edexcel

Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability)

Specification

NVQ/competence-based qualifications

First registration September 2012

Issue 2

Pearson

Edexcel, BTEC and LCCI qualifications

Edexcel, BTEC and LCCI qualifications are awarded by Pearson, the UK's largest awarding body offering academic and vocational qualifications that are globally recognised and benchmarked. For further information, please visit our qualifications website at qualifications.pearson.com. Alternatively, you can get in touch with us using the details on our contact us page at qualifications.pearson.com/contactus

About Pearson

Pearson is the world's leading learning company, with 35,000 employees in more than 70 countries working to help people of all ages to make measurable progress in their lives through learning. We put the learner at the centre of everything we do, because wherever learning flourishes, so do people. Find out more about how we can help you and your learners at qualifications.pearson.com

This qualification has been developed with Leeds College of Building and we would like to thank the following partners and the professional institutions and numerous large and small built environment employers for their support with the development:

Bradford College

ConstructionSkills

Grimsby College

Highbury College

Leicester College

Moulton College

National Apprenticeship Service

New College Nottingham

Oldham College

Skills Funding Agency

SummitSkills

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

This qualification was previously known as:

Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability) (QCF)

The QN remains the same.

References to third party material made in this specification are made in good faith. Pearson does not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

All information in this specification is correct at time of going to publication.

ISBN 9781446953471

Summary of Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability) specification Issue 2 changes

Summary of changes made between previous issue and this current issue	Page number
All references to QCF have been removed throughout the specification	
Definition of TQT added	1
Definition of sizes of qualifications aligned to TQT	2
TQT value added	
Guided learning definition updated	
QCF references removed from unit titles and unit levels in all units	

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

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

Contents

Introducing Pearson Edexcel NVQ qualifications

What are NVQ qualifications?

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

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

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

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

Sizes of NVQ/Competence-based qualifications

For all regulated qualifications, Pearson specify a total number of hours that is estimated learners will require to complete and show achievement for the qualification – this is the Total Qualification Time (TQT). The TQT value indicates the size of a qualification.
Within the TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve tutors and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.
In addition to guided learning, other required learning directed by tutors or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.
As well as TQT and GLH, qualifications can also have a credit value – equal to one tenth of TQT, rounded to the nearest whole number.
TQT and credit values are assigned after consultation with users of the qualifications.

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

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

Qualification title covered by this specification

This specification gives you the information you need to offer the Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability):

Qualification title	Qualification Number (QN)	Accreditation start date
Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability)	600/5985/0	01/07/2012

Qualifications eligible and funded for post-16-year-olds can be found on the funding Hub. The Skills Funding Agency also publishes a funding catalogue that lists the qualifications available for 19+ funding.

You should use the Qualification Number (QN), when you wish to seek public funding for your learners. Each unit within a qualification will also have a unique unit reference number, which is listed in this specification.

The qualification title and unit reference numbers will appear on the learners' final certification document. Learners need to be made aware of this when they are recruited by the centre and registered with Pearson.

Key features of the Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability)

This qualification is:

- nationally recognised
- based on the ConstructionSkills National Occupational Standards (NOS). The NOS and the qualification structure are owned by ConstructionSkills.

The Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability) has been approved as a component for the Higher Level Apprenticeship Framework in Sustainable Built Environment Level 5.

What is the purpose of this qualification?

This qualification is appropriate for employees in the construction and the built environment sector working across a broad range of areas. It is designed to assess occupational competence in the workplace where learners are required to demonstrate skills and knowledge to a level required in the construction industry.

Who is this qualification for?

This qualification is for all learners aged 18 and above who are capable of reaching the required standards.

Pearson's policy is that the qualification should:

- be free from any barriers that restrict access and progression
- ensure equality of opportunity for all wishing to access the qualification.

The new Higher Level Apprenticeship (HLA) in Sustainable Built Environment will be extremely dynamic in nature and will allow all delivery partners to clearly evidence modern methods of design, construction and maintenance of the built environment in action.

Employees working in the built environment at supervisory or technician level will be able to demonstrate their skills and knowledge in the workplace through the **Pearson Edexcel Level 5 NVQ Diploma in Construction Management (Sustainability)** while at the same time extend their learning at college or university through the:

- **Pearson BTEC Level 5 HND Diploma in Construction and the Built Environment** or
- **Pearson BTEC Level 5 HND Diploma in Construction and the Built Environment (Building Services Engineering)** or
- **Pearson BTEC Level 5 HND Diploma in Construction and the Built Environment (Civil Engineering).**

What are the benefits of this qualification to the learner and employer?

This qualification allows learners to demonstrate competence against National Occupational Standards (NOS), which are based on the needs of the Construction industry as defined by ConstructionSkills, the Sector Skills Council. The qualification contributes to the development of skilled labour in the sector. Earning whilst learning is clearly a phrase that is appropriate to the Higher Level Apprenticeships, with learning at college and in the workplace. Being a member of a team, or learning to use initiative in Real-life situations will be part of the personal and professional development associated with the programme. Learners will carry out fieldwork in a number of subjects and take part in guided site visits to some of the top projects in the country. They will also work in groups to develop their own team skills on new projects, taking a scheme from inception and feasibility through a full project lifecycle.

What are the potential job roles for those working towards this qualification? Career pathways include:

Architectural technology
Building services engineering
Building surveying
Civil engineering
Contracts management
Environment management
Estimating
Health and safety management
Project management
Quantity surveying
Site management
Site engineering
Structural engineering

What progression opportunities are available to learners who achieve this qualification?

This qualification allows learners to demonstrate competence in construction management (sustainability) at a level required by the construction and the built environment industry. Learners can progress across the level and size of the construction and the built environment competence and knowledge qualifications and to other occupational areas such as team leading and management.

Progression from this qualification could be within employment in the construction and built environment sector, to degree programmes. Learners can also progress to progression to professional body membership where they can work towards membership of Chartered Institute of Architectural Technologists (CIAT), the Chartered Institute of Building (CIOB), the Royal Institution of Chartered Surveyors (RICS), the Chartered Institution of Building Services Engineers (CIBSE), the Chartered Institution of Highways and Transportation (CIHT), the Institution of Civil Engineers (ICE), the Institute of Highway Engineers (IHE) and the Institution of Structural Engineers (IStructE) or other relevant professional bodies.

What is the qualification structure for the Level 5 NVQ Diploma in Construction Management (Sustainability)?

Rules of combination

A minimum of 64 credits is required overall for completion of this qualification, which must include a minimum of 39 credits at, or above, Level 5. The mandatory core units for this qualification are made up of 28 credits at Level 5 and 10 credits at Level 4.

Learners must select one of three pathways: Construction and the Built Environment (CBE Pathway), Civil Engineering (CE Pathway) or Building Services Environment (BSE Pathway) and take at least one unit from their pathway.

Learners may select the remaining credits from EITHER their selected pathway, or from the Optional Units group or from a combination of their selected pathway and the Optional Units group.

Individual units can be found in the *Units* section. The level and credit value are given on the first page of each unit.

Qualification structure

Pearson Edexcel Level 5 Diploma in Construction Management (Sustainability)

The Total Qualification Time (TQT) for this qualification is 640.

The Guided Learning Hours for this qualification are 293.

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

Minimum number of credits that **must** be achieved	**64**
Minimum number of credits that **must** be achieved at level **5** or above	**39**

Mandatory Units Group

Learners must complete all five units for a total of 38 credits.

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
1	M/600/9712	Manage the Environmental Impact of Work Activities	4	5	10
2	T/504/1065	Maintaining Health, Safety and Welfare Systems in Construction and the Built Environment	5	10	40
3	Y/504/1088	Developing Working Relationships in Construction and the Built Environment	5	8	30
4	H/600/9609	Ensure Compliance with Legal, Regulatory, Ethical and Social Requirements	4	5	25
5	J/504/1104	Monitoring Environmental Factors and Sustainability in Construction and the Built Environment	5	10	40

Mandatory Pathway Units Group

This group consists of three pathways: Construction and the Built Environment (CBE Pathway), Civil Engineering (CE Pathway) and Building Services Engineering (BSE Pathway). Learners must decide on a pathway and take at least one unit from their pathway.
Learners MUST achieve the remaining credits from EITHER their selected pathway, or from the Optional Units Group or from a combination of their selected pathway and the Optional Units Group.

Construction and the Built Environment (CBE Pathway)

Learners selecting this pathway **MUST achieve at least one unit** from the **Mandatory CBE Pathway Group**.

Learners MUST achieve the remaining credits from EITHER:

1. The **Mandatory CBE Pathway Group** OR

2 the **Optional Units Group** OR

3. a combination of the **Mandatory CBE Pathway Group** and the **Optional Units group.**

Mandatory CBE Pathway Group

1. Learners MUST achieve at least one unit from this group.

2 Learners MAY achieve their remaining credits form this group.

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
13	K/504/1094	Managing Performance in Construction and the Built Environment	5	12	30
15	T/504/1096	Preparing and Evaluating Supply Chain Tenders in Construction	5	12	48
16	F/504/1098	Surveying in Construction and the Built Environment	5	12	48
17	J/504/1099	Developing Detailed Project Designs in Construction and the Built Environment	5	12	60
18	M/504/1100	Work Scheduling and Procurement in Construction and the Built Environment	5	12	30
20	A/504/1102	Contract Valuations and Claims in Construction and the Built Environment	5	12	50
21	A/600/9616	Establish Risk Management Processes for an Organisation	5	6	30
22	F/504/1103	Planning Conservation Activities in Construction and the Built Environment	5	12	30

Optional Units Group **Learners MAY take their remaining credits from this group or from a combination of this group and Mandatory CBE Pathway Group.**					
Unit Number	**Unit Reference Number**	**Unit title**	**Level**	**Credit**	**Guided Learning Hours**
6	Y/504/1091	Providing Built Environment Related Customer Service in the Workplace	5	8	20
7	H/504/1093	Innovation in Sustainable Construction	5	10	40
8	J/600/9800	Conduct a Quality Audit	6	6	30
9	K/600/9711	Manage Physical Resources	4	3	25
10	T/600/9632	Promote Equality of Opportunity, Diversity and Inclusion Across an Organisation	5	6	30
11	J/600/9702	Promote the Use of Technology Within an Organisation	5	6	30
12	M/600/9614	Support the Culture of an Organisation	6	5	30
14	M/504/1095	Formulating Project Requirements in Construction and the Built Environment	5	12	60
19	T/504/1101	Optimising the Supply Chain in Construction and the Built Environment	5	12	60
23	D/504/1089	Chairing Meetings in the Built Environment	5	8	20
24	L/504/1105	Monitoring Projects in Construction and the Built Environment	5	12	50
28	H/504/1109	Managing Tests in Construction and the Built Environment	5	14	48
32	J/600/9750	Plan and Manage a Project	4	8	30
33	H/600/9738	Manage a Tendering Process	4	4	20

34	A/504/1116	Using Specialist Software in Construction and the Built Environment	5	12	30

Civil Engineering (CE Pathway)
Learners selecting this pathway **MUST achieve at least one unit** from the **Mandatory CE Pathway Group**. **Learners MUST achieve the remaining credits from EITHER:** **1.** The **Mandatory CE Pathway Group** OR **2** the **Optional Units Group** OR **3**. a combination of the **Mandatory CBE Pathway Group** and the **Optional Units group.**
Mandatory CE Pathway Group **1. Learners MUST achieve at least one unit from this group.** 2 Learners MAY achieve their remaining credits form this group.

