Level 5 NVQ Diploma in Controlling Lifting Operations (Construction) – Planning Lifts

Qualification Specification

Contents

Introduction

The ProQual Level 5 NVQ Diploma in Controlling Lifting Operations (Construction) – Planning Lifts qualification provides a nationally recognised qualification for those working in the construction industry who want to specialise in the planning of the lifting of suspended loads.

The awarding body for this qualification is ProQual Awarding Body (www.proqualab.com) and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual); It is also endorsed by the sector body for construction - CITB.

The qualification has been accredited onto the Regulated Qualifications Framework (RQF) and is published on Ofqual's Register of Qualifications.

Qualification Profile
Level 5 NVQ Diploma in Controlling Lifting Operations (Construction) – Planning Lifts

Qualification title	**Level 5 NVQ Diploma in Controlling Lifting Operations (Construction) – Planning Lifts**
Ofqual qualification number	601/7662/3
Level	5
Total qualification time	985 hours
Guided learning hours	482 hours
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	01/10/2015
Qualification end date	

Entry Requirements

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

Qualification Structure

To achieve the qualification candidates must complete ALL of the Mandatory units:

Mandatory Units – candidates must complete all units in this group				
Unit Reference Number	**Unit Title**	**Unit Level**	**GLH**	***CITB Ref. No***
A/651/0177	Developing and maintaining good working relationships in the workplace	3	27	210v3
F/651/0467	Planning lifting activities in the workplace	5	120	529v3
H/651/0468	Planning and establishing safety, health, welfare and environmental systems for lifting operations in the workplace	5	110	530v3
J/651/0469	Planning work activities and resources to meet project requirements in the workplace	4	50	702v3
A/651/0366	Evaluating and confirming work methods in the workplace	7	30	728v2
F/651/0402	Planning the preparation of the site for the project in the workplace	7	50	729v2
Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2

Centre Requirements

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

Staff
Staff delivering this qualification must be appropriately qualified and/or occupationally competent.

Assessors/Internal Quality Assurance
Assessors for each 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.

Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or internal quality assurance qualifications.

Support for Candidates

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

Links to National Standards / NOS mapping

National Occupational Standards (NOS) are owned by a Sector Skills Council or Standard Setting Body and they describe the skills, knowledge and understanding needed to undertake a particular task or job at different levels of competence.

The structure and units of this qualification are based on NOS for the construction sector developed by CITB.

Assessment

This qualification is competence-based, candidates must demonstrate the level of competence described in the units. Assessment is the process of measuring a candidate's skill, knowledge and understanding against the standards set in the qualification.

The qualifications must be assessed in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Plant Operations and Controlling Lifting Operations National Vocational Qualifications (NVQ's) and Scottish Vocational Qualifications (SVQ's).

This qualification must be internally assessed by an appropriately experienced and qualified assessor.

Each candidate is required to produce a portfolio of evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- observation report by assessor
- assignments/projects/reports
- professional discussion
- witness testimony
- candidate product
- worksheets
- record of oral and written questioning
- Recognition of Prior Learning

Learning outcomes set out what a candidate is expected to know, understand or be able to do.

Assessment criteria specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria can be found from page 9.

Additional information for assessment and requirements for unit **endorsements** where relevant is included after all of the learning outcomes and assessment criteria for each unit.

Internal Quality Assurance

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

Adjustments to Assessment

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

Results Enquiries and Appeals

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

Certification

Candidates who achieve the requirements for this qualification will be awarded:

- A certificate listing all units achieved, and
- A certificate giving the full qualification title -

ProQual Level 5 NVQ Diploma in Controlling Lifting Operations (Construction) – Planning Lifts

Claiming certificates

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the qualification. All certificates will be issued to the centre for successful candidates.

Unit certificates

If a candidate does not achieve all of the units required for a qualification, the centre may claim a unit certificate for the candidate which will list all of the units achieved.

Replacement certificates

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

Learning Outcomes and Assessment Criteria

Title:	Developing and maintaining good occupational working relationships in the workplace
Unit Number:	A/651/0177

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Develop, maintain and encourage working relationships to promote good will and trust.	1.1	Give appropriate advice and information to relevant people about the occupational work activities and/or associated occupations involved.
		1.2	Apply the principles of equality and diversity by considering the needs of individuals when working and communicating with others.
		1.3	Explain the methods and techniques used and personal attributes required to encourage and maintain working relationships that promote goodwill and trust with relevant people.
		1.4	Explain the principles of equality and diversity and how to apply them when working and communicating with others.
2	Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency.	2.1	Communicate on the following work activity information to relevant people following organisational procedures: - appropriate timescales - health and safety requirements - co-ordination of work procedures.
		2.2	Explain the different methods and techniques used to inform relevant people about work activities.
		2.3	Explain the effects of not informing relevant people with the expected level of urgency.
		2.4	Explain the different types of work activity related information and to what level of detail the following people would expect to receive: - colleagues - employers - customers - contractors - suppliers of products and services - other people affected by the work/project.

