



ProQual Level 6 NVQ Diploma in Construction Site Management (Construction)

Qualification Specification

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Introduction

The ProQual Level 6 NVQ Diploma in Construction Site Management (Construction) qualification provides a nationally recognised qualification appropriate for those working as construction site managers in building and civil engineering, highways maintenance and repair, residential development, conservation or demolition.

There are 7 pathways available:

Pathway 1: Building and Civil Engineering

Pathway 2: Highways Maintenance and Repair

Pathway 3: Residential Development

Pathway 4: Traditional and Heritage Building

Pathway 5: Demolition

Pathway 6: Tunnelling

Pathway 7: Retrofit

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 6 NVQ Diploma in Construction Site Management (Construction)

Qualification title	ProQual Level 6 NVQ Diploma in Construction Site Management (Construction)
Ofqual qualification number	610/3809/X
Level	6
Total qualification time	2180 – 2290 (Dependent on Pathway)
Guided learning hours	857 - 927 (Dependent on Pathway)
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	18/03/2024
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 the Mandatory/Optional Units from one of the Pathways. Candidates may also complete any of the Additional Units, but these will not count towards the qualification.

Pathway	Minimum TQT
Pathway 1: Building and Civil Engineering	2200
Pathway 2: Highways Maintenance and Repair	2180
Pathway 3: Residential Development	2210
Pathway 4: Traditional and Heritage Building	2270
Pathway 5: Demolition	2230
Pathway 6: Tunnelling	2270
Pathway 7: Retrofit	2290

CITB references are provided in this document for information only.

Pathway 1: Building and Civil Engineering

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2

Y/650/0906	Managing your personal development in the workplace	6	20	740v2
Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Optional Units – ONE unit				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
L/650/0902	Planning demolition activities in the workplace	7	50	722v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1

Pathway 2: Highways Maintenance and Repair

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
Optional Units – TWO units				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2

J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
L/650/0902	Planning demolition activities in the workplace	7	50	722v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1

Pathway 3: Residential Development

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
Optional Units – TWO units				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
L/650/0902	Planning demolition activities in the workplace	7	50	722v2

Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2

Pathway 4: Traditional and Heritage Building

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
Optional Units – THREE units				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
L/650/0902	Planning demolition activities in the workplace	7	50	722v2

Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2

Pathway 5: Demolition

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
L/650/0902	Planning demolition activities in the workplace	7	50	722v2
Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Optional Units – ONE unit				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2

J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2

Pathway 6: Tunnelling

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Optional Units – ONE unit				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2

Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
L/650/0902	Planning demolition activities in the workplace	7	50	722v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1

Pathway 7: Retrofit

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 occupational working relationships in the workplace	3	27	210v3
J/650/0893	Allocating work and monitoring people's performance in the workplace	6	40	713v3
L/650/0895	Contributing to the identification of a work team in the workplace	5	20	715v2
K/651/0360	Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace	7	65	726v2
R/651/0363	Establishing, controlling and monitoring environmental factors and sustainability in the workplace	6	70	727v2
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
H/651/0403	Monitoring project activities in the workplace	6	20	730v2
J/651/0404	Ensuring that work activities and resources meet project work requirements in the workplace	7	50	731v2
K/651/0405	Organising, controlling and monitoring supplies of materials in the workplace	5	20	733v2
L/651/0406	Identifying and maintaining communication systems and organisational procedures in the workplace	6	30	734v2
T/651/0409	Controlling project progress against agreed quality standards in the workplace	6	30	735v2
H/651/0412	Controlling project progress against agreed programmes in the workplace	6	30	737v2
Y/650/0906	Managing your personal development in the workplace	6	20	740v2
F/651/0420	Establishing dimensional control criteria in the workplace	6	20	736v2
L/651/0424	Controlling project quantities and costs in the workplace	6	20	738v2
A/651/0465	Planning the installation of retrofit works in the workplace	6	60	756v1
D/651/0466	Managing installation, commissioning and handover of retrofit works in the workplace	6	60	757v1
Optional Units – TWO units				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
K/650/0894	Enabling learning opportunities in the workplace	5	40	714v3
Y/650/0899	Providing customer services in the construction workplace	6	40	719v2

J/650/0900	Planning activities to traditional and heritage buildings and structures in the workplace	6	50	720v3
K/650/0901	Supervising activities to traditional and heritage buildings and structures in the workplace	5	50	721v2
L/650/0902	Planning demolition activities in the workplace	7	50	722v2
R/651/0426	Evaluating feedback and making recommendations in the workplace	6	25	739v2
M/651/0434	Planning and scheduling the maintenance activities of property, services or systems in the workplace	6	40	741v2
H/651/0430	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace	6	30	758v1
Additional Units – Not mandatory				
Unit Reference Number	Unit Title	Unit Level	GLH	CITB Ref. No
M/650/0896	Planning highways maintenance and repair activities in the workplace	5	30	716v2
R/650/0904	Supervising tunnelling activities in the workplace	6	50	724v2
Y/651/0419	Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace	6	20	732v2
A/651/0438	Managing the project handover in the workplace	6	40	742v2
Y/651/0464	Planning tunnelling activities in the workplace	6	50	743v2

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.

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 22.

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 6 NVQ Diploma in Construction Site Management (Construction)

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:

1 Develop, maintain and encourage working relationships to promote good will and trust.

2 Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency.

Assessment criteria

The learner can:

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.

2.1 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.

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| 3 | Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments. | <p>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.</p> <p>3.2 Explain the techniques of encouraging questions and/or requests for clarification and comments.</p> <p>3.3 Explain the different ways of offering advice and help to different people about work activities, in relation to:</p> <ul style="list-style-type: none"> - progress - results - achievements - occupational problems - occupational opportunities - health and safety requirement - co-ordinated work. |
| 4 | Clarify proposals with relevant people and discuss alternative suggestions. | <p>4.1 Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.</p> <p>4.2 Explain the methods of clarifying alternative proposals with relevant people.</p> <p>4.3 Explain the methods of suggesting alternative proposals.</p> |
| 5 | Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect. | <p>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.</p> <p>5.2 Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect.</p> |

Title: Developing and maintaining good occupational working relationships in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	05.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	27
Assessment hours	10

Title: Allocating work and monitoring people's performance in the workplace

Unit Number: J/650/0893

Learning outcomes

Assessment criteria

The learner will be able to:

The learner can:

1	Confirm the programmes, and schedules, identify priorities and critical activities, and plan how the work will be undertaken.	1.1	Confirm the proposed programmes and schedules with those responsible.
		1.2	Identify and record the priorities and critical activities and devise a plan on how the work will be undertaken.
		1.3	Explain how to identify priorities and critical activities in programmes and schedules.
		1.4	Describe how to confirm the following: <ul style="list-style-type: none">- programmes- critical activities- action lists- method statements- risk assessments.
		1.5	Explain how to plan the work to be undertaken.
2	Allocate work to team members, taking into account their skills, knowledge and experience.	2.1	Evaluate and assign work to team members taking into account their skills, knowledge, experience and workload.
		2.2	Brief the team members on the work they have been assigned and record the outcomes.
		2.3	Explain how to allocate work to team members taking into account their skills, knowledge, experience and current workload.
3	Check the validity of team member's documentation.	3.1	Carry out checks of team members' industry certification cards, competence schemes, qualifications, certificates and training to verify their validity.
		3.2	Describe how to use card checking systems, applications and online databases to verify the validity of the following: <ul style="list-style-type: none">- industry certification cards- competence schemes- qualifications- certificates- training.
		3.3	Explain why it is important to verify the validity of any presented documentation prior to a team member entering site and commencing work.

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| 4 | Brief team members on the quality standards and outcomes expected. | 4.1 | Brief team members on the quality standards and outcomes expected from them. |
| | | 4.2 | <p>Explain how to brief team members about the following quality standards or outcomes expected:</p> <ul style="list-style-type: none"> - statutory requirements - project specifications - British Standards - International Standards - Codes of practice - organisational standards - manufacturer's technical information and product data sheets - benchmarks or key performance indicators. |
| 5 | Monitor both the progress and quality of the work. | 5.1 | Monitor and record both the progress and the quality of work being undertaken. |
| | | 5.2 | <p>Explain how to check the progress of work against the following:</p> <ul style="list-style-type: none"> - programmes and schedules - critical activities - action lists - method statements - risk assessments. |
| | | 5.3 | <p>Explain how to check work against the following required quality standards and expected outcomes:</p> <ul style="list-style-type: none"> - statutory requirements - project specifications - British Standards - International Standards - Codes of practice - organisational standards - manufacturer's technical information and product data sheets - benchmarks or key performance indicators. |
| | | 5.4 | Explain why it is important to check the progress of work and standards of quality. |
| 6 | Provide prompt and constructive feedback. | 6.1 | Provide prompt and constructive feedback to those undertaking the work. |

6	continued	6.2	<p>Explain how to provide constructive feedback to team members on the progress of work and standards of quality by using the following:</p> <ul style="list-style-type: none"> - formal appraisal - interim appraisal - verbal report - written report - references.
7	Motivate team members to complete the work they have been allocated and provide additional support.	7.1	Motivate team members to complete the work they have been allocated.
		7.2	Review and provide additional support where needed to team members.
		7.3	<p>Explain how to motivate team members using the following:</p> <ul style="list-style-type: none"> - inspire - stimulate - prompt - encourage - incentivise.
		7.4	<p>Explain how to provide additional support for the following:</p> <ul style="list-style-type: none"> - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utilities.
8	Identify unacceptable or poor performance, discuss the cause(s) and agree ways of improving performance with team members.	8.1	Identify and record unacceptable or poor performance for given work activities.
		8.2	Discuss the causes of poor performance with team members.
		8.3	Agree and record ways of improving performance with team members.
		8.4	Describe how to identify unacceptable or poor performance.

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| 8 | continued | <p>8.5 Detail methods of discussing the following cause(s) of poor performance with team members:</p> <ul style="list-style-type: none"> - external factors - internal factors - social factors - personal circumstances - skills and knowledge deficiencies - lack of support - lack of resources. <p>8.6 Interpret how best to agree performance improvement measures with team members.</p> <p>8.7 Explain how to recognise the causes of workplace behaviours, negative and positive in self and others.</p> <p>8.8 State why you need to identify and act upon unacceptable or poor performance.</p> |
| 9 | Recognise exceptional performance by individuals and/or by the team and advise stakeholders. | <p>9.1 Recognise exceptional performance, record the praise and recognition provided to individuals and the team.</p> <p>9.2 Advise stakeholders of successes.</p> <p>9.3 Explain how to recognise exceptional performance by individuals and the team.</p> <p>9.4 Explain how to advise the following stakeholders of successes:</p> <ul style="list-style-type: none"> - the client, customer or their representative - contractors - consultants - sub-contractors - suppliers - workforce. |

Title: Allocating work and monitoring people's performance 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

40

Assessment hours

10

Title: Contributing to the identification of a work team in the workplace

Unit Number: L/650/0895

Learning outcomes

Assessment criteria

The learner will be able to:

The learner can:

1	Identify any significant factors which will affect the number, type and availability of people and services.	1.1	Examine, identify and record any significant factors which will affect the number, type and availability of people and services including but not limited to: <ul style="list-style-type: none">- location- cost- time- skills, experience and knowledge- availability- compatibility- training and development requirements.
		1.2	Explain how to identify the following significant factors which will affect numbers, types and availability of people or services including technical staff, sub-contractors, specialist services and operatives: <ul style="list-style-type: none">- location- cost- time- skills, experience and knowledge- availability- compatibility- training and development requirements.
2	Evaluate and record the quality and reliability of people or services, and notify relevant stakeholders.	2.1	Undertake an evaluation and record the quality and reliability of the following people or services: <ul style="list-style-type: none">- technical staff- sub-contractors- specialist services- operatives.
		2.2	Inform stakeholders of the outcomes of quality and reliability checks made on relevant people or services.
		2.3	Describe how best to evaluate and record the quality and potential reliability of people or services including: <ul style="list-style-type: none">- technical staff- sub-contractors- specialist services- operatives.

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| 2 | continued | 2.4 | Explain typical ways and techniques of circulating results from evaluations of quality and potential reliability to relevant stakeholders. |
| 3 | Negotiate and agree proposals which are likely to produce an effective team membership. | 3.1 | Negotiate with people or service providers to identify and obtain the required technical staff, sub-contractors, specialist services and operatives for your team. |
| | | 3.2 | Consult with people or service providers selected as meeting programme requirements and agree proposals for their effective participation with relevant projects. |
| | | 3.3 | Confirm team members on relevant projects with selected people or service providers. |
| | | 3.4 | Explain factors that allow proposals to be agreed for team membership from selected people or service providers. |
| | | 3.5 | Explain how to negotiate to get the appropriate people or services including: <ul style="list-style-type: none"> - technical staff - sub-contractors - specialist services - operatives. |
| 4 | Follow rules and organisational procedures for obtaining people and services. | 4.1 | Ensure the following organisational procedures for obtaining people and services are followed: <ul style="list-style-type: none"> - contractual - right to work - codes of practice - industry certification cards, competence schemes, qualifications, certificates and training - insurance. |
| | | 4.2 | Explain how to ensure organisational procedures for obtaining people and services are followed, including but not limited to: <ul style="list-style-type: none"> - contractual - right to work - codes of practice - industry certification cards, competence schemes, qualifications, certificates and training - insurance. |
| | | 4.3 | Give reasons on why you must work within organisational procedures when identifying teams. |

Title: Contributing to the identification of a work team in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment hours	10

Title: Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace

Unit Number: K/651/0360

Learning outcomes

Assessment criteria

The learner will be able to:

The learner can:

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| 1 | Establish a culture of health, safety, welfare and wellbeing on site, and identify and implement improvements. | 1.1 | Establish a culture of health, safety, welfare and wellbeing on site by carrying out the following: <ul style="list-style-type: none">- communicate with and involve the workforce- provide opportunities for development or training- lead by example- implement a proactive reporting process- identify and implement agreed ways to improve health, safety, welfare and wellbeing. |
| | | 1.2 | Implement a proactive reporting process that enables the workforce the opportunity to influence the health, safety, welfare and wellbeing culture on site. |
| | | 1.3 | Identify and implement agreed improvement modifications to health, safety, welfare and wellbeing systems, procedures and/or facilities. |
| | | 1.4 | Explain the different methods of communication required to establish a culture of health, safety, welfare and wellbeing with the following: <ul style="list-style-type: none">- the workforce- sub-contractors- suppliers- clients- consultants- visitors- the public. |
| | | 1.5 | Explain the principles of leading by example. |
| | | 1.6 | Describe how to implement a proactive reporting process to provide the workforce the opportunity to influence the health, safety, welfare and wellbeing culture on site. |
| | | 1.7 | Explain how to identify opportunities to improve health, safety, welfare and wellbeing, and how to make appropriate recommendations that can be agreed, and the modifications implemented. |
| | | 1.8 | Evaluate the importance of wellbeing in the workplace. |

- 2 Delegate health, safety, welfare and wellbeing responsibilities which comply with current organisational requirements and ensure site inductions consistently inform people of those responsibilities.
- 2.1 Evaluate health, safety and welfare and wellbeing requirements of projects and determine number and types of people needed to comply with organisational requirements.
- 2.2 Assign health, safety, welfare and wellbeing responsibilities to people that are defined, documented and communicated in accordance with organisational requirements.
- 2.3 Carry out site inductions, using various communication methods, which are specific to the site to ensure people have been informed of their responsibilities.
- 2.4 Monitor and maintain records of inductions to ensure they consistently inform people of their health, safety and welfare responsibilities.
- 2.5 Describe how health, safety, welfare and wellbeing responsibilities should be identified, and to whom they should be delegated, including but not limited to:
- supervisors
 - safety officers
 - first aiders
 - fire marshals.
- 2.6 Explain how to conduct site inductions, using various communication methods and techniques, which are specific to site and provide information including but not limited to:
- health and safety responsibilities
 - health, safety and welfare equipment and resources
 - risk control procedures
 - first aid arrangements
 - emergency plans
 - evacuation plans
 - traffic management
 - hazards
 - fire procedures.
- 2.7 Explain how to monitor and maintain records of site inductions to ensure they consistently inform people of their health, safety and welfare responsibilities including but not limited to:
- the workforce
 - supervisors
 - safety officers
 - first aiders and fire marshals.

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| 3 | Ensure accurate and appropriate notices and hazard warnings, that conform to current organisational requirements, are maintained and observed. | <p>3.1 Ensure accurate and appropriate notices and hazard warnings that conform to current organisational requirements are maintained and observed.</p> <p>3.2 Carry out and document regular inspections of relevant areas of work to confirm that placed notices and warnings are accurate and in the correct locations and ensure conformity.</p> <p>3.3 Check that people have been trained to recognise and understand the different types of notices and warnings.</p> <p>3.4 Explain how to ensure the following notices and hazard warnings comply with construction specific health, safety and welfare regulation, general health, safety and welfare legislation and organisational policies and procedures:</p> <ul style="list-style-type: none"> - prescribed notices - statutory certification notifications - site safety signs - information. <p>3.5 Describe how to maintain accurate and appropriate signs, notices and hazard warnings, ensuring they are sufficient to cover all requirements, their distribution and position is correct, and they are being effective for the workforce, visitors and the public.</p> <p>3.6 Give reasons why accurate and appropriate notices should be maintained and explain possible consequences should this not be the case.</p> |
| 4 | Ensure health, safety and welfare equipment and resources are available and sufficient to meet current organisational requirements. | <p>4.1 Implement a recording system to confirm that the health and safety control equipment and resources is appropriate for the work being carried out.</p> <p>4.2 Monitor and allocate health, safety and welfare equipment and resources for work activities that meets organisational requirements.</p> <p>4.3 Implement maintenance checks on health, safety and welfare equipment and resources.</p> |

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| 4 | continued | <p>4.4 Explain ways to ensure that health, safety and welfare equipment and resources are available and sufficient for the project, including but not limited to:</p> <ul style="list-style-type: none"> - protective clothing - protective equipment - first aid facilities and arrangements - welfare facilities - storage and security of materials and equipment - accident and incident reporting - firefighting equipment - provision of health, safety and welfare training. <p>4.5 Explain how to ensure that health, safety and welfare equipment and resources comply with current organisational policies and procedures.</p> |
| 5 | Implement systems which meet current organisational requirements to identify hazards, reduce risks and maintain the health, safety, welfare and wellbeing of people. | <p>5.1 Implement systems which meet current organisational requirements to identify hazards, reduce risks and maintain the health, safety, welfare and wellbeing of people including the following:</p> <ul style="list-style-type: none"> - identify the hazards and their consequences - analyse hazards and identify risks - consolidate and prioritise risks - implement monitoring systems and regularly evaluate to improve health, safety, welfare and wellbeing - implement appropriate measures to manage risks at source. <p>5.2 Explain how to implement hazard identification, risk assessment, prevention and protection management systems which meet current organisational policies and procedures for identifying and reducing risks.</p> <p>5.3 Explain how to implement management systems for reporting and recording accidents, emergencies and near misses.</p> <p>5.4 Explain how to maintain the welfare of the following in accordance with current organisational policies and procedures:</p> <ul style="list-style-type: none"> - workforce - sub-contractors - suppliers - consultants - visitors - the public. |

- 6 Ensure hazards are assessed to identify the residual risks, apply the principles of prevention and provide information to the appropriate people.
- 6.1 Examine work areas and identify and record any hazards and identify measures which can control the risks to health and safety.
- 6.2 Implement and maintain a reporting system to disseminate information regarding the identification of hazards and the prevention measures applied to reduce the risks.
- 6.3 Implement organisational prevention policy which covers health, safety, welfare and wellbeing relating to the working environment.
- 6.4 Explain how to ensure health, safety and environmental hazards which have the potential to cause harm are fully identified.
- 6.5 Explain how to review risks and communicate information to the following:
- workforce
 - sub-contractors
 - suppliers
 - consultants
 - visitors
 - the public.
- 6.6 Describe how to obtain additional information about hazards by communicating with the following:
- clients
 - designers
 - workforce
 - sub-contractors
 - suppliers
 - consultants.
- 6.7 Explain the effects of occupational health hazards.
- 6.8 Describe how to identify and record any residual risks and implement contingencies to manage the potential implications.
- 6.9 Explain how to apply the principles of prevention to eliminate and control risks at source, to manage risks and hazards, to attain a collective protection approach and to monitor the use of health and safety control equipment.

- 7 Monitor health, safety, welfare and wellbeing systems regularly for compliance with current organisational requirements.
 - 7.1 Collect and record workplace health, safety, welfare and wellbeing systems data by monitoring through regular checks.
 - 7.2 Ensure health, safety, welfare and wellbeing organisational requirements are current and actioned.
 - 7.3 Contribute to reports which demonstrate compliance with the organisational policies.
 - 7.4 Explain how to monitor health, safety, welfare and wellbeing systems to ensure compliance with current organisational policies and procedures and why it is important to do this regularly.

Title: Establishing, implementing and maintaining organisational systems for managing health, safety, welfare and wellbeing in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	65
Assessment hours	10

Title:	Establishing, controlling and monitoring environmental factors and sustainability in the workplace
Unit Number:	R/651/0363

Learning outcomes

The learner will be able to:

1 Identify the environmental management considerations.

2 Establish methods of work that will support sustainability by examining project data.

Assessment criteria

The learner can:

1.1 Identify the environmental management considerations.

1.2 Describe how to examine the following project data to identify needs for environmental management and to establish methods of work that will support sustainability:

- conditions of contract
- bills of quantities or methods of measurement
- specifications
- drawings
- health, safety and environmental plans
- programmes
- organisational requirements
- instructions and variations.