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
25	R/504/1106	Managing Engineering Project Resources	5	12	48
26	Y/504/1107	Highway Maintenance Activities	5	12	60
27	D/504/1108	Designing Engineering Solutions for the Built Environment	5	12	45

Optional Units Group **Learners MAY take their remaining credits from this group or from a combination of this group and Mandatory CE Pathway Group**					
Unit Number	**Unit Reference Number**	**Unit title**	**Level**	**Credit**	**Guided Learning Hours**
6	Y/504/1091	Providing Built Environment Related Customer Service in the Workplace	5	8	20
7	H/504/1093	Innovation in Sustainable Construction	5	10	40
8	J/600/9800	Conduct a Quality Audit	6	6	30
9	K/600/9711	Manage Physical Resources	4	3	25
10	T/600/9632	Promote Equality of Opportunity, Diversity and Inclusion Across an Organisation	5	6	30
11	J/600/9702	Promote the Use of Technology Within an Organisation	5	6	30
12	M/600/9614	Support the Culture of an Organisation	6	5	30
13	K/504/1094	Managing Performance in Construction and the Built Environment	5	12	30
14	M/504/1095	Formulating Project Requirements in Construction and the Built Environment	5	12	60
15	T/504/1096	Preparing and Evaluating Supply Chain Tenders in Construction	5	12	48
16	F/504/1098	Surveying in Construction and the Built Environment	5	12	48
17	J/504/1099	Developing Detailed Project Designs in Construction and the Built Environment	5	12	60

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
18	M/504/1100	Work Scheduling and Procurement in Construction and the Built Environment	5	12	30
19	T/504/1101	Optimising the Supply Chain in Construction and the Built Environment	5	12	60
20	A/504/1102	Contract Valuations and Claims in Construction and the Built Environment	5	12	50
21	A/600/9616	Establish Risk Management Processes for an Organisation	5	6	30
22	F/504/1103	Planning Conservation Activities in Construction and the Built Environment	5	12	30
23	D/504/1089	Chairing Meetings in the Built Environment	5	8	20
24	L/504/1105	Monitoring Projects in Construction and the Built Environment	5	12	50
28	H/504/1109	Managing Tests in Construction and the Built Environment	5	14	48
32	J/600/9750	Plan and Manage a Project	4	8	30
33	H/600/9738	Manage a Tendering Process	4	4	20
34	A/504/1116	Using Specialist Software in Construction and the Built Environment	5	12	30

Building Services Engineering (BSE Pathway)

Learners selecting this pathway **MUST achieve at least one unit** from the **Mandatory BSE Pathway Group**.

Learners MUST achieve the remaining credits from EITHER:

1. The **Mandatory BSE Pathway Group** OR

2 the **Optional Units Group** OR

3. a combination of the **Mandatory BSE Pathway Group** and the **Optional Units group.**

Mandatory BSE Pathway Group

1. Learners MUST achieve at least one unit from this group.

2 Learners MAY achieve their remaining credits form this group.

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
29	D/504/1111	Designing Sustainable Building Services Engineering Systems	5	12	30
30	H/504/1112	Commissioning Building Services Engineering Systems	5	14	48
31	M/504/1114	Analysing and Monitoring Building Services Engineering Controls	5	12	40

Optional Units Group

Learners MAY take their remaining credits from this group or from a combination of this group and Mandatory BSE Pathway Group

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
6	Y/504/1091	Providing Built Environment Related Customer Service in the Workplace	5	8	20
7	H/504/1093	Innovation in Sustainable Construction	5	10	40
8	J/600/9800	Conduct a Quality Audit	6	6	30

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
9	K/600/9711	Manage Physical Resources	4	3	25
10	T/600/9632	Promote Equality of Opportunity, Diversity and Inclusion Across an Organisation	5	6	30
11	J/600/9702	Promote the Use of Technology Within an Organisation	5	6	30
12	M/600/9614	Support the Culture of an Organisation	6	5	30
13	K/504/1094	Managing Performance in Construction and the Built Environment	5	12	30
14	M/504/1095	Formulating Project Requirements in Construction and the Built environment	5	12	60
15	T/504/1096	Preparing and Evaluating Supply Chain Tenders in Construction	5	12	48
16	F/504/1098	Surveying in Construction and the Built Environment	5	12	48
17	J/504/1099	Developing Detailed Project Designs in Construction and the Built Environment	5	12	60
18	M/504/1100	Work Scheduling and Procurement in Construction and the Built Environment	5	12	30
19	T/504/1101	Optimising the Supply Chain in Construction and the Built Environment	5	12	60
20	A/504/1102	Contract Valuations and Claims in Construction and the Built Environment	5	12	50

Unit Number	Unit Reference Number	Unit title	Level	Credit	Guided Learning Hours
21	A/600/9616	Establish Risk Management Processes for an Organisation	5	6	30
22	F/504/1103	Planning Conservation Activities in Construction and the Built Environment	5	12	30
23	D/504/1089	Chairing Meetings in the Built Environment	5	8	20
24	L/504/1105	Monitoring Projects in Construction and the Built Environment	5	12	50
28	H/504/1109	Managing Tests in Construction and the Built Environment	5	14	48
32	J/600/9750	Plan and Manage a Project	4	8	30
33	H/600/9738	Manage a Tendering Process	4	4	20
34	A/504/1116	Using Specialist Software in Construction and the Built Environment	5	12	30

How is the qualification graded and assessed?

The overall grade for the qualification is a 'pass'. The learner must achieve all the required units within the specified qualification structure.

To pass a unit the learner must:

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

The qualification is designed to be assessed:

- in the workplace or
- in conditions resembling the workplace, as specified in the assessment requirements/strategy for the sector, or
- as part of a training programme.

Assessment strategy for competence based units

The assessment strategy for the competence units has been included in Annexe D: *Assessment requirements strategy*. It has been developed by ConstructionSkills in partnership with employers, training providers, awarding organisations and the regulatory authorities. The assessment strategy includes details on:

- criteria for defining realistic working environments
- roles and occupational competence of assessors, expert witnesses, internal verifiers and standards verifiers
- quality control of assessment
- evidence requirements.

Evidence of competence may come from:

- **current practice** where evidence is generated from a current job role
- a **programme of development** where evidence comes from assessment opportunities built into a learning/training programme whether at or away from the workplace
- the **Recognition of Prior Learning (RPL)** where a learner can demonstrate that they can meet the assessment criteria within a unit through knowledge, understanding or skills they already possess without undertaking a course of learning. They must submit sufficient, reliable and valid evidence for internal and standards verification purposes. RPL is acceptable for accrediting a unit, several units or a whole qualification
- a **combination** of these.

It is important that the evidence is:

Valid	relevant to the standards for which competence is claimed
Authentic	produced by the learner
Current	sufficiently recent to create confidence that the same skill, understanding or knowledge persist at the time of the claim
Reliable	indicates that the learner can consistently perform at this level
Sufficient	fully meets the requirements of the standards.

Types of evidence

To successfully achieve a unit the learner must gather evidence which shows that they have met the required standard in the assessment criteria. Evidence can take a variety of different forms including the examples below. Centres should refer to the assessment strategy in *Annexe D*, for information about which of the following are permissible.

Centres should also refer to the assessment strategy for competence-based units and the assessment requirements/evidence requirements section in each individual unit.

The different types of evidence are:

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

The abbreviations may be used for cross-referencing purposes.

Learners can use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is, therefore, not necessary for learners to have each assessment criterion assessed separately. Learners should be encouraged to reference the assessment criteria to which the evidence relates.

Evidence must be made available to the assessor, internal verifier and Pearson standards verifier. A range of recording documents is available on the Pearson website: qualifications.pearson.com. Alternatively, centres may develop their own.

Centre recognition and approval

Centre recognition

Centres that have not previously offered Pearson qualifications need to apply for and be granted centre recognition as part of the process for approval to offer individual qualifications. New centres must complete both a centre recognition approval application and a qualification approval application.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by the new qualification and the conditions for automatic approval are met. Centres already holding Pearson approval are able to gain qualification approval for a different level or different sector via Edexcel online.

Approvals agreement

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

Quality assurance

Detailed information on Pearson's quality assurance processes is given in *Annexe A*: *Quality Assurance.*

Quality assurance model for delivery of the qualification within and outside of the Higher Apprenticeship

For the qualification in this specification, the Pearson quality assurance model will be: a twice yearly visit by an NVQ Standards Verifier to sample internal verification and assessor decisions for competence-based units and to review centre-wide quality assurance systems

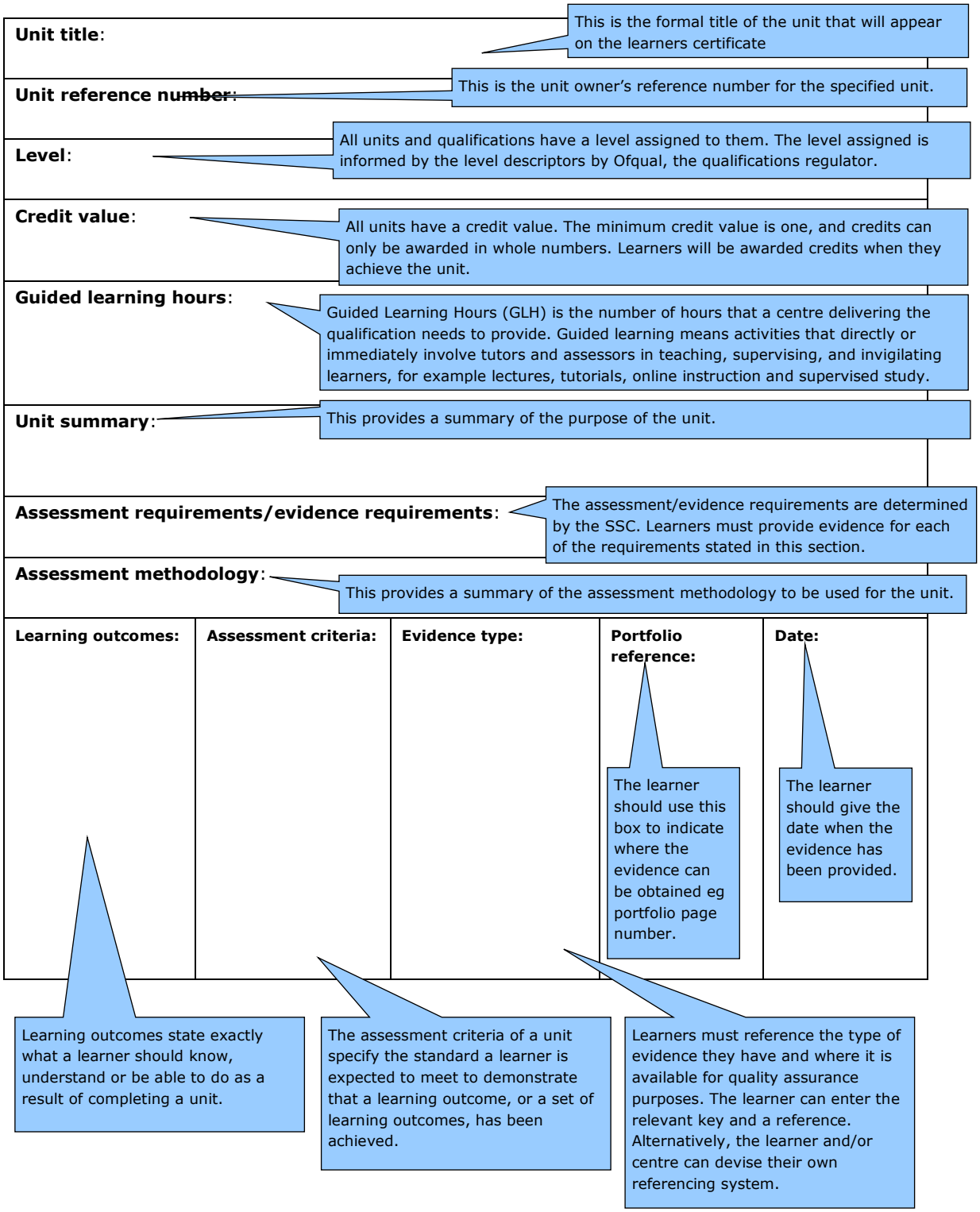
What resources are required?

This qualification is designed to support learners working in the construction sector. Physical resources need to support the delivery of the qualifications and the assessment of the learning outcomes and must be of industry standard.

Centres must meet any specific resource requirements outlined in *Annexe C: Assessment requirements strategy*. Staff assessing the learner must meet the requirements within the overarching assessment strategy for the sector.