3	Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments.	3.1	Give appropriate advice and information to relevant people about the different methods of carrying out occupational work activities to achieve the required outcome.
		3.2	Explain the techniques of encouraging questions and/or requests for clarification and comments.
		3.3	Explain the different ways of offering advice and help to different people about work activities, in relation to: - progress - results - achievements - occupational problems - occupational opportunities - health and safety requirements - co-ordinated work.
4	Clarify proposals with relevant people and discuss alternative suggestions.	4.1	Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.
		4.2	Explain the methods of clarifying alternative proposals with relevant people.
		4.3	Explain the methods of suggesting alternative proposals.
5	Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect.	5.1	Examine and agree the work activities that satisfy all people involved and will meet the required outcome of the proposed method of work.
		5.2	Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect.

Title:	Developing and maintaining good occupational working relationships in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment, in accordance with 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.
Sector Subject Area	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	27
Assessment hours	10

Title:	Planning lifting activities in the workplace
Unit Number:	F/651/0467

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Confirm work requirements from information when planning lifting activities using lifting equipment.	1.1	Identify and establish the operational requirements for a range of lifting activities.
		1.2	Confirm the work requirements to determine how the lifting activity should be carried out by producing records from the following information sources: - survey reports - designs - contractual documentation - statutory consents - risk assessments - method statements - rigging studies - drawings - programmes - records regarding the competence of the lifting team - sub-contractor arrangements - health, safety and environmental plans - utilities - work permits - local authorities - highway authorities - manufacturers data.
		1.3	Explain how to confirm work requirements for the following lifting activities: - freely suspended loads - above ground operations - below ground operations - lifting of persons - dismantling operations - excess height lifts - multiple lifting - pick-and-carry - where the operator does not have clear sight of the load - loading and unloading.

1	continued	1.4	Describe how to use a range of information sources in relation to the following stakeholders: - customers - contractors - consultants - specialists - statutory consents.
		1.5	Explain who to consult with to confirm the work requirements for the lifting activity and how to determine suitability of the following lifting equipment: - access equipment - crawler cranes - drilling rigs - excavators - floating lifting equipment - hoists - knuckle-boom cranes - lorry loaders - masted forklifts - mobile cranes - non-mechanised lifting equipment - overhead cranes - pedestal cranes - piling rigs - specialist lifting equipment - telescopic handlers - tower cranes - jacking equipment.
2	Identify and review influencing factors and guidance material about the work environment and resources.	2.1	Identify and review the influencing factors and relevant guidance material relating to the work environment and resources required for the lifting activity.
		2.2	Produce records for the following influencing factors: - customer requirements - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations - weather conditions - safety, health and welfare requirements.

2	continued	2.3	Identify, review and record consultation with the following guidance and information sources when planning a range of lifting activities: - lifting equipment other equipment and accessories manuals and data - maintenance or examination schedules and manuals - good practice guides and specifications - current legislation and official guidance - organisational procedures.
		2.4	Explain how to identify and review influencing factors in relation to the following: - customer requirements - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations - weather conditions - health, safety and welfare requirements.
		2.5	Explain how to identify and review guidance material in relation to: - manufacturers data - operators' manuals - lifting equipment and lifting accessory equipment data - maintenance data or examination schedules and manuals - good practice guides and specifications - approved codes of practice - organisational procedures - relevant legislation - official guidance.
3	Establish methods of work by arranging, planning, assessing and accounting for all influencing factors.	3.1	Plan, arrange, assess, account and produce records of influencing factors including the relevant lifting equipment, lifting accessories, lifting categories and lifting activities.
		3.2	Describe how to account for the following influencing factors: - customer requirements - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations - weather conditions - health, safety and welfare requirements.

3	continued	3.3	Describe how and why to prioritise lifting activities in relation to the following: - freely suspended loads - above ground operations - below ground operations - lifting of persons - dismantling operations - excess height lifts - multiple lifting - pick-and-carry - where the operator does not have clear sight of the load - loading and unloading.
		3.4	Explain how to define the lifting equipment for a specific lifting activity in relation to: - access equipment - crawler cranes - drilling rigs - excavators - floating lifting equipment - hoists - knuckle-boom cranes - lorry loaders - masted forklifts - mobile cranes - non-mechanised lifting equipment - overhead cranes - pedestal cranes - piling rigs - specialist lifting equipment - telescopic handlers - tower cranes - jacking equipment.
		3.5	How to define the type of lifting category in relation to: - basic - intermediate - complex.
		3.6	Explain why you need to match the lifting equipment, lifting accessories, lifting category, and lifting activity to the planned lifting operation.

