SVQ 2 Production Horticulture SCQF Level 5 (1065-02)

March 2014 Version 1.0





Qualification at a glance

Subject area	Horticulture
City & Guilds number	1065
Age group approved	16+
Entry requirements	None
Assessment	Portfolio of Evidence
Centre approval	Fast track
Support materials	Centre handbook
	Assessment pack
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number
SVQ 2 Production Horticulture SCQF Level 5	1065-02
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This document tells you what you need to do to deliver the qualification:

Area	Description	
Who is the qualification for?	It is for learners who work or want to work in the Horticulture sector	
What does the qualification cover?	It allows learners to learn, develop and practise the skills required for employment and/or career progression in the Horticulture sector. This qualification	

Structure

To achieve **SVQ 2 Production Horticulture SCQF Level 5**, learners must achieve 11 units in total **6** mandatory units and a minimum of **5** from the optional units available. *Unit 263-265 are elective units and do not count towards the qualification but can be taken for CPD purposes*.

City & Guilds unit number	Unit title	Credit value	Unit Level
Mandato	ry		•
Unit 201	Monitor and maintain health, safety and security	10	5
Unit 202	Establish and maintain effective working relationships with others	4	5
Unit 203	Agree how to manage and improve own performance in a business environment	4	5
Unit 204	Establish crops or plants	7	6
Unit 205	Prepare growing media	6	6
Unit 206	Assist with the control of pests, diseases and disorders	6	5
Optional			
Unit 207	Prepare an evaluation of group activities	4	5
Unit 208	Prepare an evaluation of group activities	4	5
Unit 209	Propagate plants from seed	8	5
Unit 210	Maintain the growth of crops or plants	10	6
Unit 211	Create plant displays	4	5
Unit 212	Maintain plant displays	6	5
Unit 213	Establish and maintain artificial plant displays	9	5
Unit 214	Dig graves	9	6
Unit 215	Prepare for burials and restore internment plots	9	6
Unit 216	Maintain grass surfaces	8	4
Unit 217	Maintain the health of sports turf	8	5
Unit 218	Maintain the condition of sports turf surfaces	10	6
Unit 219	Renovate and repair sports turf surfaces	10	6
Unit 220	Maintain and renovate artificial sports surfaces	9	5
Unit 221	Install land drainage systems	7	6
Unit 222	Maintain land drainage systems	6	6
Unit 223	Maintain irrigation systems	6	6

Unit 224	Construct pools and water features	9	5
Unit 225	Maintain pools and water features	8	5
Unit 226	Install hard standing sub-layers	6	5
Unit 227	Install flexible block surfaces	7	5
Unit 228	Install rigid block surfaces	8	5
Unit 229	Install flexible flag surfaces	8	5
Unit 230	Install rigid flag surfaces	8	5
Unit 231	Install flexible sett/cobble surfaces	7	5
Unit 232	Install rigid sett/cobble surfaces	7	5
Unit 233	Install kerbs, channels and edgings	12	5
Unit 234	Install combined kerb-drain systems	8	5
Unit 235	Install small element kerbs and edge restraints	8	5
Unit 236	Harvest crops by hand	4	5
Unit 237	Carry out post-harvest operations	4	7
Unit 238	Identify, collect and prepare plants for sale or dispatch	4	5
Unit 239	Merchandise and sell plants and other relevant products	5	5
Unit 240	Install hard standing laying courses	6	5
Unit 241	Install hard standing bed preparation	7	5
Unit 242	Maintain and store records within the workplace	3	6
Unit 243	Transport physical resources within the work area	3	4
Unit 244	Prepare and operate a tractor with attachments	11	5
Unit 245	Construct paths or surfaces	6	5
Unit 246	Maintain and repair paths or surfaces	6	5
Unit 247	Construct structures	12	6
Unit 248	Maintain and repair structures	7	5
Unit 249	Construct boundaries or access points	12	7
Unit 250	Maintain and repair boundaries or access points	6	5
Unit 251	Carry out maintenance and repair of equipment and machinery	5	6
Unit 252	Identify the presence of pests, diseases and disorders	7	6
Unit 253	Prepare and use equipment and machines	11	5
Unit 254	Prepare and cultivate sites for planting	6	6
Unit 255	Harvest crops by mechanical means	5	4
Unit 256	Store harvested crops	5	5
Unit 257	Transport harvested crops	4	4
Unit 258	Promote responsible public use of outdoor sites	4	5
Unit 259	Resolve customer service problems	6	5
Unit 260	Process payments for purchases in a retail environment	5	5

Unit 261 Receive goods from deliveries		3	5
Unit 262	Place goods in storage	5	5
Elective u	units		
Unit 263 Prepare plant or machinery for operational performance 7		5	
Unit 264 Give customers a positive impression of yourself and your organisation		5	5
Unit 265 Assemble and install purpose made equipment and components for sport/play		3	5



2 Centre requirements

Approval

If your Centre is approved to offer any qualification in the 0065 Workbased Horticulture suite, you can apply for the new **SVQ 2 Production Horticulture SCQF Level 5** approval using the **fast track approval form**, available from the City & Guilds website.

Centres should use the fast track form if:

- there have been no changes to the way the qualifications are delivered, and
- they meet all of the approval criteria in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After 12 months, the Centre will have to go through the standard Qualification Approval Process. The centre is responsible for checking that fast track approval is still current at the time of application.

Resource requirements

Resource requirements re listed under each unit that requires special resource.

Centre staffing

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

Internal Verifiers

Must:

Be occupationally competent and knowledgeable in respect of the units they are going to verify. The awarding body must ensure that internal verifiers have verifiable, relevant and current industry experience and knowledge of the occupational working area at, or above, the level being verified. This experience and knowledge must be of sufficient depth to be effective and reliable when verifying assessors' work. Internal verifiers' experience and knowledge could be verified by:

• CV and references

- Possession of a relevant NVQ/SVQ or other equivalent qualification
- Membership of a relevant professional body.
- Have sufficient knowledge of the work activities and assessment process to be able to offer credible advice on the interpretation of the standards, moderate assessments and resolve any differences and conflicts.
- Be fully conversant with the National Occupational Standards; and must be able to assist assessors with interpretation and the making of assessment judgements.

They must be able to make judgements about the assessment process being applied by assessors.

- Co-ordinate the work of assessors, provide advice, call meetings as appropriate, observe assessments and carry out all the other important roles of an internal verifier.
- Receive an appropriate induction to the SVQs that they are verifying.
- Actively engage in relevant, industry specific continuing professional development activities to keep up to date with developments relating to the industry in which they are verifying.
- Hold or be working towards the appropriate qualifications for internal verifiers.

Information on the induction and continuing professional development of internal verifiers must be made available to the external verifier.

Assessors

All assessors must:

- Be occupationally competent and knowledgeable in respect of the units they are going to assess. Assessors must have verifiable, relevant and current industry experience and knowledge of the occupational working area at, or above, the level being assessed. This experience and knowledge must be of sufficient depth to be effective and reliable when judging candidate's competence. Assessors' experience and knowledge could be verified by:
 - CV and references
 - Possession of a relevant NVQ/SVQ or other equivalent qualification
 - Membership of a relevant professional body.
- Be familiar with the National Occupational Standards; and must be able to interpret and make judgements on current working practices and technologies within the area of work
- Have sufficient time to carry out the role
- Receive an appropriate induction to the SVQs that they are assessing
- Actively engage in relevant, industry specific continuing professional development activities to keep up to date with developments relating to the industry in which they are assessing

- Hold or be working towards the appropriate qualifications for assessors.
- Information on the induction and continuing professional development of assessors must be made available to the external verifier.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Learner entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as this qualification is not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several e-Portfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **www.cityandguilds.com/eportfolios**.



4 Assessment

Candidates must:

• have a completed portfolio of evidence for each unit

Internal verifiers should develop a sampling procedure which is in line with regulatory guidance.