1.3 Explain why it is important to identify environmental management needs and the following sustainable work methods:

- appearance
- ecological
- natural conservation
- historical conservation
- statutory nuisances
- emissions to air, land and water
- movement of project people, resources and vehicles
- waste management
- responsible contractor
- contaminated land
- invasive species.

2.1 Examine relevant project data and establish the required considerations for environmental management.

2.2 Explain how to examine project data and establish and record methods of work that will support sustainability.

2.3 Give reasons why it is important to examine project data and establish and record methods of work that will support sustainability.

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| 3 | Promote a culture of environmental awareness and support for sustainability in the workforce. | <p>3.1 Adopt and implement policies that cover environmental management and sustainability procedures.</p> <p>3.2 Apply methods or procedures that encourage workforces to support sustainability and environment matters in the workplace.</p> <p>3.3 Explain how a culture of environmental awareness and support for sustainability in the workforce can be encouraged.</p> <p>3.4 Give reasons why a culture of environmental awareness and support for sustainability in the workforce should be encouraged.</p> |
| 4 | Examine and record the policies adopted for environmental management and sustainability. | <p>4.1 Assess and record the adopted policies for environmental management and sustainability.</p> <p>4.2 Explain how to examine the policies adopted for environmental management and sustainability.</p> <p>4.3 Explain why it is important to examine and record the policies adopted for environmental management and sustainability.</p> |
| 5 | Delegate and record assigned duties for environmental management and monitoring of sustainable work methods. | <p>5.1 Evaluate the environmental management requirements of projects and determine numbers and types of people needed.</p> <p>5.2 Assign and record environmental management and monitoring duties to the people selected.</p> <p>5.3 Explain how to delegate monitoring activities and inform the people selected for the following sustainable work methods:</p> <ul style="list-style-type: none"> - reuse and recycled materials and resources - sustainable materials - corporate social responsibility (CSR) and social value - wellbeing - innovation, legislation, technologies and skills - procurement of materials and resources - economic. <p>5.4 Explain how duties for environmental management and monitoring sustainable work methods should be delegated.</p> |

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| 6 | Assess the significance of environmental factors as they affect the project and take appropriate action. | <p>6.1 Assess project work against at least four of the following environmental factors when ongoing work activities are being assessed:</p> <ul style="list-style-type: none"> - appearance - ecological - natural conservation - historical conservation - statutory nuisances - emissions to air, land and water - movement of project people, resources and vehicles - waste management - responsible contractor - contaminated land - invasive species. <p>6.2 Evaluate the impact of work on the environment and apply corrective measures to eliminate or reduce effects on environmental factors.</p> <p>6.3 Explain ways of assessing significance of the following environmental factors as they affect the project and take appropriate action:</p> <ul style="list-style-type: none"> - appearance - ecological - natural conservation - historical conservation - statutory nuisances - emissions, air, land and water - movement of project people, resources and vehicles - waste management - responsible contractor - contaminated land - invasive species. |
| 7 | Monitor project work against sustainability requirements and take appropriate action to ensure progress. | <p>7.1 Assess ongoing project work against at least four of the following sustainability requirements in respect of:</p> <ul style="list-style-type: none"> - reuse and recycled materials and resources - corporate social responsibility (CSR) and social value - wellbeing - innovation, legislation, technologies and skills - procurement of sustainable materials and resources - use and storage of materials and resources - energy use, environmental emissions. |

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| 7 | continued | <p>7.2 Define the term sustainability and list the factors that make up sustainability requirements.</p> <p>7.3 Evaluate results of project work monitoring and take appropriate measures which maintain sustainability requirements and progress of work.</p> <p>7.4 Explain ways and techniques of monitoring project work against sustainability requirements and how to take appropriate action to comply with organisational requirements in relation to:</p> <ul style="list-style-type: none"> - built to last - integration with surroundings - movement of project people, resources and vehicles - meeting stakeholders' needs - energy efficiency - efficient building services systems - use of materials and resources - waste recycling - use of recycled materials - responsible procurement - biodiversity - renewables - water use and discharge - archaeological and historical requirements. |
| 8 | Record good practice in environmental management and sustainable methods of work and make recommendations to people responsible. | <p>8.1 Document results from workplace sustainability and environmental evaluations.</p> <p>8.2 Identify good practice achieved on relevant activities and inform at least three of the following people responsible:</p> <ul style="list-style-type: none"> - the client, customer or their representative - contractors - consultants - sub-contractors - suppliers - workforce - internal management. <p>8.3 Describe ways of recording good practice in environmental management and sustainable work methods.</p> <p>8.4 Explain methods and techniques of making recommendations of good practice to the people responsible.</p> |

Title: Establishing, controlling and monitoring environmental factors and sustainability in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	70
Assessment hours	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: <ul style="list-style-type: none">- 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: <ul style="list-style-type: none">- 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.

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| 4 | Evaluate identified work methods against technical, environmental and project criteria and select appropriate methods. | <p>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:</p> <ul style="list-style-type: none"> - 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. <p>4.2 Determine work methods for a range of projects, and activities that will meet programme requirements.</p> <p>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.</p> |
| 5 | Ensure method statements and risk assessments are current, accurate, agreed and acceptable to all stakeholders. | <p>5.1 Produce method statements and risk assessments for a range of projects, activities or operations where required.</p> <p>5.2 Confirm that method statements and risk assessments are current, accurate, agreed and acceptable to all stakeholders.</p> <p>5.3 Explain suitable methods that ensure method statements and risk assessments derived from the selected work methods are current, accurate, clear and concise.</p> <p>5.4 Explain possible procedures that ensure that method statements and risk assessments are acceptable to all stakeholders.</p> <p>5.5 Give reasons for the need to ensure that selected work methods, method statements and risk assessments are acceptable to all stakeholders.</p> |

- 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.

Sector Subject 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: <ul style="list-style-type: none">- 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: <ul style="list-style-type: none">- occupiers- near neighbours- public access- site conditions- environment considerations- vehicular access and egress- security and trespass- public utilities- heritage issues- archaeological- sustainability- temporary works.

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| 2 | continued | <p>2.2 Distribute relevant preparation information to those needing that information.</p> <p>2.3 Explain how the following relevant factors for consideration should be identified and recorded when planning:</p> <ul style="list-style-type: none"> - 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. <p>2.4 Explain different ways of passing on records of factors considered to people who will be affected.</p> <p>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.</p> |
| 3 | Plan for traffic management, identifying access and egress points for the site and works which are safe, convenient and which minimise disruption. | <p>3.1 Plan traffic management systems that include chosen and agreed site and work access and egress points.</p> <p>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:</p> <ul style="list-style-type: none"> - current organisational requirements - local traffic - access and egress control - security - parking - visitors - site induction - occupiers - near neighbours - traffic management. <p>3.3 Explain how to prepare a traffic management plan.</p> |

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| 4 | Organise the resources required for the preparation of site operations. | <p>4.1 Assign at least four of the following resources in order to prepare sites or activities:</p> <ul style="list-style-type: none"> - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers. <p>4.2 Explain how resources for sites or activities should be organised.</p> <p>4.3 Explain how to organise and assign the following resources for site preparation:</p> <ul style="list-style-type: none"> - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers. <p>4.4 Explain how resources used in site preparation can be utilised for project work or tasks.</p> |
| 5 | Give accurate details about the proposed work to the utility and emergency services. | <p>5.1 Collate and record information that relates to site access and egress, layout, evacuation and hazards.</p> <p>5.2 Communicate information about the proposed works site access and egress, layout, evacuation and hazards to the relevant utility and emergency services.</p> <p>5.3 Describe how to give details about the following proposed works to utility and emergency services:</p> <ul style="list-style-type: none"> - new build - infrastructure - demolition - extension - alteration - refurbishment - temporary works - installation - conservation. <p>5.4 Explain why it is important to provide details about the proposed works to the utility and emergency services.</p> |

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: <ul style="list-style-type: none"> - 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	<p>7.3 Explain how and why considerations of relevant factors should be made when arranging site environmental protection:</p> <ul style="list-style-type: none"> - 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.	<p>8.1 Implement and record the procedures and arrangements for temporary works on site.</p> <p>8.2 Explain how to implement the procedures for temporary works and how best to record the arrangements.</p> <p>8.3 Explain why it is important to implement procedures and arrangements for temporary works and the possible consequences if this is not done.</p>
9	Plan the site or area layout for operational purposes and pass information about the plans to the people on the site.	<p>9.1 Identify and plan the layout of sites or areas for work operations to take place to include the following:</p> <ul style="list-style-type: none"> - 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. <p>9.2 Identify and arrange required resources and delivery of materials, storage areas for materials and waste collection locations for projects or operations.</p>

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| 9 | continued | <p>9.3 Identify, arrange and record recycling procedures for sites or operations.</p> <p>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.</p> <p>9.5 Explain how and why the site or area layout should be planned for operational purposes.</p> <p>9.6 Describe the factors that should be considered when planning the layout of sites or areas for operations.</p> <p>9.7 Explain methods and techniques of communicating information about site or area layout plans to the people on site.</p> <p>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.</p> |
| 10 | Ensure notices to people, which provide information and comply with current organisational requirements. | <p>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.</p> <p>10.2 Arrange for the correct positioning of relevant notices at specified locations.</p> <p>10.3 Explain ways and methods of placing and recording site notices.</p> <p>10.4 Explain how to ensure that notices comply with current organisational requirements.</p> |
| 11 | Ensure the notices are placed correctly and implement a maintenance schedule. | <p>11.1 Ensure that notices have been placed correctly and implement a schedule to maintain this.</p> <p>11.2 Give reasons for maintaining notices for people, the public, visitors and the workforce and explain the possible consequences should this not happen.</p> <p>11.3 Explain how maintenance schedules for information notices should be prepared and implemented.</p> |

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: Monitoring project activities in the workplace

Unit Number: H/651/0403

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Give adequate notice to all stakeholders who will be affected about when work will start, how long it will take and when it will finish.	1.1	Prepare written notices detailing when project works starts, expected durations and planned finishing or completion dates.
		1.2	Provide written notices about project schedules to those who will be affected, to include but not limited to the following: <ul style="list-style-type: none">- client- customer or their representative- contractors- sub-contractors- third parties- public services- emergency services- suppliers- people working on site- statutory authorities- near neighbours- residents.
		1.3	Describe ways and techniques of notifying people affected by the work schedules.
		1.4	Explain why adequate notice of works should be given to people affected and explain possible consequences should this not happen.
		1.5	Explain how dates can be confirmed and why notification of work arrangements and schedules should be in writing.
2	Communicate and agree a programme and method with people who will be doing the work that integrates operations.	2.1	Communicate and agree a programme and method with people who will be doing the work that integrates operations and keep records in accordance with organisational requirements.
		2.2	Describe how to agree the following with the stakeholders who will be doing the work: <ul style="list-style-type: none">- programmes- network analysis- critical path- action lists- method statements.

2	continued	2.3	Explain why it is important to plan work to integrate operations and keep records in accordance with organisational requirements.
		2.4	Explain why programmes and methods should be agreed with the people who will be doing the work.
		2.5	Describe methods and techniques of communicating programmes and methods to the people who will be doing the work.
3	Identify, record and obtain information requirements before work starts.	3.1	Source, obtain and record information requirements prior to the start of work including but not limited to the following: <ul style="list-style-type: none"> - survey reports - design - contractual - statutory consents - contractor's pre-planning information - health, safety and environmental plan - method statements - programmes - checks carried out to verify the competence of the workforce including but not limited to industry certification schemes, cards, competence schemes, qualifications, certificates and training.
		3.2	Explain ways that information required for projects can be identified, obtained and recorded before work starts.
4	Organise attendance for sub-contractors in accordance with project and contractual agreements.	4.1	Plan and implement attendance requirements that meets project and contractual requirements.
		4.2	Arrange attendance and undertake meetings with sub-contractors to discuss project or contract requirements including but not limited to the following: <ul style="list-style-type: none"> - welfare facilities - work specifications - security and fencing - utilities - traffic management - access and egress - off-loading and loading - dimensional control - storage - records of attendance.

4	continued	<p>4.3 Explain how attendance can be organised by contract or agreement for sub-contractors and attending workforce, in accordance with project requirements and contractual agreements.</p> <p>4.4 List factors that affect typical project requirements.</p> <p>4.5 Explain why it is important to organise and record attendance for sub-contractors in accordance with project requirements and contractual agreements.</p>
5	Organise meetings and communications with sub-contractors and keep records.	<p>5.1 Organise and keep records of meetings and communications with sub-contractors to discuss project or contract requirements and attendances including but not limited to:</p> <ul style="list-style-type: none"> - time - quality - cost - statutory consents and notifications - sustainability - environment. <p>5.2 Explain how to organise meetings and communications with sub-contractors in order to discuss project or contract requirements and attendances.</p> <p>5.3 Explain why it is important to keep records of all meetings and communications with sub-contractors when discussing project or contract requirements and attendances.</p>
6	Plan and obtain sufficient resources of the appropriate type which will meet the project requirements and timescales.	<p>6.1 Plan, schedule, obtain and maintain sufficient resources of the appropriate type which will meet the project requirements and timescales for at least three of the following:</p> <ul style="list-style-type: none"> - people - plant, equipment or machinery - materials and components - sub-contractors - information. <p>6.2 Explain how to identify and plan the use of resources for projects and why resource requirements should be planned.</p> <p>6.3 Explain why there is a need to plan and schedule the use of resources.</p> <p>6.4 Explain methods and procedures that can ensure sufficient resources are obtained and maintained.</p>

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| 7 | Organise and control the site and resources so that conditions are safe, the site is tidy, and a record of maintenance activities is maintained. | <p>7.1 Produce a record of site maintenance activities by organising and controlling the site and resources including but not limited to the following:</p> <ul style="list-style-type: none"> - plan of the site showing storage and waste management areas - hoarding and security arrangements - signage - access and egress - safety and emergency response - welfare facilities - personal protective equipment (PPE). <p>7.2 Monitor that the maintenance activities are carried out to ensure that the site is safe and tidy.</p> <p>7.3 Explain how to produce records of site maintenance activities which include:</p> <ul style="list-style-type: none"> - plan of the site showing storage and waste management areas - hoarding and security arrangements - signage - access and egress - safety and emergency response - welfare facilities - personal protective equipment (PPE). <p>7.4 Explain why there is a need to organise and control the site and resources and to keep records of site maintenance activities.</p> |
| 8 | Develop contingency plans to meet special requirements to minimise disruption to those likely to be affected by the works programme. | <p>8.1 Identify any special requirements that may affect the works programme or surrounding areas on relevant projects.</p> <p>8.2 Develop and implement plans, based on the results of special contingency identification, that will minimise disruption to those affected by the work programme.</p> <p>8.3 Delegate tasks to other team members to implement the developed contingency plans.</p> |

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| 8 | continued | <p>8.4 Explain how to develop plans to meet the following special requirements and contingencies:</p> <ul style="list-style-type: none"> - elimination of waste - archaeological - heritage issues - occupiers - environmental considerations - vehicular access and egress - hazards - trespass - near neighbours - public access - site conditions. <p>8.5 Explain why there is a need to develop plans to meet special requirements and contingencies.</p> |
| 9 | Maintain records to show how disruption has been minimised for special requirements and contingencies. | <p>9.1 Maintain records or plans showing how disruption has been minimised for special requirements and contingencies which include records of delegated tasks to other team members including but not limited to the following:</p> <ul style="list-style-type: none"> - sequencing - archaeology - heritage issues - stakeholders - environmental considerations - vehicular and public access - health and safety and emergencies - hazards and site conditions - trespass - statutory regulations and limitations - political intervention. <p>9.2 Explain when and why it is important to delegate responsibilities under contingency plans.</p> |

Title: Monitoring project 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.

Sector Subject Area

5.2 Building and Construction

Availability for use

Shared unit

Unit guided learning hours

20

Assessment hours

10

Title: Ensuring that work activities and resources meet project work requirements in the workplace

Unit Number: J/651/0404

Learning outcomes

The learner will be able to:

1 Identify major activities, determine the resources needed from the information available and prepare draft work programmes and schedules.

Assessment criteria

The learner can:

- 1.1 Determine and investigate major site activities on various projects.
- 1.2 Identify the required resources for major site activities from available project information.
- 1.3 Plan initial work programmes and schedules for various projects ensuring that activities and resources meet project requirements and record all the information.
- 1.4 Explain ways that allows major work activities to be identified.
- 1.5 Explain how to determine the resources required by analysing designs, contractual information, statutory consents, contractor’s pre planning information, conditions of contract, health, safety, welfare and environmental plans, risk assessments and methods statements, programmes and schedules and sub- contractor arrangements and attendance in relation to the following:
 - people
 - plant, equipment and machinery
 - materials and components
 - sub-contractors
 - information
 - work area and facilities
 - waste management
 - utility providers.
- 1.6 Explain how the following drafts can be prepared:
 - programmes
 - network analysis
 - critical activities
 - action lists
 - resource schedules.
- 1.7 Explain why it is important to prepare draft programmes and schedules.

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| 2 | Evaluate alternative methods, resources and systems in order to select the best solution to meet project requirements. | <p>2.1 Assess the current methods, resources and systems.</p> <p>2.2 Evaluate and record the findings of examining the methods, resources and systems to identify alternative methods, resources and systems.</p> <p>2.3 Explain ways that can evaluate alternative methods and systems in relation to the following resources:</p> <ul style="list-style-type: none"> - people - plant, equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers. <p>2.4 Explain how to select the best solutions to meet the following project requirements:</p> <ul style="list-style-type: none"> - contract conditions - contract programme stipulations - statutory consent - building control notification - third-party obligations - health and safety requirements. <p>2.5 Describe the factors that determine project requirements.</p> |
| 3 | Obtain clarification and advice where the resources needed are not available. | <p>3.1 Consult with the following information sources where the resources required are not available:</p> <ul style="list-style-type: none"> - stakeholders - the workforce - technical and trade literature. <p>3.2 Explain how to obtain clarification and advice from stakeholders, the workforce and technical and trade literature where the following resources are not available:</p> <ul style="list-style-type: none"> - people - plant, equipment and machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers. - |

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| 4 | Analyse the activities against project requirements and the requirements of external factors. | 4.1 | Examine work activities against project requirements for various projects. |
| | | 4.2 | Analyse the activities against at least four of the following external factors and record the outcomes: <ul style="list-style-type: none"> - other related programmes - supply lead times - contingencies - special working conditions - weather conditions - statutory limitations - site conditions - environmental considerations - customers. |
| | | 4.3 | Explain how to analyse method studies, work studies and production analysis activities against the following: <ul style="list-style-type: none"> - contract conditions - contract programme stipulations - statutory consent - building control notification - third-party obligations - health and safety requirements. |
| | | 4.4 | Describe how to identify and consider the following external factors: <ul style="list-style-type: none"> - other related programmes - supply lead times - contingencies - special working conditions - weather conditions - statutory limitations - site conditions - environmental considerations - customers. |
| | | 4.5 | Explain how work activities are analysed against external factors. |
| 5 | Determine how long each activity will take, identify activities which influence each other and sequence them logically and realistically so that they make the best use of the resources available. | 5.1 | Determine the duration of each project activity. |

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| 5 | continued | <p>5.2 Investigate, identify and record work activities which influence each other.</p> <p>5.3 Sequence work activities realistically into a schedule of works so that they make the best use of the resources available.</p> <p>5.4 Describe how durations of activities for programmes and schedules are calculated.</p> <p>5.5 Explain how to identify work activities that can influence each other.</p> <p>5.6 Explain methods that can make best use of resources when sequencing activities logically and realistically.</p> |
| 6 | Ensure the production of detailed programmes and schedules of planned activities are consistent with the complexity of the project. | <p>6.1 Ensure the production of detailed programmes and schedules of planned activities, including at least two of the following, which are consistent with the complexity of the project:</p> <ul style="list-style-type: none"> - programmes - network analysis - critical activities - action lists - resources schedules. <p>6.2 Explain how the production of detailed programmes and schedules are ensured.</p> <p>6.3 Explain methods that ensure detailed programmes and schedules of planned activities are consistent with the complexity of the project.</p> |
| 7 | Develop a system to monitor the works programmes and schedules and use the results to improve production and planning. | <p>7.1 Plan and implement systems that can monitor works programmes and schedules.</p> <p>7.2 Monitor works programmes and schedules using a developed monitoring system.</p> <p>7.3 Analyse and record the results of the monitoring and make recommendations to improve production and planning.</p> <p>7.4 Explain how systems can be developed that monitor the following works programmes and schedules:</p> <ul style="list-style-type: none"> - programmes - network analysis - critical activities - action lists - resources schedules. |

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| 7 | continued | 7.5 | Explain how systems for monitoring works programmes and schedules can be developed. |
| | | 7.6 | Explain ways that systems for monitoring works programmes and schedules can be implemented. |
| | | 7.7 | Explain how to use the results of work programmes and schedules monitoring can improve production and planning. |
| 8 | Identify alterations to the works programmes and schedules to ensure they will meet changed circumstances. | 8.1 | Examine work activities and compare to works programmes and schedules. |
| | | 8.2 | Identify and record alterations to work programmes caused by changing circumstances and calculate the cost and time benefits for required changes. |
| | | 8.3 | Seek and obtain decision-maker's endorsement of changes to the works programmes and schedules and record the outcomes. |
| | | 8.4 | Explain how to identify alterations to the following: <ul style="list-style-type: none"> - programmes - network analysis - critical activities - action lists - resources schedules. |
| | | 8.5 | Explain ways of ensuring that alterations to work programmes and schedules meet changed circumstances. |

Title: Ensuring that work activities and resources meet project work requirements in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment hours	10

Title: Organising, controlling and monitoring supplies of materials in the workplace

Unit Number: K/651/0405

Learning outcomes

Assessment criteria

The learner will be able to:

The learner can:

1	Analyse project requirements in line with operational plans to ensure quantities and supplies of materials meet organisational requirements and develop a delivery schedule.	1.1	Analyse operational plans and quantities to assess what raw materials, components and prefabricated systems will be required.
		1.2	Calculate delivery and lead times for supplies of materials.
		1.3	Explain how to analyse operational plans and quantities to assess what raw materials, manufactured materials, components and prefabricated systems will be required.
		1.4	Explain methods for calculating delivery and lead times for supplies of materials and why they should be calculated.
		1.5	Give reasons why it is necessary to analyse organisational and project plans and quantities to assess what materials will be required.
		1.6	Explain the factors involved in developing a delivery schedule.
2	Ensure records of delivery schedule and traffic management are maintained through analysis of delivery and lead times.	2.1	Analyse calculations for delivery and lead times to ensure records of delivery schedules and traffic management are maintained.
		2.2	Ensure that scheduled deliveries and traffic management are maintained.
		2.3	Explain how to analyse calculations for delivery and lead times and ensure records of delivery schedule and traffic management are maintained.
		2.4	Give reasons why delivery schedules and construction logistics plans are required.
3	Identify and record alternatives to the supply of materials.	3.1	Identify and record alternatives to the supply of materials to improve the following: <ul style="list-style-type: none">- economy of usage- cost- environmental impact- sustainability.