Unit format

Each unit in this specification contains the following sections.



Units

Unit 1: Manage the Environmental Impact of Work Activities

Unit reference number: M/600/9712

Level: 4

Credit value: 5

Guided learning hours: 10

Unit summary

This unit will ensure that learners understand how, and are able to assess the environmental impact of their work and operate in such a way as to reduce the impact on the environment.

See *Annexe F:* for details of NOS mappings.

See *Annexe E:* for details of PLTS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the legal requirements and environmental policies that impact on own area of responsibility	1.1	Explain the legal requirements that impact on own area of responsibility			
		1.2	Explain the environmental policies that impact on own area of responsibility			
2	Understand the impact of work activities on the environment and how this can be minimised	2.1	Explain what specialist advice is available to manage the environmental impact of work activities			
		2.2	Explain how to assess the impact of work activities and resources on the environment			
		2.3	Explain how to minimise the environmental impact of work activities			
3	Understand the environmental impact of work activities in own area of responsibility	3.1	Assess the environmental impact of work activities and resource use			
		3.2	Produce a report on the environmental impact of work activities and resource use, with recommendations for improvement			
4	Be able to organise work activities and resource use to minimise environmental impact	4.1	Adapt the use of resources in own area of responsibility to reduce environmental impact			
		4.2	Organise activities in own area of responsibility to reduce environmental impact			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 2: Maintaining Health, Safety and Welfare Systems in Construction and the Built Environment

Unit reference number: T/504/1065

Level: 5

Credit value: 10

Guided learning hours: 40

Unit summary

This unit is about maintaining a positive culture of health, safety and welfare in an eco-friendly work environment. It builds on an understanding of health, safety and welfare systems in construction. Monitoring and reporting health and safety is carried out and this information is used to maintain a safe environment and build on best practice within the organisation. The unit applies to any workplace situation

See *Annexe F:* for details of NOS mappings.

See *Annexe E:* for details of PLTS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand health, safety and welfare systems in construction	1.1 Explain the roles and responsibilities of own organisational personnel in terms of the links between health, safety and welfare 1.2 Compare how the training of workplace personnel in health, safety and welfare fits with company training policy and values 1.3 Explain the systems for managing occupational health in the workplace 1.4 Explain how legislation, statutory requirements, company policy and other guidelines impact on the day to day operations 1.5 Analyse organisational compliance with health, safety and welfare systems and signage			
2 Be able to monitor and report health, safety and welfare system information in the workplace	2.1 Monitor whether safety targets are completed on time, reporting as required 2.2 Collect information on personnel training and competency checks and produce reports in a suitable format 2.3 Report workplace hazards in a suitable format 2.4 Compile information to substantiate risk issues and assist with the removal of risk 2.5 Report matters of non-compliance and ensure corrective action has been initiated 2.6 Classify what the associated penalties are for non-compliance			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Be able to maintain a safe workplace environment	3.1	Carry out supplementary risk assessments in line with company procedures			
		3.2	Produce method statements that manage workplace operational processes and incorporate sustainable/eco-friendly activities			
		3.3	Report on the importance of physical and human resources in maintaining a safe eco-friendly workplace environment			
4	Be able to ensure the best safe working practices	4.1	Demonstrate prompt and clear communication to parties as a result of hazardous or non-compliant situations in the workplace			
		4.2	Demonstrate feedback on the risk assessment outcomes agreeing the method statements with all relevant parties			
		4.3	Analyse the extent to which a health, safety and welfare ethos and culture is embedded into the organisation in line with company policy			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 3: Developing Working Relationships in Construction and the Built Environment

Unit reference number: Y/504/1088

Level: 5

Credit value: 8

Guided learning hours: 30

Unit summary

This unit is about understanding and being able to develop and maintain working relationships with colleagues. The unit builds on this understanding to enable learners to formulate their personal development needs and create and review their own personal development plan.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to develop working relationships	1.1 Discuss how to develop and maintain working relationships which promote goodwill and trust 1.2 Explain how to instruct people about work activities in an appropriate level of detail and with an appropriate degree of urgency 1.3 Explain how to provide guidance and help to people about work activities with sensitivity and encourage questions, requests for clarification and comments 1.4 Discuss how to resolve conflicts and differences of opinion in ways which minimise offence and maintain goodwill, trust and respect			
2 Be able to develop working relationships	2.1 Demonstrate the development of working relationships which promote goodwill and trust 2.2 Demonstrate methods for instructing people about work activities in an appropriate level of detail and with an appropriate degree of urgency 2.3 Follow organisational guidelines to offer help to people about work activities with sensitivity, encouraging questions, requests for clarification and comments 2.4 Determine and apply methods for resolving conflicts and differences of opinion in ways which minimise offence and maintain goodwill, trust and respect			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to undertake personal development in the occupational practice area	3.1 Formulate aims and objectives for carrying out personal development 3.2 Create a development plan for achieving needs in line with organisational requirements 3.3 Carry out activities aimed at achieving identified development needs 3.4 Record and evaluate the effectiveness of development activities 3.5 Record evidence of competence gained that confirms achievement of identified development needs 3.6 Evaluate personal development aims and objectives and update to suit changing circumstances			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 4: Ensure Compliance with Legal, Regulatory, Ethical and Social Requirements

Unit reference number: H/600/9609

Level: 4

Credit value: 5

Guided learning hours: 25

Unit summary

This unit helps learners to maintain compliance with legal, regulatory, ethical and social requirements relating to their own areas of responsibility.

See *Annexe F:* for details of NOS mappings.

See *Annexe E:* for details of PLTS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Be able to monitor the operational compliance of procedures in meeting legal, regulatory, ethical and social requirements	1.1	Monitor the operational compliance of procedures in meeting legal, regulatory, ethical and social requirements			
2	Be able to make recommendations on areas of non-compliance with procedures for legal, regulatory, ethical and social requirements relating to own area of responsibility	2.1	Identify areas of non-compliance with legal, regulatory, ethical and social procedures			
		2.2	Examine reasons for non-compliance with procedures			
		2.3	Make recommendations for corrections to ensure compliance with procedures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 5: Monitoring Environmental Factors and Sustainability in Construction and the Built Environment

Unit reference number: J/504/1104

Level: 5

Credit value: 10

Guided learning hours: 40

Unit summary

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

See *Annexe F:* for details of NOS mappings.

See *Annexe E:* for details of PLTS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the relationship between environmental awareness and sustainability	1.1	Evaluate the factors that make up environmental and sustainability requirements			
		1.2	Discuss why a culture of environmental awareness and support for sustainability in the workforce should be encouraged			
		1.3	Evaluate methods or procedures that encourage workforces to support sustainability and environmental awareness			
2	Understand the significance of environmental factors on projects in construction and the built environment	2.1	Evaluate the impact of work on the environment and recommend corrective measures to eliminate or reduce effects on environmental factors			
3	Be able to monitor environmental factors and sustainability requirements	3.1	Explain methods and techniques of monitoring projects against environmental factors and sustainability requirements			
		3.2	Monitor ongoing project work against agreed environmental factors and sustainability requirements			
		3.3	Evaluate results of monitoring and recommend corrective measures which maintain environmental factors, sustainability requirements and progress of work			
		3.4	Use results of monitoring to make recommendations for good practice to the organisation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to record results of environmental and sustainability monitoring	4.1 Maintain environmental and sustainability monitoring documentation in an agreed format 4.2 Evaluate ways of recording results of environmental and sustainable monitoring			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature:_____ Date: _____
(*if sampled*)

Unit 6: Providing Built Environment-Related Customer Service in the Workplace

Unit reference number: Y/504/1091

Level: 5

Credit value: 8

Guided learning hours: 20

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in providing and monitoring construction-related customer service in the workplace within the relevant sector of industry.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand how to give consistent customer service	1.1	Explain the methods used by the organisation to provide consistent levels of customer service			
		1.2	Assess the extent to which organisational customer service methods meet current legislation and sector guidance			
		1.3	Evaluate the effectiveness of current organisational customer service procedures and systems			
2	Be able to improve customer service systems	1.1	Make recommendations for improving customer service systems within the organisation			
		2.2	Update customer service systems in line with recommendations			
		2.3	Implement updated customer service systems			
		2.4	Evaluate the extent to which the updated systems improve customer service in the organisation.			
3	Be able to resolve customer service issues	3.1	Formulate solutions to. customer service issues			
		3.2	Compile evidence to demonstrate that issues have been resolved			
4	Be able to monitor customers' needs and expectations.	4.1	Gather feedback to determine how current customer service meets the level of service expected by stakeholders			
		4.2	Evaluate the results of customer feedback recommending possible improvements to services			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 7: Innovation in Sustainable Construction

Unit reference number: H/504/1093

Level: 5

Credit value: 10

Guided learning hours: 40

Unit summary

This unit gives the learner an understanding of the importance of sustainable construction and the drive for innovation in all aspects of the industry to achieve this. This unit also gives learners the opportunity to develop an innovative construction proposal.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand innovation in sustainable construction	1.1	Evaluate organisational approaches to innovation in sustainable construction			
		1.2	Evaluate a project proposal in terms of innovation and sustainability			
2	Understand the use of innovative materials for sustainable construction	2.1	Describe the process for the inclusion of innovative materials within the project specification			
		2.2	Evaluate the long-term implications of using innovative materials in a project			
3	Be able to develop innovative proposals in sustainable construction	3.1	Examine the specification for opportunities to use innovative materials in sustainable construction			
		3.2	Develop an innovative proposal to a design brief			
		3.3	Evaluate feedback from all stakeholders to improve the innovation process			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 8: Conduct a Quality Audit

Unit reference number: J/600/9800

Level: 6

Credit value: 6

Guided learning hours: 30

Unit summary

This unit will ensure that learners understand the principles and processes of quality auditing. Learners will be able to report on, evaluate and monitor a quality audit.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand quality audits	1.1 Define the principles, tools and techniques used when undertaking quality audits 1.2 Evaluate the most appropriate method for carrying out a quality audit 1.3 Describe the personal characteristics needed to achieve the objectives of the audit			
2 Be able to carry out a quality audit	2.1 Provide the required period of notice to the auditee, prior to carrying out a quality audit 2.2 Establish the scope and objectives of the audit, and any previous audit history 2.3 Prepare a contingency plan for the quality audit process 2.4 Communicate the audit processes to the auditee, including their role and responsibilities			
	2.5 Identify the audit procedures and highlight the quality processes 2.6 Carry out a quality audit in line with organisational requirements 2.7 Prepare a report on the findings of the quality audit			
3 Be able to communicate results of a quality audit	3.1 Communicate the results of the audit to stakeholders 3.2 Agree corrective action 3.3 Identify any immediate risk to stakeholders and consult with specialists if necessary			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to monitor corrective action	4.1 Monitor the implementation of the corrective action agreed 4.2 Maintain records of the quality audit trail			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 9: Manage Physical Resources

Unit reference number: K/600/9711

Level: 4

Credit value: 3

Guided learning hours: 25

Unit summary

This unit will enable learners to identify, obtain, manage and review the use of physical resources. The unit also ensures learners are able to take the environmental impact of resource use into consideration.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements\strategy.*

Assessment methodology

This unit is assessed using evidence from the workplace, ie observable performance, physical products of work (such as reports, plans, correspondence etc), witness testimony, discussion and questioning etc.

Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand the importance of sustainability when using physical resources.	1.1 Explain the importance of using sustainable resources 1.2 Explain the potential impact of resource use on the environment 1.3 Explain how to use resources effectively and efficiently 1.4 Describe actions one can take to minimise any adverse environmental impact of using physical resources			
2 Be able to identify resource requirements for own area of responsibility.	2.1 Consult with colleagues to identify their planned activities and corresponding resource needs 2.2 Evaluate past resource use to inform expected future demand 2.3 Identify resource requirements for own area of responsibility			
3 Be able to obtain required resources for own area of responsibility.	3.1 Submit a business case to procure required resources 3.2 Review and agree required resources with relevant individuals 3.3 Explain an organisation's processes for procuring agreed resources			

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to monitor and review the quality and usage of resources in own area of responsibility.	4.1 Monitor the quality of resources against required specifications 4.2 Identify differences between actual and planned use of resources and take corrective action 4.3 Analyse the effectiveness and efficiency of resource use in own area of responsibility 4.4 Make recommendations to improve the effectiveness and efficiency of resource use			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 10: Promote Equality of Opportunity, Diversity and Inclusion Across an Organisation

Unit reference number: T/600/9632

Level: 5

Credit value: 6

Guided learning hours: 30

Unit summary

This unit helps learners to promote and implement changes to equality, diversity and inclusion policies and procedures in their own organisation.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed using evidence from the workplace, eg observable performance, physical products of work (such as reports, plans, correspondence etc), witness testimony, discussion and questioning etc.

Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Be able to understand the benefits of an inclusive and diverse workforce	1.1	Examine the benefits of an inclusive and diverse workforce			
2	Be able to understand organisation's responsibilities under equality legislation and relevant codes of practice	2.1	Explain how legislation, equality, diversity, inclusion and relevant codes of practice apply to own organisation			
3	Be able to benchmark equality diversity and inclusion	3.1	Explain how to benchmark to equality, diversity and inclusion in own organisation			
4	Be able to communicate equality, diversity and inclusion policy and procedures.	4.1	Communicate written equality, diversity and inclusion policies and procedures to all relevant stakeholders			
5	Be able to review effectiveness of equality, diversity and inclusion issues	5.1	Analyse effectiveness of policies and procedures for equality, diversity and inclusion issues			
		5.2	Implement any change to the policy and procedures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 11: Promote the Use of Technology Within an Organisation

Unit reference number: J/600/9702

Level: 5

Credit value: 6

Guided learning hours: 30

Unit summary

This unit will ensure that learners are able to develop, implement, monitor and review a technology strategy for an organisation.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed using evidence from the workplace, ie observable performance, physical products of work (such as reports, plans, correspondence etc), witness testimony, discussion and questioning etc.

Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Be able to develop a strategy to promote the use of technology, in line with organisational values and customer needs	1.1	Examine current use of technology in meeting customer needs within an organisation			
		1.2	Identify good practice in the use of technology through benchmarking activities			
		1.3	Assess opportunities to increase productivity through the use of technology			
		1.4	Develop a technology strategy to increase productivity through the promotion of technology in line with organisational values and customer needs			
		1.5	Develop criteria to evaluate the success of the technology strategy			
2	Be able to implement a strategy for promoting technology across an organisation	2.1	Communicate a technological strategy across an organisation			
		2.2	Ensure resources and support are provided across an organisation to implement the strategy.			
3	Be able to monitor and review the impact of an organisation's technology strategy, in line with best practice	3.1	Monitor the implementation of a technology strategy across an organisation			
		3.2	Evaluate the success of a technology strategy against success criteria			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 12: Support the Culture of an Organisation

Unit reference number: M/600/9614

Level: 6

Credit value: 5

Guided learning hours: 30

Unit summary

This unit helps learners to understand organisational culture to ensure the achievement of business objectives.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed using evidence from the workplace, ie observable performance, physical products of work (such as reports, plans, correspondence etc), witness testimony, discussion and questioning etc.

Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the concept of organisational culture	1.1	Explain different definitions of organisational culture			
		1.2	Evaluate internal and external factors that can influence organisational cultures			
2	Be able to agree values and objectives in support of an organisation's culture	2.1	Analyse the culture and objectives of an organisation			
		2.2	Communicate agreed values and objectives across an organisation			
		2.3	Reflect on personal behaviours and actions that reinforce agreed values			
3	Be able to monitor objectives and their effectiveness	3.1	Monitor the values and objective effectiveness against the business objectives and implement any necessary change			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 13: Managing Performance in Construction and the Built Environment

Unit reference number: K/504/1094

Level: 5

Credit value: 12

Guided learning hours: 30

Unit summary

The aim of this unit is to develop the skills, knowledge and understanding to manage the performance of individuals and teams in construction. This includes setting objectives, allocating work and managing performance by monitoring, assessing and giving feedback against agreed objectives.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand how to manage team and individual performance	1.1 Explain how teams and individuals can be involved in agreeing their own objectives and work plans 1.2 Explain why it is important for individuals to assess their own and their team's performance against agreed objectives 1.3 Evaluate the organisational strategy used to manage the performance of teams and individuals			
2 Be able to allocate work to teams and individuals	2.1 Devise work schemes demonstrating efficient use of individual and team resources and abilities 2.2 Monitor team and individual understanding of agreed tasks at regular intervals 2. 3 Explain the responsibilities of individuals and teams, together with the limits of their authority when allocating work 2.4 Demonstrate how changes in the allocation of work have been agreed and implemented with individuals and teams throughout a project			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Be able to manage the performance of teams and individuals	3.1	Agree team and individual objectives, and work plans in line with the organisational goals and project priorities			
		3.2	Provide guidance on how objectives can be met at intervals appropriate to the needs of teams and individuals			
		3.3	Document opportunities provided for individuals to assess their own performance against agreed objectives			
		3.4	Carry out appraisals against agreed objectives			
		3.5	Revise and agree new objectives and work plans with individuals at regular intervals			
4	Be able to provide feedback to teams and individuals on their performance	4.1	Provide constructive feedback in a way which shows respect for individuals and the need for confidentiality			
		4.2	Provide constructive feedback using a manner most likely to maintain and improve performance			
		4.3	Provide clear and objective feedback based on performance against previously agreed outcomes			
		4.4	Evaluate team and individual response to feedback, and agree future performance objectives			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 14: Formulating Project Requirements in Construction and the Built Environment

Unit reference number: M/504/1095

Level: 5

Credit value: 12

Guided learning hours: 60

Unit summary

This unit explores design brief preparation and procurement through the early stages of project development and feasibility. The unit looks at the factors involved in formulating the requirements of the client and using this information to design a procurement strategy.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand project procurement strategies in construction and the built environment	1.1 Examine how an organisational procurement strategy affects both the financing and the programming of projects 1.2 Evaluate project constraints and risks in the procurement process 1.3 Justify the rejection of unfeasible project requirements 1.4 Evaluate a procurement strategy based on a project brief and client requirements			
2 Be able to formulate project requirements	2.1 Devise project requirement specifications with clients and stakeholders following organisational guidelines 2.2 Determine with the client the agreed goals and priorities for the project 2.3 Analyse the function and performance criteria for the project requirements 2.4 Formulate the project requirements in line with the project specification			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to design a procurement strategy	3.1 Determine project resource requirements in accordance with project specifications 3.2 Critically assess the viability of the project development 3.3 Produce procurement programmes and statements of purpose for investigation in accordance with project requirements 3.4 Design a procurement strategy in accordance with stakeholder requirements			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 15: Preparing and Evaluating Supply Chain Tenders in Construction

Unit reference number: T/504/1096

Level: 5

Credit value: 12

Guided learning hours: 48

Unit summary

This unit is about preparing and evaluating supply chain tenders. Learners will develop an understanding of the tendering process and the associated tender documentation. They will prepare the supply chain tender documents against agreed criteria and assess the resources to meet the tender requirements at the estimating stage of a project.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand supply chain tenders	1.1 Explain the processes for completing supply chain tender packages at the estimating stage 1.2 Explain how to resolve any supply chain issues in the tender process 1.3 Critically evaluate the contractual and environmental issues on the supply chain tender process			
2 Understand supply chain tender documentation at the estimating stage	2.1 Evaluate organisational tender documents against project criteria 2.2 Assess whether the organisation is capable of meeting the tender requirements and has enough resources to do so 2.3 Evaluate organisational procedures used in the analysis of supply chain quotations 2.4 Examine the inclusion of any contractual conditions and preliminaries elements			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to manage supply chain tenders at the estimating stage	3.1 Justify the selection of a suitable shortlist of organisations for the supply chain tender enquiry 3.2 Demonstrate that the successful organisation meets the requirements for inclusion within the tender 3.3 Prepare the tender documents against the agreed criteria to meet the tender requirements 3.4 Produce a clear schedule of documents to be sent to the supply chain organisations 3.5 Report on the progress of the supply chain tender as the tender period progresses 3.6 Resolve any points of concern in the supply chain quotations 3.7 Compile a report that analyses and compares the supply chain quotations received 3.8 Determine the most appropriate supply chain quotation for inclusion within the estimate 3.9 Evaluate the supply chain tender process			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 16: Surveying in Construction and the Built Environment

Unit reference number: F/504/1098

Level: 5

Credit value: 12

Guided learning hours: 48

Unit summary

The aim of this unit is for learners to be able to demonstrate the skills, knowledge and understanding required to confirm competence in surveys and investigations for a planned development within the relevant sector of the construction industry.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand survey requirements for planned developments	1.1 Explain the techniques for carrying out different types of surveys 1.2 Discuss the equipment required to carry out a range of surveying operations 1.3 Explain the different types of data compiled from surveys 1.4 Explain the circumstances that would lead to seeking expert advice where additional specialist information is required 1.5 Explain the risk assessments required for different types of surveys			
2 Be able to carry out different types of surveys	2.1 Assess any constraints which may limit choice of survey processes 2.3 Obtain permission from relevant landowners and legal authorities to carry out surveys 2.4 Plan survey methods in accordance with survey requirements 2.5 Plan the implementation of quality assurance and safety standards relevant to the survey 2.6 Carry out surveys in accordance with the specified methods 2.7 Store collected data in line with organisational requirements			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to present survey data	3.1 Collate relevant data from identified sources of information 3.2 Evaluate survey data to determine if it is valid, reliable, sufficient, complete and consistent with legal requirements for the planned development 3.3 Present survey data detailing the implications of the survey in a format which is suitable for circulation and discussion with stakeholders			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 17: Developing Detailed Project Designs in Construction and the Built Environment

Unit reference number: J/504/1099

Level: 5

Credit value: 12

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing detailed designs, determining the factors which influence the design and the revision of designs as the work progresses within the relevant sector of industry.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand detailed project designs	1.1	Explain the importance of evaluating the parameters which are significant for the detailed design			
		1.2	Examine methods for developing detailed designs			
		1.3	Evaluate different formats for presenting the detailed design information			
		1.4	Determine the factors that influence the preparation of detailed design			
		1.5	Classify the methods for developing detailed designs			
		1.6	Explain formats for presenting the detailed design information			
2	Be able to develop detailed design solutions	2.1	Analyse the design requirements which are significant to the overall design			
		2.2	Determine what data is needed, and assess how accurate the data needs to be			
		2.3	Determine the criteria which are significant to the overall design			
		2.4	Source existing design solutions which contain similar design criteria			
		2.5	Select existing solutions which best meet the construction and installation requirements			
		2.6	Develop solutions against the requirements of the project brief as the work progresses			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to record the results for detailed designs	3.1 Demonstrate ways of recording detailed design results and revisions in accordance with organisational requirements 3.2 Assemble any supporting data which is relevant in an agreed format 3.3 Contribute to the safe storage and distribution of all relevant data, indexing clearly for future reference in an agreed format			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 18: Work Scheduling and Procurement in Construction and the Built Environment

Unit reference number: M/504/1100

Level: 5

Credit value: 12

Guided learning hours: 30

Unit summary

This unit will ensure that learners understand work scheduling and procurement in their organisations and apply the theory to real projects. Learners will be required to contribute to the design of sustainable buildings/services in their relevant sector. Learners will demonstrate the incorporation of sustainable concepts into their solutions.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand work scheduling in construction and the built environment	1.1	Analyse current work scheduling methodologies for the sector			
		1.2	Evaluate organisational work scheduling methods			
		1.3	Explain the importance of work scheduling in the sector			
2	Be able to develop schedules of work for sector projects	2.1	Plan the schedules of work so that they are achievable with the resources available			
		2.2	Calculate the work content and time duration accurately for a work schedule			
		2.3	Calculate appropriate and realistic allowances to meet anticipated contingencies			
		2.4	Produce a detailed schedule of work in line with contract documentation			
		2.5	Evaluate the effectiveness of project progress against the planned schedule			
3	Understand procurement in construction and the built environment	3.1	Analyse current procurement methods for the sector			
		3.2	Evaluate own organisational procurement processes			
		3.3	Explain the importance of procurement in the sector			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to develop a procurement programme	4.1 Establish the lead times for ordering and receiving essential resources to meet procurement requirements 4.2 Develop a detailed and accurate procurement schedule in an appropriate sector format 4.3 Align the procurement programme with the overall programme to accommodate possible contract changes 4.4 Evaluate the effectiveness of the procurement programme in the sector			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 19: Optimising the Supply Chain in Construction and the Built Environment

Unit reference number: T/504/1101

Level: 5

Credit value: 12

Guided learning hours: 60

Unit summary

The efficiency in obtaining elements of the supply chain is essential for a construction organisation in maintaining the commitments of time, value and quality standards for a construction and built environment client.