Internal verifiers should be able to demonstrate how the internal verification sampling process ensures that:

- A selection of portfolios are sampled during their development stage.
- A selection of portfolios are sampled on completion.
- All types of evidence are sampled.
- All assessors are sampled, including those based at different sites.
- The work of different assessors is compared (where possible this comparison should be across the same unit(s)).
- The full range of units across the qualification is sampled.
- Internal verifiers should observe assessors conducting candidate assessments at regular intervals according to the guidelines, risk rating and experience of assessor. The reliability, validity and authenticity of evidence must be checked during these observations.
- Standardisation should be an integral part of the IV process.

The IV is responsible for signing off a candidate's record of achievement prior to certification request.

The IV is responsible for agreeing the countersigning arrangements for new assessors who have not achieved the appropriate qualification (as required by the regulatory authorities).

Workplace Assessment

Each Lantra unit has its own specific requirements which are attached to the unit.

Lantra believes that all assessments of a candidate's performance must take place in a real working environment that reflects industry working practices. This principle will apply to all units except those for which simulation has been deemed acceptable (see Simulation).

In order to ensure that the evidence used to assess candidates against the SVQ is valid all centres must demonstrate that the candidates have

access to the types of resources commonly in use in the industry and that the pressures and constraints of the workplace are reflected.

Lantra has no objection to the assessment of knowledge and understanding taking place in a different environment, for example a college or another environment which is not the immediate workplace. However, the assessment of this knowledge and understanding should be linked directly to workplace performance.

Witness Testimony

Lantra recognises that for the assessment of workplace performance to be as natural and efficient as possible, the use of witness testimony has a crucial role in the collection of evidence.

Witnesses must be fully briefed and clear about the purpose and use of the testimony.

Any relationship between the witness and candidate should be declared and noted by the assessor.

Witnesses must be able to demonstrate to the assessor that they have the necessary expertise in the area for which they are providing testimony. This information should be noted by the assessor.

Simulation

Simulation should only be used where it is difficult to collect evidence through a real work environment/situation. Simulations will usually deal with contingencies such as unexpected problems, emergencies, or other incidents which will not necessarily occur frequently, or where opportunities are not available.

City & Guilds will issue guidance to centres on request as to how these simulations should be planned and organised. In general this guidance must ensure the following:

- Simulations should only be used where prescribed in the relevant guidance for the development of SVQs.
- All simulations must be planned, developed and documented by the centre in a way that ensures the simulation correctly reflects what the standard seeks to assess.
- The physical environment for the simulation must be as realistic as possible and draw on real resources that would be used in the industry.
- Where simulations are used they must be based in an environment which reflects industry working practices (as defined in Workplace Assessment) and must be based on current working practice. This will be monitored by City & Guilds.
- Simulations can only be used to supplement real work activities and should not be the only source of evidence used to indicate competence.
- A centre's overall strategy for simulation must be approved by City & Guilds.

Recognition of prior learning (RPL)

The City & Guilds policy on RPL can be found at:

http://www.cityandguilds.com/Provide-Training/Centre-Support/Centre-Document-Library/Policies-and-Procedures/Quality-Assurance-Documents.



5 Units

Availability of units

These units are also available from Lantra www.lantra.co.uk

Unit 201 Monitor and maintain health, safety and security (CS2)

SCOE Lovel	
SCQF Level:	5
SCQF Credit value:	9
Aim:	This standard covers the key activities that are required to monitor and maintain good health and safety practices in your workplace. A workplace is wherever your work activities take place.
	To maintain a healthy and safe working environment, you are required to take reasonable care of the health and safety of yourself and others who may be affected by your work. You are also required to cooperate with your employer to help them to comply with their duties under health and safety legislation.
	You will follow set health and safety procedures and be able to recognise unsafe situations within the work area and from work activities and take action to deal with these or bring them to the attention of an appropriate person.
	You will need to be aware of the main risks to health and safety in your work area and any control measures or safe systems of work put in place by your employer.
	You must also be able to follow appropriate procedures in the event of an accident or emergency.
	It is important that in all your activities you recognise the limits of your own competence and ask for help and advice when it is needed.

Performance criteria

You must be able to:

- P1. follow set procedures and requirements (safe systems of work) relating to health and safety in your workplace
- P2. identify any significant risks to health and safety in your workplace

- P3. take action to control the risks where possible or seek guidance from an appropriate person
- P4. work in a way that minimises risks to your own safety and health and that of others
- P5. use safe methods of lifting and handling
- P6. use, handle and store equipment and materials correctly according to instructions and relevant legislation
- P7. use, handle and store potentially hazardous substances correctly in accordance with instructions and legislation
- P8. deal with waste safely and correctly in accordance with instructions and relevant legal requirements
- P9. wear appropriate clothing and protective equipment for the work to be undertaken
- P10. ensure a good standard of hygiene is maintained at all times
- P11. follow appropriate procedures when working alone or at risk of abuse
- P12. stop work immediately if there is a danger of accident or injury and take the appropriate action
- P13. follow procedures safely, correctly and without delay in an emergency situation
- P14. report accidents, incidents and near misses in accordance with instructions
- P15. record information as required

Knowledge and understanding

You need to know and understand

- K1. the main legal duties of your employer for health and safety under current legislation
- K2. your main legal duties and any additional responsibilities in relation to health and safety
- K3. the effects that work-related accidents, incidents and ill health can have on people and businesses
- K4. the main areas of risk in your work environment and the control measures and safe systems of work put in place to control these
- K5. how to identify health and safety hazards
- K6. who to seek guidance from with regard to health and safety
- K7. the range of alternative and complementary measures to control risks e.g. guarding machinery, personal protective equipment, instruction and training
- K8. the risks of personal injury, contracting disease or other health problems associated with your work and how these can be minimised
- K9. the risks of injury associated with lifting and handling and how these can be reduced e.g. mechanical handling aids, safe lifting techniques
- K10. safe methods of using, handling and storing equipment and materials
- K11. the importance of maintaining machinery and equipment in good working order and operating safely in accordance with instructions
- K12. safe use, handling and storage of potentially hazardous substances how

- K13. hazardous and non-hazardous waste should be dealt with appropriate
- K14. clothing and protective equipment for different work activities the
- K15. importance of good hygiene
- K16. the risks to others from your work activities including members of the public, children, visitors, contractors
- K17. the risks of working in isolation or in remote locations and the need for safe systems of work and emergency procedures
- K18. the types of accidents or injury that may occur in your workplace and how these can be avoided
- K19. the actions to take for different types of emergencies in your area of work including accidents, incidents and near misses
- K20. records that need to be maintained
- K21. the need to communicate health and safety precautions to others

Unit 201 Monitor and maintain health, safety and security (CS2)

Supporting information

Hazard: something with the potential to cause harm

Risk: likelihood of the hazard's potential being realised

In the land-based industry the most common risks arise from:

- workplace transport
- working at height
- > machinery or equipment
- > lifting and handling
- > noise and vibration
- dust, chemicals and hazardous substances including microorganisms
- confined spaces
- > sources of power: gases, electricity, compressed air
- > slips, trips and falls
- lone working.

Evidence requirements

- A. you must provide performance evidence for evaluating risks resulting from a minimum of two of the following:
- i. the use and maintenance of machinery or equipment
- ii. the use of materials or substances
- iii. working practices which do not conform to laid down procedures
- iv. unsafe behaviour
- v. accidental breakages and spillages
- vi. environmental factors
- vii. reporting accidents to self or other in accordance with work place practice
 - B. you must provide performance evidence for following a minimum of four types of workplace policies which cover:
 - i. the use of safe working methods and equipment
- ii. the safe use of hazardous substances
- iii. smoking, eating, drinking and drugs
- iv. what to do in the event of an emergency
- v. personal presentation

Notes

Evidence from performance is required and should be the primary source of evidence. However this will often be supported by questioning or other assessment methods in order to gather evidence of your ability to perform competently.

Unit 202 Establish and maintain effective working relationships with others (CS4)

SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard is about working effectively with other people. This includes communicating clearly, co-operating with others and helping to improve ways of working. This could be with your own colleagues, supervisors/managers or people external to the team/department/organisation including suppliers and customers. It may include those for whom English is not their first language. You may work closely within a team, or spend a significant amount of time working alone.