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| 3 | continued | <p>3.2 Explain how to identify and record alternative materials in relation to:</p> <ul style="list-style-type: none"> - economy of usage - cost - environmental impact - sustainability. <p>3.3 Explain ways that opportunities for standardising supplies of materials can be identified.</p> <p>3.4 Explain how standardisation and alternative materials can assist a project.</p> <p>3.5 Give reasons why opportunities for standardisation and alternative materials should be considered.</p> |
| 4 | Ensure orders are prepared in line with organisational and/or project requirements to meet the delivery schedule. | <p>4.1 Identify and confirm supplies of required materials against delivery schedules.</p> <p>4.2 Carry out checks that ensure appropriate orders are prepared in line with organisational and/or project requirements.</p> <p>4.3 Explain methods of checking what materials are needed to maintain programme and project requirements.</p> <p>4.4 Describe ways that can ensure appropriate orders are prepared.</p> <p>4.5 Give reasons why checks must be made to ensure appropriate orders are prepared.</p> |

- 5 Promote goodwill and trust with suppliers and users to ensure the delivery schedule is maintained through positive negotiation.
- 5.1 Promote goodwill and trust with both suppliers and users to ensure the delivery schedule is maintained through positive negotiation in relation to:
- elimination or reduction of waste
 - recycling and re-use
 - quantity
 - availability
 - lead time
 - life expectancy or deterioration
 - maintenance
 - storage and handling facilities
 - environmental considerations
 - ethical and sustainability considerations
 - health and safety considerations
 - logistics
 - damage
 - loss or theft
 - supplier service
 - archaeology
 - heritage issues.
- 5.2 Agree and monitor supply requirements for various projects with various suppliers.
- 5.3 Explain methods and techniques of conducting negotiations and meetings with suppliers and users to ensure supply requirements are agreed.
- 5.4 Explain how goodwill and trust can be maintained with suppliers and users and why goodwill and trust should be maintained.
- 5.5 Explain why it is important to conduct formal and informal meetings with suppliers and users.
- 6 Implement systems, for monitoring the delivery schedule, materials and supplier performance to ensure they meet the project specification.
- 6.1 Implement organisational or project systems for the monitoring of the delivery schedule, materials and supplier performance to ensure they meet the project specification and keep records.
- 6.2 Explain how to implement an organisational or project system, that analyses the following factors used in materials control which will inform the delivery schedules:
- quality
 - quantity
 - payment to suppliers
 - approval by client, customer or their representative
 - programming
 - cost.

6	continued	6.3	Explain how organisational or project systems that can monitor the performance of suppliers against the agreed supply requirements can be implemented.
		6.4	Describe how identified improvements to delivery schedules can be recorded.
		6.5	Give reasons why it is important to analyse the performance of suppliers against the delivery schedule.
7	Analyse records of factors used in materials control.	7.1	<p>Analyse records of the following identified factors used in materials control:</p> <ul style="list-style-type: none"> - quality - quantity - payment to suppliers - approval by client, customer or their representative - programming.
		7.2	Explain how to analyse records of the following identified factors used in materials control.
		7.3	Explain why it is important to analyse factors in materials control.
8	Identify problems with supply, record them and take action to resolve them.	8.1	Analyse supply monitoring systems and delivery schedules and note identified supply problems.
		8.2	Implement appropriate methods to resolve identified supply problems.
		8.3	Explain methods that can identify problems with supply and supply requirements, how they can be recorded and what actions can be taken to resolve them.
		8.4	Explain how the delivery schedule can be modified to minimise disruption to the programme.
		8.5	Explain why it is important to identify and record problems with supply and the importance of taking action to resolve them.
9	Identify and record revisions to the delivery schedule to facilitate change or minimise disruption to the programme.	9.1	Regularly examine material supply performance against ongoing project requirements to identify changes likely to result in over or under supply.
		9.2	Modify delivery schedules to minimise disruption or facilitate change when supplies of raw materials, manufactured materials, components and prefabricated systems are not meeting programme requirements or where excess materials are being supplied.

9 continued

- 9.3 Explain ways that can identify changes likely to result in over or under supply.
- 9.4 Explain how to modify delivery schedules that minimises disruption to the programme.

Title: Organising, controlling and monitoring supplies of materials 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 hours

10

Title: Identifying and maintaining communication systems and organisational procedures in the workplace

Unit Number: L/651/0406

Learning outcomes

Assessment criteria

The learner will be able to:

The learner can:

1	Identify the organisational and communication needs for the project.	1.1	Identify the organisational needs for the project in relation to the following: <ul style="list-style-type: none">- roles and responsibilities- site or head office interface- contract or project administration- health, safety, welfare, wellbeing and environmental needs- project team interfaces- integration of data- sharing of project data- team working- stakeholders.
		1.2	Implement procedures which ensure administrative, management and operational control for the project.
		1.3	Explain how to identify the following communication systems and organisational procedures for a project: <ul style="list-style-type: none">- roles and responsibilities- site and head office interface- contract and project administration- health, safety, welfare, wellbeing and environmental needs- project team interfaces- integration of data- sharing of project data- team working- stakeholders.
2	Establish and maintain systems which are compatible with those used by the client, customer or their representative, the supply chain and other stakeholders.	2.1	Identify and implement communication systems and organisational procedures that will enable clear effective management, administrative and operational controls.
		2.2	Manage, administer and control operational communication systems and procedures which are compatible with those used by the client, customer or their representative, other stakeholders and the supply chain.
		2.3	Explain ways that systems, which are compatible with those used by clients, customers or their representatives, other stakeholders and the supply chains, can be established and introduced.

2	continued	<p>2.4 Explain methods of establishing communication and organisational systems that will enable clear effective management, administrative and operational controls.</p> <p>2.5 Give reasons why it is important that communication and organisational systems and procedures meet statutory and organisational controls relating to data, privacy and confidentiality.</p>
3	Ensure project information is produced, accurate and issued to relevant stakeholders.	<p>3.1 Identify relevant information needed for the project.</p> <p>3.2 Produce project information in relevant formats that will support the project.</p> <p>3.3 Distribute to the relevant stakeholders the following project information:</p> <ul style="list-style-type: none"> - details of roles and responsibilities - details of the organisational structure. <p>3.4 Describe ways to produce accurate and unambiguous information about people's roles and responsibilities, the project and the organisational structure using individual job descriptions, organisational charts, contractual arrangements and team schedules.</p> <p>3.5 Explain methods that allow for the circulation of information, using inclusive communication methods, about the project, organisational structure and people's roles and responsibilities using individual job descriptions, organisational charts, contractual arrangements and team schedules.</p> <p>3.6 Give reasons why information on people's roles and responsibilities including individual job descriptions, organisational charts, contractual arrangements and team schedules is important to relevant stakeholders.</p>
4	Implement inclusive methods of communication for reporting and retrieving information between the project team, organisations and stakeholders.	<p>4.1 Identify people and organisations that have interest or need relevant project information.</p> <p>4.2 Implement inclusive communication methods for reporting, recording and retrieving information.</p> <p>4.3 Explain how to implement methods of reporting, recording and retrieving information using inclusive communication methods, between people and organisations that have an interest and are appropriate to the needs of the project.</p>

4	continued	4.4	Explain why methods of reporting, recording and retrieving information using inclusive communication methods between interested people and organisations should be established.
5	Monitor communication systems and organisational procedures for effectiveness.	5.1	Implement systems to monitor the effectiveness of communication and organisational procedures.
		5.2	Explain how to monitor the methods of communicating, for reporting, recording and retrieving of information.
		5.3	Explain why it is important to monitor the methods of communication.
6	Identify and investigate breakdowns, conflicts or opportunities for improvement and take action to restore effective communication and organisation.	6.1	Identify, investigate and record any breakdowns, conflicts or opportunities for improvement to the communication systems and organisational procedures.
		6.2	Explain how to identify and investigate conflicts to the communication systems and organisational procedures and how breakdowns in communication can be identified.
		6.3	Explain why conflicts in communication systems and organisational procedures need to be investigated.
7	Implement and record any action taken to improve or restore effective communication systems and organisational procedures.	7.1	Gather relevant information about the project organisational procedures and communication systems from the monitoring that has taken place.
		7.2	Establish where communication systems and project organisational procedures can be improved.
		7.3	Explain actions that can be taken to restore effective communication systems and organisational procedures.
		7.4	Restore effective communication and organisational procedures by implementing appropriate corrective actions.
		7.5	Explain how possible improvements to methods of communication and organisational procedures can be identified.
		7.6	Explain how to implement actions to improve or restore effective communication and organisational procedures.
		7.7	Explain why it is important to improve established communication systems and organisational procedures.

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| 8 | Prepare for and manage meetings with colleagues and stakeholders. | <p>8.1 Prepare for and manage meetings with colleagues and stakeholders that include the following:</p> <ul style="list-style-type: none"> - prepare an agenda, arrange venue and contact attendees in good time - the objectives to be achieved during the meeting - encourage and acknowledge constructive contributions from the attendees during the meeting - encourage a balanced and informed discussion on the agenda items - run the meeting on time - agree whether objectives have been achieved - agree and record actions and responsibilities following the meeting. <p>8.2 Explain how to prepare for meetings with colleagues and stakeholders that include the following:</p> <ul style="list-style-type: none"> - prepare an agenda, arrange venue and contact attendees in good time - the objectives to be achieved during the meeting - encourage and acknowledge constructive contributions from the attendees during the meeting - encourage a balanced and informed discussion on the agenda items - run the meeting on time - agree whether objectives have been achieved - agree and record actions and responsibilities following the meeting and whether set objectives have been met. <p>8.3 Explain how to manage face-to-face and remote meetings to ensure objectives are met for the following:</p> <ul style="list-style-type: none"> - formal group - informal group - formal one-to-one - informal one-to-one. <p>8.4 Explain why you should manage meetings to ensure objectives are met.</p> |
| 9 | Ensure post meeting activities are carried out. | <p>9.1 Ensure post meeting activities are carried out including:</p> <ul style="list-style-type: none"> - minutes of the meeting drafted and circulated - monitoring of the completion of the agreed post meeting actions. <p>9.2 Evaluate the effectiveness of meetings.</p> |

9 continued

9.3 Explain how to ensure the actions arising from a meeting are completed following meetings to ensure the objectives are met.

9.4 Explain why it is required to evaluate the effectiveness of meetings and how this can be done.

Title: Identifying and maintaining communication systems and organisational procedures in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment hours	10

Title: Controlling project progress against agreed quality standards in the workplace

Unit Number: T/651/0409

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Identify and interpret quality standards from available information and ensure their implementation before work commences.	1.1	Gather a range of sources which will identify quality standards for given projects.
		1.2	Examine collected sources and interpret quality standards from the available information.
		1.3	Provide the workforce with relevant quality standards so that they can be implemented prior to work commencing.
		1.4	Explain how to identify and interpret quality standards, including but not limited to the following: <ul style="list-style-type: none">- current legislation- project specifications- British Standards- international standards- Codes of Practice- organisational standards- trade advisory guidance and best practice- benchmarking.
		1.5	Explain how to ensure the project's quality standards are issued to the workforce before starting work on a contract.
2	Specify clearly and unambiguously the roles and responsibilities and allocate them to individuals to maintain quality standards.	2.1	Specify roles and responsibilities and allocate to individuals to maintain quality standards and contribute towards a site quality plan or procedure.
		2.2	Explain how to allocate roles and responsibilities to maintain quality standards.
		2.3	Explain why it is important to specify and allocate the roles and responsibilities to maintain quality standards.
		2.4	Explain how to contribute to a site quality plan or procedure in accordance with the project's quality standards.
3	Establish systems to inspect and control the quality of the work.	3.1	Establish and implement systems that can inspect ongoing and completed work and record the systems adopted.
		3.2	Describe types of systems and methods that can be implemented to check quality standards.

3	continued	<p>3.3 Explain how to establish the following systems for inspecting, controlling and recording the quality of work relating to methods of construction, materials, components and their use:</p> <ul style="list-style-type: none"> - visual inspection - comparison with design requirements - comparison with standard documentation - checking manufacturer’s documentation - checking delivery notes - sampling and mock-ups - testing - site inspection reports - contractor reports - site meetings. <p>3.4 Give reasons why it is important to establish systems for inspecting, controlling and recording the quality of work relating to methods of construction and materials, components and their use.</p>
4	Regularly check that inspections are carried out to ensure that the work conforms to the specified quality standards.	<p>4.1 Arrange inspections of ongoing and completed work on projects to ensure that work conforms to the specified quality standards.</p> <p>4.2 Record acceptance and rejection criteria for given project activities from inspection activities.</p> <p>4.3 Explain how to check that work relating to methods of construction and materials, components and their use conforms to design requirements and the specified project quality standards.</p>
5	Identify and record any work which fails to meet the requirements and specified quality standards and implement corrective action.	<p>5.1 Establish, through investigation and comparison with quality standards, work that is identified as sub-standard.</p> <p>5.2 Plan and arrange appropriate corrective actions and ensure records are kept.</p> <p>5.3 Explain how to identify and record work relating to methods of construction, materials, components and their use that fail to meet the requirements and specified project quality standards.</p> <p>5.4 Explain why it is important to identify, record and report work relating to methods of construction, materials, components and their use, that fail to meet the requirements and specified project quality standards.</p>

5	continued	5.5	Explain how to implement corrective action where work relating to methods of construction, materials, components and their use fails to meet the requirements and specified project quality standards.
		5.6	Explain how to inform stakeholders following the organisational non-conformance procedures regarding methods of construction, materials, components and their use that fail to meet the requirements and specified project quality standards.
		5.7	Explain why it is important to implement corrective actions in cases of non-conformance.
6	Inform stakeholders about variations in quality standards and recommend solutions and actions they need to take.	6.1	Communicate with stakeholders about identified variations in quality standards on given work activities.
		6.2	Suggest actions, record and recommend solutions to stakeholders about variations in quality standards for the following: <ul style="list-style-type: none"> - effects of quality on the programme - effects of quality on safety - effects of quality on finished product.
		6.3	Explain methods and techniques that can be used to inform stakeholders about variations in project quality standards, safety implications and the finish to the product that may affect programme.
		6.4	Explain how to recommend solutions to stakeholders on the actions required to correct variations.
		6.5	Explain ways of recommending improvements to stakeholders, and why it is important to recommend solutions and improvements.
7	Identify conflicts between quality standards and refer them to stakeholders for resolution.	7.1	Establish where conflicts lie between the project's quality standards and ongoing work activities.
		7.2	Communicate sufficient information about quality standard conflicts to stakeholders for resolution.
		7.3	Explain how conflicts between quality standards can be identified and how to refer them to stakeholders.
		7.4	Describe why it is important to identify and report conflicting quality standards to stakeholders.

- 8 Identify improvements from feedback received and record and recommend them to stakeholders.
 - 8.1 Analyse received feedback against project requirements, record and establish where improvements to quality standards can be made.
 - 8.2 Explain how possible improvements in project quality standards can be identified from feedback received.
 - 8.3 Explain how to compare possible improvements and how to recommend them to decision makers.
 - 8.4 Recommend improvements to decision makers.
 - 8.5 Explain why it is important to identify and recommend improvements to the project quality standards.
 - 8.6 Explain how to agree and record amendments to the project quality standards with stakeholders.

Title: Controlling project progress against agreed quality standards 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

30

Assessment hours

10

Title: Controlling project progress against agreed programmes in the workplace

Unit Number: H/651/0412

Learning outcomes

The learner will be able to:

1 Develop and implement systems to monitor and record the progress of the project against the agreed programme(s).

Assessment criteria

The learner can:

1.1 Plan and implement a system that meets organisational requirements and that will monitor and record work progress for projects.

1.2 Investigate and monitor the progress of given project(s) against agreed programme(s) using at least four of the following systems:

- visual inspection(s)
- resource records
- site inspection reports
- contractor's report
- written, graphical and electronic records of the actual work against the programmed work
- site meetings
- organisational procedures
- management reports
- benchmarks
- comparison with project requirements.

1.3 Document findings of monitoring systems on given projects using written, graphical and electronic formats.

1.4 Explain how to develop, monitor and implement the following systems and record the progress of projects against agreed programmes:

- visual inspection
- resources records
- site inspection reports
- contractor's reports
- written, graphical and electronic records of actual work against programmed work
- site meetings
- organisational procedures
- management reports
- benchmarks
- comparison and project requirements.

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| 1 | continued | <p>1.5 Give reasons why it is important to develop systems, that monitor and record the progress of the project against the following:</p> <ul style="list-style-type: none"> - programmes - network analysis - critical path - line balance - action lists - resources schedules - project expenditure forecasts. |
| 2 | Collect progress information regularly and summarise it for stakeholders. | <p>2.1 Gather and record information on work progress of given projects on a regular basis.</p> <p>2.2 Present a summary of findings on work progress in suitable formats to stakeholders.</p> <p>2.3 Explain ways that information on work progress can be collected regularly.</p> <p>2.4 Explain ways of accurately summarising progress information to present to stakeholders.</p> <p>2.5 Outline which stakeholders would need to be informed about work progress on given projects.</p> |
| 3 | Identify inadequate or inappropriate resources, recommend alternative resources and inform stakeholders. | <p>3.1 Examine work activities on given projects in order to identify inadequate or inappropriate resources and record the findings.</p> <p>3.2 Inform stakeholders in sufficient detail using appropriate formats where inadequate or inappropriate resources have been identified.</p> <p>3.3 Recommend and source alternative resources that meet project requirements to stakeholders.</p> <p>3.4 Explain ways that inadequate and inappropriate resources can be identified.</p> <p>3.5 Explain how to inform stakeholders about inadequate and inappropriate resources.</p> <p>3.6 Explain different methods of recommending alternative resources to stakeholders.</p> |

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| 4 | Identify and quantify any identified or predicted deviations from planned progress which have occurred, or which may occur, that could disrupt the programme. | <p>4.1 Inspect work activities against planned progress to identify deviations that have occurred, or which may occur.</p> <p>4.2 Analyse and record work activity inspection results and quantify current, or predicted, deviations that could disrupt the agreed programme.</p> <p>4.3 Assess factors that can create deviations in planned progress on typical projects.</p> <p>4.4 Explain how to identify deviations from planned progress, which have occurred and those which may occur.</p> <p>4.5 Explain how deviations from the planned progress, which may disrupt the programme, can be identified.</p> <p>4.6 Explain ways that deviations from planned progress can be quantified.</p> <p>4.7 Give reasons why it is important to identify and quantify any deviations from planned progress.</p> |
| 5 | Investigate the circumstances of any deviations thoroughly and agree and implement appropriate corrective actions. | <p>5.1 Examine, analyse and record the circumstances of any identified deviations to planned progress on given projects.</p> <p>5.2 Conclude and obtain approval for corrective actions where deviations to planned progress have been identified from stakeholders.</p> <p>5.3 Implement agreed corrective actions for deviations to: <ul style="list-style-type: none"> - maintain progress in accordance with agreed programme - agree a revised programme - secure additional resources - alter planned work schedules. </p> <p>5.4 Explain how circumstances of deviations from planned progress can be investigated and recorded.</p> <p>5.5 Explain ways that corrective action for deviations from planned progress with stakeholders can be agreed.</p> <p>5.6 Explain how agreed corrective action for deviations from planned progress can be implemented to: <ul style="list-style-type: none"> - maintain progress in accordance with agreed programme - agree a revised programme - secure additional resources - alter planned work schedules. </p> |

5	continued	5.7	Give reasons why corrective action(s) must be agreed.
6	Recommend options to stakeholders that allow the programme to be maintained.	6.1	Analyse available information on alternatives in order to help the project progress.
		6.2	Suggest a range of alternative options that will maintain and improve project progress, to stakeholders using appropriate formats.
		6.3	Explain how to recommend options to stakeholders that will help the project progress.
		6.4	Explain why recommendations, that will minimise increases in cost and time and help the project progress, need to be made.
7	Inform stakeholders about changes to the operational programme.	7.1	Identify and keep records of changes that need to be made to the operational programme following investigations of work activities and resource use on projects.
		7.2	Inform stakeholder about changes to the operational programme.
		7.3	Explain methods that can be used to regularly inform relevant stakeholders about changes to operational programmes and demands on resources.
		7.4	Explain why it is important to keep stakeholders informed about changes to operational programme(s) and demands on resources.
8	Suggest and implement the decisions and actions that need to be taken to maintain progress.	8.1	Analyse and determine actions that need to be taken to maintain progress.
		8.2	Provide suggested options to stakeholders that allows project progress to be maintained.
		8.3	Implement and record the decisions made and the actions taken to maintain progress.
		8.4	Explain how to recommend decisions and actions to stakeholders that need to be taken to maintain progress.
		8.5	Explain why it is important to make recommendations to maintain progress.
9	Identify and record improvements to the programme from feedback received and inform stakeholders.	9.1	Seek, collect and collate feedback information on work progress on given projects.