You will examine the supply chain, evaluating the key components that make up a construction project within the planning and design stage, so that supplier scheduling can be completed accurately using all available contract documentation.

The approaches taken through the application of ISO9000 would prove useful in the evaluation of key suppliers within the supply chain. This forms part of the learning outcomes.

Sourcing efficiencies within the planning of the supply chain is a valuable skill that will greatly aid the successful outcome of a project for all stakeholders concerned.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidenced data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the components of the supply chain network	1.1	Evaluate the selection criteria used for contracting supply chain network suppliers			
		1.2	Explain the components of the full supply chain network that meet the contract requirements			
		1.3	Explain how to compile a purchasing schedule to ensure that program requirements of the supply chain network are met			
		1.4	Evaluate the effect of changes to supply chain resources on an organisational project			
2	Be able to create a purchasing schedule	2.1	Analyse contract documentation and calculate resource quantities required			
		2.2	Analyse areas of the supply chain where costs and the environmental impact can be reduced			
		2.3	Produce a purchasing schedule in accordance with contract supply requirements			
		2.4	Monitor variations to the supply chain delivery program rescheduling as necessary			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the impact of supplier performance	3.1	Analyse the criteria for monitoring supplier performance for a project			
		3.2	Evaluate the impact of scheduling issues with suppliers			
		3.3	Develop solutions that will improve supplier performance			
		3.4	Explain how to develop working relationships with suppliers that promote supplier performance			
4	Be able to optimise supplier performance	4.1	Evaluate the performance of suppliers against agreed criteria and contract requirements regularly			
		4.2	Produce detailed feedback on supplier monitoring and performance to improve the supply chain network			
		4.3	Conduct negotiations and meetings with suppliers in a manner which leads to the optimisation of supplier performance			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 20: Contract Valuations and Claims in Construction and the Built Environment

Unit reference number: A/504/1102

Level: 5

Credit value: 12

Guided learning hours: 50

Unit summary

This unit covers the application of the financial management of a construction project. Financial management includes the preparation of interim valuations, the valuation of variations, the preparation of contract claims and the completion of the final account for the project.

The compilation of financial accounts involves the collection of data, measurements, reading current contract documentation and obtaining contract rates. This allows complete accurate financial project costs to be determined.

The process involves working closely with other stakeholders involved with the contract namely subcontracts, suppliers, client representatives, the designer and the client's financial manager or quantity surveyor.

Agreement without conflict avoids disputes within any contract and minimises the possibility of disputes. The application of good interpersonal skills is therefore an essential requirement of this unit.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidenced data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand contract valuations in construction projects	1.1 Explain how to value work in progress 1.2 Explain how to prepare and submit accurate valuations and accounts 1.3 Explain how to prepare areas of potential variation or disagreement using contract documentation 1.4 Evaluate contract valuation documentation for an organisational project			
2 Be able to carry out contract valuations	2.1 Produce a monthly valuation of work in progress, and agree the gross valuation 2.2 Carry out the valuation of contract instructed variations by using contract rates or agreed nonstandard rates 2.3 Calculate the liability for the cost of any non contract variations for re-work or additional work by other stakeholders 2.4 Record all financial information and calculations in accordance with company procedures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to prepare and agree contract claims	3.1 Explain the circumstances leading to a construction contract claim 3.2 Formulate a claim against the original contract based on a set of justified criteria 3.3 Calculate the cost of the claim, including justification of the cost of the claim 3.4 Negotiate amendments to the claim with the parties involved in the contract 3.5 Explain the importance of maintaining the goodwill and trust of the parties involved in the contract 3.6 Record all financial information and calculations in accordance with company procedures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 21: Establish Risk Management Processes for an Organisation

Unit reference number: A/600/9616

Level: 5

Credit value: 6

Guided learning hours: 30

Unit summary

This unit will ensure that learners can establish and communicate a risk management process within an organisation.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidenced data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information. Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand risk management within own area of responsibility	1.1	Explain the types of risk that can impact on an organisation			
		1.2	Review the knowledge and awareness of risks within the organisation			
2	Be able to establish a risk management process for an organisation	2.1	Identify the risks that impact on an organisation			
		2.2	Identify criteria to enable evaluation of the impact of identified risks			
		2.3	Establish processes to manage risk within an organisation			
3	Be able to allocate resources to enable risk management activities to take place	3.1	Plan resources across an organisation for risk management activity			
4	Be able to communicate risk management processes across an organisation	4.1	Communicate risk management processes and policy across an organisation			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 22: Planning Conservation Activities in Construction and the Built Environment

Unit reference number: F/504/1103

Level: 5

Credit value: 12

Guided learning hours: 30

Unit summary

The aim of this unit is to develop the learner's skills and understanding to confirm competence in planning historical conservation activities within the workplace. Consideration is given to the role of influencing factors in the planning process and the importance of confirming proposed conservation work against clearly identified information sources. The significance of prioritising activities and producing an effective schedule of work are central to the unit.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Given the level of this unit, it is anticipated that activities will more than likely form part of a larger main contract, and as such will be limited in scope and responsibility. Learners may wish to consider this aspect when assembling portfolio information. The use of smaller sub-contract packages may be at a more appropriate level for assembling evidence.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the factors that impact on conservation activities	1.1	Critically examine the factors that impact on the planning of historical conservation activities			
		1.2	Analyse guidance material available to practitioners when planning conservation activities			
		1.3	Explain how influencing factors and guidance material impact on project planning			
2	Be able to confirm conservation work requirements against contract documentation	2.1	Analyse the extent to which statutory bodies and other amenity groups have been consulted when confirming work requirements			
		2.2	Provide examples of how conservation activities have been confirmed against a range of information sources			
		2.3	Reconcile differences between statutory body recommendations and information sources			
		2.4	Make recommendations to modify conservation activities where appropriate			
3	Understand the importance of prioritising conservation activities	3.1	Discuss why historical conservation activities should be prioritised			
		3.2	Explain the factors that need to be taken into account when prioritising conservation activities			
		3.3	Illustrate how changing circumstances can be accounted for when prioritising conservation activities			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to plan conservation activities to reflect influencing factors	4.1 Plan schedules of work for conservation activities in accordance with the resources available 4.2 Show how realistic allowances to meet anticipated contingencies have been incorporated into the planning 4.3 Produce detailed schedules of work for typical conservation activities in accordance with the contract documentation 4.4 Analyse how conservation activities have been prioritised whilst considering influencing factors 4.5 Explain how decision makers have influenced the negotiation and agreement of plans and schedules 4.6 Evaluate the effectiveness of the planned schedule against actual project progress			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 23: Chairing Meetings in the Built Environment

Unit reference number: D/504/1089

Level: 5

Credit value: 8

Guided learning hours: 20

Unit summary

This unit is about chairing meetings, analysing information and making decisions based on the conclusions from the analysis. This involves circulating appropriate information before the meeting and ensuring that those attending the meeting agree the meeting objectives. Learners will be able to select and analyse information, based on identified objectives and using suitable methods and then develop clear conclusions.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Be able to chair built environment meetings	1.1 Plan meetings to give people attending sufficient notice and information to allow them to contribute effectively 1.2 Agree objectives of the meeting with all attendees at the start 1.3 Plan discussion time to topics consistently in accordance with their importance, urgency and complexity 1.4 Chair the meeting and provide clear summaries at appropriate points during the meeting 1.5 Demonstrate that the objectives of the meeting have been met within the allocated time 1.6 Summarise the agreed actions, decisions and recommendations ensuring that they fall within the group's authority 1.7 Compile clear, accurate and concise minutes incorporating agreed actions, decisions and recommendations and communicate to all relevant stakeholders 1.8 Seek feedback from those attending and use this to inform the planning of future meetings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Be able to make decisions during built environment meetings	2.1 Compile qualitative and quantitative information relevant to the objectives, to support decisions 2.2 Make decisions affecting operational performance or organisational policy 2.3 Justify decisions supported with reasoned arguments and appropriate evidence, differentiating clearly between fact and opinion 2.4 Create records to show the assumptions and decisions made at meetings			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 24: Monitoring Projects in Construction and the Built Environment

Unit reference number: L/504/1105

Level: 5

Credit value: 12

Guided learning hours: 50

Unit summary

This unit is about monitoring the fundamental drivers leading to successful programme completion. The unit will focus on establishing an accurate profile of progress attained and from an understanding of how change mechanisms are implemented. There is also an emphasis on maintaining quality outcomes and understanding sustainable approaches to work activity and procurement of resources.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidenced data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace or in conditions resembling the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand quality control monitoring for construction projects	1.1	Explain the key external quality control monitoring mechanisms for construction projects			
		1.2	Evaluate the types of organisational processes that can be used to regularly monitor the quality of work activity against specification and plans			
		1.3	Explain the benefits of regular quality control monitoring to the project			
2	Be able to monitor construction projects	2.1	Carry out monitoring of work activity and expenditure in accordance with organisational procedures			
		2.2	Produce accurate records to show monitoring activities in line with sector requirements			
		2.3	Analyse the progress of actual project activity against predicted baseline programme activity			
		2.4	Provide evidence of communications with internal and external stakeholders in relation to quality outcomes and timeliness of work activity for a construction project			
		2.5	Evaluate the time and cost implications of exceeding the contract duration and budget for a construction project			
		2.6	Explain the benefits of early completion of a construction project			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand how to manage project variations	3.1	Explain the possible responses to issues of programme slippage			
		3.2	Illustrate the commitment of internal and external stakeholders in minimising project variations			
		3.3	Explain how contract variations are managed with minimal impact to contract duration and budget			
		3.4	Discuss the circumstances in which an extension of time is necessary, and the possible implications of this			
4	Understand how monitoring can lead to sustainable approaches to work activity	4.1	Analyse how management of waste is monitored during a construction project			
		4.2	Evaluate the effect of monitoring policy on the procurement of sustainable resources			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 25: Managing Engineering Project Resources

Unit reference number: R/504/1106

Level: 5

Credit value: 12

Guided learning hours: 48

Unit summary

This unit illustrates the skills, knowledge and understanding required to confirm competence in the management of engineering project resources during the construction phase of a project.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed using evidence from the workplace, ie observable performance, physical products of work (such as reports, plans, correspondence etc), witness testimony, discussion and questioning etc.