4	Amend work methods to take account of changing circumstances whilst maintaining requirements of the lifting activity.	4.1	Amend work methods to take account of changing circumstances whilst maintaining the requirements of the lifting activity in relation to: - customer requirements - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations - weather considerations - safety, health and welfare requirements.
		4.2	Produce records of amended working methods taking into account the following circumstances: - susceptibility to damage - safety requirements - compromised operational effectiveness - weather conditions - use, or change of use of equipment - current legislation - resources - lifting equipment, other equipment and accessories data - workforce and lifting team - security threats - external factors - project alterations - ground conditions.
		4.3	Explain how and why the following changing circumstances should be taken into account when planning lifting activities: - susceptibility to damage - safety requirements - compromised operational effectiveness - weather conditions - use or change of use - current legislation - resources - lifting equipment, other equipment and accessories data - workforce and lifting team - security threats - external factors - project alterations - ground conditions.

4	continued	4.4	Describe how work methods can be amended when reviewing influencing factors when planning in relation to: - customer requirements - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations - weather conditions - health, safety and welfare requirements.
5	Communicate work methods to people involved in the lifting activity.	5.1	Communicate work methods to people involved in the lifting operation including any amendments required due to changing circumstances by producing records of communication.
		5.2	Explain how and why it is important for effective communication of work methods using discussions, sketches and briefings of the lifting activities to people involved in the lifting operation.
		5.3	Explain why it is important to communicate amended work methods.
		5.4	Explain why changing circumstances can cause amendments to the lifting activity in relation to: - susceptibility to damage - safety requirements - compromised operational effectiveness - weather conditions - use, or change of use - current legislation - resources - lifting equipment, other equipment and accessories data - workforce and lifting team - security threats - external factors - project alterations.
6	Prepare and record lift plans, work methods and schedules and negotiate and agree them with decision makers.	6.1	Prepare plans and produce records of work methods in written and visual formats.
		6.2	Negotiate and agree plans and work methods with decision-makers.
		6.3	Describe how to prepare plans and record work methods and schedules for lifting activities.

7	Apply a range of engineering-based calculations to inform planning.	7.1	Apply a range of engineering-based calculations that support the planning process based on mathematical formulas that apply tolerances, factors of safety, variations and ranges to determine: - height - length - density - mass - capacity - volume - area - angles - stress or strain - loadings - pressure - stability - velocity - temperature - ratios - deflection - time - shape - centre of gravity.
		7.2	Describe how to identify international system (SI), national, regional, manufacturer specific, regulative and official guidance that apply to the following units: - height - length - density - mass - capacity - volume - area - angles - stress or strain - loadings - pressure - stability - velocity - temperature - ratios - deflection - time - shape - centre of gravity.
		7.3	Explain how industry accepted tolerances for factors of safety are applied to planning activities.

7	continued	7.4	Describe how to use a range of mathematical formulas to plan lifting operations in relation to: - size, volume and weights of crane loads - ground bearing pressures - wind speeds and loadings - hoist rope strength - stability - derating - angles of slings - heights, distances and clearances - boom and jib angles, radius and deflection - centre of gravity.

Title:	Planning lifting activities in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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 NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	120
Assessment hours	15

Title:	Planning and establishing safety, health, welfare and environmental systems for lifting operations in the workplace
Unit Number:	H/651/0468

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Identify and recommend actions for improving the safety, health, and welfare of people affected by the lifting operation.	1.1	Identify, recommend and record ways to improve safety, health and welfare for people affected by lifting operations.
		1.2	Explain how to identify ways to improve safety, health and welfare for people on site.
		1.3	Describe how to identify potential actions for improvement of safety, health and welfare systems in relation to the following: - workforce - lifting team - customer - other personnel on site - members of the public - occupiers of buildings - site visitors - people affected by on-site operations.
2	Promote a culture of safety, health, welfare and environmental awareness.	2.1	Implement systems to keep records of initiatives taken that promote a culture of safety, health, welfare and environmental awareness during the lifting operation.
		2.2	Explain ways that the culture of safety, health, welfare and environmental awareness can be promoted on site.
3	Establish procedures that ensure lifting team responsibilities and competencies are fully applied to the lifting operation.	3.1	Allocate and record the required safety, health and welfare responsibilities to the relevant lifting team members.
		3.2	Plan and record site inductions and activity briefings prior to the start of lifting operations.
		3.3	Explain why the workforce and visitors need to have site inductions and activity briefings.