Performance criteria

You must be able to

- P1. present a professional image of yourself and those you represent
- P2. establish and maintain good working relationships with other people
- P3. discuss opportunities to make improvements to ways of working
- P4. co-operate effectively with other people to achieve results
- P5. deal with any conflicts effectively in an appropriate way
- P6. communicate with others in a way that supports effective working relationships
- P7. be aware of non-verbal communication messages (e.g. body language)
- P8. provide information clearly, tactfully and in an appropriate manner
- P9. maintain confidentiality.

Knowledge and understanding

You need to know and understand

- K1. the ways in which you can present a professional image of yourself and those you represent
- K2. the reasons why good working relationships are important
- K3. the ways in which good working relationships can be maintained and improved
- K4. when conflict might occur in a work situation and how to deal with it
- K5. the reasons why effective communication is important
- K6. methods of communicating effectively
- K7. the importance of good listening skills
- K8. the messages conveyed by non-verbal communication (e.g. body language)
- K9. the importance of not using derogatory statements in a work situation
- K10. the importance of maintaining confidentiality
- K11. the limits of your responsibility and authority

Unit 202 Establish and maintain effective working relationships with others (CS4)

Supporting information

Evidence requirements

Notes

Evidence from simulations is not acceptable for this element.

Unit 203 Agree how to manage and improve own performance in a business environment (CFABAA625)

SCQF Level:	5
SCQF Credit value:	4
Aim:	Accept plans for own work and its delivery; improve own performance; and, behave in a way that encourages effective working. Links: All categories Specific skills: 1. analysing 2. communicating 3. decision-making 4. organising 5. planning 6. presenting information 7. problem solving

Performance criteria

You must be able to:

Plan and be accountable for own work

- P1. agree realistic targets and achievable timescales for own work
- P2. plan how to make best use of time and the other resources needed
- P3. confirm working methods with work colleagues
- P4. follow the correct procedures to deal with problems when they arise, using the support of other people when necessary
- P5. keep other people informed of progress
- P6. meet deadlines or renegotiate timescales and plans in good time
- P7. take responsibility for own work and accept responsibility for any mistakes made
- P8. follow agreed guidelines, procedures and, where appropriate, codes of practice
- P9. set high standards for own work and show commitment to achieving these standards.

Improve own performance

- P10. encourage and accept feedback from other people
- P11. use feedback to agree ways to improve own work and put improvements into practice
- P12. agree where further learning and development could improve own performance

- P13. follow through a learning plan that meets own needs
- P14. review own progress and update own learning plan

Behave in a way that supports effective working

- P15. understand your own needs and rights
- P16. show a willingness to take on new challenges
- P17. adapt readily to change
- P18. treat other people with honesty, respect and consideration

Knowledge and understanding

You need to know and understand:

Plan and be accountable for own work

- K1. the purpose of planning own work and being accountable to others
- K2. how to agree realistic targets for own work and why this is important
- K3. how to plan own work to meet agreed deadlines
- K4. the types of problems that may occur during work and how to seek help if needed
- K5. the purpose of keeping other people informed about progress
- K6. the purpose and benefits of giving other people sufficient notice if revisions to plans are needed
- K7. the benefits of acknowledging and learning from mistakes
- K8. guidelines, procedures and codes of practice that are relevant to own area of work
- K9. the benefits of setting high standards for own work and how to set these standards

Improve own performance

- K10. the benefits of trying to continuously improve own work
- K11. the benefits of encouraging and accepting feedback from others
- K12. how learning and development can help to improve own work, benefit the organisation and further own career
- K13. the main career progression routes available
- K14. learning and development opportunities that are available

Behave in a way that supports effective working

- K15. the purpose and benefits of being ready to take on new challenges and adapt to change
- K16. the value of treating others with honesty, respect and consideration
- K17. the types of behaviour that show you are honest, respectful and considerate and the types of behaviour that show you are not
- K18. how to help and support others and why this is important

Unit 204 Establish crops or plants (LANH9)

SCQF Level:	6
SCQF Credit value:	7

Aim:

This standard covers the establishment of plants or seeds in protected conditions or outdoors. The types of plants and planting methods will depend on the type of site or project within which you work. Planting may be into a wide variety of growing media which could include soil, hydroponics, matting, compost or other growing media as appropriate. This includes planting plants and seeds in any horticulture setting, whether amenity (green roofs, gardens, sports turf etc) or production (fruit, vegetable, trees etc).

You will set out plants or seeds in the appropriate growing medium according to requirements (this could be production or project requirements), at an acceptable speed (could be commercial) while maintaining quality. Following planting moisture, support and protection may be required to allow the plants or seeds to establish themselves within the growing medium.

The identification of plant material to meet specification will include the need to identify plants by the common and botanical names. As well as knowledge of common and botanical names this standard will also cover grouping of different plants.

If you are required to use chemicals (e.g. herbicides, fungicides or insecticides), these are subject to legislative requirements, and you will need to be in possession of the relevant qualifications or be under the direct supervision of someone who possesses the relevant qualification.

Performance criteria

You must be able to:

- P1 assess the risks associated with the site and the proposed works
- P2 prepare the site to meet specifications
- P3 select plant material appropriate to the specifications
- P4 check the health of plant material before planting, and reject unacceptable specimens
- P5 ensure the growing medium is in a suitable condition for planting
- P6 appropriately position the plant material within the growing medium in accordance with the specifications
- P7 maximise the health, vigour and physical condition of plant material through handling and planting methods
- P8 provide protection and support appropriate to the crop or plant
- P9 provide crops or plants with appropriate aftercare where required
- P10 ensure the integrity of the site is maintained
- P11 make the site good when your work is finished, and dispose of waste and excess materials safely to minimise environmental risk and in accordance with legal requirements
- P12 ensure equipment is used and maintained in a safe, clean and effective condition throughout
- P13 maintain environmental and health and safety legislation, codes of practice and organisational policy

Knowledge and understanding

You need to know and understand:

- K1 how to identify hazards and assess risks
- K2 how to interpret specifications and plans
- K3 principles of marking and setting out
- K4 stages of plant development
- K5 how to identify plant material to meet specifications
- K6 indications that plant material is unsuitable for planting
- K7 the principles of selecting and combining plant types for different applications
- K8 how to identify types of growing medium and their relationship to plant growth and development
- K9 methods of preparing growing media for planting
- K10 the correct spacing, depth, orientation and firmness of crops or plants which are grown
- K11 the factors affecting the timing and method of planting
- K12 the causes of damage and how to prevent them
- K13 the methods of assessing the health and condition of the crop or plant I
- K14 methods of support and protection and how to apply them
- K15 the initial maintenance requirements to ensure effective establishment of crops or plants
- K16 how to select, prepare and use tools, equipment and materials relevant to the specifications
- K17 your responsibilities under current environmental and health and safety legislation and codes of practice

Unit 204 Establish crops or plants (LANH9)

Supporting information

Glossary

Plants include grass, woody plants, herbaceous, bedding plants, seeds, crops and sedums.

Specifications include drawings, schedules, method statements, Standard Operating Procedures (SOPs) and manufacturers' guidelines.

Instructions can be verbal or written.

Evidence requirements

- A. set and mark out one of the following sites for the establishment of crops or plants:
- (i) areas for soft landscape construction
- (ii) areas for planting
- (iii) areas for restoration
- B. establish at least two of the following plants/crops:
- (i) trees
- (ii) shrubs
- (iii) container grown
- (iv) root grown
- (v) turf
- (vi seeds
- C. identify at least 20 plants/crops/grasses using their common and botanical names
- D. position plants/crops according to the correct:
- (i) spacing
- (ii) depth
- (iii) orientation
- (iv) firmness
- E. assess the need to apply protection from three of the following:
- (i) pests
- (ii) diseases
- (iii) weeds
- (iv) environmental conditions

- F. provide two of the following types of aftercare:
- (i) provision of water
- (ii) protection
- (iii) support
- (iv) initial pruning or cutting

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

Areas for plants could be in a production environment or in a landscape environment, and can include Grass Swards.

The 20 plants/crops/grasses can include common weeds, trees, shrubs, perennials, etc.