Simulation is not allowed.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand method statements for managing engineering project resources	1.1 Explain how to use method statements to effectively and efficiently plan engineering project resources 1.2 Explain the importance of maximising sustainable work methods to formulate an eco-friendly method statement which minimises carbon emissions 1.3 Evaluate the organisational approach to the production of method statements			
2 Be able to formulate engineering project resource requirements	2.1 Devise engineering project resource requirements in line with the project specification 2.2 Produce a method statement for engineering project resource requirements in line with the project specification 2.3 Determine critical path engineering activities and associated resources for the project			
3 Understand procurement of engineering resources	3.1 Analyse current procurement methods for engineering resources 3.2 Evaluate own organisational procurement processes 3.3 Explain the importance of procurement in the engineering sector			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Be able to procure engineering resource requirements	4.1 Establish the lead times for ordering and receiving engineering resources to meet procurement requirements 4.2 Develop a detailed and accurate procurement schedule for engineering resources in an appropriate format 4.3 Align the engineering procurement programme with the overall contract programme to accommodate possible contract changes			
5 Be able to manage engineering project resources	5.1 Plan meetings to ensure attendees prioritise and programme resources to achieve the project goals5.2 Present quality standards for resources to ensure they are maintained in line with engineering specifications5.3 Maintain engineering project resource monitoring documentation in an agreed format			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 26: Highway Maintenance Activities

Unit reference number: Y/504/1107

Level: 5

Credit value: 12

Guided learning hours: 60

Unit summary

This unit is to illustrates the skills, knowledge and understanding required to confirm competence in identifying and scheduling highways maintenance activities within the relevant sector of the construction industry.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the requirements of highway maintenance activities	1.1	Explain the importance of highway maintenance activities and categorise them into common highways procedures			
		1.2	Explain who needs to be consulted when confirming work requirements for highways maintenance			
		1.3	Discuss the factors and standards which influence highway maintenance activities			
		1.4	Explain the effects of maintenance schedules and manuals; practice guides and specifications; current legislation and official guidance on the planning of highway maintenance			
		1.5	Evaluate the types of maintenance activities that are applied to highways			
2	Be able to plan highway maintenance activities	2.1	Assess highway defects and their severity and relate these to a common standard			
		2.2	Determine resources requirements in accordance with maintenance schedule			
		2.3	Prioritise maintenance activities in accordance with maintenance schedule			
		2.4	Create a maintenance schedule for a highway in an agreed organisational format			
3	Understand standard computerised systems for highway maintenance	3.1	Explain the application of computer software systems to highway maintenance			
		3.2	Evaluate a standard computerised system for highway maintenance rating			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Understand testing procedures to detect highway defects	4.1 Explain how highways are tested for structural deterioration 4.2 Explain how highways are tested for skid resistance 4.3 Analyse the results of highway tests			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 27: Designing Engineering Solutions for the Built Environment

Unit reference number: D/504/1108

Level: 5

Credit value: 12

Guided learning hours: 45

Unit summary

This unit illustrates the skills, knowledge and understanding required to confirm competence in producing detailed engineering design solutions in the workplace within the civil and structural engineering sector of industry.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand engineering design solutions in the built environment	1.1 Evaluate the factors which influence engineering design solutions. 1.2 Explain the steps involved in producing a design solution 1.3 Evaluate techniques for investigating, calculating, specifying, developing and testing detailed design solutions			
2 Be able to produce detailed engineering design solutions	2.1 Produce a detailed design solution against the requirements of a project brief 2.2 Use existing engineering design solutions which contain similar design criteria where possible 2.3 Evaluate the detailed design solution against the overall design concept 2.4 Store records of detailed engineering design solutions in accordance with company procedures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to select resources for a design solution	3.1 Determine the engineering resource requirements and standards for the overall design 3.2 Formulate resources for the construction and engineering requirements of the agreed design 3.3 Justify selected materials, components and systems which meet the identified construction and engineering requirements and standards 3.4 Store records of materials, components and systems for the project team in accordance with company procedures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature:_____ Date: _____
(*if sampled*)

Unit 28: Managing Tests in Construction and the Built Environment

Unit reference number: H/504/1109

Level: 5

Credit value: 14

Guided learning hours: 48

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in managing tests and presenting the results in construction and the built environment.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Be able to manage tests in Construction and the Built Environment	1.1	Evaluate existing project information and specify testing relevant to a development project			
		1.2	Obtain permission to carry out tests from appropriate authorities			
		1.3	Programme the tests to meet the objectives of the project			
		1.4	Implement quality assurance and health and safety standards relevant to the tests			
		1.5	Manage the planning and scheduling of tests in accordance with objectives and purpose			
		1.6	Manage and monitor the tests in accordance with planning and scheduling programme			
		1.7	Evaluate test methods and justify any modifications to maintain compliance with test requirements			
2	Be able to record the results from tests	2.1	Record test results in line with organisational requirements			
		2.2	Compile supporting test data in an agreed format			
		2.3	Store test results and data, indexing clearly for future reference in an agreed format			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Be able to process test data in Construction and the Built Environment	3.1 Process test data in the context of the project requirements 3.2 Explain organisational procedures for dealing with unexpected issues related to the testing 3.3 Provide test reports and conclusions with reference to the objectives of the project			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 29: Designing Sustainable Building Services Engineering Systems

Unit reference number: D/504/1111

Level: 5

Credit value: 12

Guided learning hours: 30

Unit summary

This unit will ensure that learners are able to take knowledge based learning into their organisations and apply the theory to real projects. Learners will be required to take part in the design of sustainable Building Services Engineering (BSE) systems, considering the design brief, solutions, technical design and specification. Learners will demonstrate the incorporation of sustainable design into their solutions.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand sustainable building services engineering systems	1.1 Evaluate client needs, objectives, business case and possible constraints for a client design brief 1.2 Evaluate the feasibility of utilising sustainable BSE systems appropriate to the design brief			
2 Be able to design sustainable building services engineering systems.	2.1 Prepare a feasibility study and assessment of BSE system options from a design brief 2.2 Determine the design parameters for the system in line with the feasibility study 2.3 Plan the concept design including outline proposals for sustainable building services engineering system, outline specification and preliminary cost details in line with the design brief 2.4 Develop the concept design for a sustainable building services engineering system, update outline specifications and cost details 2.5 Perform accurate design calculations to size mechanical and/or electrical BSE plant and equipment, using both software packages and manual techniques, in accordance with the concept design 2.6 Create the technical design, incorporating BSE plant, materials and equipment for the project 2.7 Select and justify appropriate mechanical and/or electrical BSE plant, materials and equipment for the project in accordance with the technical design			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	2.8 Explain how current legislative requirements, good practice and construction safety have been incorporated into the design, including 'duties on designers' from CDM regulations 2.9 Evaluate the degree of sustainability included in the design system 2.10 Contribute to design team meetings			
3 Be able to produce sustainable building services engineering specifications	3.1 Create specifications in accordance with the system design to meet current legislation standards in terms of energy efficiency and/or water use 3.2 Create specification documentation in sufficient detail to enable a tender or tenders to be obtained 3.3 Evaluate the stages from feasibility study to the production of the specification identifying strengths and any areas for improvement			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 30: Commissioning Building Services Engineering Systems

Unit reference number: H/504/1112

Level: 5

Credit value: 14

Guided learning hours: 48

Unit summary

This unit gives learners an opportunity to develop the skills needed to commission building engineering systems in compliance with relevant legislation and standards. The unit also develops the skills needed to monitor and test building engineering systems, diagnose systems faults and rectify requirements to correctly commission systems for effective operation. Learners will complete appropriate documentation and maintain records, together with calibration recording in accordance with relevant legislation and standards. Learners will report and advise clients of system operation and effective system settings.

The focus of this unit is on establishing effective systems and ensuring that building engineering services are commissioned correctly and function efficiently within installations in industrial, public and commercial buildings.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Be able to prepare building services engineering installation status	1.1	Establish the required operating parameters in accordance with legislation and standards			
		1.2	Determine plant, equipment and instruments to be used for safety and functionality			
		1.3	Determine the status of the plant, equipment and instruments in accordance with legislation and standards before commissioning			
2	Be able to commission building services engineering plant and equipment	2.1	Plan commissioning works in accordance with commissioning schedule and specification			
		2.2	Manage commissioning works in accordance with the plan			
		2.3	Carry out tests for BSE systems in accordance with design and legislative standards and organisational procedures			
		2.4	Determine the configuration of the BSE systems for optimal performance in accordance with the specification			
3	Be able to diagnose and rectify faults on building services engineering systems	3.1	Carry out condition reporting on BSE systems in line with current legislative standards and organisational procedures			
		3.2	Present the results of monitoring and testing activity and identify any areas for improvement in accordance with organisational procedures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	3.3 Specify corrective actions to remedy any identified issues, and set deadlines for their implementation 3.4 Specify procedures for monitoring and recording corrective action based on diagnosis and re-evaluate effectiveness of systems			
4 Be able to complete and maintain commissioning documentation	4.1 Compile records and documentation required by legislative standards in an agreed format 4.2 Compile commissioning reports in accordance with industry and legislative standards 4.3 Maintain commissioning records and documentation in accordance with legislative requirements and quality standards 4.4 Maintain and monitor calibration records and certification schemes			
5 Be able to advise clients of system operation	5.1 Demonstrate effective handover of BSE systems to meet client requirements 5.2 Demonstrate to clients the operational parameters that meet the most energy efficient operation of the system 5.3 Formulate suitable system advice and user maintenance guidance documentation for clients			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 31: Analysing and Monitoring Building Services Engineering Controls

Unit reference number: M/504/1114

Level: 5

Credit value: 12

Guided learning hours: 40

Unit summary

This unit gives learners an opportunity to develop the skills needed in the analysis and monitoring of building engineering control systems in compliance with relevant legislation and standards.

This unit also develops the skills needed to monitor and interrogate building services engineering control systems providing appropriate data to diagnose systems faults and to optimise systems for effective operation. Learners will complete appropriate documentation and maintain records, and carry out analysis recorded in accordance with relevant legislation and standards. Learners will report and advise clients on control system operation and effective system settings.

The focus of this unit is on establishing effective control systems and strategies to ensure building services engineering installations are controlled correctly and function efficiently within industrial, public and commercial buildings.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the parameters employed in effective building services engineering control systems.	1.1	Compare the control parameters of selected BSE control systems			
		1.2	Evaluate control requirements to optimise operation and energy efficiency			
		1.3	Assess the status of BSE plant operational characteristics and match this to selected control systems			
2	Be able to monitor building services engineering control systems	2.1	Use industry standard software solutions to devise an optimal programme of data analysis and monitoring of BSE control systems			
		2.2	Manage data analysis and monitoring of BSE control systems in accordance with the devised programme			
		2.3	Report the results of data analysis and monitoring in line with organisational procedures			
3	Be able to rectify fault conditions on building services engineering control systems	3.1	Carry out diagnostic routines on BSE control systems to identify and rectify fault conditions			
		3.2	Determine the validity of the results provided by the diagnostic routines in BSE control systems against stipulated parameters and identify any areas for improvement			
		3.3	Determine the corrective processes required to rectify identified fault conditions and schedule deadlines for their implementation and completion			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	3.4 Provide documentation to monitor fault diagnosis and implementation of remedial action based upon the data provided by BSE control systems			
4. Be able to optimise the performance of building services engineering installations	4.1 Use BSE control systems to provide performance reports 4.2 Use BSE control systems to modify and optimise BSE installations to enhance performance 4.3 Compile planned preventative maintenance scheduling programmes using the data provided by BSE control performance reports 4.4 Devise energy management strategies using the reports and data obtained from BSE control systems			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 32: Plan and Manage a Project

Unit reference number: J/600/9750

Level: 4

Credit value: 8

Guided learning hours: 30

Unit summary

This unit helps learners to clarify the scope and objectives of a project, develop a project plan and consult and agree the plan with others.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the principles, processes, tools and techniques of project management	1.1	Describe the roles and responsibilities of a project manager			
		1.2	Explain how to apply principles, processes, tools and techniques of project management			
2	Be able to agree the scope and objectives of a project	2.1	Agree SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) objectives and scope of the project with project sponsor(s) and stakeholders			
3	Be able to develop a project plan	3.1	Develop the project plan with stakeholders to agreed time-scales and budget			
		3.2	Consult with stakeholders to negotiate the project plan			
		3.3	Evaluate potential risks and contingencies			
4	Be able to implement a project plan	4.1	Allocate roles and responsibilities to project team members			
		4.2	Provide resources identified in the project plan			
		4.3	Brief project team members on the project plan and their roles and responsibilities			
		4.4	Implement a project plan using project management tools and techniques			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Be able to manage a project to its conclusion	5.1 Apply a range of project management tools and techniques to monitor, control and review progress 5.2 Provide support to project team members in accordance with project objectives 5.3 Evaluate the planning and management of the project and recommend possible improvements			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 33: Manage a Tendering Process

Unit reference number: H/600/9738

Level: 4

Credit value: 4

Guided learning hours: 20

Unit summary

This unit will ensure that learners are able to manage a tendering process during the construction phase of a project. This includes developing product or service specifications and tender guidelines, evaluating tenders and selecting a supplier to deliver the required products or services.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements/strategy*.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Understand tendering processes	1.1 Explain the legal requirements of a tendering process 1.2 Explain organisational tendering policies and processes 1.3 Explain how to seek specialist support for the tendering process			
2 Be able to draw up a specification for required products or services	2.1 Consult with colleagues to identify and agree requirements for products or services 2.2 Draw up a specification that describes the products or services required			
3. Be able to create an invitation to tender document	3.1 Create an invitation to tender document outlining required specifications and organisational tendering processes 3.2 Communicate the invitation to tender to prospective suppliers			
4. Understand how to respond fairly to pre-tender queries	4.1 Explain how to respond to pre-tender queries in ways that ensure all prospective suppliers have the same information			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Be able to evaluate received tenders	5.1	Establish criteria with which to evaluate received tenders			
		5.2	Receive, record and open tenders in line with stated tendering process			
		5.3	Seek clarification from prospective suppliers where necessary			
		5.4	Evaluate tenders against established criteria			
6	Be able to select a supplier and provide post-tender feedback	6.1	Offer a contract to the chosen supplier			
		6.2	Inform unsuccessful suppliers of the outcome and provide feedback			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Unit 34: Using Specialist Software in Construction and the Built Environment

Unit reference number: A/504/1116

Level: 5

Credit value: 12

Guided learning hours: 30

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in using specialist software in construction and the built environment.