3	continued	3.4	Describe how to ensure site inductions are conducted in relation to: - health and safety responsibilities - welfare facilities - environmental responsibilities - safety, health, welfare and environmental protection equipment and resources - risk control procedures - first aid arrangements - health, safety and environmental plans - emergency procedures.
		3.5	Explain how to identify and specify the competence of the following lifting team members: - appointed persons and lift planners - lifting operations supervisor - slinger signallers - crane or lifting equipment operators - ancillary workers - other occupations associated with the lifting activity.
4	Ensure the safety, health, welfare and environmental protection equipment and resources comply with current legislation.	4.1	Demonstrate how the following complies with current legislation by producing records for the identification of the following safety, health, welfare and environmental protection equipment or resources: - protective clothing - protective equipment - first aid facilities and arrangements - welfare facilities - storage and security of materials and equipment - accident and incident reporting system - fire-fighting equipment - provision of health, safety and welfare training - environmental protection arrangements.
		4.2	Describe what the lifting activity specific safety, health, welfare and environmental legislation to meet the project, organisational and statutory requirements.
		4.3	Describe how to identify the recognised industry guidance, codes of practice and organisational procedures in relation to: - protective clothing - protective equipment - first aid facilities and arrangements - welfare facilities - storage and security of materials and equipment - environmental protection arrangements.

5	Establish and implement risk assessments and method statements and lessons learned to prevent recurrence.	5.1	Implement systems that identify hazards, reduce risks, report incidents or near misses which meet organisational and statutory requirements.
		5.2	Analyse causes and lessons learned to prevent recurrence.
		5.3	Describe how to establish and implement systems which meet organisational and statutory requirements for identifying hazards, reducing risks, reporting incidents and near misses with lessons learned to prevent recurrence in relation to the following: - lifting activity specific safety, health, welfare and environmental legislation - recognised industry codes of practice - organisational procedures.
6	Review safety, health, welfare and environmental protection systems on completed lifting activities in accordance with organisational and statutory requirements.	6.1	Implement systems that ensures reviews are carried out on a range of completed lifting activities in relation to: - freely suspended loads - above ground operations - below ground operations - lifting of persons - dismantling operations - excess-height lifts - multiple lifting - pick-and-carry - where the operator does not have clear sight of the load - loading and unloading.
		6.2	Identify safety, health, welfare and environmental issues against organisational and statutory requirements on previous completed lifting operations.
		6.3	Explain how the results of reviews of previous lifting operations can influence the planning of future operations.
7	Assess the significance of environmental factors as they affect the lifting operation and take appropriate action.	7.1	Identify and consider the following environmental factors when planning a range of lifting activities, taking appropriate action where required: - ecological - nature conservation - noise or nuisance - emissions and contamination to land, air and water - economic and social - traffic and people management - waste management and recycling - weather - wind effects, vortices and building shielding.

7	continued	7.2	Describe how and why you need to assess the significance of environmental factors affecting the lifting operation and how to take appropriate action in relation to the factors listed above.
		7.3	Explain ways to identify the significance of environmental protection requirements on the lifting operation in relation to: - legislation and regulations - national, regional and local Government - conservation councils, trusts and bodies - industry sustainability and good practices initiatives - local initiatives - voluntary organisations.

Title:	Planning and establishing safety, health, welfare and environmental systems for lifting operations in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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.
Sector Subject Areas	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	110
Assessment hours	10

Title:	Planning work activities and resources to meet project requirements in the workplace
Unit Number:	J/651/0469

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Organise work activities to make the most efficient use of the available resources.	1.1	Organise work activities which make the most efficient use of at least four of the following resources and record the outcomes: - people - plant - equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		1.2	Explain how to organise and record work activities to make the most efficient use of the following resources: - people - plant - equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		1.3	Give reasons why work activities need to be organised to make the best use of resources.
		1.4	Explain the potential risks of works impacting on the cultural significance of the historic environment.
		1.5	Explain the specific requirements for buildings and structures of traditional (pre 1919) construction or of architectural, historical or archaeological significance.
2	Recommend alternative methods, resources and systems to meet programmes and schedules.	2.1	Assess and identify a variety of effective solutions for alternative work methods, resources and systems to meet a range of programmes, and schedules.
		2.2	Recommend alternative methods, resources and systems to meet programmes and schedules.
		2.3	Explain how to recommend the evaluated resources, methods and systems to meet programmes and schedules to stakeholders.