9 continued

- 9.2 Analyse and record collated information to identify improvements that can be made to the work progress on given projects.
- 9.3 Provide suggestions to stakeholders that allow improvements to work progress.
- 9.4 Explain how improvements to progress can be identified from feedback received.
- 9.5 Explain ways of recommending improvements in progress to stakeholders.
- 9.6 Give reasons why recommended improvements in progress to stakeholders need to be made.

Title: Controlling project progress against agreed programmes in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment hours	10

Title: Managing your personal development in the workplace

Unit Number: Y/650/0906

Learning outcomes

The learner will be able to:

- 1 Define your aims and objectives for undertaking personal development.
- 2 Contact sources of support and guidance to identify recognised standards for you to manage your personal development.

Assessment criteria

The learner can:

- 1.1 Analyse, determine and record personal aims and objectives to meet work requirements.
- 1.2 Explain how to define your aims and objectives based on the following for undertaking development:
- preparation for new assignment
 - intellectual challenge
 - continued professional development (CPD)
 - professional competence
 - compliance with employer
 - professional body membership requirements
 - promotion and role change
 - awareness of personal strengths and areas of focus.
- 1.3 Give reasons why to need to define aims and objectives.
- 2.1 Access at least three of the following sources of support and guidance to identify recognised standards to manage your personal development:
- national organisations
 - industry organisations and associations
 - professional institutions
 - further education organisations
 - training providers
 - in-house resources
 - line manager
 - colleagues
 - trade periodicals and journals
 - social media
 - online resources
 - certification bodies.

- 2 continued
- 2.2 Explain how to access the following sources of support and guidance to identify recognised standards:
- national organisations
 - industry organisations and associations
 - professional institutions
 - further education organisations
 - training providers
 - in-house resources
 - line manager
 - colleagues
 - trade periodicals and journals
 - social media
 - online resources
 - certification bodies.
- 2.3 Give reasons why you need to access the following recognised standards for you to undertake personal development:
- job descriptions
 - professional institution requirements
 - national occupational standards
 - industry recognised standards.
- 3 Analyse the current level of your knowledge and performance.
- 3.1 Examine the current level of your knowledge and work performance and compare against selected and recognised standards.
- 3.2 Describe how to analyse current personal levels of knowledge and performance against the following selected and recognised standards:
- job descriptions
 - professional institution requirements
 - national occupational standards
 - industry recognised standards.
- 3.3 Explain how to develop a profile of your personal development needs based on the following:
- maintenance of existing competence
 - improvements to existing skills
 - improvements to existing knowledge
 - development of new skills and knowledge
 - commitment to professional excellence.
- 3.4 Give reasons why you need a profile of your personal development needs.

4	Develop a profile of your competence and personal development needs.	4.1	Determine a profile of your competence and personal development needs and record the outcomes.
		4.2	Explain how to develop a profile of your knowledge and competence against the following identified recognised standards: <ul style="list-style-type: none"> - job descriptions - professional institution requirements - national occupational standards - industry recognised standards.
		4.3	Explain how to measure achievement of the following identified personal development needs: <ul style="list-style-type: none"> - maintenance of existing competence - improvements to existing skills - improvements to existing knowledge - improvement to existing competence - development of new skills and knowledge - commitment to professional excellence.
5	Prepare a development plan for achieving identified development needs.	5.1	Prepare and record a personal development plan based on identified development needs.
		5.2	Describe how to prepare a personal development plan based on the following: <ul style="list-style-type: none"> - maintenance of existing competence - improvements of existing skills - improvements of existing knowledge - development of new skills and knowledge - commitment to professional excellence.
		5.3	Explain why a personal development plan needs to be prepared.
6	Undertake development activities aimed at achieving identified development needs, reviewing the effectiveness of the activities.	6.1	Engage in development activities aimed at meeting personal development needs.
		6.2	Establish and/or use processes that can review development progress.
		6.3	Review and record the effectiveness of the development activities undertaken.
		6.4	Explain different ways to undertake development activities to achieve personal development needs.
		6.5	Explain how to review and record progress and evaluate effectiveness of activities undertaken.

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| 7 | Obtain, accept and record feedback from people who can judge your performance. | <p>7.1 Obtain feedback from people who can judge your performance and provide objective, valid feedback.</p> <p>7.2 Accept and record the feedback provided to aid in future development.</p> <p>7.3 Explain how to obtain, accept and record feedback from people who can judge your performance and provide objective, valid feedback.</p> <p>7.4 Explain why you need to obtain and accept feedback provided.</p> |
| 8 | Review the cycle of personal development aims and objectives to revise and update aims and objectives to suit changing circumstances. | <p>8.1 Conduct regular reviews on personal aims and objectives and record the outcomes.</p> <p>8.2 Measure and update personal development plans that meet changing work circumstances.</p> <p>8.3 Explain how to review the cycle of the following personal development aims and objectives:</p> <p style="margin-left: 40px;">Personal Development</p> <ul style="list-style-type: none"> - maintenance of existing competence - improvements to existing skills - improvements to existing knowledge - development of new knowledge and skills - commitment to professional excellence. <p style="margin-left: 40px;">Aims and Objectives</p> <ul style="list-style-type: none"> - preparation for new assignment - intellectual challenge - continued professional development (CPD) - professional competence - compliance with employer - professional body membership requirements - promotion and role change - awareness of personal strengths and weaknesses. <p>8.4 Explain how to revise and update aims and objectives to suit changing circumstances.</p> <p>8.5 Give reasons why personal development plans should be reviewed, revised and updated.</p> |

Title: Managing your personal development in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
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

Assessment criteria

The learner will be able to:

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: <ul style="list-style-type: none"> - 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.

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| 3 | Implement a system to update the deployment and allocation of plant, equipment or machinery, and operators, as the project progresses, or changes occur. | <p>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.</p> <p>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.</p> <p>3.3 Explain why a system for updating the deployment and allocation of plant, equipment or machinery is required.</p> <p>3.4 Make recommendations on the use of alternative types of plant, equipment or machinery to decision makers.</p> <p>3.5 Explain ways of recommending alternative plant, equipment or machinery to decision makers.</p> |
| 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. | <p>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:</p> <ul style="list-style-type: none"> - methods of work - risk assessment - safe use and storage of tools - safe use and storage of materials - traffic management. <p>4.2 Explain the various methods of identifying hazards and assessing risks arising from the use of plant, equipment or machinery.</p> <p>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:</p> <ul style="list-style-type: none"> - 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.

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| 7 | Identify and record the competency requirements for supervisors, operators and users of plant, equipment or machinery. | <p>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.</p> <p>7.2 Explain the various methods of identifying competence requirements for plant, equipment or machinery supervisors, operators and users according to organisational requirements.</p> <p>7.3 Explain how to compare identified competency needs with the needs of the project and future projects.</p> <p>7.4 Explain how to determine if a person meets the competency requirements of their project role.</p> <p>7.5 Explain how to arrange development for supervisors, operators and users of plant, equipment or machinery according to organisational requirements.</p> |
| 8 | Promote and record opportunities to suggest improvements in plant operations. | <p>8.1 Promote and record opportunities to at least four of the following in order to suggest improvements:</p> <ul style="list-style-type: none"> - supervisors - operators - users - the workforce - members of the public - stakeholders - clients and other duty holders - visitors - supply chain. <p>8.2 Explain how to promote and record opportunities to suggest improvements in plant operations.</p> <p>8.3 Explain why it is important to promote and record opportunities to suggest improvements in plant operations.</p> |
| 9 | Ensure that plant, equipment or machinery which is no longer needed is returned or removed and records are maintained. | <p>9.1 Make arrangements to allow plant, equipment or machinery to be removed or returned and keep records.</p> <p>9.2 Describe how to return or remove plant, equipment or machinery which is no longer needed.</p> <p>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.</p> |

Title: Identifying, allocating and planning the deployment and use of plant, equipment or machinery in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment hours	10

Title: Establishing dimensional control criteria in the workplace

Unit Number: F/651/0420

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Obtain pre-construction information, in relation to dimensional control ensuring that it is up to date and accurate.	1.1	Collect and collate relevant pre-construction information for projects.
		1.2	Analyse the pre-construction information that has been obtained in relation to dimensional accuracy.
		1.3	Explain ways that relevant pre-construction information can be obtained.
		1.4	Explain how pre-construction information can be checked to ensure it is up to date and accurate.
		1.5	Explain how problems with pre-construction information can be resolved.
		1.6	Explain why it is important to resolve problems with pre-construction information.
2	Establish and record the relevant dimensional control information for the project.	2.1	Establish and record the relevant dimensional control information for the project.
		2.2	Correlate and interpret information on project work which is relevant to the following dimensional control information: <ul style="list-style-type: none">- lines- levels- angles- distances- radii- positions- setting out points.
		2.3	Explain how to correlate and interpret information on project work which is relevant to the following dimensional control information: <ul style="list-style-type: none">- lines- levels- angles- distances- radii- positions- setting out points.

2	continued	<p>2.4 Explain methods that can be used to interpret information on project work which is relevant to dimensional control information.</p> <p>2.5 Give reasons why it is important to correlate and interpret information on project work, which is relevant to the following dimensional control information:</p> <ul style="list-style-type: none"> - lines - levels - angles - distances - radii - positions - setting out points.
3	Ensure that variations in dimensional control are identified, recorded and notified to stakeholders.	<p>3.1 Establish variations relating to boundaries, levels and locations between the actual and the specified project dimensions.</p> <p>3.2 Record identified variations of actual and specified site dimensions following organisational procedures.</p> <p>3.3 Distribute identified variations of actual and specified project dimensions to stakeholders.</p> <p>3.4 Describe possible causes of variations between specified and actual project dimensions.</p> <p>3.5 Explain how to identify and record variations, relating to boundaries, levels and locations between the specified and the actual project dimensions.</p> <p>3.6 Explain why it is important to identify and record variations, relating to boundaries, levels and locations between the specified and the actual project dimensions.</p>
4	Ensure a dimensional control monitoring system, which ensures dimensional controls are maintained.	<p>4.1 Establish a dimensional control monitoring system which ensures dimensional controls are maintained.</p> <p>4.2 Record and store dimensional control information for future reference.</p> <p>4.3 Describe the elements of monitoring systems and how to establish graphical, measured and instrumental monitoring systems for dimensional controls.</p> <p>4.4 Explain why establishing graphical, measured and instrumental monitoring systems for dimensional controls is required.</p>

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| 4 | continued | 4.5 | Give reasons why it is important to record and store dimensional control information for future reference. |
| 5 | Ensure that measuring and recording equipment is maintained to meet the specified accuracy criteria. | 5.1 | Establish the checks that are required to maintain and use measuring and recording equipment. |
| | | 5.2 | Ensure that calibration and maintenance checks are carried out on relevant measuring and recording equipment and that the checks are recorded. |
| | | 5.3 | Explain how to ensure mechanical, optical and electronic measuring and recording equipment are calibrated correctly and maintained. |
| | | 5.4 | Give reasons why specific mechanical, optical and electronic measuring and recording equipment should be selected. |

Title: Establishing dimensional control criteria in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment hours	10

Title: Controlling project quantities and costs in the workplace

Unit Number: L/651/0424

Learning outcomes

The learner will be able to:

- 1 Implement quantities and cost control systems which can provide early warning of problems.
- 2 Ensure that quantity and cost data is regularly collected, recorded and passed on to the responsible stakeholders, in time for them to be able to use it.

Assessment criteria

The learner can:

- 1.1 Implement and monitor one of the following quantities and cost control systems which can provide early warning of problems:
 - operational procedures and meetings
 - electronic records.
- 1.2 Examine factors that determine quantities and cost data.
- 1.3 Explain how appropriate project quantities and cost control systems, which will provide early warnings of problems, can be implemented and monitored.
- 2.1 Gather and collate quantity and cost data in relation to at least four of the following on a frequent basis:
 - people
 - plant, equipment or machinery
 - materials and components
 - sub-contractors
 - information
 - work area and facilities
 - waste management
 - utility providers
 - site overheads
 - records of valuations of work completed.
- 2.2 Document and record the findings of quantities and costs data using appropriate formats and pass on to the appropriate stakeholders following organisational timescales.

2 continued

2.3 Explain methods that allow for the following quantities and cost data to be collected and recorded for the project against the following resources used:

Quantities and Cost Data

- materials
- plant
- people
- sub-contractors
- day works
- variations
- retention sums
- forecasts of expenditure
- performance information
- project programme and progress.

Resources

- people
- plant, equipment or machinery
- materials and components
- sub-contractors
- information
- work area and facilities
- waste management
- site overheads
- records of valuations of work completed.

2.4 Explain how to ensure that data is passed on to the stakeholders in time for them to use it.

3 Ensure that work values, quantities and cost data are prepared.

3.1 Implement and monitor systems that ensures that cost calculations for projects are undertaken and recorded.

3.2 Implement and monitor systems that ensures that work values and quantities for projects are undertaken and recorded.

3.3 Explain how to ensure the correct work values, quantities and cost data are prepared:

- materials
- plant
- people
- sub-contractors
- day works
- variations
- retention sums
- forecasts of expenditures
- performance information
- project programme and progress.

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| 4 | Ensure that accurate quantities and cost data are prepared and presented in a format which will help the stakeholders responsible to make decisions. | <p>4.1 Determine, prepare and document the results of quantity and cost information for given projects.</p> <p>4.2 Present analysed results on quantities and cost data to the stakeholders responsible using relevant formats.</p> <p>4.3 Explain how to ensure that the following accurate quantities and cost data is presented in a format which will help those responsible to make the relevant decisions:</p> <ul style="list-style-type: none"> - materials - plant - people - sub-contractors - day works - variations - retention sums - forecasts of expenditures - performance information - project programme and progress. |
| 5 | Ensure that variations and trends in quantities and cost data are identified, specified, quantified, costed and recorded. | <p>5.1 Analyse monitoring systems data to identify variations and trends in costs and quantities for given projects.</p> <p>5.2 Quantify, specify and record the identified variations or trends in cost data and quantities.</p> <p>5.3 Explain how to ensure that variations and trends in the following quantities and cost data are identified, specified, quantified and calculated:</p> <ul style="list-style-type: none"> - materials - plant - people - sub-contractors - day works - variations - retention sums - forecasts of expenditures - performance information - project programme and progress. <p>5.4 Give reasons why it is important that trends in cost and quantities and cost data are quantified.</p> |

- 6 Ensure that any variations are investigated, agreed and recorded.
- 6.1 Carry out investigations on identified variations to allow at least one of the following actions to be implemented:
- alter progress in accordance with agreed programme
 - agree new completion dates
 - initiate contract claim
 - secure alternative resources
 - alter planned work schedules
 - alter method of work.
- 6.2 Seek and gain agreement and record at least one of the following actions:
- alter progress in accordance with agreed programme
 - agree new completion dates
 - initiate contract claim
 - secure alternative resources
 - alter planned work schedules
 - alter method of work.
- 6.3 Explain how to ensure that variations in cost data are investigated and explain why variations in cost data need to be investigated.
- 6.4 Explain how to agree and implement the following corrective actions with stakeholders which will add costs and expenditure to budget:
- alter progress in accordance with agreed programme
 - agree new completion dates
 - secure alternative resources
 - alter planned work schedules
 - alter method of work.
- 6.5 Give reasons why it is important to agree and implement corrective action with stakeholders, in order to maintain costs and expenditure to budget.
- 6.6 Explain how to initiate a contract claim.

- 7 Identify opportunities for cost efficiencies and recommend them to stakeholders.
- 7.1 Identify and record cost efficiencies on at least four of the following opportunities:
- waste reduction
 - resource management and logistics
 - applications of new technologies and materials
 - energy and utility management
 - recyclable and recoverable materials
 - alternative sources and types of materials
 - variations in quality
 - standardisation
 - revenue generation
 - method of work.
- 7.2 Recommend opportunities for cost efficiencies, using suitable formats, to stakeholders.
- 7.3 Explain how to identify the following opportunities for cost efficiencies:
- waste reduction
 - resource management and logistics
 - applications of new technologies and materials
 - energy and utility management
 - recyclable and recoverable materials
 - alternative sources and types of materials
 - variations in quality
 - standardisation
 - revenue generation
 - method of work.
- 7.4 Explain how to develop and recommend to stakeholders the systems and processes that will assist in the identification of opportunities for cost efficiencies.
- 7.5 Explain why it is important to develop and recommend to stakeholders the systems and processes, which identify opportunities for cost efficiencies.
- 7.6 Describe methods to best recommend opportunities for cost efficiencies to stakeholders.

Title: Controlling project quantities and costs in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment hours	10

Title: Evaluating feedback and making recommendations in the workplace

Unit Number: R/651/0426

Learning outcomes

The learner will be able to:

1 Implement systems for the collection of feedback.

Assessment criteria

The learner can:

1.1 Devise systems that will promote, to others, the value of making and collecting feedback that can allow improvements to work progress.

1.2 Implement systems for the collection of feedback from at least six of the following sources:

- general public
- workforce
- suppliers
- customers
- colleagues
- social media
- regulators
- auditors
- client appointees
- designers.

1.3 Explain how to implement systems to collect feedback from the following sources:

- general public
- workforce
- suppliers
- customers
- colleagues
- social media
- regulators
- auditors
- client appointees
- designers.

1.4 Give reasons why the collection of feedback from sources should be encouraged.

1.5 Explain methods that encourage the collection of feedback from sources.

- 2 Ensure feedback is obtained, investigated, recorded and analysed.
- 2.1 Collect feedback from at least five of the following methods or sources:
- project correspondence
 - site tests and inspections
 - scientific research and data
 - performance in use
 - meetings
 - questionnaires
 - audits and reports
 - site monitoring
 - consultations.
- 2.2 Investigate, analyse and record the gathered feedback using organisational procedures or other methods.
- 2.3 Explain how to ensure feedback is obtained from the following stakeholders using the following methods:
- Stakeholders**
- general public
 - workforce
 - suppliers
 - customers
 - colleagues
 - social media
 - regulators
 - auditors
 - client appointees
 - designers.
- Methods**
- project correspondence
 - site tests and inspections
 - scientific research and data
 - performance in use
 - meetings
 - questionnaires
 - audits and reports
 - site monitoring
 - consultations.
- 2.4 Explain how to investigate and assess feedback from stakeholders.
- 2.5 Give reasons why feedback from stakeholders need to be investigated and assessed.

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| 3 | Recommend improvements by evaluating feedback received and justify the recommendations to stakeholders. | <ul style="list-style-type: none"> 3.1 Evaluate the feedback received to identify potential improvements that can be made. 3.2 Recommend potential improvements that can be made by justifying the possible options to stakeholders. 3.3 Explain how to evaluate feedback received and make recommendations. 3.4 Explain how to justify recommendations to stakeholders based on feedback. 3.5 Give reasons why it is important to make and justify recommendations for improvements from feedback to stakeholders. |
| 4 | Summarise recommendations from feedback analysis and promote them for adoption and use. | <ul style="list-style-type: none"> 4.1 Summarise and record recommendations from feedback analysis. 4.2 Promote the adoption and use of recommendations identified from feedback to those involved in maintaining the progress of the work. 4.3 Explain how to summarise changes and recommendations based on feedback received. 4.4 Describe how the adoption of changes and recommendations based on feedback can be promoted. |
| 5 | Evaluate feedback systems to ensure that recommendations have been implemented. | <ul style="list-style-type: none"> 5.1 Evaluate feedback systems to ensure that recommendations have been implemented and that they are effective. 5.2 Explain how to evaluate feedback systems to ensure recommendations have been implemented and are effective. 5.3 Explain why it is important to evaluate feedback systems. |

Title: Evaluating feedback and making recommendations in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	25
Assessment hours	10

Title:	Managing the installation, maintenance, monitoring and removal of temporary works in the workplace
Unit Number:	H/651/0430

Learning outcomes

The learner will be able to:

1 Interpret and confirm the relevance of information when supervising the installation, maintenance and removal of temporary works.

Assessment criteria

The learner can:

1.1 Interpret and confirm the relevance of the following information when supervising the installation, maintenance and removal of temporary works:

- drawings
- design brief
- check certificates
- hold points
- permits to work
- risk classification
- implementation plan
- inspection and test plan
- specifications
- schedules
- method statements
- risk assessments
- manufacturers' information.

1.2 Explain how to interpret the given design information relating to the work and resources to confirm its accuracy, completeness and relevance to the building type and construction for the following:

- drawings
- design brief
- check certificates
- hold points
- permit to work
- risk classification
- implementation plan
- inspection and test plan
- specifications
- schedules
- method statements
- risk assessments
- manufacturers' information.

1.3 Explain how to record and report issues in relation to the interpreted information relating to the work and resources.

