locations, to given working instructions			
		8.4	Shut down and secure concrete pumps			
		8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the concrete pump used for pumping and discharging work carry out function checks to receive, pump and discharge materials identify characteristics, type and volume of loads to receive, pump and discharge prepare, set up and adjust for operational requirements carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area 			

Learning outcomes		Assessment 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 style="list-style-type: none"> • recognise and determine when specific skills and knowledge are required and report accordingly • identify the area for pumping • check to avoid damage to structures and utilities service apparatus • receive, pump and discharge materials safely and securely • be on the public highway • shut down and secure the concrete pump • 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 pumping and discharging operations			
		8.8 Describe how to maintain the plant and machinery, hand tools and ancillary equipment used pumping and discharging operations			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 29: Erecting and dismantling plant (cranes and rigs) in the workplace

Unit reference number: R/506/4675

Level: 2

Credit value: 36

Guided learning hours: 120

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in erecting and dismantling plant (cranes and rigs) 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
- 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.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to erecting and dismantling plant	1.1	Interpret and extract relevant information from drawings, specifications, schedules, risk assessments and manufacturers' information			
		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 style="list-style-type: none"> drawings, specifications, schedules, method statements, risk assessments and manufacturers' information 			
2	Organise with others the sequence and operation in which erecting and dismantling operations are to be carried out	2.1	Organise the work according to given information or instructions			
		2.2	Describe how to communicate ideas between team members			
		2.3	Organise and communicate with team members and other associated occupations			
		2.4	Describe how to organise resources prior to and during erecting and dismantling operations			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when erecting and dismantling plant	3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working: <ul style="list-style-type: none"> 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			
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Maintain safe and healthy working practices when carrying out erecting and dismantling of plant	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 erecting and dismantling operations			
		4.2	Demonstrate compliance with given information and relevant legislation when carrying out erecting and dismantling of plant in relation to two or more of the following: <ul style="list-style-type: none"> • safe use and storage of plant • safe use and storage of tools and equipment • safe use of access 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 erecting and dismantling plant, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> • 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			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to carry out erecting and dismantling of plant	5.1	Request and select resources associated with the work in relation to consumables, materials, attachments, 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: <ul style="list-style-type: none"> • plant • hand and/or powered tools and 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, pressure, quantity, length and area associated with the method/procedures to carry out extracting operations using skid steer			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when erecting and dismantling plant	6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures			
		6.2	Minimise 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 within the allocated time when erecting and dismantling plant	7.1	Demonstrate completion of the work within the allocated time			
		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme 			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to erect and dismantle plant to the required specification	8.1	Demonstrate the following work skills when erecting and dismantling plant: <ul style="list-style-type: none"> • unloading, loading, siting, measuring, marking out, laying out, aligning, fitting, positioning, connecting, configuring, dismantling, removing, adjusting, securing, checking and inspecting 			
		8.2	Use and maintain hand tools, ancillary equipment and/or accessories			
		8.3	Prepare, erect and dismantle plant to given working instructions of one or more of the following: <ul style="list-style-type: none"> • mobile crane • mobile tower crane • crawler crane • self-erect equipment • drilling rig • piling rig • demolition rig 			

	8.4	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • erect and dismantle one or more of the following: mobile crane, mobile tower crane, crawler crane, self-erect equipment, drilling rig, piling rig and demolition rig • consider ground conditions and work area • fit, fasten and secure equipment • dismantle and remove equipment • recognise the requirements for controlling, directing and guiding the movement and operations of plant and machinery 			
	8.5	Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • identify valid certification for maintenance, inspection and thorough examination • recognise and determine when specific skills and knowledge are required and report accordingly • complete function checks • use access equipment • use hand tools, power tools, plant and equipment • record and report 			
	8.6	Describe the needs of other occupations and how to effectively communicate within a team when preparing for and erecting and dismantling plant			
	8.7	Describe how to maintain the hand tools, portable power tools, plant and ancillary equipment used to erect and dismantle plant			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

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 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 at: qualifications.pearson.com/en/support/contact-us.html

Online support: find the answers to your questions in *Knowledge Base*, a searchable database of FAQs and useful videos that we have put together with the help of our subject advisors to support you in your role. Whether you are a teacher, administrator, Assessment Associate (AA) or training provider, you will find answers to your questions. If you are unable to find the information you need please send us your query and our qualification or administrative experts will get back to you.

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

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 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 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 Framework, 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 Framework, 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 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'	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.
'plan how the work will be undertaken'	This means as dictated by the lift plan.
'programmes and schedules'	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 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 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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