3	Obtain clarification or advice from various sources where the resources required are not available.	3.1	Obtain advice or clarification to determine required resources from the following: - stakeholders - trade and technical guidance.
		3.2	Explain methods of finding potential sources for clarification and advice for a range of work programmes.
		3.3	Outline the types of information that could be gained from various information sources.
		3.4	Explain how to obtain advice from stakeholders or trade and technical guidance when required resources are not available.
4	Examine work activities against project data or operational data and the requirements of external factors.	4.1	Examine a range of work activities against project data and the requirements of at least three of the following external factors and record the findings: - other related programmes - supply lead times - contingencies - special working conditions - weather conditions - statutory limitations - site conditions - availability of resources.
		4.2	Explain how to identify the following external factors: - other related programmes - supply lead times - contingencies - special working conditions - weather conditions - statutory limitations - site conditions - availability of resources.
		4.3	Describe ways in which external factors can affect a programme, operation or schedule.
		4.4	Explain how to examine work activities against the following project data and requirements of external factors: - contract conditions - bills of quantities or methods of measurements - specifications and schedules of work - drawings - survey reports - health, safety and environmental plans - programmes - organisational requirements - instructions and variations.

4	continued	4.5	Explain the different methods of examining work activities against resources and related information.
5	Update existing programmes and schedules of planned activities and inform stakeholders.	5.1	Update at least two of the following programmes and schedules of planned activities: - programmes and schedules - critical analysis - action lists - method statements - risk assessments.
		5.2	Inform stakeholders of updates that should be made on works programmes and schedules.
		5.3	Explain different methods of updating the following programmes and schedules: - programmes - critical analysis - action lists - method statements - risk assessments.
		5.4	Describe the possible effects on the project if programmes and schedules are not updated when factors change.
		5.5	Describe ways of recommending updates to existing programmes and schedules to stakeholders.
6	Implement systems to monitor and record works against programmes and schedules.	6.1	Implement a system to monitor and record works being undertaken against programmes and schedules.
		6.2	Review and record results of monitoring programmes against given programmes and schedules.
		6.3	Explain different systems which are available for monitoring and recording works against programmes and schedules and how to implement them.
		6.4	Give reasons why it is necessary to monitor and record the results of works against programmes and schedules.

Title:	Planning work activities and resources to meet project requirements in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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.
Sector Subject Areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment Time	10

Title:	Evaluating and confirming work methods in the workplace
Unit Number:	A/651/0366

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Evaluate project or operational data in order to identify work methods.	1.1	Examine at least five of the following project data sources or operational data in order to identify required work methods: - conditions of contract - bills of quantities or methods of measurement - specifications and/or schedules of work - drawings - health, safety and environmental plans - organisational requirements - instructions and variations - information on materials - programmes - survey reports - design data - statutory consents - sub-contractor arrangements and attendance - method statements and/or risk assessments - safe systems of work.
		1.2	Explain different methods and techniques that allows the evaluation of available project or operational data.
		1.3	Explain how to identify construction work methods from the evaluation of project data.
		1.4	Give reasons why it is important to evaluate available project data and explain possible project consequences should this not be undertaken correctly.
2	Obtain additional information from other sources in cases where the available project data is insufficient.	2.1	Carry out consultations with and/or examine at least two of the following other sources where the available project data is insufficient: - stakeholders - regulatory authorities - technical and trade guidance.
		2.2	Explain how additional information from other sources can be obtained in cases where available project data is insufficient.

3	Identify work methods which will make the best use of resources and materials and meets project and current organisational requirements.	3.1	Establish and record a range of work methods which will make best use of resources and materials which meet project and current organisational requirements from at least two of the following information sources: - current organisational requirements, Codes of Practice and official guidance - investigative research - technical and trade guidance. - building regulations and/or standards - surveys and reports.
		3.2	Explain different ways that allow comprehensive identification of work methods from possible information sources and will make the best use of resources and materials for projects.
		3.3	Explain how to identify work methods from evaluating organisational requirements, including but not limited to: investigative research, technical and trade guidance, codes of practice and official guidance which will make the best use of resources and materials in relation to: - sequencing and integration - organisation of resources - techniques - use of temporary works - modern methods of construction - preparatory systems - adoption of new materials - application of new skills.
4	Evaluate identified work methods against technical, environmental and project criteria and select appropriate methods.	4.1	Examine and record identified work methods using at least six of the following technical, environmental and project criteria and select the most suitable: - materials performance and availability - health, safety, welfare and wellbeing - fire safety - access - plant, equipment or machinery performance and availability - resources - traffic management - environmental issues - cost benefits - current organisational requirements, Codes of Practice and official guidance - stakeholder needs - contract requirements in terms of time and quantity - waste management - sustainability.