See *Annexe F:* for details of NOS mappings.

Assessment requirements/evidence requirements

Learners will collect work-based evidence data and complete a portfolio which must be mapped against the assessment criteria within this unit. Learners will need to develop methodologies in recording and evidencing against the assessment criteria, using page numbers and annotating the portfolio with relevant criteria. The work-based assessor should be used to witness and sign evidence for the learner.

For more information see *Annexe C: Assessment requirements strategy.*

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the evidence can be dated and initialled against each assessment criterion. Alternatively, centre-devised documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the functions and applications of specialist software in construction and the built environment	1.1	Critically analyse the functionality of CBE software applications			
		1.2	Explain the applications of CBE software			
2	Be able to use specialist software in construction and the built environment to solve complex problems	2.1	Analyse complex problems and formulate input data for CBE software application			
		2.2	Use of appropriate software tools and techniques to input complex problem data			
		2.3	Formulate solutions to complex problems using input data			
		2.4	Validate software solutions to ensure that outcomes are fit for purpose and meet needs			
		2.5	Apply appropriate tools and methods to present results in accordance with organisational requirements			
		2.6	Critically evaluate the role, benefits and opportunities that specialist CBE software provides to an organisation			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)

Further information and useful publications

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

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

Key publications

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

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

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

How to obtain National Occupational Standards

To obtain the National Occupational Standards go to www.ukstandards.org.uk.

Professional development and training

Pearson supports UK and international customers with training related to NVQ and BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

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

The national programme of training we offer can be viewed on our website (qualifications.pearson.com). You can request customised training through the website or by contacting one of our advisers in the Training from the Pearson team via Customer Services to discuss your training needs.

The training we provide:

- is active
- is designed to be supportive and thought provoking
- builds on best practice
- may be suitable for those seeking evidence for their continuing professional development.

Annexe A: Quality assurance

Key principles of quality assurance

- A centre delivering Pearson qualifications must be an Pearson recognised centre and must have approval for qualifications that it is offering.
- The centre agrees, as part of gaining recognition, to abide by specific terms and conditions relating to the effective delivery and quality assurance of assessment. The centre must abide by these conditions throughout the period of delivery.
- Pearson makes available to approved centres a range of materials and opportunities to exemplify the processes required for effective assessment and provide examples of effective standards. Approved centres must use the guidance on assessment to ensure that staff who are delivering Pearson qualifications are applying consistent standards.
- An approved centre must follow agreed protocols for: standardisation of assessors; planning, monitoring and recording of assessment processes; internal verification and recording of internal verification processes and dealing with special circumstances, appeals and malpractice.

Quality assurance processes

The approach to quality assured assessment is made through a partnership between a recognised centre and Pearson. Pearson is committed to ensuring that it follows best practice and employs appropriate technology to support quality assurance processes where practicable. The specific arrangements for working with centres will vary. Pearson seeks to ensure that the quality-assurance processes it uses do not inflict undue bureaucratic processes on centres, and works to support them in providing robust quality-assurance processes.

The learning outcomes and assessment criteria in each unit within this specification set out the standard to be achieved by each learner in order to gain each qualification. Pearson operates a quality-assurance process, designed to ensure that these standards are maintained by all assessors and verifiers.

For the purposes of quality assurance, all individual qualifications and units are considered as a whole. Centres offering these qualifications must be committed to ensuring the quality of the units and qualifications they offer, through effective standardisation of assessors and internal verification of assessor decisions. Centre quality assurance and assessment processes are monitored by Pearson.

The Pearson quality-assurance processes will involve:

- gaining centre recognition and qualification approval if a centre is not currently approved to offer Pearson qualifications
- annual visits to centres by Pearson for quality review and development of overarching processes and quality standards. Quality review and development visits will be conducted by an Pearson quality development reviewer
- annual visits by occupationally competent and qualified Pearson Standards Verifiers for sampling of internal verification and assessor decisions for the occupational sector
- the provision of support, advice and guidance towards the achievement of National Occupational Standards.

Centres are required to declare their commitment to ensuring quality and appropriate opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Annexe B: Centre certification and registration

Pearson Standards Verifiers will provide support, advice and guidance to centres to achieve Direct Claims Status (DCS). Pearson will maintain the integrity of Pearson NVQs through ensuring that the awarding of these qualifications is secure. Where there are quality issues identified in the delivery of programmes, Pearson will exercise the right to:

- direct centres to take action
- limit or suspend certification
- suspend registration.

The approach of Pearson in such circumstances is to work with the centre to overcome the problems identified. If additional training is required, Pearson will aim to secure the appropriate expertise to provide this.

What are the access arrangements and special considerations for the qualifications in this specification?

Centres are required to recruit learners to Pearson qualifications with integrity.

Appropriate steps should be taken to assess each applicant's potential and a professional judgement should be made about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Pearson's policy on learners with particular requirements.

Pearson's policy on access arrangements and special considerations for Pearson qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the Equality Act 2010), without compromising the assessment of skills, knowledge, understanding or competence. Please refer to *Access Arrangements and Special Considerations for BTEC and Pearson NVQ Qualifications* For further details. Please go to qualifications.pearson.com.

Annexe C: Assessment requirements/strategy

Consolidated Assessment Strategy for Construction and the Built Environment — Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification Framework title and SVQs

Introduction

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

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

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

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

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

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

Principles

1 External quality control of assessment

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

- workplace evidence
- the use of simulation
- the occupational competence of assessors and verifiers.

1.2 The monitoring and standardisation of assessment decisions must be achieved by robust and strong internal and external verification systems meeting the requirements of the qualification regulators' documentation.

1.3 Awarding organisations must be members of the sector's Built Environment Awarding Body Forum, which includes the qualification regulators. They will be expected to provide feedback on National Occupational Standards (NOS), NVQ or SVQ units and qualifications, including aspects informing incremental change.

1.4 The Forum will, in respect of this strategy:

- build on the good relationships with awarding organisations
- provide opportunities to identify and address particular issues of external quality control
- contribute to improving quality and consistency
- support awarding organisations to monitor assessment centres' performance to identify areas and levels of risk
- provide information and statistics about take up and completion, as well as trends and developments that can be used by ConstructionSkills and awarding organisations to identify any problem areas and agree remedial action
- discuss matters concerning quality assurance, as well as providing the opportunity to identify issues arising from implementation of NOS and related vocational qualifications
- inform the continuous improvement of NOS and awards derived from them
- identify and share best practices to build a whole industry approach to pursue excellence in education and work-based learning and assessment process to achieve competence.

1.5 Awarding organisations and their partners, assessment centres, verifiers and assessors must maintain robust and transparent operational arrangements. They must preserve independence in assessment, certification and quality assurance processes. Awarding organisations must ensure clear separation of their NVQ/SVQ assessment responsibilities from their industry, training, membership, certification, accreditation and commercial interests and resolve any conflicts of interest.

1.6 Where e-assessment is used, it must meet the requirements of the qualification regulators' documentation.

2 Aspects to be assessed through performance in the workplace

2.1 Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant. ConstructionSkills' National Working Groups will specify any exceptions to this position (see section 3).

2.2 Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate
- recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
- performance evidence.

2.3 A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence. Annex A suggests standard evidence notes for awarding organisations.

3 How simulated working conditions may be used to assess competence

3.1 Simulations (designed situations for producing artificially generated evidence) may only be used where candidates are prevented from gathering direct evidence normally from the workplace because:

- there are hazards
- it is difficult to distinguish individual performance in team situations
- circumstances occur infrequently or long term results are involved
- confidentiality is important
- there are organisational constraints.

3.2 Any instances where simulation is considered to be acceptable as an alternative (to direct workplace evidence) as a means of generating evidence, will be determined by the relevant ConstructionSkills National Working Group and stated in the unit. Annex A suggests standard evidence notes for awarding organisations.

3.3 The ConstructionSkills National Working Group will determine and specify in the required realistic working environment and context to be adopted. This could include appropriate:

- tools, equipment and instruments
- materials
- types of contingencies
- standards and quality specifications
- real timescales
- quantities of work

- physical conditions
- relationships with people
- types of interaction
- communication methods and media
- information and data.

3.4 Where simulated evidence is stated as acceptable in the unit, the circumstances and requirements for the simulation needs to be confirmed by discussions between the candidate and the assessor, which are then agreed by the internal and external verifiers.

3.5 Where other Standard Setting Bodies' units are imported into a ConstructionSkills suite, the evidence requirements of the originating body will be adopted and specified.

4 Occupational expertise requirements for assessors and verifiers

4.1 Awarding organisations must ensure that **assessors**:

4.1.1 have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at or above the level being assessed. This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of:

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of a relevant professional institution
- interview

The verification process must be recorded and available for audit

4.1.2 have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements

4.1.3 only assess in their acknowledged area of occupational competence

4.1.4 have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and this Assessment Strategy (this document)

4.1.5 are prepared to participate in training activities for their continued professional development

4.1.6 hold, or are working towards, a qualification as listed within Assessing and Assuring Quality of Assessment, either in the Qualifications Framework, or the Scottish Credit and Qualifications Framework (SCQF):

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

or hold one of the following

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

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

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

4.2 Awarding organisations must ensure that **internal verifiers**:

4.2.1 have sufficient, verifiable, relevant up to date experience, knowledge and understanding of the occupational working area at or above the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about assessors' assessment processes and decisions. Internal verifiers' experience, knowledge and understanding could be verified by a combination of:

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of a relevant professional institution
- interview

The verification process must be recorded and available for audit.