1 continued

- 1.4 Explain the characteristics, uses and limitations of temporary works including but not limited to:
- pedestrian and vehicular access
 - earthworks: trenches, excavations, temporary slopes and stockpiles
 - structures: formwork, falsework, propping, façade retention, needling, shoring, edge protection, scaffolding, temporary bridges, site hoarding and signage, site fencing and cofferdams
 - equipment and plant foundations: tower crane bases, supports, anchors and ties for construction hoists and mast climbing work platforms, piling platforms and groundworks to provide suitable locations for plant and lifting equipment erection
 - dewatering
 - non-permanent vehicle restraint systems
 - traffic management.
- 1.5 Explain how to identify the correct sequence of work for the installation, maintenance and removal of temporary works.
- 1.6 Explain how to implement organisational requirements when reporting the following inappropriate information associated with the installation, maintenance, monitoring and removal of temporary works with respect to accuracy, completeness and relevancy:
- design briefs
 - design check certification
 - drawings
 - specifications
 - schedules
 - method statements
 - risk assessments
 - electronic data
 - written and verbal instructions
 - permits
 - manufacturers' information
 - official guidance.
- 1.7 Explain the organisational requirements to solve problems with the information.
- 1.8 Explain why it is important to follow organisational requirements in the workplace.

- 2 Ensure protection and safety of the workforce, the general public, visitors and the environment by observing current legislation and official guidance.
- 2.1 Observe current legislation and official guidance in the work environment to ensure protection and safety of the workforce, the general public, visitors and the environment by application of information relating to at least six of the following:
- methods of work
 - risk assessment
 - safe use and storage of tools
 - safe use of access equipment
 - traffic management
 - emergency plans
 - fire safety/ hot works
 - lifting plans
 - environmental factors.
- 2.2 Explain how to comply with relevant, current legislation and official guidance and how it is applied to install and maintain safe, healthy and environmentally responsible work practices including:
- communicate and coordinate with the responsible person
 - methods of work
 - safe use of health and safety control equipment
 - safe use of access equipment
 - safe use, storage and handling of materials, tools and equipment
 - specific risks to health.
- 2.3 Explain why communication and coordination with the responsible person as denoted by industry standards is required.
- 2.4 Evaluate the organisational requirements for the security of temporary works.
- 2.5 Explain why it is important to follow the correct sequence of work when installing and removing temporary works installations.

- 3 Identify, assess and maintain resources for temporary works.
- 3.1 Identify, assess, and maintain the following resources for temporary works:
- people
 - plant, equipment or machinery
 - materials and components
 - sub-contractors
 - information
 - work and facilities
 - waste management
 - utilities (power, water, lighting).
- 3.2 Explain how to identify, assess and record the acquisition of the following resources:
- people
 - plant, equipment or machinery
 - materials and components
 - sub-contractors
 - information
 - work and facilities
 - waste management
 - utilities (power, water, lighting).
- 3.3 Explain how to assess the quality of the resources.
- 3.4 Explain how to maintain the resources for work activities.
- 3.5 Explain how to report any problems and defects associated with the resources.
- 3.6 Explain the potential hazards associated with the following in relation to temporary works:
- materials
 - supports
 - components
 - fittings and fixings
 - hand tools
 - portable power tools and equipment
 - methods of installation.
- 3.7 Explain the project and organisational requirements needed to obtain a permit to load from the relevant responsible person as denoted by industry standards.
- 4 Confirm that all materials, equipment and tooling is correct prior to installation.
- 4.1 Check and confirm that all materials, equipment and tooling are correct prior to installation.

4	continued	4.2	Explain how to implement organisational procedures, to report inappropriate materials, machinery and equipment associated with the installation, maintenance, monitoring and removal of temporary works.
		4.3	Explain why reporting inappropriate materials, machinery and equipment associated with installation, maintenance, monitoring and removal of temporary works is required.
5	Manage the installation of temporary works in accordance with the programme of works to meet organisational and stakeholder procedures.	5.1	Manage the installation of the temporary works in accordance with the programme of works to meet the needs of organisational and other stakeholder procedures.
		5.2	Explain how to keep and maintain accurate records of work progress by managing checks of the temporary works.
		5.3	Explain why accurate records, to maintain and monitor progress are needed.
		5.4	Explain how to communicate and suggest corrective actions and changes to the programme.
6	Keep accurate records of work progress during the installation of temporary works and maintain safe working methods and practices.	6.1	Keep accurate records of work progress checks, faults, problems, corrective actions, quantities involved and maintain safe working methods and practices.
		6.2	Explain how installation of the works, in accordance with the programme and schedule, is to be carried out to meet the needs of the organisation and other stakeholders.
		6.3	Determine the hazards associated with temporary works materials, supports, components, fittings, fixings and tooling in relation to the installation of temporary works.
		6.4	Explain why deadlines should be kept and why deadlines are important in the installation and removal of temporary works structures.
7	Handover the temporary works in accordance with the organisational procedures.	7.1	Manage the temporary works handover in accordance with the organisational procedures.
		7.2	Explain why handover of temporary works to the responsible person, as denoted by organisational procedures, is required.
		7.3	Explain how to identify and confirm the responsible person for temporary works.
		7.4	Discuss the procedures for obtaining certificates of sign-off works from the responsible person.

- 8 Manage the removal of the temporary works in accordance with the programme of works.
- 8.1 Manage the removal of the temporary works in accordance with the programme of works to meet the needs of organisational and other stakeholder requirements.
 - 8.2 Examine how the removal of the works, in accordance with the programme and schedule, is to be carried out to meet the needs of the organisation and other stakeholders.
 - 8.3 Explain the hazards associated with temporary works materials, supports, components, fittings, fixings and tooling in relation to the removal of temporary works.
 - 8.4 Explain how to obtain permission from the responsible person to remove the temporary works through following project and organisational procedures.
 - 8.5 Specify how to comply with organisational procedures to manage the removal of temporary works.

Title: Managing the installation, maintenance, monitoring and removal of temporary works 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.

The assessor requirements for this unit must include verifiable, current industry experience/qualification at, or above, the level of this unit. The assessor must demonstrate relevant occupational competence and knowledge of Temporary Works.

In assessing this unit, the assessor 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

30

Assessment hours

10

Title: Enabling learning opportunities in the workplace

Unit Number: K/650/0894

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Promote the benefits of accessing learning by giving positive and constructive feedback on work performance regularly.	1.1	Analyse individual and collective work performances of team members on various activities.
		1.2	Regularly provide positive and constructive feedback on individual and collective work performances in order to encourage individuals to access learning.
		1.3	Record the outcomes of discussions and actions in accordance with organisational requirements.
		1.4	Provide team members with collective and individual reasons that promote the benefits of continual learning and self-development.
		1.5	Describe the different techniques that can be used to promote benefits of learning to individuals and groups.
		1.6	Explain how to give positive and constructive feedback regularly to teams and to individuals.
		1.7	Explain why it is important to record the outcomes of discussions and actions in accordance with organisational requirements.
2	Work with the team to identify and prioritise learning needs and identify and obtain information on a range of possible learning activities.	2.1	Communicate with the team to identify, prioritise and record learning needs.
		2.2	Obtain learning information on a range of possible learning activities for at least two of the following: <ul style="list-style-type: none">- formal- coached- mentored- continuous professional development.
		2.3	Explain how to work with teams in order to identify and prioritise learning needs based on current skills and knowledge, learning activities undertaken and learning objectives to be achieved.
		2.4	Outline how to identify resource requirements for development and timescales.

2	continued	<p>2.5 Explain how to obtain information on the following range of learning activities:</p> <ul style="list-style-type: none"> - formal - coached - mentored - continuous professional development.
3	Discuss and plan development needs with team members.	<p>3.1 Communicate effectively and plan development needs with team members, including but not limited to all of the following key points:</p> <ul style="list-style-type: none"> - current skills and knowledge - learning activities undertaken - learning objectives to be achieved - resource requirements for development - timescales. <p>3.2 Agree and record development needs with team members in accordance with organisational requirements.</p> <p>3.3 Explain how to communicate, agree and record development needs with team members in accordance with organisational requirements including but not limited to the following:</p> <ul style="list-style-type: none"> - current skills and knowledge - learning activities undertaken - learning objectives to be achieved - resource requirements for development - timescales.
4	Support team members in undertaking learning activities by making efforts to overcome barriers to learning.	<p>4.1 Provide relevant assistance and support to individuals and the team when undertaking learning activities.</p> <p>4.2 Identify any relevant barriers to an individual's learning and take actions to help them overcome them.</p> <p>4.3 Explain how to support team members and maintain records for them when undertaking the following learning activities:</p> <ul style="list-style-type: none"> - formal - coached - mentored - qualifications - continuous professional development opportunities. <p>4.4 Describe the ways of identifying barriers to learning for both individuals and teams.</p>

4	continued	4.5	Explain how barriers to learning for individuals and teams can be overcome.
5	Communicate the outcomes of the learning activity undertaken with team members to ensure the desired outcomes have been achieved and organisational standards have been maintained.	5.1	Communicate the outcomes of the learning activities undertaken by individuals and the team to ensure organisational standards are maintained.
		5.2	Map the learning outcomes from completed learning programmes against the team and individual's pre-identified learning needs.
		5.3	Check that outcomes have been achieved and recorded and a thorough evaluation of the learning activity, post completion, is formally assessed and fed back by team members.
		5.4	Explain how to work with team members to evaluate learning activities undertaken.
		5.5	Describe how to ensure desired outcomes from learning activities have been achieved and recorded through completion of the following documents: <ul style="list-style-type: none"> - formal appraisal - interim appraisal - written report - references - organisational standard evaluation form.
6	Update development plans with team members and ensure records of plan are kept updated.	6.1	Review team members individual development plans and contribute towards them, amend the plans following completed learning activities and/or identified learning needs.
		6.2	Ensure records of the development plans are kept updated and communicated with team members.
		6.3	Explain how to update development plans with team members by contributing towards learning plans in accordance with organisational requirements.

Title: Enabling learning opportunities in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	40
Assessment hours	20

Title: Planning activities to traditional and heritage buildings and structures in the workplace

Unit Number: J/650/0900

Learning outcomes

The learner will be able to:

1 Confirm the project requirements against the information supplied when planning activities for traditional and heritage buildings.

Assessment criteria

The learner can:

1.1 Confirm and record project requirements for at least two of the following activities for traditional and heritage buildings using at least five of the following information sources:

Activities:

- repair
- maintenance
- conservation
- alteration
- adaption
- energy efficiency retrofit
- installation or replacement of building services.

Information sources:

- survey reports, drawings, schedules, specifications and programmes
- sub-contractor arrangements
- records of industry certification, registration cards, competency schemes, qualifications and training of people
- risk assessments, method statements, health, safety and environmental plans
- asbestos surveys
- statutory consents
- manufacturers' technical information and product data sheets
- hot works permit
- legislation and official guidance relating to built conservation management plans
- heritage impact statements
- written scheme of investigation of archaeology
- specialist investigations.

1 continued

1.2 Explain how to confirm and record project requirements for traditional and heritage buildings for the following activities:

- repair
- maintenance
- conservation
- alteration
- adaption
- energy efficiency retrofit
- installation or replacement of building services.

1.3 Explain how to identify and use a range of information sources for traditional and heritage building project requirements including but not limited to:

- survey reports, drawings, schedules, specifications and programmes
- sub-contractor arrangements
- records of industry certification, registration cards,
- competency schemes, qualifications and training of people
- risk assessments and method statements, health, safety and environmental plans
- asbestos surveys
- statutory consents
- manufacturers technical information and product data sheets
- hot works permit
- legislation and official guidance relating to built heritage (Listed Building Consent, Planning Permission, Scheduled Monument Consent, Conservation Area Consent, Ecclesiastical Exemption)
- conservation management plans
- heritage impact statements
- written scheme of investigation for archaeology (WSI)
- specialist surveys and investigations to understand the existing buildings and structures and inform proposed works including but not limited to:
 - a) heritage issues and significance
 - b) construction materials and methods
 - c) condition and behaviour
 - d) the range of diagnostic investigations.

1.4 Explain who needs to be consulted when confirming project requirements for traditional and heritage buildings.

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| 1 | continued | 1.5 | Explain why information from a range of sources must be used when planning activities to traditional and heritage building project requirements. |
| 2 | Identify, review and record the potential impact of a range of factors. | 2.1 | <p>Identify, review and record the impact of at least three of the following factors on planning work activities to traditional and heritage buildings:</p> <ul style="list-style-type: none"> - current organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - working in and around occupied or tenanted buildings - environmental considerations - weather conditions - sustainability - sequencing of trades - temporary works. |
| | | 2.2 | <p>Explain how to identify, review and record the impacts of a range of factors on the planning of work activities including but not limited to:</p> <ul style="list-style-type: none"> - current organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - working in and around occupied and tenanted buildings - environmental considerations - weather conditions - sustainability - sequencing of trades - temporary works. |
| | | 2.3 | Give reasons why the impacts on the planning of work activities from a range of factors need to be identified, reviewed and recorded. |

- 3 Review the impacts of heritage issues on the planning of work activities.
- 3.1 Identify, review and record the impacts of at least three of the following heritage issues on the planning of work activities:
- fire safety
 - hot works
 - archaeology
 - legislation and official guidance relating to built heritage
 - wildlife and ecology
 - condition of existing buildings and structures
 - specialist investigations
 - performance of traditional materials and construction methods
 - protection of heritage features.
- 3.2 Explain how to identify, review and record the impacts of heritage issues on the planning of work activities including but not limited to:
- sustainability
 - fire safety
 - hot works
 - archaeology
 - wildlife and ecology
 - condition of existing buildings and structures
 - performance of traditional materials and construction methods
 - sequencing of trades
 - protection of heritage features
 - temporary works
 - conservation management plans
 - heritage impact statements
 - legislation and official guidance relating to built heritage
 - specialist surveys and investigations to understand the existing buildings and structures and inform proposed works including but not limited to:
 - a) heritage issues and significance
 - b) construction materials and methods
 - c) condition and behaviour
 - d) the range of diagnostic investigations.
- 3.3 Explain why you need to identify, review and record the impacts of heritage issues on the planning of work activities.

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| 3 | continued | <p>3.4 Examine how to apply the following key terms and concepts when planning work activities:</p> <ul style="list-style-type: none"> - heritage values - significance - principles of conservation - sustainable development and management. <p>3.5 Compare the differences in performance characteristics between traditional and modern materials and construction methods.</p> <p>3.6 Explain how to recognise and determine when specialist skills and knowledge are required and report accordingly to those responsible.</p> |
| 4 | Review and record information sourced from guidance materials. | <p>4.1 Identify, review and record the information sourced from at least two of the following guidance materials:</p> <ul style="list-style-type: none"> - owner's manuals - log books - maintenance schedules and manuals - practice guides and specifications - current legislation and official guidance - health and safety file. <p>4.2 Evaluate your findings of the review and judge the impact on the planned activities.</p> <p>4.3 Explain how to identify, review and record the information sourced from the following guidance materials:</p> <ul style="list-style-type: none"> - owner's manuals - log books - maintenance schedules and manuals - practice guides and specifications - current legislation and official guidance - health and safety file. <p>4.4 Explain why it is important to review and record influencing factors against information sourced from the guidance materials.</p> |
| 5 | Prioritise activities by assessing and accounting for a range of heritage issues. | <p>5.1 Prioritise activities by assessing and accounting for a range of heritage issues and record the outcomes of your findings.</p> <p>5.2 Explain methods that can be used to assess and account for a range of heritage issues in order to prioritise and plan activities and record outcomes.</p> |

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| 5 | continued | 5.3 | Give reasons why activities for traditional and heritage buildings and structures should be prioritised. |
| 6 | Review priorities; make recommendations and record the decisions made when circumstances change. | 6.1 | <p>Review priorities, make recommendations and record the decisions made taking into account at least four of the following changing circumstances:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - condition of existing buildings and structures - compromised operational effectiveness - environmental conditions - use or change of use - meeting current legislation - resources - security threats - discovery of architectural or archaeological features during the works - wildlife and ecology - temporary works. |
| | | 6.2 | <p>Explain how to review priorities, make recommendations and record decisions made to take account of the following changing circumstances:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - condition of existing buildings and structures - compromised operational effectiveness - environmental conditions - use or change of use - meeting current legislation - resources - security threats - discovery of architectural or archaeological features during the works - wildlife and ecology - temporary works. |
| | | 6.3 | <p>Explain why you need to review priorities, make recommendations and record the decisions made to take account of changing circumstances.</p> |

- 7 Prepare plans or programmes and negotiate and agree them with stakeholders.
- 7.1 Prepare and record plans or programmes for at least two of the following activities for traditional and heritage buildings:
- repair
 - maintenance
 - conservation
 - alteration
 - adaption
 - energy efficiency retrofit
 - installation or replacement of building services.
- 7.2 Negotiate and agree with stakeholders the prepared plans or programmes for traditional and heritage buildings.
- 7.3 Explain how to prepare and record plans or programmes for the following activities on traditional and heritage buildings:
- repair
 - maintenance
 - conservation
 - alteration
 - adaption
 - energy efficiency retrofit
 - installation or replacement of building services.
- 7.4 Explain methods and techniques of negotiating and agreeing plans and programmes for traditional and heritage buildings and structures with stakeholders.

Title: Planning activities to traditional and heritage buildings and structures in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment hours	10

Title: Planning demolition activities in the workplace

Unit Number: L/650/0902

Learning outcomes

The learner will be able to:

1 Confirm the work requirements when planning demolition activities against the information supplied.

Assessment criteria

The learner can:

1.1 Confirm and record at least two of the following demolition activities against at least five of the following information sources:

Demolition activities:

- soft strip
- mechanical demolition
- remote mechanical demolition
- explosive demolition
- selective demolition
- diamond drilling and sawing.

Information sources:

- survey reports
- design
- Building Information Modelling (BIM)
- contractual
- statutory consents
- risk assessments and method statements
- programmes
- records about the competence of people
- sub-contractor arrangements
- health, safety and environmental plan
- asbestos surveys
- service disconnection certificates
- utilities survey report.

1 continued

1.2 Explain how to confirm and record the work requirements for the following demolition activities against the following information sources:

Demolition activities:

- soft strip
- mechanical demolition
- remote mechanical demolition
- explosive demolition
- selective demolition
- diamond drilling and sawing.

Information sources:

- survey reports
- design
- Building Information Modelling (BIM)
- contractual
- statutory consents
- risk assessments and method statements
- programmes
- records about the competence of people
- sub-contractor arrangements
- health, safety and environmental plan
- asbestos surveys
- service disconnection certificates
- utilities survey report.

1.3 Discuss why it is important to confirm the work requirements against the information sources.

1.4 Explain who needs to be consulted when confirming work requirements for demolition activities.

- 2 Identify, review and record influencing factors and guidance materials in relation to the work environment.
- 2.1 Identify, review and record the findings from at least three of the following influencing factors and two of the following guidance materials in relation to the work environment when planning demolition activities:
- Influencing Factors:**
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - Stakeholder requirements
 - environmental considerations.
- Guidance Materials:**
- owner's manuals
 - log books
 - maintenance schedules and manuals
 - practice guides and specifications
 - organisational requirements.
- 2.2 Explain how to identify and review the following influencing factors in relation to the work environment:
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - Stakeholder requirements
 - environmental considerations
 - temporary works.
- 2.3 Explain how to identify and review influencing factors against the following guidance materials:
- owner's manuals
 - log books
 - maintenance schedules and manuals
 - practice guides and specifications
 - organisational requirements.
- 2.4 Give reasons why influencing factors should be reviewed against guidance materials in relation to the work environment.

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| 3 | Prioritise demolition activities by assessing, recording and accounting for all the influencing factors. | <p>3.1 Assess, record and account for all the influencing factors whilst prioritising demolition activities.</p> <p>3.2 Explain how to assess and account for the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations. <p>3.3 Explain how to prioritise the following demolition activities:</p> <ul style="list-style-type: none"> - soft strip - mechanical demolition - remote mechanical demolition - explosive demolition - selective demolition - diamond drilling and sawing - temporary works. <p>3.4 Give reasons why demolition activities should be prioritised.</p> |
| 4 | Amend priorities to take account of changing circumstances whilst maintaining consistency with the influencing factors. | <p>4.1 Amend and record pre-determined demolition activity priorities to take account of the following changing circumstances:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - compromised operational effectiveness - environmental considerations - meeting current legislation - resources - security threats - temporary works. <p>4.2 Explain how to amend priorities when reviewing the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - stakeholders' requirements - environmental considerations. |

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| 4 | continued | <p>4.3 Explain how the following changing circumstances can be accounted for when planning demolition activities:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - compromised operational effectiveness - environmental considerations - meeting current legislation - resources - security threats. |
| 5 | Prepare plans or schedules and negotiate and agree them with decision makers. | <p>5.1 Prepare and record plans or schedules for at least three of the following demolition activities:</p> <ul style="list-style-type: none"> - soft strip - mechanical demolition - remote mechanical demolition - explosive demolition - selective demolition - diamond drilling and sawing - temporary works installation or removal. <p>5.2 Negotiate and agree the prepared plans or schedules with decision makers and record the outcomes.</p> <p>5.3 Describe how to prepare plans and schedules for the following demolition activities:</p> <ul style="list-style-type: none"> - soft strip - mechanical demolition - remote mechanical demolition - explosive demolition - selective demolition - diamond drilling and sawing - temporary works. <p>5.4 Explain how best to negotiate with decision makers in order to agree proposed plans and schedules.</p> <p>5.5 Judge the potential risks of works impacting on the cultural significance of the historic environment.</p> <p>5.6 Evaluate the specific requirements for buildings and structures of traditional (pre 1919) construction and architectural, historical or archaeological significance.</p> |

Title: Planning demolition activities in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment hours	10

Title: Planning and scheduling the maintenance activities of property, services or systems in the workplace

Unit Number: H/600/7360

Learning outcomes

The learner will be able to:

1 Implement and record regular inspections to confirm the project requirements for the maintenance activities for property, services or systems.

Assessment criteria

The learner can:

1.1 Arrange regular inspections that can confirm and monitor project requirements for at least three of the following **maintenance** activities on at least two of the following **properties, services or systems:**

Maintenance activities:

- remedial
- scheduled
- unscheduled
- preventative
- corrective
- emergency.