Unit 205 Prepare growing media (LANH2)

SCQF Level:	6
SCQF Credit value:	6
Aim:	This standard is for those who prepare growing media for planting in accordance with specifications. The growing media may be soil, compost or synthetic media (e.g. rock wool).
	The standard is applicable to the preparation of growing media by hand or machine.

Performance criteria

You must be able to

P1	carry out all work in accordance with specifications
P2	select, prepare, use and maintain equipment in a safe, clean and effective condition throughout
P3	obtain and make ready the required quantities of materials for incorporation into the growing media in accordance with specifications
P4	incorporate materials into the growing media in accordance with specifications
P5	prepare the growing medium in accordance with specifications
P6	maintain suitable levels of hygiene and biosecurity
P7	deal with waste safely and correctly in accordance with company policies
P8	store and label growing media in accordance with specifications
P9	complete records as appropriate
P10	carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

K1	the importance of completing the activity in accordance with specifications
K2	how to select, prepare, use and maintain equipment in a safe and effective condition
K3	specifications in relation to the preparation of growing media
K4	how the requirements of different crops and varying growing conditions affect the make up of the growing media
K5	how environmental conditions influence the preparation of growing media

Κ6 external factors affecting the timing of operations Κ7 the preparation of growing media in relation to planting requirements different ingredients used in the preparation of growing media Κ8 Κ9 the different properties of the various ingredients used to prepare growing media procedures for obtaining materials and measuring out the K10 ingredients of the growing media K11 different methods of incorporating ingredients into a growing medium K12 different methods of preparing the growing medium K13 the importance of accurate labelling K14 relevant storage conditions for growing media and factors affecting storage life K15 the importance of maintaining hygiene and biosecurity when preparing growing media how to handle, transport and dispose of waste in accordance with K16 legal and organisational requirements K17 the potential impact of your work on the environment and how this can be minimised K18 the records which need to be completed your responsibilities under current environmental and health and K19 safety legislation, codes of practice and company policies

Unit 205 Prepare growing media (LANH2)

Supporting information

Glossary

Specifications: drawings, schedules, method statements, Standard

Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Evidence requirements

- A. identify and obtain the following materials:
- (i) fertiliser
- (ii) growing media ingredients
- (iii) soil conditioner
- B. use the following methods for preparing the growing media:
- (i) mixing
- (ii) cultivating
- C. use the following materials:
- (i) fertiliser
- (ii) soil conditioner
- (iii) growing media ingredients
- D. prepare growing media in accordance with the following planting requirements:
- (i) consistency
- (ii) moisture level
- (iii) tilth
- (iv) depth of cultivation
- D. dispose of the following types of waste:
- (i) organic
- (ii) inorganic

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

Unit 206 Assist with the control of pests, diseases and disorders (LANCS54)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standard covers assisting with the control of pests, diseases and disorders.
	You will be working in accordance with instructions and specifications.
	You must carry out your work in a way which will minimise any impact on the natural environment.
	You are expected to assist with the control of pests, diseases and disorders under close supervision from your supervisor or a competent colleague. You are not expected to make decisions about the most appropriate control methods to use.
	If you are to assist in the use of chemical controls (e.g. herbicides, fungicides or insecticides), these are subject to separate legislative requirements, and you will need to be in possession of the relevant certificate of competence or be under the direct supervision of someone who possesses the relevant certificate of competence.

Performance criteria

You must be able to

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. confirm the control methods to be used with the appropriate person P3 prepare and use equipment appropriate for the work safely and effectively
- P3. handle all materials carefully, safely and efficiently in accordance with instructions and organisational policy
- P4. assist with applying control methods in a way which minimises the risks to non-target species and the environment
- P5. report any problems that arise during pest, disease and disorder control to the appropriate person without delay
- P6. deal with waste safely and correctly in accordance with instructions P8 complete records as appropriate

Knowledge and understanding

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. your responsibilities for the control of substances hazardous to health
- K3. workplace policies and procedures relating to the control of pests, diseases and disorders
- K4. safe handling and effective use of materials, equipment and chemicals during the control of pests, diseases and disorders
- K5. the dangers and emergency treatments associated with the use of K6 chemicals chemical and cultural control methods
- K6. biological control methods for controlling pests
- K7. instructions for assisting with the use of control methods
- K8. the types of problems which may occur and to whom they should be reported
- K9. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K10. the purpose and importance of the records which need to be completed relating to use of control methods

Scope/range

Control methods:

- 1 chemical
- 2 biological
- 3 cultural

Unit 206 Assist with the control of pests, diseases and disorders (LANCS54)

Supporting information

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Pests will include insects, slugs, snails and rodents, for example.

Diseases may be fungal, viral or bacterial.

Disorders may include nutrient deficiencies (e.g. nitrogen or calcium deficiencies).

Control may be by biological, cultural and/or chemical means

Evidence requirements

Notes

Assessment to be based on naturally occurring evidence of realistic working environment

Unit 207 Collect and store propagation materials (LANH3)

SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard is for anyone whose role it is to carry out the collection and storage of propagation material.
	It covers the collection of different types of propagation material and the requirements for storage ready for use. This includes vegetative material and seeds.
	Propagation of vegetative material is covered in H5 and propagation of seeds is covered in H7.
	You will be working in accordance with instructions and specifications.

Performance criteria

P1	carry out all work in accordance with instructions and specifications
P2	prepare, use and maintain equipment in a safe, clean and effective condition throughout
P3	identify plants from which material is to be collected
P4	ensure material meets specifications and is suitable for propagation
P5	handle plant material in a manner that minimises damage and waste
P6	collect the propagation material in accordance with specifications
P7	store collected material in accordance with specifications
P8	label collected material in accordance with specifications
P9	maintain suitable levels of hygiene and biosecurity
P10	deal with waste safely and correctly in accordance with instructions
P11	complete records as appropriate
P12	carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

K1	the importance of completing the activity in accordance with specifications
K2	how to prepare, use and maintain equipment in a safe and effective condition
К3	the type of plants that can be propagated
K4	where and how to obtain information on plants and plant identification
K5	the structure of plants
K6	the stages of plant development
K7	the ways in which plant material should be handled
K8	how to collect propagation material and the requirements of the specifications
K9	appropriate conditions for storing propagation material prior to use
K10	the importance of maintaining hygiene and biosecurity during collection and storage of propagation material
K11	how to handle, transport and dispose of waste in accordance with legal and organisational requirements
K12	length of storage that is required
K13	requirements for labelling
K14	the records which need to be completed
K15	your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

Propagation methods:

- cuttings (including soft wood and leaf cuttings)
- budding (including leaf budding)
- grafting
- micro-propagation

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Unit 207 Collect and store propagation materials (LANH3)

Supporting information

Evidence requirements

- A. use and maintain the following equipment:
- (i) cutting equipment
- (ii) containers for storage and transport of material

Notes

Evidence from simulations is not acceptable for this element.

Unit 208 Prepare and establish propagation materials (LANH5)

SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard is for anyone whose role it is to carry out the preparation and establishment of propagation material through vegetative methods.
	It covers the preparation of the propagation material, establishing the propagation material in a growing environment and providing aftercare to sustain and promote plant development.
	You will be working in accordance with instructions and specifications.