4	continued	4.2	Determine work methods for a range of projects, and activities that will meet programme requirements.
		4.3	Explain different ways and techniques of evaluating identified work methods against relevant technical, environmental and project criteria to select the best or appropriate method.
5	Ensure method statements and risk assessments are current, accurate, agreed and acceptable to all stakeholders.	5.1	Produce method statements and risk assessments for a range of projects, activities or operations where required.
		5.2	Confirm that method statements and risk assessments are current, accurate, agreed and acceptable to all stakeholders.
		5.3	Explain suitable methods that ensure method statements and risk assessments derived from the selected work methods are current, accurate, clear and concise.
		5.4	Explain possible procedures that ensure that method statements and risk assessments are acceptable to all stakeholders.
		5.5	Give reasons for the need to ensure that selected work methods, method statements and risk assessments are acceptable to all stakeholders.
6	Recommend and promote the selected work method for the project.	6.1	Present the chosen work method to at least two of the following stakeholders and record the outcomes: - the client, customer or their representative - contractors - consultants - designers - sub-contractors - suppliers - workforce - internal management.
		6.2	Explain the different ways and techniques of recommending work methods to stakeholders.
		6.3	Explain the potential risks of works impacting on the cultural significance of the historic environment.
		6.4	Explain the specific requirements for buildings and structures of traditional (pre 1919) construction or of architectural, historical or archaeological significance.

Title:	Evaluating and confirming work methods in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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.
Subject Sector Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment Hours	10

Title:	Planning the preparation of the site for the project in the workplace
Unit Number:	F/651/0402

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Assemble and review information used in the preparation of the project plan, clarify information which is not clear and update it for production planning purposes.	1.1	Maintain, verify, update and record the project plan using at least four of the following types of information: - survey reports - design information - contractual information - statutory consents - contracts pre-planning information - health, safety and environmental plans - risk assessments and method statements - programmes and schedules - team competency - sub-contractor arrangements and attendance.
		1.2	Clarify and verify information which is not clear and update it for production planning purposes.
		1.3	Describe different ways of assembling information needed for the preparation of the project plan.
		1.4	Explain techniques that can be used to clarify project information that is not clear.
		1.5	Explain the procedures that can be implemented that keeps project information up to date.
		1.6	Give reasons why information should be assembled, clarified and kept up to date, and explain the possible consequences if this is not undertaken.
2	Identify factors for consideration, record them and distribute them to people who may be affected.	2.1	Identify and record planning information in which at least four of the following factors have been considered: - occupiers - near neighbours - public access - site conditions - environment considerations - vehicular access and egress - security and trespass - public utilities - heritage issues - archaeological - sustainability - temporary works.

2	continued	2.2	Distribute relevant preparation information to those needing that information.
		2.3	Explain how the following relevant factors for consideration should be identified and recorded when planning: - occupiers - near neighbours - public access - site conditions - environment considerations - vehicular access and egress - security and trespass - public utilities - the potential risks of works impacting on the cultural significance of the historic environment - the specific requirements for buildings and structures of traditional (pre 1919) construction or of architectural, historical or archaeological significance - sustainability - temporary works.
		2.4	Explain different ways of passing on records of factors considered to people who will be affected.
		2.5	Give reasons why it is important to pass on considered and recorded factors to those people affected and explain possible consequences should this not be done.
3	Plan for traffic management, identifying access and egress points for the site and works which are safe, convenient and which minimise disruption.	3.1	Plan traffic management systems that include chosen and agreed site and work access and egress points.
		3.2	Explain ways of identifying access and egress points for the site and works which are the most convenient for works traffic and which minimise disruption in relation to: - current organisational requirements - local traffic - access and egress control - security - parking - visitors - site induction - occupiers - near neighbours - traffic management.
		3.3	Explain how to prepare a traffic management plan.

4	Organise the resources required for the preparation of site operations.	4.1	Assign at least four of the following resources in order to prepare sites or activities: - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		4.2	Explain how resources for sites or activities should be organised.
		4.3	Explain how to organise and assign the following resources for site preparation: - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		4.4	Explain how resources used in site preparation can be utilised for project work or tasks.
5	Give accurate details about the proposed work to the utility and emergency services.	5.1	Collate and record information that relates to site access and egress, layout, evacuation and hazards.
		5.2	Communicate information about the proposed works site access and egress, layout, evacuation and hazards to the relevant utility and emergency services.
		5.3	Describe how to give details about the following proposed works to utility and emergency services: - new build - infrastructure - demolition - extension - alteration - refurbishment - temporary works - installation - conservation.
		5.4	Explain why it is important to provide details about the proposed works to the utility and emergency services.