Property, services or systems:

- highways
- traffic controls
- structures
- external structure
- internal structure
- historical or conservation interests
- internal fabric
- external fabric
- utilities and services
- landscaping.

1 continued

1.2 Explain how project requirements for **maintenance activities** of the following **property, systems or services** can be confirmed:

Maintenance activities:

- remedial
- scheduled
- unscheduled
- preventative
- corrective
- emergency.

Property, services or systems:

- highways
- traffic controls
- structures
- external structure
- internal structure
- historical or conservation interests
- internal fabric
- external fabric
- utilities and services
- landscaping.

1.3 Confirm who to consult with regarding project requirements.

2 Identify, review and record influencing factors and guidance material about the property, service or system to be maintained.

2.1 Evaluate and record at least four of the following **influencing factors** against at least three of the following **guidance materials** about the property, service or system to be maintained:

Influencing factors:

- organisational requirements
- project requirements
- current legislation
- resource allocation
- working requirements
- environmental considerations
- near neighbours
- weather conditions
- ground or site conditions
- sustainability
- client, customer or their representative
- reports and surveys
- archaeology
- heritage issues
- planning or statutory consents.

Guidance materials:

- plans, drawings or diagrams
- owner's manuals
- logbooks
- maintenance schedules and manuals
- practice guides and specifications
- current legislation and official guidance
- historical data
- existing records
- surveys.

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| 2 | continued | <p>2.2 Explain how to identify and review the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - project requirements - current legislation - resource allocation - working requirements - environmental considerations - near neighbours - weather conditions - ground or site conditions - sustainability - client, customer or their representative - reports and surveys - archaeology - heritage issues - planning and statutory consents. <p>2.3 Explain how to identify and review the following guidance materials:</p> <ul style="list-style-type: none"> - plans, drawings or diagrams - owner's manuals - logbooks - maintenance schedules and manuals - practice guides and specifications - current legislation and official guidance - historical data - existing records - surveys. <p>2.4 Give reasons why influencing factors need to be identified and reviewed against guidance materials.</p> |
| 3 | <p>Prioritise and record the maintenance activities to take account of identified influencing factors whilst maintaining consistency.</p> | <p>3.1 Prioritise maintenance activities to take account of identified influencing factors and maintain consistency.</p> <p>3.2 Record prioritised maintenance activities.</p> |

3 continued

3.3 Explain how to assess the following influencing factors:

- organisational requirements
- project requirements
- current legislation
- resource allocation
- working requirements
- environmental considerations
- near neighbours
- weather conditions
- ground or site conditions
- sustainability
- client, customer or their representative
- reports and surveys
- archaeology
- heritage issues
- planning and statutory consents.

3.4 Explain why it is important to prioritise and record the maintenance activities to take account of identified influencing factors whilst maintaining consistency.

3.5 Explain how to prioritise the following maintenance activities:

- planned maintenance
- tendered works
- responsive works
- preventative maintenance work
- cost estimated work
- seasonal maintenance
- traffic maintenance (signing, lighting and guarding)
- emergency works
- contingency plans.

3.6 Give reasons why it is important to assess influencing factors and prioritise maintenance activities.

- 4 Identify and record changing circumstances.
- 4.1 Identify and record at least four of the following changing circumstances:
- susceptibility to damage
 - safety requirements
 - need to inhibit, and respond to, deterioration
 - weather conditions
 - ground or site conditions
 - environmental conditions
 - use or change of use
 - current legislation
 - resources
 - security threats
 - client, customer or their representative
 - reports and surveys
 - historical data
 - planning or statutory consents.
- 4.2 Explain how to account for the following changing circumstances:
- susceptibility to damage
 - safety requirements
 - need to inhibit, and respond to deterioration
 - weather conditions
 - ground or site conditions
 - environmental conditions
 - use or change of use
 - current legislation
 - resources
 - security threats
 - client, customer or their representative
 - reports and surveys
 - historical data
 - planning and statutory consents.

- 4 continued
- 4.3 Explain how to amend priorities when reviewing the following influencing factors:
- organisational requirements
 - project requirements
 - current legislation
 - resource allocation
 - working requirements
 - environmental considerations
 - near neighbours
 - weather conditions
 - ground or site conditions
 - sustainability
 - client, customer or their representative
 - reports and surveys
 - archaeology
 - heritage issues
 - planning and statutory consents.
- 5 Ensure maintenance activity records of actions carried out and data collected are current.
- 5.1 Assess at least four of the following maintenance activity records of actions carried out and data collected:
- inspections
 - faults or problems
 - corrective actions
 - costs
 - resources
 - complaints
 - delays.
- 5.2 Ensure maintenance activity records of actions carried out and data collected are current.

5 continued

5.3 Give reasons why records of **activities carried out and data collected**, for the following **work and maintenance activities** needs to be current:

Activity records and data collected

- inspections
- faults or problems
- corrective actions
- costs
- resources
- complaints
- delays.

Maintenance work

- remedial
- scheduled
- unscheduled
- preventative
- corrective
- emergency.

Maintenance activities

- planned maintenance work
- tendered works
- responsive works
- preventative maintenance work
- cost estimated work
- seasonal maintenance
- traffic maintenance (signing, lighting and guarding)
- emergency works
- contingency plans.

5.4 Explain how to ensure that records of the following maintenance activities and data collected are current:

- inspections
- faults or problems
- corrective actions
- costs
- resources
- complaints
- delays.

6 Identify, assess and obtain the necessary resources for maintenance activities.

6.1 Identify, assess and obtain at least two of the following necessary resources for maintenance activities:

- people
- plant, equipment or machinery
- materials and components
- sub-contractors
- information
- work area and facilities
- waste management
- utility providers.

6.2 Explain how to identify the following necessary resources for maintenance activities:

Resources

- people
- plant, equipment or machinery
- materials and components
- sub-contractors
- information
- work area and facilities
- waste management
- utility providers.

Maintenance activities

- planned maintenance work
- tendered works
- responsive works
- preventative maintenance work
- cost estimated work
- seasonal maintenance
- traffic maintenance (signing, lighting and guarding)
- emergency works
- contingency plans.

6.3 Explain how to assess the quantity and quality of resources for maintenance activities.

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| 6 | continued | <p>6.4 Explain how to maintain the necessary resources for the maintenance work of the following property, systems or services:</p> <ul style="list-style-type: none"> - highways - traffic controls - structures - external structure - internal structure - historical or preservation interests - internal fabric - external fabric - utilities and services - landscaping. |
| 7 | Prepare plans and schedules of maintenance activities and negotiate and agree them with stakeholders. | <p>7.1 Prepare plans and schedules for at least three of the following maintenance activities:</p> <ul style="list-style-type: none"> - planned maintenance activities - tendered works - responsive works - preventative maintenance work - cost estimated works - seasonal maintenance - traffic maintenance (signing, lighting and guarding) - emergency works - contingency plans. <p>7.2 Negotiate and agree prepared plans and schedules with stakeholders.</p> <p>7.3 Explain how to prepare plans and schedules for the following maintenance activities:</p> <ul style="list-style-type: none"> - planned maintenance activities - tendered works - responsive works - preventative maintenance work - cost estimated works - seasonal maintenance - traffic maintenance (signing, lighting and guarding) - emergency works - contingency plans. <p>7.4 Explain how to negotiate and agree plans and schedules with decision-makers.</p> |

7 continued

7.5 Give reasons why it is important that plans and schedules for the following maintenance activities are agreed:

- planned maintenance activities
- tendered works
- responsive works
- preventative maintenance work
- cost estimated work
- seasonal maintenance
- traffic maintenance (signing, lighting and guarding)
- emergency works
- contingency plans.

Title: Planning and scheduling the maintenance activities of property, services or systems in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	40
Assessment hours	10

Title: Managing the project handover in the workplace

Unit Number: A/651/0438

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Confirm project requirements, consult with stakeholders and develop, agree and record a handover programme.	1.1	Confirm that project requirements have met stakeholder's expectations.
		1.2	Undertake consultation with stakeholders to negotiate handover arrangements.
		1.3	Develop, agree and record a handover programme.
		1.4	Describe the following typical project requirements that must be met for handover purposes: <ul style="list-style-type: none">- time- quality- cost- health and safety- sustainability- defects rectification period- warranties.
		1.5	Explain how project requirements for developing handover programmes can be confirmed.
		1.6	Explain ways of consulting with stakeholders when developing and agreeing a handover programme.
		1.7	Give reasons why you need a handover programme.
2	Check that project requirements have been met, or record outstanding work, in order to agree, arrange and record a satisfactory completion.	2.1	Check work against project requirements that may need to be completed against the requirements of the project.
		2.2	Note outstanding work, defects or remedial activities in order to agree, arrange and record a satisfactory completion.
		2.3	Agree and organise work activities that can complete outstanding work to ensure that the project requirements are met.

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| 2 | continued | <p>2.4 Explain how to check that the following project requirements have been met:</p> <ul style="list-style-type: none"> - time - quality - cost - health and safety - sustainability - defects rectification period - warranties. <p>2.5 Explain how to record outstanding work in order to agree and arrange a satisfactory completion.</p> <p>2.6 Explain why it is important to check project requirements and outstanding work to agree a satisfactory completion.</p> |
| 3 | Carry out handover inspections, relevant tests and commissioning activities ensuring they are recorded and certificated. | <p>3.1 Complete handover inspections and relevant tests, ensuring they are recorded and certificated.</p> <p>3.2 Undertake commissioning activities and keep records of all certificates issued.</p> <p>3.3 Explain how to carry out handover inspections and the range of tests required on handover.</p> <p>3.4 Describe how to ensure that relevant tests are witnessed by the following stakeholders:</p> <ul style="list-style-type: none"> - client, customer and their representative - users - consultants - contractors - regulatory authorities. <p>3.5 Explain how to ensure that the relevant certification is acquired.</p> <p>3.6 Explain why handover inspections and certificates are required.</p> |
| 4 | Record stakeholder concerns during inspection, agree and record any required actions. | <p>4.1 Seek, identify and record stakeholders' concerns during handover inspections.</p> <p>4.2 Agree actions with stakeholders that will resolve their concerns raised during handover inspections.</p> |

- 4 continued
- 4.3 Describe how to record concerns from the following stakeholders' during inspections:
- client, customer or their representative
 - users
 - consultants
 - contractors
 - regulatory authorities.
- 4.4 Explain how to agree relevant actions during inspections with stakeholders.
- 4.5 Give reasons why stakeholders concerns need to be addressed.
- 5 Ensure that stakeholders' respective responsibilities are recorded, accepted and adopted on handover.
- 5.1 Establish, confirm and record that stakeholders will accept responsibility on handover for at least three of the following:
- insurance
 - security
 - operations
 - health and safety and wellbeing
 - utility supply
 - environment
 - sustainability.
- 5.2 Explain how to ensure that the following stakeholders accept and adopt the following responsibilities on handover:
- Stakeholders:**
- client, customer or their representative
 - users
 - consultants
 - contractors
 - regulatory authorities.
- Responsibilities:**
- insurance
 - security
 - operations
 - health, safety and wellbeing
 - utility supply
 - environmental
 - sustainability.
 -
- 5.3 Explain why stakeholders need to accept their responsibilities.

- 6 Assemble, record and hand over relevant documentation in accordance with the project.
- 6.1 Assemble, record and handover relevant documentation for the following in accordance with the project:
- manuals and guidance materials
 - plans
 - operating equipment
 - security information and equipment
 - certificates
 - services
 - systems
 - equipment
 - materials
 - maintenance records
 - structural design.
- 6.2 Explain how to assemble the following relevant documentation in accordance with the project:
- manuals and guidance materials
 - plans
 - operating equipment
 - security information and equipment
 - certificates
 - services
 - systems
 - equipment
 - materials
 - maintenance records
 - structural design.
- 6.3 Describe how to hand over relevant documentation in accordance with the project requirements.
- 6.4 Give reasons why it is required to assemble and hand over appropriate documentation for the project.

Title: Managing the project handover 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

40

Assessment hours

10

Title: Planning tunnelling activities in the workplace

Unit Number: Y/651/0464

Learning outcomes

The learner will be able to:

1 Determine and record the tunnelling activities against the information supplied.

Assessment criteria

The learner can:

1.1 Determine and record at least two of the following **tunnelling activities** against the input of information from at least five of the following **information sources**:

Tunnelling activities:

- mobile plant and machinery operations
- back up services installation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

Information sources:

- survey reports
- site investigations
- drawings
- schedules and specifications
- contractual
- statutory consents
- risk assessments and method statements
- programmes
- records about the competence of people
- sub-contractor arrangements
- health, safety and environmental plan
- material suppliers
- tunnelling plans.

1 continued

1.2 Explain how work requirements are determined for **tunnelling activities** against the following **information sources**:

Tunnelling activities:

- mobile plant and machinery operations
- back up services installation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

Information sources:

- survey reports
- site investigations
- drawings, schedules and specifications
- contractual
- statutory consents
- risk assessments and method statements
- programmes
- records about the competence of people
- sub-contractor arrangements
- health, safety and environmental plan
- material suppliers
- tunnelling plans.

1.3 Explain who needs to be consulted when confirming work requirements for tunnelling activities.

- 2 Identify and review influencing factors relating to the work environment.
- 2.1 Consider at least three of the following influencing factors relating to the work environment and record the outcomes:
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - working requirements
 - environmental considerations
 - weather conditions
 - ground conditions.
- 2.2 Explain how to identify and review the following influencing factors:
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - working requirements
 - environmental considerations
 - weather conditions
 - ground conditions.
- 3 Prioritise activities by assessing and accounting for all the influencing factors.
- 3.1 Assess and account for all the influencing factors and use them to prioritise the tunnelling activities.
- 3.2 Explain how to assess and account for the following influencing factors:
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - working requirements
 - environmental considerations
 - weather conditions
 - ground conditions.

- 3 continued
- 3.3 Explain how to prioritise the following tunnelling activities:
- mobile plant and machinery operations
 - back up services installation, maintenance or removal
 - spoil removal
 - access equipment erection, maintenance or removal
 - pipejacking operations
 - micro tunnelling operations
 - excavation and installation of supports
 - shaft and tunnel construction
 - tunnel transport
 - spraying concrete lining
 - operating separation plant
 - temporary works
 - lifting loads.
- 3.4 Give reasons why it is important to prioritise tunnelling activities.
- 4 Identify and review guidance materials.
- 4.1 Identify and review at least two of the following guidance materials and record the outcomes:
- owner's manuals
 - log books
 - maintenance schedules and manuals
 - practice guides and specifications
 - current legislation and official guidance
 - organisational procedures
 - historical data.
- 4.2 Explain how to identify and review the following guidance materials:
- owner's manuals
 - log books
 - maintenance schedules and manuals
 - practice guides and specifications
 - current legislation and official guidance
 - organisational procedures
 - historical data.
- 4.3 Explain why it is important to review influencing factors against guidance materials.

- 5 Amend priorities to take account of changing circumstances whilst maintaining consistency with the influencing factors.
- 5.1 Review and amend priorities to take account of at least four of the following changing circumstances with the influencing factors:
- susceptibility to damage
 - safety requirements
 - need to inhibit and respond to deterioration
 - compromised operational effectiveness
 - weather conditions
 - unidentified obstructions
 - meeting current legislation
 - resources
 - security threats
 - ground conditions
 - face instability.
- 5.2 Explain how to take account of the following changing circumstances:
- susceptibility to damage
 - safety requirements
 - need to inhibit and respond to deterioration
 - compromised operational effectiveness
 - weather conditions
 - unidentified obstructions
 - meeting current legislation
 - resources
 - security threats
 - ground conditions
 - face instability.
- 5.3 Explain how to amend priorities when reviewing the following influencing factors:
- organisational requirements
 - contractual requirements
 - statutory requirements
 - resource allocation
 - working requirements
 - environmental considerations
 - weather conditions
 - ground conditions.

- 6 Prepare plans and programmes then negotiate, agree and record them with stakeholders.
- 6.1 Prepare plans and produce programmes for at least three of the following tunnelling activities:
- mobile plant and machinery operations
 - back up services installation, operations, maintenance or removal
 - spoil removal
 - access equipment erection, maintenance or removal
 - pipejacking operations
 - micro tunnelling operations
 - excavation and/or installation of supports
 - shaft and tunnel construction
 - tunnel transport
 - spraying concrete lining
 - operating separation plant
 - temporary works
 - lifting loads.
- 6.2 Negotiate, agree and record the prepared plans and programmes with stakeholders.
- 6.3 Explain how plans and programmes can be prepared for the following tunnelling activities:
- mobile plant and machinery operations
 - back up services installation, operations, maintenance or removal
 - spoil removal
 - access equipment erection, maintenance or removal
 - pipejacking operations
 - micro tunnelling operations
 - excavation and/or installation of supports
 - shaft and tunnel construction
 - tunnel transport
 - spraying concrete lining
 - operating separation plant
 - temporary works
 - lifting loads.
- 6.4 Explain methods and techniques to negotiate and agree plans and programmes with stakeholders.

Title: Planning tunnelling 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.

Sector Subject Area

5.2 Building and Construction

Availability for use

Shared unit

Unit guided learning hours

50

Assessment hours

20

Title: Planning highways maintenance and repair activities in the workplace

Unit Number: M/650/0896

Learning outcomes

The learner will be able to:

1 Confirm and record the work requirements of planning highway maintenance activities on controlled roads.

Assessment criteria

The learner can:

1.1 Confirm and record the work requirements for at least two of the following maintenance activities and at least five of the following repair activities on controlled roads:

Maintenance Activities:

- scheduled and preventative
- corrective
- emergency.

Repair Activities:

- structure
- surface
- materials
- markings
- fittings
- power and light
- drainage
- telecommunications
- special services and equipment
- landscaping
- temporary traffic management
- fencing
- vehicle restraint systems
- signs
- lighting columns and traffic control equipment.

1.2 Explain how work requirements for controlled roads and their scheduled and preventative, corrective and emergency maintenance or repair can be confirmed.

1.3 Explain who needs to be consulted when confirming work requirements.

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| 1 | continued | <p>1.4 Describe how to confirm the work requirements for the following work activities:</p> <p>Repair activities</p> <ul style="list-style-type: none"> - structure - surface - materials - markings - fittings - power and light - drainage - telecommunications - special services and equipment - landscaping - temporary traffic management - fencing - vehicle restraint systems - signs - lighting columns and traffic control equipment. |
| 2 | Identify and review influencing factors about the work environment. | <p>2.1 Consider at least three of the following influencing factors relating to the work environment:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - stakeholder requirements - working requirements - environmental considerations. <p>2.2 Examine how to identify and review the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - stakeholder requirements - working requirements - environmental considerations. <p>2.3 Examine how influencing factors can be identified and what different methods can be used to review them when planning maintenance or repair activities on controlled roads.</p> |

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| 3 | Consult with guidance materials. | <p>3.1 Consult at least two of the following guidance materials and record the outcomes:</p> <ul style="list-style-type: none"> - manufacturer's instructions under the Construction Product Regulations - log books - maintenance schedules and manuals - practice guides and specifications - current legislation and official guidance. <p>3.2 Explain how to identify and review the following guidance materials:</p> <ul style="list-style-type: none"> - manufacturer's instructions under the Construction Product Regulations - log books - maintenance schedules and manuals - practice guides and specifications - current legislation and official guidance. <p>3.3 Explain how to review risk assessments and method statements and use that information to inform the planned work.</p> <p>3.4 Describe how to record the outcome from consulting the guidance materials, risk assessments and method statements.</p> <p>3.5 Examine when and how to consult manufacturer's instructions under the construction product regulations.</p> |
| 4 | Prioritise and record the maintenance activities by assessing and accounting for all the influencing factors. | <p>4.1 Prioritise and record the maintenance activities by assessing and accounting for all of the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental consideration - weather conditions. |

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| 4 | continued | <p>4.2 Describe how to assess and account for the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental consideration - weather conditions. <p>4.3 Explain how to prioritise scheduled and preventative, corrective and emergency maintenance activities.</p> |
| 5 | Amend priorities to take account of changing circumstances whilst maintaining consistency. | <p>5.1 Review and update pre-determined maintenance or repair priorities, considering the following changing circumstances whilst maintaining consistency with the influencing factors:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - need to inhibit, and respond to deterioration - compromised operational effectiveness - weather conditions - use or change of use - current legislation - resources - security threats. <p>5.2 Explain how to account for the following changing circumstances:</p> <ul style="list-style-type: none"> - susceptibility to damage - safety requirements - need to inhibit, and respond to deterioration - compromised operational effectiveness - weather conditions - use or change of use - current legislation - resources - security threats. <p>5.3 Explain how to amend priorities when reviewing the following influencing factors:</p> <ul style="list-style-type: none"> - organisational requirements - contractual requirements - statutory requirements - resource allocation - working requirements - environmental considerations. |

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| 5 | continued | <p>5.4 Assess the different types of temporary traffic management for all controlled roads.</p> <p>5.5 Analyse the potential risks of works impacting on the cultural significance of the historic environment.</p> <p>5.6 Evaluate the specific requirements for building and structures of traditional (pre 1919) construction or of architectural, historical or archaeological significance.</p> |
| 6 | Prepare plans or schedules of maintenance activities and negotiate and agree them with decision makers. | <p>6.1 Prepare plans or schedules for at least two of the following maintenance activities:</p> <ul style="list-style-type: none"> - regular programmes - tendered works - responsive works - cost estimated works - winter maintenance - traffic maintenance (signing, lighting and guarding) - temporary traffic management (on motorways and high speed dual carriageways) - risk assessments and method statements. <p>6.2 Negotiate and agree the proposed plans or schedules with decision makers.</p> <p>6.3 Explain how plans and schedules can be prepared for scheduled and preventative, corrective and emergency maintenance activities.</p> <p>6.4 Explain how to negotiate and agree plans and schedules with decision makers.</p> |
| 7 | Prepare risk assessments and method statements. | <p>7.1 Prepare risk assessments and method statements for three of the following:</p> <ul style="list-style-type: none"> - structure - surface - materials - markings - fittings - power and light - drainage - telecommunications - special services and equipment - landscaping - temporary traffic management - fencing - vehicle restraint systems - signs - lighting columns and traffic control equipment. |

- 7 continued
- 7.2 Explain the best approach to preparing risk assessments and method statements.
- 7.3 Describe how to identify and rate the range of risks for the following:
- structure
 - surface
 - materials
 - markings
 - fittings
 - power and light
 - drainage
 - telecommunications
 - special services and equipment
 - landscaping
 - temporary traffic management
 - fencing
 - vehicle restraint systems
 - signs
 - lighting columns and traffic control equipment.
- 7.4 Describe why preparing risk assessments and method statements is required.
- 7.5 Explain why it is important to identify and rate risks.
- 8 Prepare plans and schedules.
- 8.1 Prepare plans and schedules for two of the following maintenance activities:
- winter maintenance
 - traffic maintenance (signing, lighting and guarding)
 - temporary traffic management (on motorways and high-speed dual carriageways).
- 8.2 Explain how to prepare plans and schedules for the following maintenance activities:
- winter maintenance
 - traffic maintenance (signing, lighting and guarding)
 - temporary traffic management (on motorways and high-speed dual carriageways).