Performance criteria

P1	carry out all work in accordance with instructions and specifications
P2	prepare, use and maintain equipment in a safe, clean and effective condition throughout
P3	use the required growing medium in accordance with specifications
P4	prepare and treat propagation material in accordance with specifications
P5	handle plant material in a manner that minimises damage and wastage and optimises growth
P6	position propagation material in the growing medium in accordance with specifications
P7	label propagation material in accordance with specifications
P8	provide propagation material with a suitable growing environment in accordance with specifications
P9	complete activities to sustain and promote plant development after propagation and in accordance with specifications
P10	maintain suitable levels of hygiene and biosecurity
P11	deal with waste safely and correctly in accordance with instructions
P12	complete records as appropriate

P13 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

K1	the importance of completing the activity in accordance with specifications
K2	how to prepare, use and maintain equipment in a safe and effective condition
K3	how to prepare and treat propagation material in accordance with specifications
K4	the different propagation methods
K5	how to establish propagation material in the growing media in accordance with specifications
K6	the ways in which plant material should be handled
K7	the types of growing environments
K8	the importance of aftercare
K9	methods for sustaining and promoting plant development following propagation
K10	the use of hormone treatments to encourage rooting
K11	the stages of plant development
K12	the requirements for labelling
K13	the importance of maintaining hygiene and biosecurity when preparing and establishing propagation material
K14	how to handle, transport and dispose of waste in accordance with legal and organisational requirements
K15	the records which need to be completed
K16	your responsibilities under current environmental and health and

safety legislation, codes of practice and company policies

Glossary

Propagation material:

- seedlings
- rooted cuttings
- unrooted cuttings
- divisions

Preparation methods:

- trimming of cuttings
- trimming of divisions
- preparation of stocks
- trimming of scions

Aftercare:

- provision of water
- provision of nutrients
- temperature control
- humidity control
- removal of diseased material
- training or trimming to promote appropriate growth formation
- subculturing

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Unit 208 Prepare and establish propagation materials (LANH5)

Supporting information

Evidence requirements

- A. maintain the following equipment:
- (i) cutting equipment
- (ii) containers for storage and transport of material
- B. prepare propagation material in at least one of the following ways:
- (i) trimming of cuttings(ii) trimming of divisions(iii) preparation of stocks(iv) trimming of scions
- C. use one of the following propagation methods:
- (i) cuttings
- (ii) budding
- (iii) grafting
- (iv) micro-propagation
- (vii) division
- D. promote plant development using two of the following:
- (i) watering
- (ii) temperature control
- (iii) humidity control
- (iv) removal of diseased material

Notes

Evidence from simulations is not acceptable for this element.

Unit 209 Propagate plants from seed (LANH7)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard is for anyone whose role it is to propagate plants from seed. This may require the operation of manual seed sowing equipment or seed sowing machines.
	It covers the preparation of materials and the process of seed sowing. You will need to be aware of seed preparation methods and growing mediums and also the aftercare of the crop in the period from sowing to the end of the propagation phase.
	You will be working in accordance with instructions and specifications.
	If you are working with machinery you need to be appropriately trained or certificated in line with current legislation

Performance criteria

- P1. carry out an environmental assessment of the site before starting work
- P2. prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P3. check type and quality of seed to ensure it meets specifications
- P4. check growing medium has been prepared
- P5. prepare the seeds in accordance with specifications
- P6. handle seeds in a way that minimises damage
- P7. evenly and accurately sow seeds in accordance with specifications
- P8. provide optimum environmental conditions for the seed
- P9. maintain suitable levels of hygiene and biosecurity
- P10. remove and dispose of unwanted seedlings in accordance with instructions
- P11. provide aftercare in accordance with specifications
- P12. label seeds in accordance with specifications
- P13. complete records as appropriate
- P14. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. the importance of carrying out an environmental assessment of the site before starting work and the findings which must be reported
- K2. how to prepare, use and maintain equipment in a safe and effective condition
- K3. the importance of completing the activity in accordance with specifications
- K4. how to identify type and quality of seed and recognise those which are substandard
- K5. different methods of preparing seed
- K6. types of growing medium
- K7. methods for handling seeds
- K8. the need for an even distribution of seeds and how to achieve the required ratio
- K9. the correct depth of sowing and how to achieve it
- K10. factors affecting the rate and percentage of germination
- K11. stages of plant development
- K12. how to recognise problems with germination and the action to take
- K13. the importance of maintaining hygiene and biosecurity during seed propagation
- K14. health problems that can occur during propagation
- K15. common pests and diseases encountered during propagation
- K16. types of aftercare required and the purpose including non-chemical alternatives to pests and diseases
- K17. the requirements for labelling
- K18. the records which need to be completed
- K19. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

Seed preparation methods:

- soaking
- priming
- > temperature treatments
- stratification

Aftercare:

- humidity control
- > temperature control
- ➤ light control
- provision of nutrients
- provision of water
- > pricking out

weed control

> pest or disease control

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written

Unit 209 Propagate plants from seed (LANH7)

Supporting information

Evidence requirements

- A. maintain at least one the following types of equipment:
- (i) manual seed sowing equipment
- (ii) seed sowing machines
- B. provide two of the following types of aftercare:
- (i) humidity control
- (ii) temperature control
- (iii) pricking out
- (iv) weed control
- (v) pest or rodent control

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real work situations.

Unit 210 Maintain the growth of crops or plants (LANH11)

SCQF Level:	6
SCQF Credit value:	10
Aim:	This standard covers the maintenance of crop or plant growth both outdoors and in protected conditions
	This standard is for those whose role it is to maintain the growth and development of crops or plants both outdoors and in protected conditions.
	This includes maintaining crops or plants in any horticulture setting, whether amenity (green roofs, gardens, sports turf etc) or production (fruit, vegetable, trees etc). You will carry out your work in accordance with instructions and specifications. If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. carry out an environmental assessment of the site before starting work
- P2. carry out all work in accordance with instructions and specifications
- P3. prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P4. monitor the health and development of the plants in accordance with specifications
- P5. take appropriate actions to optimise growth
- P6. recognise problems with the plant or environmental conditions and take the appropriate action
- P7. maintain plant development to specifications
- P8. monitor and maintain the integrity of the site to specifications to include irrigation and drainage where appropriate
- P9. recognise weeds, pests and diseases and take the appropriate action
- P10. handle plants in a manner which prevents damage
- P11. maintain suitable levels of hygiene and biosecurity
- P12. carry out work in a manner which causes minimal damage to the surrounding area

- P13. deal with waste safely and correctly and in accordance with instructions
- P14. complete records as appropriate
- P15. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and workplace policies

You need to know and understand:

- K1. the importance of carrying out an environmental assessment of the site before starting work and the findings which must be reported
- K2. how to prepare, use and maintain equipment in a safe and effective condition
- K3. the stages of plant development
- K4. methods for maintaining and optimising plant development
- K5. the impact of the growing medium on plant health
- K6. problems which may occur with development of plants and the appropriate action to take
- K7. indications that environmental conditions require adjustment and the action to take
- K8. how to recognise weeds, pests and diseases and the action to take
- K9. methods of supplying water to plants
- K10. how to check and adjust irrigation and drainage systems to meet specifications
- K11. methods of providing nutrients to plants
- K12. the importance of following specifications when providing nutrients to plants
- K13. types of unwanted plant material and why they must be removed
- K14. when plants require protection
- K15. the importance of completing the activity in accordance with specifications
- K16. the importance of maintaining hygiene and biosecurity when maintaining plants
- K17. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K18. how to complete appropriate records
- K19. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

Methods for maintaining plant development:

- protection from pests and diseases
- weed control measures
- > weather protection
- > control of temperature, humidity, ventilation, light and shade
- pruning and trimming

- supporting
- > nutrient provision
- provision of water

Control measures:

- mechanical
- > chemical
- > cultural

Crops or plants:

- > herbaceous perennials
- > sedums
- > arable crops
- crops for human consumption (e.g. strawberries, mushrooms, vines)
- > plants for sale or propagation

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Unit 210 Maintain the growth of crops or plants (LANH11)

Supporting information

Evidence requirements

- A. maintain equipment in the following ways:
- (i) preparation
- (ii) cleaning
- (iii) storage
- B. recognise and remove the following unwanted plant material:
- (i) damaged crops
- (ii) weeds
- (iii) crop debris
- (iv) diseased materials
- C. use the following methods when manipulating a plant for development:
- (i) trimming
- (ii) supporting
- D. take the following appropriate action where problems occur:
- (i) remedy the situation
- (ii) inform the appropriate person

Notes

Evidence from simulations is not acceptable for this element.