4.2.2 have expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements

4.2.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)

4.2.4 are prepared to participate in training activities for their continued professional development

4.2.5 hold, or are working towards, a qualification as listed in Assessing and Assuring Quality of Assessment, either in the Qualifications Framework, or the Scottish Credit and Qualifications Framework (SCQF):

- Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice
- SVQ(SCQF level) in the Internal Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF level) in Leading the Internal Quality Assurance of Assessment Process and Practice

or hold one of the following

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

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

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

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

or one of the following

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

4.3 Awarding organisations must ensure that **external verifiers:**

4.3.1 have sufficient, verifiable, relevant experience, knowledge and broad understanding of the occupational working area at or above the level being verified. This must be of sufficient depth to be effective and reliable when verifying judgements about internal verification and assessment processes and decisions. External verifiers' experience, knowledge and understanding could be verified by a combination of:

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification
- corporate membership of a relevant professional institution
- interview

The verification process must be recorded and available for audit

4.3.2 have sufficient expertise so they have an up to date experience, knowledge and understanding of the particular aspects of work they are verifying. This could be verified by records of continuing professional development achievements

4.3.3 have a sound, in-depth knowledge of, and uphold the integrity of, the NOS and this Assessment Strategy (this document)

4.3.4 are prepared to participate in training activities for their continued professional development

4.3.5 hold, or are working towards, a qualification as listed in Assessing and Assuring Quality of Assessment, either in the Qualifications Framework, or the Scottish Credit and Qualifications Framework (SCQF):

- Level 4 Award in the External Quality Assurance of the Assessment Process and Practice
- Level 4 Certificate in Leading the External Quality Assurance of Assessment
- SVQ (SCQF level) in the External Quality Assurance of the Assessment Process and Practice
- SVQ (SCQF) in Leading the External Quality Assurance of Assessment

or hold one of the following

- V2 Conduct external quality assurance of the assessment process
- D35 Externally verify the assessment process

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

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

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

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

or one of the following

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

4.4 Selection and appointment of assessors and verifiers

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

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

All assessors should have experience as well as, not in lieu of, qualifications.

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

Annexe A

ConstructionSkills' standard evidence notes for awarding organisations

These guidance notes have been produced to ensure consistency interpreting the principles set out in sections 2 and 3 of the ConstructionSkills Assessment Strategy. The notes should help awarding organisations incorporate relevant parts of the assessment strategy principles' requirements in their documentation for construction and built environment – craft, supervisory, technical, managerial and professional NVQ/SVQs. The following general standard notes are strongly recommended for adoption by awarding organisations in their assessment specification:

Standard note 1:

'Taken as a whole, the evidence must show that the candidate consistently meets all the following performance criteria across the scope/range.'

Standard note 2:

'There must be workplace evidence against each performance criterion. Where the workplace evidence does not cover the whole scope/range, knowledge evidence must be provided to cover the remaining items of scope/range for each relevant performance criterion.'

Standard note 3:

'Knowledge evidence may be established from questioning the candidate, or from industry recognised industry education and training programme assessment, or professional interview assessment, that has been matched to the requirements of the National Occupational Standards. Such assessments should also have their own independent external assessment, moderation or verification. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.'

Standard note 4:

Either:

'Simulations are not considered to be acceptable for producing this evidence.'

OR

'Simulations are considered to be an acceptable alternative for producing evidence for the following item(s) which is/are considered to be rare/infrequent, but key/critical to demonstrating competence. The following realistic working environment and context must be adopted for the simulation: appropriate: tools, equipment and instruments; materials; types of contingencies; standards and quality specifications; real timescales; quantities of work; physical conditions; relationship with people; type of interaction; communication methods and media; information and data.'*

[**include as appropriate*]

Annex B

The following is a list of the additional information Annexes for awarding organisations where National Working Groups or Awarding Body Forums have identified the need for specific clarification for the units and qualifications with NVQ in the title and SVQs.

NVQs/SVQs	Annex
Controlling Lifting Operations	B1
Plant Operations	B2

Annex B1

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

Part A: Clarification and guidance notes

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

Additional requirements for assessors of planning and supervising lifting operations

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

Supplementary guidance

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

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

Part B: Clarification on standards (NOS) content terminology

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

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

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

Clarification of NOS terminology for controlling lifting operations

'construction operations'	Includes lifting operations within other sectors of industry.
'decision-makers'	This refers to the client, customer or their representative, senior/contracts manager, project team, consultants or in VR 705 the lift planner.
'ensure notice has been given to all the people who will be affected...'	This means as dictated by the lift plan.
lines', 'levels', 'angles'	This includes load levels, ground levels, lines for placing loads and lifting accessory angles
'near neighbours'	This can include other structures and a workforce in a different part of the project.
'organise and control the site'	The lifting activity and the immediate surrounding area
'position, align and/or level the work'	This refers to items being moved and placed and the equipment used to attach and move the loads.
'produce clear requests for plant, equipment or machinery'	This means those specified by the lift plan.
'place and maintain notices'	This means ensuring that the correct notices (for the lifting activity) are in place prior to the commencement of the lifting activity, and checked throughout the duration of the activity.
'plan how the work will be undertaken'	This means as dictated by the lift plan.
'programmes and schedules'	This refers to either components part of, or the complete lift plan.
'project'	A lifting operation that is taking place within an overall contract, project or work activity.
'project plan'	This refers to either components part of, or the complete lift plan.
'site'	A lifting operation that is taking place within an overall contract, project or work activity.
'site plan'	This refers to either components part of, or the complete lift plan.
'vehicular access'	This can comprise of all forms of transport, including waterborne and airborne craft.

Annexe B2

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

Clarification and guidance notes

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

Additional requirements for assessors of plant operations

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

Supplementary guidance

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

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

Annexe E: Additional requirement for qualifications that use the term 'NVQ' in a qualification title

For details please go to www.ofqual.gov.uk to access the document *'Operating rules for using the term 'NVQ' in a qualification title'*.

Annexe E: PLTS Mappings

PLTS	Units	1 Level 4	2 Level 5	3 Level 5	4 Level 4	5 Level 5
Independent Enquirers						
1 identify questions to answer and problems to resolve		•	•			•
2 plan and carry out research, appreciating the consequences of decisions		•	•		•	•
3 explore issues, events or problems from different perspectives		•			•	•
4 analyse and evaluate information, judging its relevance and value		•	•		•	•
5 consider the influence of circumstances, beliefs and feelings on decisions and events		•				•
6 support conclusions, using reasoned arguments and evidence		•	•		•	•
Creative Thinkers						
1 generate ideas and explore possibilities		•	•			
2 ask questions to extend their thinking			•			
3 connect their own and others' ideas and experiences in inventive ways			•			
4 question their own and others' assumptions		•	•			
5 try out alternatives or new solutions and follow ideas through		•				
6 adapt ideas as circumstances change					•	
Reflective Learners						
1 assess themselves and others, identifying opportunities and achievements				•		
2 set goals with success criteria for their development and work				•		
3 review progress, acting on the outcomes			•	•		
4 invite feedback and deal positively with praise, setbacks and criticism			•	•		
5 evaluate experiences and learning to inform future progress				•		•
6 communicate their learning in relevant ways for different audiences			•	•		
Team Workers						
1 collaborate with others to work towards common goals			•	•		
2 reach agreements, managing discussions to achieve results			•	•		
3 adapt behaviour to suit different roles and situations, including leadership roles				•		
4 show fairness and consideration to others				•		
5 take responsibility, showing confidence in themselves and their contribution				•		
6 provide constructive support and feedback to others				•		
Self-Managers						
1 seek out challenges or new responsibilities and show flexibility when priorities change			•			
2 work towards goals, showing initiative, commitment and perseverance			•	•		
3 organise time and resources, prioritising actions		•				
4 anticipate, take and manage risks			•			
5 deal with competing pressures, including personal and work-related demands				•		
6 respond positively to change, seeking advice and support when needed		•				
7 manage their emotions, and build and maintain relationships				•		
Effective Participators						
1 discuss issues of concern, seeking resolution where needed			•		•	
2 present a persuasive case for action		•	•		•	•
3 propose practical ways forward, breaking these down into manageable steps		•	•		•	•
4 identify improvements that would benefit others as well as themselves			•	•	•	•
5 try to influence others, negotiating and balancing diverse views to reach workable solutions			•	•		•
6 act as an advocate for views and beliefs that may differ from their own			•	•	•	•

Annexe F: NOS Mappings

Unit number	Unit reference number	Unit title	Derived from the National Occupation Standards
1	M/600/9712	Manage the Environmental Impact of Work Activities	CFAMLE9 manage the environmental impact of your work
2	T/504/1065	Maintaining Health, Safety and Welfare systems in Construction and the Built Environment	COSVR726 Establish, implement and maintain systems for managing health, safety and welfare
3	Y/504/1088	Develop Working Relationships in Construction and the Built Environment	COSVR210 Develop and maintain good working relationships
4	H/600/9609	Ensure Compliance with Legal, Regulatory, Ethical and Social Requirements	CFAMLB8 Ensure compliance with legal, regulatory, ethical and social requirements
5	J/504/1104	Monitoring Environmental Factors and Sustainability in Construction and the Built Environment	COSVR727 Establish, control and monitor environmental factors and sustainability
6	Y/504/1091	Providing Built Environment Related Customer Service in the Workplace	COSVR719 Provide customer service in construction
7	H/504/1093	Sustainable Innovation in Construction	CFAMLC3 Encourage innovation in your organisation
8	J/600/9800	Conduct a Quality Audit	SEMMPA47 Carry out quality audits
9	K/600/9800	Manage Physical Resources	SFJCPS8.4 Manage physical resources
10	K/600/9711	Promote Equality of opportunity, Diversity and Inclusion Across and Organisation	CFAMLB12 Promote equality of opportunity, diversity and inclusion in your organisation
11	J/600/9702	Promote the Use of technology Within an Organisation	CFAMLE4 Promote the use of technology within your organisation
12	M/600/9614	Support the Culture of an Organisation	CFAMLB9 Develop the culture of your organisation

Unit number	Unit reference number	Unit title	Derived from the National Occupation Standards
13	K/504/1094	Managing Performance in Construction and the Built Environment	COSVR713 Allocate work and check people's performance
15	T/504/1096	Preparing and Evaluating Supply Chain Tenders in Construction	COSVR731 Ensure that work activities and resources meet project work requirements
16	F/504/1098	Surveying in Construction and the Built Environment	COSBEDL4O13 Identify survey and information requirements in planning, conservation and building control
17	J/504/1099	Developing Detailed Project Designs in Construction and the Built Environment	COSTPCBCB51.2 Select, test and refine project solutions in planning and conservation
18	M/504/1100	Work Scheduling and Procurement in Construction and the Built Environment	COSVR702 Plan work activities and resources to meet work requirements
19	A/504/1102	Optimising the Supply Chain in Construction and the Built Environment	COSVR733 Organise, control and monitor supplies of materials
20	A/600/9616	Contract Valuations and Claims in Construction and the Built Environment	COSVR738 Control project quantities and costs
21	F/504/1103	Establish Risk Management Processes for an Organisation	PPLAOG75 Manage risk
22	T/504/1096	Planning Conservation Activities in Construction and the Built Environment	COSVR720 Plan historical conservation/restoration activities
23	D/504/1089	Chair Meetings in the Built Environment	CFABAA413 Chair meetings
24	L/504/1105	Monitoring Projects in Construction and the Built Environment	COSVR727 Establish, control and monitor environmental factors and sustainability

Unit number	Unit reference number	Unit title	Derived from the National Occupation Standards
27	D/504/1108	Designing Engineering Solutions for the Built Environment	COSTPCBCB51.1 Identify and assess significant factors influencing project proposals in conservation and building control
28	H/504/1109	Managing Tests in Construction and the Built Environment	COSTPCBCA32.2 Assess the sustainability of proposals in planning and conservation
29	D/504/1111	Designing Sustainable Building Services Engineering Systems	COSTPCBCB51.1 Identify and assess significant factors influencing project proposals in conservation and building control
30	H/504/1112	Commissioning Building Services Engineering Systems	COSTPCBCB51.1 Identify and assess significant factors influencing project proposals in conservation and building control
31	M/504/1114	Analysing and Monitoring Building Services Engineering Controls	COSTPCBCB51.1 Identify and assess significant factors influencing project proposals in conservation and building control
32	J/600/9750	Plan and Manage a Project	CFABA152 Plan run and evaluate projects
33	H/600/9738	Manage a Tendering Process	COSVR731 Ensure that work activities and resources meet project work requirements
34	A/504/1116	Using Specialist Software in Construction and the Built Environment	ESKIBS3 Bespoke or specialist software

October 2017

For information about Edexcel, BTEC or LCCI qualifications visit qualifications.pearson.com

Pearson Education Limited. Registered in England and Wales No. 872828
Registered Office: 80 Strand, London WC2R 0RL.
VAT Reg No GB 278 537121