Title: Planning highways maintenance and repair 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.

Sector Subject Area

5.2 Building and Construction

Availability for use

Shared unit

Unit guided learning hours

30

Assessment hours

10

Title: Providing customer services in the construction workplace

Unit Number: Y/650/0899

Learning outcomes

The learner will be able to:

Assessment criteria

The learner can:

1	Identify and use organisational procedures to implement systems or processes that will deliver and improve customer service.	1.1	Record and use identified information to implement systems or processes that will deliver customer service for at least two of the following: <ul style="list-style-type: none">- specifications- drawings- instructions and variations- feedback processes.
		1.2	Revise ways of improving customer service whilst implementing customer service systems and processes.
		1.3	Describe how to identify organisational procedures, current legislation and official guidance relevant to delivering and improving customer service.
		1.4	Explain how to deliver and improve customer service by using identified information to implement and record systems or processes for the following: <ul style="list-style-type: none">- organisational procedures- specifications- drawings- instructions and variations- feedback processes.
2	Give a consistent and reliable service that promotes a customer's confidence.	2.1	Give a consistent and reliable service and maintain records of how the provision of customer service promotes customer confidence.
		2.2	Examine current customer procedures and systems to identify if they provide consistent customer service and evaluate the current methods used.
		2.3	Explain how to provide consistent levels of customer service.
		2.4	Explain how systems or procedures can be used effectively to provide a reliable level of customer service and promote customer confidence.

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| 3 | Work with others to resolve customer services problems and communicate with customers. | <p>3.1 Work with others to resolve customer service problems using at least two of the following forms of communication:</p> <ul style="list-style-type: none"> - electronic - verbal - via a second person - feedback documents - group meetings. <p>3.2 Describe how to work with others to resolve customer service problems using the following forms of communication:</p> <ul style="list-style-type: none"> - electronic - verbal - via a second person - feedback documents - group meetings. <p>3.3 Explain how to best communicate and share information with the following:</p> <ul style="list-style-type: none"> - client, customer or their representative - contractors and sub-contractors - consultants - workforce. |
| 4 | Communicate with customers to provide information, check and record their satisfaction. | <p>4.1 Communicate with customers to provide information, check and record satisfaction for at least two of the following actions:</p> <ul style="list-style-type: none"> - corrective - referral - investigative - reactive - proactive. <p>4.2 Explain how to communicate with customers to check and record satisfaction with the information provided for the following actions:</p> <ul style="list-style-type: none"> - corrective - referral - investigative - reactive - proactive. <p>4.3 Explain what checks can be undertaken to ensure that customers are satisfied with actions taken.</p> |

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| 5 | Solve problems within existing systems or procedures that may affect customers before the customer becomes aware of them. | <p>5.1 Investigate and collate information on the current customer procedures and systems to identify potential problems.</p> <p>5.2 Apply rectification measures to procedures and systems to eliminate or reduce identified potential customer problems before the customer becomes aware of them.</p> <p>5.3 Describe how to identify problems within existing systems or procedures that may affect customers, including but not limited to:</p> <ul style="list-style-type: none"> - current legislation - official guidance - organisational procedures - specifications - drawings - instructions and variations - feedback processes. <p>5.4 Explain how to ensure problems in systems or procedures are resolved before customers become aware of them.</p> |
| 6 | Confirm that the service given meets the customer's needs and expectations. | <p>6.1 Establish the level of service expected by the customers and confirm it with them from the outset.</p> <p>6.2 Regularly communicate with customers to check that the service given has met their needs and expectations and record the outcomes.</p> <p>6.3 Explain ways of communicating with the customers to confirm that they are satisfied with the given level of service and that it meets their needs and expectations.</p> |
| 7 | Inform and record any changes to customer service systems or procedures to those people responsible. | <p>7.1 Inform and record any changes to customer service systems or procedures that will reduce the chance of problems being repeated to at least two of the following people responsible:</p> <ul style="list-style-type: none"> - client, customer or their representative - contractors - consultants - sub-contractors - suppliers - workforce. <p>7.2 Describe how to identify recurring problems in customer service systems and procedures.</p> <p>7.3 Explain how to report on customer service systems and procedures to reduce the chance of problems being repeated.</p> |

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| 7 | continued | <p>7.4 Describe how best to inform the following about changes to customer service systems and procedures:</p> <ul style="list-style-type: none"> - client, customer or their representative - contractors - consultants - sub-contractors - suppliers - workforce. |
| 8 | Share information to maintain and improve standards of service delivery. | <p>8.1 Share and record information to maintain and improve standards of service delivery with those people responsible.</p> <p>8.2 Explain how to improve and maintain standards of service delivery.</p> <p>8.3 Describe how to share information in order to maintain and improve standards of service with the following:</p> <ul style="list-style-type: none"> - client, customer or their representative - contractors - consultants - sub-contractors - suppliers - workforce. |

Title: Providing customer services in the construction workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	40
Assessment hours	10

Title: Supervising activities to traditional and heritage buildings and structures in the workplace

Unit Number: K/650/0901

Learning outcomes

The learner will be able to:

1 Carry out supervision activities which will minimise disruption and maintain optimum performance.

Assessment criteria

The learner can:

1.1 Undertake supervision duties for at least two of the following programmed work activities on traditional and heritage buildings and structures:

- repair
- maintenance
- conservation
- alteration
- adaption
- energy efficiency retrofit
- installation or replacement of building services.

1.2 Explain how to supervise programmed work activities to traditional and heritage buildings and structures for the following:

- repair
- maintenance
- conservation
- alteration
- adaption
- energy efficiency retrofit
- installation or replacement of building services.

1.3 Explain how to minimise disruption to the following:

- workforce
- sub-contractors
- suppliers
- consultants
- visitors
- general public
- other works.

1.4 Examine what current legislation and official guidance applies to work for traditional and heritage buildings and structures.

1 continued

1.5 Evaluate a range of heritage issues that can affect the supervising of programmed work activities including but not limited to:

- sustainability
- fire safety
- hot works
- archaeology
- wildlife and ecology
- condition of existing buildings and structures
- performance of traditional materials and construction methods
- sequencing of trades
- protection of heritage features
- temporary works
- conservation management plans
- heritage impact statements
- legislation and official guidance relating to built heritage
- Specialist survey and investigations to understand the existing buildings and structures and inform proposed works including but not limited to:
 - a) heritage issues and significance
 - b) construction materials and methods
 - c) condition and behaviour
 - d) the range of diagnostic investigations.

1.6 Explain the following key terms and concepts relevant to traditional and historic buildings and structures including but not limited to:

- heritage values
- significance
- principles of conservation
- sustainable development and management.

1.7 Compare the differences in performance characteristics between traditional and modern materials and construction methods.

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| 2 | Observe organisational requirements appropriate to the protection of the workforce. | <p>2.1 Observe organisational requirements appropriate for the protection of the workforce, visitors and the environment by the application of information relating to at least three of the following:</p> <ul style="list-style-type: none"> - methods of work - risk assessment - safe use and storage of tools - safe use and storage of materials - traffic management - emergency plans - fire safety - hot works - environmental factors. <p>2.2 Describe the current legislation and official guidance that applies directly to the protection of the workforce, visitors and the environment in relation to the following:</p> <ul style="list-style-type: none"> - methods of work - risk assessment - safe use and storage of tools - safe use and storage of materials - traffic management - emergency plans - fire safety - hot works - environmental factors. |
| 3 | Check the validity of team members documentation. | <p>3.1 Check the validity of team members by verifying the following documentation:</p> <ul style="list-style-type: none"> - industry certification cards - competence schemes - qualifications - certificates and training. <p>3.2 Describe how to check the validity of team members' industry certification cards, competence schemes, qualifications, certificates and training.</p> <p>3.3 Explain why it is necessary to check the validity of documentation before the team members enter the site to commence work.</p> |

- 4 Identify and assess defects, faults and issues, recommend and implement corrective action which conforms to safe working methods and practices.
- 4.1 Identify and assess any defective works, faults or other issues and recommend and implement corrective action, which conforms to safe working methods and practices, for at least three of the following:
- construction errors
 - identification of further utilities
 - non-compliance with legislation and official guidance relating to built heritage
 - environmental concerns
 - previous incorrect maintenance
 - previous selection of inappropriate materials and construction methods
 - identification of hazardous materials
 - breaches of security
 - poor workmanship
 - faults caused by incorrect sequencing of trades
 - discovery of architectural or archaeological features during the works
 - condition of existing buildings and structures
 - limitations of design choices.
- 4.2 Describe how to identify and assess defects, faults and other issues for traditional and heritage buildings and structures including but not limited to:
- construction errors
 - identification of further utilities
 - non-compliance with legislation and official guidance relating to built heritage (listed building consent, planning permission, scheduled monument consent, conservation area consent, ecclesiastical exemption)
 - environmental concerns
 - previous incorrect maintenance
 - previous selection of inappropriate materials and construction methods
 - identification of hazardous materials
 - breaches of security
 - poor workmanship
 - faults caused by incorrect sequencing of trades
 - discovery of architectural or archaeological features
 - during the works
 - condition of existing buildings and structures
 - limitations of design choices.
- 4.3 Explain why it is important to identify and assess defects, faults and issues.

4	continued	4.4	Explain how to recommend to stakeholders about corrective actions and changes made to the programme.
5	Keep accurate records of work progress checks, defects, problems, corrective action and quantities involved.	5.1	Implement recording systems following organisational procedures that keeps accurate records of work progress by conducting checks for defective works, problems, faults and other issues and record the decisions and corrective action taken with the quantities involved.
		5.2	Describe how to keep accurate records of work progress checks by conducting checks for defects, problems and other issues and any decisions and corrective action taken.
		5.3	Explain how to keep accurate records of quantities of the following resources used: <ul style="list-style-type: none"> - people - plant - equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		5.4	Give reasons why accurate records should be kept.
6	Identify, assess and record the necessary resources for work activities for traditional and heritage buildings and structures.	6.1	Identify, assess and record the acquisition and maintain at least four of the following resources for work activities for traditional and heritage buildings and structures: <ul style="list-style-type: none"> - people - plant - equipment or machinery - materials and components - sub-contractors - information - work area and facilities - waste management - utility providers.
		6.2	Examine how to identify, assess and record the acquisition of the resources for work activities to traditional and heritage buildings and structures.
		6.3	Explain how resources are maintained for work activities to traditional and heritage buildings and structures.
		6.4	Explain how to recognise and determine when specialist skills and knowledge are required and report accordingly.

Title: Supervising activities to traditional and heritage buildings and structures in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment hours	10

Title: Supervising tunnelling activities in the workplace

Unit Number: R/650/0904

Learning outcomes

The learner will be able to:

1 Supervise tunnelling activities and provide input into the programmes, plans or schedules which will minimise disruption and maintain optimum performance.

Assessment criteria

The learner can:

1.1 Undertake supervision duties and provide input into the programmes, plans or schedules which will minimise disruption and maintain optimum performance for at least two of the following tunnelling activities:

- mobile plant and machinery operations
- back up services installation
- operation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

1.2 Explain how to supervise and provide input into programmes, plans or schedules for at least six of the following tunnelling activities:

- mobile plant and machinery operations
- back up services installation
- operation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

- 1 continued
- 1.3 Explain how to minimise disruption during tunnelling activities to:
- other works
 - the workforce
 - other personnel on site
 - members of the public
 - occupiers
 - site visitors
 - people affected by on-site operations.
- 1.4 Explain possible methods to optimise and maintain work performance during tunnelling activities.
- 2 Observe current legislation, regulations and official guidance to the work environment for protection and safety of everyone.
- 2.1 Ensure compliance to current legislation, regulations and official guidance appropriate to the work environment to ensure the protection and the safety of the workforce, the general public, visitors and the environment by the application of information relating to at least three of the following:
- methods of work
 - tunnel access arrangements
 - risk assessments
 - safe use and storage of tools
 - safe use and storage of materials
 - traffic management
 - emergency plans
 - fire safety
 - hot works
 - environmental factors.
- 2.2 Explain what current legislation, regulations and official guidance applies directly to tunnelling activities appropriate to the work environment to ensure protection and safety of the workforce, the general public, visitors and the environment.

- | | | |
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| 2 | continued | <p>2.3 Describe how to use current legislation and official guidance appropriate to the work environment for the protection of the workforce, the general public, visitors and the environment by applying the following information sources:</p> <ul style="list-style-type: none"> - methods of work - tunnel access arrangements - risk assessments - safe use and storage of tools - safe use and storage of materials - traffic management - emergency plans - fire safety - hot works - environmental factors. |
| 3 | Identify and assess common tunnelling defects and problems and recommend and implement corrective action which conforms to safe working methods and practices. | <p>3.1 Observe and evaluate the preparation and work activities against given requirements and methods of work to identify tunnelling defects and problems.</p> <p>3.2 Identify and assess common tunnelling defects and problems, recommend and implement corrective actions to be taken which conform to safe working methods and practices to at least three of the following:</p> <ul style="list-style-type: none"> - limitations of design choices - construction errors - identification of further utilities - archaeology and heritage concerns - environmental concerns - incorrect maintenance - identification of hazardous materials - breaches of security - changes in ground conditions. <p>3.3 Describe how to identify and assess the following common tunnelling defects and problems:</p> <ul style="list-style-type: none"> - limitations of design choices - construction errors - identification of further utilities - archaeological and heritage concerns - environmental concerns - incorrect maintenance - identification of hazardous materials - breaches of security - changes in ground conditions. <p>3.4 Explain methods that can be used to assess and identify potential tunnelling defects and problems.</p> |

- 3 continued 3.5 Explain how to make recommendations and implement the required corrective actions, in accordance with safe working methods and practices, to rectify tunnelling defects and problems.
- 4 Keep accurate records of work progress checks and quantities involved. 4.1 Set up recording systems, following organisational requirements, that detail work progress checks and the tunnelling defects and problems, corrective action taken and quantities involved of the following resources:
- people
 - plant, equipment or machinery
 - materials and components
 - sub-contractors
 - information
 - work area and facilities
 - waste management
 - utilities.
- 4.2 Explain how to keep accurate records of work progress by conducting checks for tunnelling defects and problems, corrective actions taken, and quantities involved for the following resources:
- people
 - plant, equipment or machinery
 - materials and components
 - sub-contractors
 - information
 - work area and facilities
 - waste management
 - utilities.
- 4.3 Explain why accurate records of work progress checks, defects, problems, corrective actions taken, and quantities involved are needed.

5 Identify, assess and record the acquisition and maintenance for the necessary resources for tunnelling activities.

5.1 Identify, assess and record the acquisition and maintenance of at least four of the following resources for at least three of the following tunnelling activities:

Resources:

- people
- plant, equipment or machinery
- materials and components
- sub-contractors
- information
- work area and facilities
- waste management
- utility providers.

Tunnelling activities:

- mobile plant and machinery operations
- back up services installation, operation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

5 continued

5.2 Explain how to identify, assess and record the acquisition and maintenance of the necessary resources for tunnelling activities:

Resources:

- people
- plant, equipment or machinery
- materials and components
- sub-contractors
- information
- work area and facilities
- waste management
- utility providers.

Tunnelling activities:

- mobile plant and machinery operations
- back up services installation, operation, maintenance or removal
- spoil removal
- access equipment erection, maintenance or removal
- pipejacking operations
- micro tunnelling operations
- excavation and installation of supports
- shaft and tunnel construction
- tunnel transport
- spraying concrete lining
- operating separation plant
- temporary works
- lifting loads.

5.3 Explain how resources can be assessed for quality and how to maintain the necessary resources for tunnelling activities.

- 6 Comply with the given contract information when supervising tunnelling activities to carry out the work efficiently to the required specification.
- 6.1 Undertake supervision duties, complying with the given contract information, of the work activities to form tunnels ensuring the that the work is carried out efficiently to the required specification in at least one of the following occupational areas:
- hand miner
 - shaft miner
 - tunnelling machine operator
 - machine tunnelling operative
 - spoil removal equipment operative
 - tunnel services operative
 - tunnel transport operator
 - tunnel fitter's mate
 - tunnel electrician's mate
 - sprayed concrete lining tunnelling operative
 - pipejacking operative
 - micro-tunnelling operative
 - separation plant operative
 - specialist tunnelling occupations.
- 6.2 Explain how to comply with the given contract information to supervise activities to form tunnels ensuring the work is carried out sufficiently to the required specification in the following occupational areas:
- hand miner
 - shaft miner
 - tunnelling machine operator
 - machine tunnelling operative
 - spoil removal equipment operative
 - tunnel services operative
 - tunnel transport operator
 - tunnel fitter's mate
 - tunnel electrician's mate
 - sprayed concrete lining tunnelling operative
 - pipejacking operative
 - micro-tunnelling operative
 - separation plant operative
 - specialist tunnelling occupations.

6 continued

6.3 Describe how to apply safe work practices, procedures and skills, relating to the supervision of the following methods of work and materials used to meet the specification:

- booking in and out of tunnels
- setting out lines and templates for shaft and tunnel excavations
- excavation of tunnels using different methods (by hand, machines, segments, sprayed concrete lining and by pipejacking)
- installing, using and moving permanent tunnel support and service systems
- installing, using, moving and removing temporary tunnel support and service systems
- installing, moving and removing spoil removal systems
- dealing with ground water and de-watering methods
- signalling the movement of loads, vehicles and machinery
- working with tunnel and shaft transport systems
- using hand tools, power tools and equipment
- working at height
- using access equipment
- team work and communication
- needs of other occupations associated with tunnelling.

6.4 Explain why it is important to carry out the work efficiently to the required specification.

Title: Supervising tunnelling activities in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment hours	20

Title: Planning the installation of retrofit works in the workplace

Unit Number: A/651/0465

Learning outcomes

The learner will be able to:

1 Evaluate and implement pre-installation checks to identify technical and procedural risks.

Assessment criteria

The learner can:

- 1.1 Evaluate and implement pre-installation checks to identify technical and procedural risks for at least nine of the following:
- accuracy and completeness of project information
 - building condition
 - health and safety hazards
 - fire safety
 - temporary works
 - protection of existing fabric and services
 - suitability of materials
 - working in and around buildings and their occupants and
 - neighbouring properties
 - environment and ecology including but not limited to
 - safeguarding protected species
 - heritage significance
 - discovery of architectural or archaeological features.
- 1.2 Explain why it is important to evaluate and implement pre-installation checks to identify technical and procedural risks and how to do this.
- 1.3 Explain why it is important to determine accuracy and completeness of project information and how to do this.
- 1.4 Examine the implications of building conditions and common building defects for retrofit works including but not limited to:
- moisture ingress including, but not limited to, damp,
 - salts and causes of dampness, rain penetration, rising
 - damp
 - internal moisture vapour
 - poor indoor air quality
 - inadequate ventilation
 - existing and damaged services
 - structural defects.

1 continued

- 1.5 Evaluate the importance of building condition and repair and maintenance as the first stage in energy efficiency improvements.
- 1.6 Explain any specific health and safety hazards including but not limited to poor ventilation (roof space, inside the property and under floor) and services.
- 1.7 Explain the principles of building design for fire safety and the key components of the building and their implications for retrofit works.
- 1.8 Explain the primary causes of failure to fire safety systems and their potential impact on users and occupants, building safety and each other, including compartmentation.
- 1.9 Explain how to implement temporary works as required during retrofit works.
- 1.10 Give reasons why it is important to explain the Whole Building approach to energy efficiency retrofit comprising building fabric, services, any low zero carbon technologies, renewable technologies and occupant behaviour, and how to do this.
- 1.11 Explain how to identify traditional and protected buildings including the difference in performance characteristics between traditional and modern materials and construction methods with particular reference to the breathability and permeability characteristics of traditional building fabric.
- 1.12 Explain how to identify building fabric, building structure, materials and construction methods for buildings of different ages including alterations and additions.
- 1.13 Judge the proposed materials to ensure that they are both suitable and in sufficient quantity to achieve the design outcomes.
- 1.14 Explain how to work in and around buildings and their occupants including neighbouring properties and site constraints.
- 1.15 Measure the potential environmental and ecological impacts of retrofit works and how to respond including but not limited to safeguarding protected species.