Unit 211 Create plant displays (LANH17)

CCOF Level	
SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard covers the creation of plant displays which could include interior or exterior plants. The displays could range from borders in a formal or informal garden, hanging baskets, planting containers etc. Within this standard you will need to know how to interpret plans and drawings (specifications).
	This standard is for those responsible for the creation of plant displays.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. establish employer requirements for the display
- P3. select plants and materials to meet specifications
- P4. ensure plants and materials are in a condition that is fit for use
- P5. select, prepare, use and maintain tools, equipment and machinery that are appropriate for the work safely and effectively
- P6. prepare the plants and materials according to specifications
- P7. handle and transport plants and materials safely and effectively
- P8. make sure that grouping and positioning is appropriate to the plants, environmental conditions and enhances the impact of the display
- P9. keep the plants and materials in a condition appropriate for use
- P10. use and maintain equipment in a safe, clean and effective condition throughout

- P11. use methods of support that maintain the plants' growth, appearance and intended purpose
- P12. label plants if required
- P13. carry out work in a manner which prevents damage to the surrounding area
- P14. deal with waste safely and correctly in accordance with instructions/legislation
- P15. restore the site to an appropriate condition following completion of the work

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of establishing the employer requirements for the display
- K3. the principles underpinning effective interior plant displays
- K4. stages of plant development
- K5. how to select plants and materials appropriate to different displays and sites
- K6. the different containers and growing mediums for displays and how to ensure they are fit for purpose
- K7. the tools and equipment required to set up plant displays and how to use and maintain them
- K8. how to prepare materials for plant displays
- K9. how to handle and transport the plants and materials safely and effectively
- K10. how to position features and groupings of plants in a way which is appropriate to them, the environment and the intended visual impact
- K11. how to ensure support methods are consistent with the display and the health and vigour of the plants
- K12. how to decide when labelling is necessary and how to label effectively
- K13. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K14. the importance of restoring the site to a clean and tidy condition.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Plant displays: interior or exterior

Unit 211 Create plant displays (LANH17)

Supporting information

Evidence requirements

- A select and use two of the following types of materials:
- (i) nutrients
- (ii) containers
- (iii) irrigation systems
- (iv) supports
- (v) plant material
- (iv) growing medium
- B. select, prepare and plant at least three of the following types of plant:
- (i) tropical
- (ii) temperate
- (iii) shade lovers
- (iv) sun lovers
- C. establish one of the following types of areas:
- (i) temporary
- (ii) permanent
- D. arrange three of the following types of plants displays:
- (i) formal bedding
- (ii) hanging baskets
- (iii) other containers
- (iv) wall shrubs
- (v) climbers
- (vi) mixed borders
- E. group and position plants appropriately according to environmental conditions including:
- (i) adjacent features
- (ii) light
- (iii) humidity
- (iv) air movement
- (v) temperature
- F. install one of the following types of feature:
- (i) water
- (ii) non-water

Notes

Evidence from simulations is not acceptable for this element.

Unit 212 Maintain plant displays (LANH18)

SCQF Level:	6
SCQF Credit value:	5
Aim:	This standard covers the maintenance and development of an established horticultural display. This could include formal bedding, hanging baskets and other containers, shrubs/bushes, climbers, mixed borders or rock gardens.
	This standard is for those who are responsible for the maintenance and development of plant displays.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. inspect the display matches specifications
- P3. identify suitable methods to promote plant health
- P4. select, use and maintain tools and equipment in a safe, clean and effective condition throughout
- P5. maintain the display in a way that is appropriate to the plants, their environmental conditions and the overall visual impact
- P6. provide plants with support where required to maintain growth and appearance
- P7. remove weeds and unwanted plant material to promote healthy growth
- P8. use appropriate and effective methods to deal with pests, diseases and disorders
- P9. use appropriate methods to promote and maintain healthy growth

- P10. deal with waste safely and correctly in accordance with instructions/legislation
- P11. restore the site to a clean and tidy condition
- P12. carry out work in a manner which prevents damage to the surrounding area.

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. why it is important to maintain and develop the appearance of decorative horticultural displays
- K3. why it is important to check the condition of plants according to agreed schedules
- K4. how the seasons affect the way you maintain plants
- K5. signs of damage and threats to plant health
- K6. stages of plant development
- K7. how to respond to signs of damage and threats to plant health
- K8. the impact of soil conditions on plant growth
- K9. how to water and feed plants to develop their condition in their environment
- K10. the effects of different types of fertilisers and their safe use as per manufactuers' instructions
- K11. the chemicals you can use for pest, disease and weed control and their safe use as per manufacters' instructions
- K12. cultural methods of improving health and vigour of plants
- K13. the effects of base dressing, top dressing and liquid feeding
- K14. how to select tools and equipment appropriate to the maintenance of displays
- K15. how to use and maintain this equipment safely and effectively
- K16. how to select and remove unwanted plant material in a way which maintains and develops the visual impact of the display
- K17. how to ensure the positioning of plants and labels maintains and develops the visual impact
- K18. how to ensure support methods continue to support the plants' growth and appearance
- K19. why it is important to keep working areas clean and tidy during operations
- K20. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K21. the potential impact of your work on the environment and how to minimise this
- K22. the importance of restoring the site to a clean and tidy condition.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Threats to plant health: pests, diseases, disorders, unfavourable conditions, competing growth.

Methods to promote plant health: feeding, watering, surface cultivation, mulching.

Methods of dealing with threats to plant health: physical, chemical, cultural, irrigation.

Maintain and develop displays to achieve health, vigour and overall decorative effect by watering by hand and using rotary and oscillating sprinklers, applying nutrients in dry and liquid form by hand and using distributors.

Controlling pests and diseases and weeds by cultural and chemical methods using manual and powered equipment.

Unit 212 Maintain plant displays (LANH18)

Supporting information

Evidence requirements

- A. maintain one of the following types of area:
- (i) temporary
- (ii) permanent
- B. maintain three of the following plant displays:
- (i) formal bedding
- (ii) hanging baskets
- (iii) other containers
- (iv) wall shrubs
- (v) climbers
- (vi) mixed borders
- (vii) plants for rock gardens
- (viii) plants for ponds
- C. carry out two of the following maintenance operations:
- (i) cleaning
- (ii) providing support
- (iii) replacement of plants, features or containers
- (iv) pruning
- D. maintain the appearance and health of at least three of the following types of plant:
- (i) tropical
- (ii) temperate
- (iii) shade lovers
- (iv) sun lovers
- E. identify and deal with all of the following threats to plant health:
- (i) pests
- (ii) diseases
- (iii) disorders
- (iv) unfavourable conditions
- (v) competing growth
- F. use all of the following methods to promote plant health:
- (i) feeding
- (ii) watering
- (iii) surface cultivation
- (iv) mulching

Notes - Evidence from simulations is not acceptable for this element.

Unit 213 Establish and maintain artificial plant displays (LANH19)

	<u> </u>
SCQF Level:	5
SCQF Credit value:	9
Aim:	This standard is about setting up, installing and maintaining artificial plant displays. It is for individuals who carry out the work described, under limited supervision only.
	The typical tasks you would carry out include:
	 selecting, handling, transporting and preparing artificial plants, containers, supports etc.
	 installing the plants to achieve maximum visual impact
	 supporting and tying in according to type of plant and display
	 cleaning and repairing the display.

Performance criteria

- P1. establish customer requirements for the display
- P2. select the artificial plants and other materials for the display to meet requirements
- P3. handle and transport materials safely and effectively
- P4. select and use tools and equipment safely and correctly
- P5. prepare the artificial plants and other materials according to requirements
- P6. ensure that grouping and positioning has the required visual impact
- P7. use methods of support which are consistent with the intended purpose of the display
- P8. minimise the waste of materials and dispose of debris correctly
- P9. minimise the damage to plants, features and surrounding areas
- P10. carry out maintenance operations safely and efficiently
- P11. reinstate the site to the client's satisfaction
- P12. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. the importance of establishing the customer's requirements for the display
- K2. how to select materials appropriate to different types of interior displays and sites
- K3. how to handle and transport the materials safely and effectively
- K4. how to select, use and maintain the equipment safely and correctly
- K5. how to group and position plants in a way that achieves the intended visual impact
- K6. how to ensure support methods are consistent with the display
- K7. why it is important to minimise unnecessary waste and the correct methods for recycling or disposal
- K8. the importance of maintaining the appearance of artificial plant displays
- K9. how to carry out the maintenance operations safely and efficiently
- K10. why it is important that the site is reinstated to the client's satisfaction and how to judge whether this has been done
- K11. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

materials:

- containers
- supports
- features

maintenance operations:

- cleaning
- support
- replacement of plants, features or containers
- removal of debris
- redressing
- fire retarding

Unit 213 Establish and maintain artificial plant displays (LANH19)

Supporting information

Evidence requirements

- A. select all of the following types of materials:
- (i) artificial plants
- (ii) containers
- (iii) supports
- B. carry out four of the following types of maintenance operations:
- (i) cleaning
- (ii) support
- (iii) replacement of plants, features or containers
- (iv) removal of debris
- (v) redressing
- (vi) fire retardant

Notes

Evidence from simulations is not acceptable for this element.