5	continued	5.5	Explain methods and techniques of providing details of site access and egress, layout, evacuation and hazards to utility and emergency services.
6	Make arrangements for adequate site safety and welfare, reviewing as work progresses.	6.1	Make and record arrangements identified for site safety and welfare before work starts and review as work progresses.
		6.2	Identify procedures needed to protect the environment relative to the site or operations.
		6.3	Ensure adequate site safety and welfare for the following proposed works are implemented and recorded: - new build - infrastructure - demolition - extension - alteration - refurbishment - temporary works - installation - conservation - retrofit works.
		6.4	Describe various procedures that can ensure adequate security of sites.
		6.5	Explain ways that arrangements for health, safety, welfare and security are reviewed as work progresses.
7	Implement procedures and arrangements for environmental protection and security.	7.1	Implement and record procedures and arrangements for environmental protection and security.
		7.2	Arrange procedures for site or operational security.

7	continued	7.3	Explain how and why considerations of relevant factors should be made when arranging site environmental protection: - occupiers - near neighbours - public access - site conditions - environment considerations - vehicular access and egress - security and trespass - public utilities - the potential risks of works impacting on the cultural significance of the historic environment - the specific requirements for buildings and structures of traditional (pre 1919) construction or of architectural, historical or archaeological significance, heritage issues - sustainability.
8	Implement and record the procedures and arrangements for temporary works.	8.1	Implement and record the procedures and arrangements for temporary works on site.
		8.2	Explain how to implement the procedures for temporary works and how best to record the arrangements.
		8.3	Explain why it is important to implement procedures and arrangements for temporary works and the possible consequences if this is not done.
9	Plan the site or area layout for operational purposes and pass information about the plans to the people on the site.	9.1	Identify and plan the layout of sites or areas for work operations to take place to include the following: - storage - temporary accommodation - work areas - plant - temporary services - access and egress - security - continuing use by occupiers - waste management - pollution control - provision for prefabricated components and systems - existing fabric.
		9.2	Identify and arrange required resources and delivery of materials, storage areas for materials and waste collection locations for projects or operations.
		9.3	Identify, arrange and record recycling procedures for sites or operations.

9	continued	9.4	Ensure that information about site layouts showing resources and materials delivery, storage and waste collection locations and arrangements for recycling are communicated to people on site.
		9.5	Explain how and why the site or area layout should be planned for operational purposes.
		9.6	Describe the factors that should be considered when planning the layout of sites or areas for operations.
		9.7	Explain methods and techniques of communicating information about site or area layout plans to the people on site.
		9.8	Explain how the planning of storage and use of materials and components is carried out so that material handling is efficient, and wastage is minimised.
10	Ensure notices to people, which provide information and comply with current organisational requirements.	10.1	Record the types and locations of notices which provide information required for the site and ensure that they comply with current organisational requirements.
		10.2	Arrange for the correct positioning of relevant notices at specified locations.
		10.3	Explain ways and methods of placing and recording site notices.
		10.4	Explain how to ensure that notices comply with current organisational requirements.
11	Ensure the notices are placed correctly and implement a maintenance schedule.	11.1	Ensure that notices have been placed correctly and implement a schedule to maintain this.
		11.2	Give reasons for maintaining notices for people, the public, visitors and the workforce and explain the possible consequences should this not happen.
		11.3	Explain how maintenance schedules for information notices should be prepared and implemented.

Title:	Planning the preparation of the site for the project in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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.
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment Hours	10

Title:	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace
Unit Number:	Y/651/0419

Learning outcomes *The learner will be able to:*		**Assessment criteria** *The learner can:*	
1	Ensure that the specification of the selected plant, equipment or machinery meets the needs of the project before deployment.	1.1	Review and record the specifications for plant, equipment or machinery and evaluate against project requirements.
		1.2	Describe ways of ensuring that the specifications for the following plant, equipment or machinery meet the needs of the project before deployment: - static - mobile - accessories - consumables - health and safety equipment - specialised hand tools - standard plant, equipment or machinery - non-standard plant, equipment or machinery.
		1.3	Explain why it is important that the plant specification meets the needs of the project.
2	Confirm that the plant, equipment or machinery to be deployed complies with current legislation and will be set up, operated and maintained by competent people.	2.1	Devise and implement a system to ensure pre-use checks, inspections, thorough examinations and tests have been conducted on plant, equipment or machinery and ensure records are kept.
		2.2	Explain how to ensure that plant, equipment or machinery complies with current legislation and why.
		2.3	Carry out and record checks on the competence of people who will set up, operate and maintain plant, equipment or machinery.
		2.4	Explain the methods of checking competence of those setting up, operating and maintaining plant, equipment or machinery.
		2.5	Give reasons as to why it is important to ensure compliance and competence of those setting up, operating and maintaining plant, equipment or machinery through adequate checks.