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| 1 | continued | <p>1.16 Explain key terms and concepts including but not limited to:</p> <ul style="list-style-type: none"> - heritage values - heritage significance - heritage impact assessment - conservation principles - sustainable development - management of traditional and historic buildings and structures. <p>1.17 Explain the legislation and official guidance including but not limited to heritage, traditional and protected buildings.</p> <p>1.18 Explain why it is important to report the discovery of architectural or archaeological features to relevant stakeholders, and how to do this.</p> |
| 2 | Implement external and internal pre-installation building inspections and record and report the findings to stakeholders. | <p>2.1 Implement external and internal pre-installation building inspections, and record and report findings to relevant stakeholders to include:</p> <ul style="list-style-type: none"> - suitable access - property suitability - adjoining structures - structural integrity - hazardous materials - dampness - decay - exposure ratings - combustion appliances, flues and ventilation - services (gas, electric, water, media cables). <p>2.2 Explain why implementation of external and internal pre-installation building inspections, recording findings and reporting them to the relevant stakeholders is required.</p> |

- 2 continued
- 2.3 Explain how to implement external and internal pre-installation building inspections and record and report to stakeholders for the following:
- suitable access
 - property suitability
 - adjoining structures
 - structural integrity
 - hazardous materials
 - dampness
 - decay
 - exposure ratings
 - combustion appliances, flues and ventilation
 - services (gas, electric, water, media cables)
 - invasive species.
- 2.4 Explain how to identify, assess and respond to hazards including hazardous materials, fire safety and flues and ventilation (incorrectly installed, blocked, damaged and insufficient).
- 3 Implement and record suitable and sufficient control measures to mitigate risks arising from external and internal pre-installation building inspections.
- 3.1 Implement and record suitable and sufficient control measures to mitigate risks arising from external and internal pre-installation building inspections to include:
- suitable access
 - property suitability
 - adjoining structures
 - structural integrity
 - hazardous materials
 - dampness
 - decay
 - exposure ratings
 - combustion appliances, flues and ventilation
 - services (gas, electric, water, media cables).
- 3.2 Explain why implementation and recording of suitable and sufficient control measures to mitigate risks arising from external and internal pre-installation building inspections is required.

- 3 continued
- 3.3 Explain how to implement and record suitable and sufficient control measures to mitigate risks arising from external and internal pre-installation building inspections for the following:
- suitable access
 - property suitability
 - adjoining structures
 - structural integrity
 - hazardous materials
 - dampness
 - decay
 - exposure ratings
 - combustion appliances, flues and ventilation
 - services (gas, electric, water, media cables)
 - invasive species.
- 3.4 Explain how to report and record the key issues from external and internal pre-installation building inspections that may affect the commencement of the work whilst working within your authority to rectify or suspend works.
- 4 Implement and record suitable and sufficient control measures to mitigate technical and procedural risks.
- 4.1 Implement and record suitable and sufficient control measures to mitigate technical and procedural risks for at least eight of the following:
- accuracy and completeness of project information
 - building condition
 - health and safety hazards
 - fire safety
 - temporary works
 - protection of existing fabric and services
 - suitability of materials
 - working in and around buildings and their occupants
 - and neighbouring properties
 - environment and ecology including but not limited to
 - safeguarding protected species
 - heritage significance
 - discovery of architectural or archaeological features.
- 4.2 Explain why suitable and sufficient control measures to mitigate the technical and procedural risks need to be implemented and recorded.

4.3 Explain how to determine, implement and record suitable and sufficient control measures to mitigate the technical and procedural risks for the following:

- accuracy and completeness of project information
- building condition
- health and safety hazards
- fire safety
- temporary works
- protection of existing fabric and services
- suitability of materials
- working in and around buildings and their occupants and
- neighbouring properties
- environment and ecology including but not limited to
- safeguarding protected species
- heritage significance
- discovery of architectural and archaeological features.

4.4 Explain how to use due diligence to apply the principles and intent of fire safety legislation and guidance relating to the retrofit design, construction, management and use of the building.

4.5 Examine the issues relating to the control of work onsite interpreting any statutory or manufacturers requirements for testing and maintaining fire prevention and protection systems and records.

4.6 Measure the principles and benefits of effective fire risk management and the required mitigation measures to deliver safe buildings.

4.7 Explain how to recognise, record and report the key issues from technical and procedural risks that may affect the commencement of the work whilst working within your authority to rectify or suspend works.

- 5 Identify, review and confirm information sources against the retrofit works plans.
- 5.1 Identify, review and confirm information sources against on site conditions to contribute to the retrofit works plan, risk assessments and method statements for at least six of the following:
- drawings, design and specification information
 - building performance criteria to industry standards
 - manufacturers technical information and product data sheets
 - sub-contractor methods and scope of works
 - surveys
 - tests
 - examinations
 - specialist reports
 - statutory consents
 - current legislation, official and technical guidance
 - written scheme of investigation (WSI) for archaeology.
- 5.2 Explain why identification and review of information sources against on-site conditions to contribute to the retrofit works plan, risk assessments and method statements are required for the following:
- drawings, design and specification information
 - building performance criteria to industry standards
 - manufacturers' technical information and product data sheets
 - sub-contractor methods and scope of works
 - surveys
 - tests
 - examinations
 - specialist reports
 - statutory consents
 - current legislation, official and technical guidance
 - written scheme of investigation (WSI) for archaeology.

5 continued

- 5.3 Explain how to identify and review information sources against on site conditions to contribute to the retrofit works plan, risk assessments and method statements for the following:
- drawings, design and specification information
 - building performance criteria to industry standards
 - manufacturers' technical information and product data sheets
 - sub-contractor methods and scope of works
 - surveys
 - tests
 - examinations
 - specialist reports
 - statutory consents
 - current legislation, official and technical guidance
 - written scheme of investigation (WSI) for archaeology.
- 5.4 Explain why it is important to comply with relevant legal duties and fire safety standards during the construction phase of retrofit works, and how to do this.
- 5.5 Explain why documented information for fire safety including advising and sharing information with end-users and relevant stakeholders is required.
- 5.6 Evaluate the range of energy assessment tools used for both domestic and non-domestic buildings.
- 5.7 Examine the range of hygrothermal assessment tools for both domestic and non-domestic buildings.
- 5.8 Analyse the sources of heat loss and heat gains.
- 5.9 Explain heat loss through fabric, U values and calculations and thermal bridging.
- 5.10 Explain the differences between one off, incremental and whole building retrofit plans.
- 5.11 Explain how to review low carbon improvement plans.

- 6 Record and report issues with the planned retrofit works and recommend corrective actions.
- 6.1 Report and record issues with the planned retrofit works and recommend corrective actions for at least seven of the following information sources:
- risk assessments
 - method statements
 - drawings, design and specification information
 - building performance criteria to industry standards
 - manufacturers technical information and product data sheets
 - sub-contractor methods and scope of works
 - surveys
 - tests
 - examinations
 - specialist reports
 - statutory consents
 - current legislation, official and technical guidance
 - the limitations, defects of the materials and their characteristics
 - written scheme of investigation (WSI) for archaeology.
- 6.2 Explain why it is important and how to report issues with planned retrofit works and suggest corrective actions for the following:
- risk assessments
 - method statements
 - drawings, design and specification information
 - building performance criteria to industry standards
 - manufacturers' technical information and product data sheets
 - sub-contractor methods and scope of works
 - surveys
 - tests
 - examinations
 - specialist reports
 - statutory consents
 - current legislation, official and technical guidance
 - the limitations, defects of the materials and their characteristics
 - written scheme of investigation (WSI) for archaeology.
- 6.3 Explain the principles and factors affecting the fire safety of users and explain the impact on the building and performance in relation to retrofit works.

- 7 Contribute to the project programme and plan the sequence of works for the installation of retrofit works.
- 7.1 Contribute to the project programme and plan the sequence of works for the installation of retrofit works, including but not limited to:
- repair
 - stabilisation
 - temporary works
 - opening-up and investigations
 - removal of fabric, structure or services, and making good
 - preparing the building for installation of fabric measures
 - installation of fabric, structure or services
 - testing
 - commissioning
 - handover.
- 7.2 Explain why contributing to the project programmes and method statements for working on and around existing buildings and structures are required.
- 7.3 Examine how to contribute to a project programme for working on and around existing buildings and structures.
- 7.4 Explain how to produce method statements for working on and around existing buildings and structures.
- 7.5 Explain why planning the sequence of works for the installation of retrofit works is required.
- 7.6 Explain how to plan the sequence of works for the installation of retrofit works:
- repair
 - stabilisation
 - temporary works
 - opening-up and investigations
 - removal of fabric, structure or services, and making good
 - preparing the building for installation of fabric measures
 - installation of fabric, structure or services
 - testing
 - commissioning
 - handover.

7	continued	7.7	<p>Explain why it is required and how to identify and plan to avoid potential thermal and hygrothermal technical and performance risks of failure through planning and sequencing of works including but not limited to:</p> <ul style="list-style-type: none"> - thermal bridges - ventilation - thermal bypass - condensation and interstitial condensation - alterations in structure including materials, components and the building - moisture movement - optimisation of heating systems.
		7.8	<p>Analyse the implications to planning and sequencing of offsite construction methods and onsite assembly.</p>
8	<p>Plan the efficient use of resources required for retrofit works.</p>	8.1	<p>Plan the efficient use of resources required for retrofit works, including but not limited to:</p> <ul style="list-style-type: none"> - materials and components - services - plant, equipment or machinery - workforce - information - site facilities - waste management - structures - storage of materials within specified parameters.
		8.2	<p>Explain why it is important to plan the efficient use of resources required for retrofit works and how to do this for the following:</p> <ul style="list-style-type: none"> - materials and components - services - plant, equipment or machinery - workforce - information - site facilities - waste management - structures - storage of materials within specified parameters.

8 continued

8.3 Explain how to recognise and determine when specialist skills and knowledge are required and how to resource accordingly including but not limited to:

- electrical
- asbestos
- radon
- heritage
- ecology
- ventilation
- fire safety.

8.4 Explain the principles of due diligence to deliver specialist skills as they apply to obtaining, electing and appointing contractors, selecting suppliers, executing work and record keeping.

Title: Planning the installation of retrofit works 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

60

Assessment hours

10

Title: Managing installation, commissioning and handover of retrofit works in the workplace

Unit Number: D/651/0466

Learning outcomes

The learner will be able to:

1 Observe and apply organisational requirements for the protection of the workforce, sub-contractors, suppliers, consultants, occupants, visitors, the general public and the environment.

Assessment criteria

The learner can:

1.1 Observe and apply organisational requirements appropriate for the protection of the workforce, sub-contractors, suppliers, consultants, occupants, visitors, the general public, and the environment by the application of information relating to:

- methods of work
- risk assessments
- safe use and storage of tools
- safe use and storage of materials and components
- traffic management
- emergency plans
- fire safety
- acoustic and sound insulation
- thermal insulation
- workforce competency
- site constraints.

1.2 Explain which organisational requirements and how they apply to the protection of the workforce, sub-contractors, suppliers, consultants, occupants, visitors, the general public, and the environment in relation to the following:

- methods of work
- risk assessment
- safe use and storage of tools
- safe use and storage of materials and components
- traffic management
- emergency plans
- fire safety
- acoustic and sound insulation
- thermal insulation
- workforce competency
- site constraints.

2 Manage the implementation of the retrofit plan ensuring effective and efficient working practices for a given occupational area.

2.1 Manage the implementation of the retrofit plan ensuring effective and efficient working practices compliant with design and quality standards, for a given occupational area.

2	continued	2.2	Explain why it is important to manage the implementation of the retrofit plan ensuring effective and efficient working practices that are compliant with design and quality standards for a given occupational area and describe how to do this.
		2.3	Explain why it is required, and how to ensure operatives undertaking the installation, commissioning and handover are qualified to do so for a given occupational area.
3	Review and record works progress against the project programme.	3.1	Review and record works progress against the project programme, resources and planned sequencing of works.
		3.2	Recommend and take corrective action when required to maintain the works progress.
		3.3	Explain why reviewing, recording and reporting works progress against the project programme, resources and planned sequencing of works is required.
		3.4	Explain how to review, record and report on works progress against the project programme, resources and planned sequencing of works.
		3.5	Recognise when and how to recommend and take corrective action.
		3.6	Identify and explain potential risks of failure and mitigate through planning, accuracy, dimensional control and sequencing of work, including but not limited to: <ul style="list-style-type: none"> - technical and performance risks: <ul style="list-style-type: none"> ○ thermal bridges ○ heating ○ ventilation ○ thermal bypass ○ condensation and interstitial condensation ○ alterations in structure ○ moisture movement ○ fire safety ○ acoustic and sound insulation - inefficiencies - additional costs - delays to programme - abortive works - duplication - damage - latent defects.

4	Recognise and report defects in installation.	4.1	Recognise and report defects in installation, with specific reference to six of the following: <ul style="list-style-type: none"> - gaps in installation - missing and inappropriate fixings - detailing at corners, edges, junctions and openings - interaction with building services - combustion appliances, flues and ventilation - fire safety - acoustic and sound insulation - thermal bypass and thermal bridges - loading.
		4.2	Explain how to recognise defects in installation with specific reference to: <ul style="list-style-type: none"> - gaps in installation - missing and inappropriate fixings - detailing at corners, edges, junctions and openings - interaction with building services - combustion appliances, flues and ventilation - fire safety - acoustic and sound insulation - thermal bypass and thermal bridges - loading.
		4.3	Explain how and when to propose suitable corrective action for any defects in installation.
5	Record and report that ventilation is not compromised and complies with all relevant standards.	5.1	Record and report that ventilation is not compromised and complies with all relevant standards for the following: <ul style="list-style-type: none"> - gas and other combustion appliances - flues - general ventilation.
		5.2	Explain and summarise why it is important to check, record and report that ventilation is not compromised and the importance of complying with all relevant standards for the following: <ul style="list-style-type: none"> - gas and other combustion appliances - flues - general ventilation.
		5.3	Interpret and describe how to check, record and report that ventilation is not compromised and explain how to comply with all relevant standards.

- 6 Check and record that the retrofit works conform to quality, standards and compliance with the retrofit design.
- 6.1 Check and record that the retrofit works conform to quality, standards and compliance with the retrofit design and manufacturers' instructions, throughout the installation process, for at least fourteen of the following:
- alterations to the structure
 - loadings
 - fixings
 - corners, junctions and edges of building elements
 - interfaces between the building fabric, services and the
 - occupants
 - windows and doors including reveals, sills and soffits
 - thermal bypass
 - thermal bridges
 - air tightness
 - vapour barriers
 - moisture movement
 - moisture ingress
 - condensation risks
 - rainwater goods
 - mechanical, electrical and plumbing (MEP)
 - fire safety
 - acoustic and sound insulation.
- 6.2 Explain why it is required to carry out specified checks of the retrofit works during installation and record the works conform to:
- quality
 - standards
 - manufacturers' instructions, technical information
 - and product data sheets
 - retrofit design.

6 continued

6.3 Explain how to check and record installation of works for quality, standards and compliance with the retrofit design, and manufacturers' instructions for the following:

- alterations to the structure
- loadings
- fixings
- corners, junctions and edges of building elements
- interfaces between the building fabric, services and the occupants
- windows and doors including reveals, sills and soffits
- thermal bypass
- thermal bridges
- air tightness
- vapour barriers
- moisture movement
- moisture ingress
- condensation and interstitial condensation risks
- rainwater goods
- mechanical, electrical and plumbing (MEP)
- fire safety
- acoustic and sound insulation.

6.4 Explain the potential risks and implications of non-compliance and poor quality installations over time for active and passive fire safety measures.

6.5 Recognise the principles of a building as a system and its component parts and explain the importance of identifying standards and the consequences of failure to follow organisational requirements.

6.6 Analyse the potential risks and implications of non-compliance and poor quality installations over time including but not limited to:

- occupant health and safety
- indoor air quality
- mould
- performance gaps
- rot
- building fabric decay
- overheating.

6.7 Describe the importance of maintaining ventilation.

6	continued	<p>6.8 Explain how to recognise ventilation and air movement pathways through buildings and why it is important that these are maintained, whilst balancing the need for airtightness.</p> <p>6.9 Explain how to recognise the different properties of insulation materials and how these relate to thermal, moisture, condensation, acoustic and sound and fire safety.</p> <p>6.10 Compare the different types of air and vapour control layers and breather membranes, where and how they should be used, and explain why it is important to install them correctly.</p> <p>6.11 Examine the importance of ensuring the integrity of air and vapour control layers and breather membranes following installation and the need to ensure continuity.</p> <p>6.12 Explain how condensation forms in buildings, how this relates to moisture and moisture movement and describe what steps can be taken to mitigate potential risks.</p> <p>6.13 Explain why a 'Whole Building' approach is taken to retrofit works and how this relates to building performance and building use.</p>
7	Recommend, record and implement corrective actions when required.	<p>7.1 Recommend, record and implement corrective actions when required for at least fourteen of the following:</p> <ul style="list-style-type: none"> - alterations to the structure - loadings - fixings - corners, junctions and edges of building elements - interfaces between the building fabric, services and the - occupants - windows and doors including reveals, sills and soffits - thermal bypass - thermal bridges - air tightness - vapour barriers - moisture movement - moisture ingress - condensation risks - rainwater goods - mechanical, electrical and plumbing (MEP) - combustion appliances, flues and ventilation - fire safety - acoustic and sound insulation.

7	continued	7.2	<p>Interpret and explain how and when to recommend, record and implement corrective actions for the following:</p> <ul style="list-style-type: none"> - alterations to the structure - loadings - fixings - corners, junctions and edges of building elements - interfaces between the building fabric, services and the - occupants - windows and doors including reveals, sills and soffits - thermal bypass - thermal bridges - air tightness - vapour barriers - moisture movement - moisture ingress - condensation and interstitial condensation risks - rainwater goods - mechanical, electrical and plumbing (MEP) - combustion appliances, flues and ventilation - fire safety - acoustic and sound insulation.
8	Manage the scheduling and coordination of inspection, testing and commissioning for retrofit works.	8.1	Manage the scheduling and coordination of the inspection, testing and commissioning and record the outcomes of retrofit works.
		8.2	Explain why managing the scheduling and coordination of the inspection testing and commissioning for retrofit works is required.
		8.3	Explain how to manage the scheduling and coordination of the inspection testing and commissioning for retrofit works.
		8.4	Explain why it is required and how to record outcomes for retrofit works, services and fabric.

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| 8 | continued | <p>8.5 Examine the range of non-destructive testing and investigation methods including but not limited to:</p> <ul style="list-style-type: none"> - thermal imaging - moisture content of building fabric - air tightness for building envelope and identifying air - filtration and air leakage points - energy use of buildings from meters and sub-meters - for individual systems - sound insulation testing - borescope testing. <p>8.6 Discuss the scheduling of the stages of commissioning including but not limited to:</p> <ul style="list-style-type: none"> - setting-to-work - regulation - performance optimisation - recording - post-commissioning checks - fine tuning during occupancy. <p>8.7 Explain why the final commissioning of all building services is done together, rather than separately.</p> |
| 9 | Recommend, record and implement any required corrective actions for retrofit works. | <p>9.1 Recommend, record and implement any required corrective actions for retrofit works following commissioning including but not limited to two of the following:</p> <ul style="list-style-type: none"> - ventilation - combustion appliances - heat recovery devices - heating systems - hot water systems - lighting fittings - systems and controls - insulation - draught proofing - windows and doors - solar blinds, shutter and shading devices - renewable energy installations - fire safety - acoustic and sound insulation. <p>9.2 Explain why recommending, recording and implementing corrective actions is required following commissioning.</p> |

9	continued	9.3	Explain how to recommend, record and implement corrective actions following commissioning.
10	Manage the project handover on completion of retrofit works.	10.1	Manage the project handover on completion of the installation of retrofit works.
		10.2	Explain why it is important to manage the project handover on completion of the installation, and how to do this.
		10.3	Justify why monitoring and evaluation of the project handover is required.
		10.4	Explain how to manage the project handover in accordance with the 'handover strategy' and the requirements of the relevant certification schemes.
		10.5	Explain how to gather, record, analyse and interpret information.
		10.6	Explain how to convey the following information about the installed measures: <ul style="list-style-type: none"> - physical inspection and explanation of function and operation - demonstrate the safe operation of any components, - devices and controls - visual checks to ensure the recipient is able to operate the components, devices and controls - care needed to avoid detrimental effects - maintenance, including requirements to comply with - guarantees and warranties - efficient operation to facilitate the delivery of intended reduction in energy use - importance of ventilation - post completion services - provision of documentation including end-user advice information.

- 10.7 Choose how to present information and recommendations for any remedial actions or changes to the retrofit process required, to relevant stakeholders including, but not limited to:
- clients
 - designers and contract administrators
 - installers and contractors
 - end-users
 - external enforcement and quality assurance bodies
 - funding organisations
 - guarantee or warranty providers.
- 10.8 Explain how to ensure operatives undertaking the handover are vocationally competent to do so and have access to adequate knowledge of the measures and the behaviours required for their safe, efficient and effective operation and maintenance.
- 10.9 Explain when to undertake the handover procedure, including a phased handover.
- 10.10 Explain when basic, intermediate and advanced levels of monitoring and evaluation are required and what information is required for each.
- 10.11 Explain timescales for completing and reporting different levels of monitoring and evaluation.
- 10.12 Establish who the recipients of the handover process are.
- 10.13 Distinguish which stakeholders require copies of the following documentation:
- test certificates and commissioning records
 - operation and maintenance instructions and manuals
 - warranty and guarantee certificates
 - as constructed plans.

Title: Managing installation, commissioning and handover of retrofit works in the workplace

Additional information about this unit

Assessment Guidance	<p>This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment</p> <p>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.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Sector Subject Area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60
Assessment hours	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