Unit 214 Dig graves (LANH21)

SCQF Level:	6
SCQF Credit value:	9
Aim:	This standard is about preparing the site and the equipment you need for digging a grave and carrying out excavation in preparation for burial.
	All operations must be carried out with due regard to relevant legislation and industry codes of practice.
	If you are working with machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. locate the plot using the information provided
- P2. assess the risks associated with the site and the required activity
- P3. select tools and equipment appropriate to the type of internment plot and soil conditions
- P4. prepare, use and maintain equipment and machinery in accordance with specifications
- P5. mark and set out in accordance with specifications
- P6. excavate the ground and remove excess soil in accordance with specifications
- P7. adhere to safe working practices when digging graves
- P8. carry out work in a manner which prevents damage to the surrounding area
- P9. keep the grave site tidy and safe and your equipment secure when unattended
- P10. complete work in good time for the burial
- P11. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. how to locate plots
- K2. how to identify hazards and assess risks
- K3. how to select tools and equipment appropriate to the types of plots and soil conditions
- K4. how to prepare, use and maintain equipment and machinery for excavation of ground and removal of excess soil safely and affectively
- K5. the importance of completing the activity in accordance with specifications
- K6. regulations and codes of practice relating to the work
- K7. how to mark and set out according to specifications
- K8. the purpose and use of different types of shoring
- K9. how to position and secure escape ladders
- K10. the role and duties of the banks person
- K11. why it is important to leave the grave in a tidy and safe condition and secure equipment when unattended
- K12. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

Soil conditions:

- wet
- dry
- clay
- sand/shingle
- made up ground

Specifications:

- drawings
- schedules
- method statements
- Standard Operating Procedures (SOPs)
- manufacturers' guidelines

Unit 214 Dig graves (LANH21)

Supporting information

Evidence requirements

- A. locate the site using two of the following methods:
- (i) plans
- (ii) grave numbers
- (iii) measuring
- B. prepare both of the following types of plot:
- (i) open
- (ii) with obstructions
- C. select one of the following working methods:
- (i) by hand
- (ii) using mechanical equipment
- D. select and use all of the following types of tools and equipment:
- (i) measuring
- (ii) digging
- (iii) safety
- (iv) protective clothing
- E. prepare for and excavate both of the following types of internment:
- (i) new
- (ii) reopened
- F. deal with three of the following types of soil conditions:
- (i) wet
- (ii) dry
- (iii) clay
- (iv) sand/shingle
- (v) made up ground

Notes

Evidence from simulations is not acceptable for this element.

Equipment can be mechanical or hand tools.

Unit 215 Prepare for burials and restore internment plots (LANH22)

SCQF Level:	6
SCQF Credit value:	9
Aim:	This standard covers the preparation of burials and the restoration of internment plots.
	This standard is for those responsible for the preparation of burials and restoration of interment plots.
	Throughout operations you will demonstrate respect for the deceased and the mourners.
	All operations must be carried out with due regard to relevant legislation and industry codes of practice.

Performance criteria

- P1. ensure the required authorisation prior to burial has been given
- P2. locate the correct plot for the appointed burial
- P3. assess the site for readiness and safety prior to burial and take appropriate action where required
- P4. dress the bottom of the grave where appropriate
- P5. check the condition and positioning of equipment such as ropes, putlogs and grass mats in preparation for burial
- P6. restrict access to internment plot to members of the public effectively
- P7. keep the condition of the internment plot for the burial in a safe and appropriate condition prior to the arrival of the cortège
- P8. direct the cortège to the graveside correctly and helpfully
- P9. respond to unexpected problems and take appropriate action
- P10. show respect for the deceased, mourners and those officiating throughout the ceremony
- P11. carry out all operations following the departure of the mourners according to specifications
- P12. backfill according to specifications and soil conditions
- P13. arrange floral tributes in an orderly manner, showing respect for the deceased and bereaved
- P14. leave the plot in a tidy and safe condition

- P15. remove equipment and resources in a safe and efficient manner
- P16. clean and store equipment correctly and efficiently
- P17. ensure records are maintained in the appropriate manner
- P18. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. authorisation procedures for burials
- K2. how to locate the appropriate plot
- K3. how to assess the site prior to burial
- K4. time required to prepare the grave site to meet the specifications
- K5. the equipment and resources required and how to ensure they are in good order
- K6. details of shoring, dressing material and soil box construction
- K7. why it is important to restrict public access to the grave site
- K8. how to ensure the site is in a proper condition prior to the arrival of the cortège
- K9. how to position lowering ropes safely and in a way appropriate to the coffin and the conditions
- K10. how to respond to problems which may occur
- K11. how to ensure behaviour is suitable to different types of ceremonies, cultures and customs and why this is important
- K12. why it is important to show respect to all those involved throughout the ceremony
- K13. why all operations should take place after the mourners have left
- K14. the appropriate way to carry out preliminary backfilling
- K15. how to ensure the remaining backfilling is safe and appropriate to the soil conditions
- K16. how to arrange the floral tributes in an orderly way which shows respect for the deceased and bereaved and why it is important to do so
- K17. how to remove equipment and resources in a safe and effective manner
- K18. how to ensure the plot is left in a clean and tidy condition
- K19. how to clean and store the equipment and resources in a safe manner
- K20. the records that need to be completed
- K21. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

Unexpected problems:

- water
- collapse
- shrinkage
- unexpected find
- poor weather conditions

Equipment:

- hand tools
- grass mats
- lowering ropes
- putlogs
- pumps
- excavators
- soil boxes

Types of authorisation:

- oral instruction
- presentation of disposal form

Types of soil conditions:

- wet
- dry
- clay
- sand/shingle
- made up ground

Specifications:

- drawings
- schedules
- method statements
- Standard Operating Procedures (SOPs)
- manufacturers' guidelines

Unit 215 Prepare for burials and restore internment plots (LANH22)

Supporting information

Evidence requirements

- A. deal with at least two of the following unexpected problems:
- (i) water
- (ii) collapse
- (iii) shrinkage
- (iv) unexpected find
- B. use four of the following types of equipment:
- (i) hand tools
- (ii) grass mats
- (iii) lowering ropes
- (iv) put locks
- (v) pumps and excavator (if the situation requires)
- (vi) mechanical
- (vii) soil box
- C. check one of the following types of authorisation:
- (i) oral instruction
- (ii) presentation of disposal form
- D. deal with three types of soil conditions:
- (i) wet
- (ii) dry
- (iii) clay
- (iv) sand / shingle

Notes

Evidence from simulations is not acceptable for this element.