3	Implement a system to update the deployment and allocation of plant, equipment or machinery, and operators, as the project progresses, or changes occur.	3.1	Implement and use a system that updates the deployment, allocation and use of plant, equipment or machinery and operators as the project progresses or changes occur.
		3.2	Explain the various methods of implementing an effective system that can update the deployment and allocation of plant, equipment or machinery as the project progresses and changes occur.
		3.3	Explain why a system for updating the deployment and allocation of plant, equipment or machinery is required.
		3.4	Make recommendations on the use of alternative types of plant, equipment or machinery to decision makers.
		3.5	Explain ways of recommending alternative plant, equipment or machinery to decision makers.
4	Identify hazards, assess and mitigate risks arising from the use of plant, equipment or machinery and implement measures that protect people and the environment.	4.1	Evaluate risks arising from hazards and apply measures in order to protect the workforce, sub-contractors, suppliers, consultants, occupants, visitors, the general public and the environment relating to at least three of the following: - methods of work - risk assessment - safe use and storage of tools - safe use and storage of materials - traffic management.
		4.2	Explain the various methods of identifying hazards and assessing risks arising from the use of plant, equipment or machinery.
		4.3	Explain how to mitigate risks by implementing measures that protect the workforce, sub-contractors, suppliers, consultants, occupants, visitors, the general public and the environment by the application of the following information: - methods of work - risk assessment - safe use and storage of tools - safe use and storage of materials - traffic management.

5	Ensure that plant, equipment or machinery operations are planned, appropriately supervised and conducted in accordance with current legislation.	5.1	Analyse the following to ensure that plant, equipment or machinery operations are planned, appropriately supervised and conducted in accordance with current legislation: - safe systems of work written or approved for plant, equipment or machinery operations - roles and responsibilities allocated to plant, equipment or machinery supervisors, operators and users - information passed to operators, users and supervisors.
		5.2	Describe various methods of writing or approving safe systems of work for the use of plant, equipment or machinery.
		5.3	Explain how best to inform relevant persons about the use of plant, equipment or machinery in relation to organisational requirements.
		5.4	Explain how to ensure that plant, equipment or machinery operations are supervised and conducted in accordance with current legislation and organisational requirements.
		5.5	Explain how to maintain effective records for the competence of supervisors, operators and users.
6	Ensure the suitable storage, servicing and maintenance of plant, equipment or machinery has been arranged to meet organisational requirements.	6.1	Analyse the following to ensure that the suitable storage, servicing and maintenance of plant, equipment or machinery has been arranged and meets organisational requirements: - arrangements for the storage of plant, equipment or machinery - checks made for the serviceability and maintenance of plant, equipment or machinery as appropriate to organisational requirements.
		6.2	Explain how to confirm that plant, equipment or machinery is stored, serviced, maintained, examined and inspected in accordance with organisational requirements.
		6.3	Explain why is important to ensure that, plant, equipment or machinery is stored, serviced, maintained, examined and inspected in accordance with organisational requirements.
7	Identify and record the competency requirements for supervisors, operators and users of plant, equipment or machinery.	7.1	Identify and record the competency requirements for supervisors, operators and users of plant, equipment or machinery that will or could support the project or future projects in relation to organisational requirements.

7	continued	7.2	Explain the various methods of identifying competence requirements for plant, equipment or machinery supervisors, operators and users according to organisational requirements.
		7.3	Explain how to compare identified competency needs with the needs of the project and future projects.
		7.4	Explain how to determine if a person meets the competency requirements of their project role.
		7.5	Explain how to arrange development for supervisors, operators and users of plant, equipment or machinery according to organisational requirements.
8	Promote and record opportunities to suggest improvements in plant operations.	8.1	Promote and record opportunities to at least four of the following in order to suggest improvements: - supervisors - operators - users - the workforce - members of the public - stakeholders - clients and other duty holders - visitors - supply chain.
		8.2	Explain how to promote and record opportunities to suggest improvements in plant operations.
		8.3	Explain why it is important to promote and record opportunities to suggest improvements in plant operations.
9	Ensure that plant, equipment or machinery which is no longer needed is returned or removed and records are maintained.	9.1	Make arrangements to allow plant, equipment or machinery to be removed or returned and keep records.
		9.2	Describe how to return or remove plant, equipment or machinery which is no longer needed.
		9.3	Give reasons why it is important that plant, equipment or machinery should be returned or removed when it is no longer needed and adequate records kept.

Title:	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with 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.
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment Time	10

Tel: 01430 423822

www.proqualab.com

enquiries@proqualab.com

ProQual AB Limited, ProQual House, Unit 1, Innovation Drive, Newport HU15 2HG
Company Registration Number: 07464445