Unit 216 Maintain grass surfaces (LANH24)

SCQF Level:	4
SCQF Credit value:	8
Aim:	This standard is suitable for those who maintain grass surfaces.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. carry out all work in accordance with specifications
- P3. inspect the site to ascertain what work is required
- P4. select, prepare and use tools and equipment that are appropriate to the work safely and effectively
- P5. clear any debris before commencing operations
- P6. ensure the grass is in an appropriate condition for maintenance
- P7. use methods of dealing with threats to health which are appropriate to the grass and its condition
- P8. maintain the finish of the grass surface according to specifications
- P9. prevent damage to the surrounding area, and keep environmental pollution to a minimum
- P10. deal with grass cuttings and other waste safely and correctly in accordance with specifications
- P11. clean and store tools and equipment appriopriately
- P12. ensure that environmental and health and safety policies and risk assessment requirements are put into practice across your area of responsibility

You need to know and understand:

- K1. how to assess the site prior to work
- K2. how to interpret risk assessments
- K3. the importance of checking grass surfaces regularly and how this varies according to the type of grass and the intended purpose
- K4. the conditions that are appropriate for cutting grass
- K5. the stage of grass development
- K6. the impact that the seasons and soil condition have on the growth and maintenance of grass surfaces
- K7. methods of maintaining the health of the grass plant
- K8. how to identify pests, disease and damage to grass surfaces and take appropriate action
- K9. types of tools and equipment required and how to maintain and use these safely and effectively
- K10. the effects of boxing off and leaving grass cuttings in situ
- K11. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K12. the importance of preventing damage to the surrounding area
- K13. your responsibilities under current environmental and health and safety legislation and codes of practice
- K14. the dangers of undertaking work alongside the public highway and sloping surfaces
- K15. the implications of using equipment and machinery over an extended period of time

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Tools and equipment: hand tools, strimmers, pedestrian-controlled mowers, ride on mowers.

Maintaining health: pests, diseases, disorders, unfavourable conditions, competing growth.

Methods of dealing with threats to health: physical, chemical, cultural, irrigation.

Maintain the grass: mowing, strimming, edging, feeding, watering, top dressing, repair.

Unit 216 Maintain grass surfaces (LANH24)

Supporting information

Evidence requirements

- A. identify and deal with four of the following threats to turf health:
- (i) pests
- (ii) diseases
- (iii) disorders
- (iv) unfavourable conditions
- (v) competing growth
- B. use two of the following methods of dealing with threats to turf health:
- (i) physical
- (ii) chemical
- (iii) cultural
- (iv) irrigation
- C. select and use all of the following types of tools and equipment:
- (i) hand tools
- (ii) strimmers
- (iii) pedestrian controlled mowers
- (iv) ride on mowers
- D. use all of the following methods to maintain the turf:
- (i) mowing
- (ii) edging
- (iii) feeding
- (iv) watering
- (v) top dressing
- (vi) repair

Notes

Evidence from simulations is not acceptable for this element.

Unit 217 Maintain the health of sports turf (LANH25)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard covers the maintenance of the health of sports turf so that it is suitable for play.
	It covers dealing with weeds, moss, pests, diseases and other disorders.
	This standard is for those responsible for the maintenance of the health of sports turf.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. inspect the turf to establish its health and condition
- P3. identify conditions that threaten the health of the sports turf
- P4. report these conditions to the appropriate people
- P5. use, maintain and store tools and equipment in a safe, clean and effective condition throughout
- P6. apply treatments safely, effectively and without damage to surrounding areas, as instructed
- P7. deal with waste safely and correctly in accordance with instructions/legislation
- P8. restore the site to a clean and tidy condition
- P9. carry out work in a manner which prevents damage to the surrounding area

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the reasons for controlling weeds, pests, diseases, moss and disorders on sports surfaces
- K3. conditions that can affect the health of sports turf and the effects these conditions have on sports turf
- K4. who should be informed of conditions affecting sports turf and why
- K5. the effect of turf treatments and how to use these treatments effectively
- K6. what are the approved procedures for turf treatments and why it is important to follow these
- K7. use and application of different pesticides
- K8. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K9. how to clean and store tools and equipment needed to control conditions and why safety measures are important
- K10. the potential impact of your work on the environment and how to minimise this
- K11. the importance of restoring the site to a clean and tidy condition
- K12. the relevant pieces of legislation and codes or practice governing the treatment and control of these conditions and what their main points are.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines. Inspecting the turf as requested.

Identifying ill health and potential causes of ill health in sports turf.

Controlling pests and diseases, weeds and moss in sports turf by physical, cultural and chemical methods using manual and powered equipment.

Rectifying soil and environmental conditions likely to cause ill health in turf

Unit 217 Maintain the health of sports turf (LANH25)

Supporting information

Evidence requirements

- A. identify and deal with four of the following conditions:
- (i) weeds
- (ii) pests
- (iii) diseases
- (iv) disorders
- (v) moss
- B. use two of the following treatments:
- (i) physical
- (ii) chemical
- (iii) cultural

Notes

Evidence from simulations is not acceptable for this element.

Unit 218 Maintain the condition of sports turf surfaces (LANH26)

SCQF Level:	6
SCQF Credit value:	10
Aim:	This standard covers the maintenance of the condition of sports turf surfaces.
	This standard is for those responsible for the maintenance of the condition of sports turf surfaces.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. select, prepare and use tools, equipment and machinery that are appropriate for the work safely and effectively
- P2. clear surfaces of unwanted debris
- P3. prepare the playing surface so that it meets the requirements of the sport and the standard for the event
- P4. maintain the quality and appearance of surfaces
- P5. make markings which are clear and appropriate to the event
- P6. set out the sports equipment required by the rules of the sport and the standard of the event
- P7. deal with waste safely and correctly in accordance with instructions/legislation
- P8. clean tools, equipment and machinery and store them securely
- P9. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P10. carry out work in a manner which prevents damage to the surrounding area
- P11. restore the site to a clean and tidy condition

You need to know and understand:

- K1. how to prepare and use tools, equipment and machinery in a safe and effective condition necessary to present the surface for play
- K2. how ground conditions affect maintenance operations
- K3. why it is important to clear surfaces of unwanted debris
- K4. the methods used for preparing and maintaining surfaces
- K5. the effects of season, climate and soil conditions on intensity, type and frequency of maintenance operations
- K6. how to carry out marking appropriate to sports and events
- K7. the required standard of sports turf areas for different events
- K8. why it is important to set out equipment correctly and what might happen if you do not
- K9. the potential impact of your work on the environment and how to minimise this
- K10. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K11. how to clean and store tools, equipment and machinery correctly
- K12. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K13. the importance of restoring the site to a clean and tidy condition.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating

Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Preparing the sports turf surface by mowing with powered equipment, irrigating using rotary, oscillating and pop-up sprinklers, scarifying and verticutting using pedestrian- controlled, ride-on and tractor-mounted/trailed equipment, rolling using pedestrian or powered equipment, top dressing using manual and powered equipment, brushing using pedestrian-controlled, ride-on and tractor-mounted/trailed brushes and setting out sports equipment in accordance with the standard for the event.

Producing a surface with the desired speed, surface response to ball, animal or player, moisture content, grass cover, consolidation and trueness according to the requirements of the sport and standard for the event.

Application of fertilisers by hand and distributor.

Unit 218 Maintain the condition of sports turf surfaces (LANH26)

Supporting information

Evidence requirements

- A. use all of the following types of tools and equipment:
- (i) hand tools
- (ii) powered equipment
- B. use all the following methods to prepare the surface :
- (i) mowing
- (ii) irrigation
- (iii) scarifying and verticutting
- (iv) rolling
- (v) top dressing
- (vi) brushing or switching
- (vii) aeration
- (viii) edging (where appropriate)
- (ix) feeding
- (x) marking out sports surface
- (xi) setting out equipment
- C. maintain at least three of the following aspects of the standard for the surface:
- (i) speed
- (ii) surface response to a ball, animal or player
- (iii) moisture content
- (iv) grass cover
- (v) degree of consolidation
- (vi) trueness

Notes

Evidence from simulations is not acceptable for this element.

Scope A: powered equipment includes pedestrian controlled machines and ride on machines

Unit 219 Renovate and repair sports turf surfaces (LANH27)

SCQF Level:	6
SCQF Credit value:	10
Aim:	This standard covers repairing and renovating the sports turf surface following play.
	This standard is for those responsible for the renovation and repair of sports turf surfaces following play.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value

Performance criteria

- P1. inspect sports turf surfaces
- P2. identify and assess surfaces in need of renovation and repair
- P3. select renovation and repair methods that are appropriate to the damage and the type of sports surface and specifications
- P4. select, prepare and use tools, equipment and machinery that are appropriate for the work safely and effectively
- P5. prepare the surface and use the selected renovation and repair methods safely and correctly
- P6. reinstate the surface so that it meets the requirements of the sport and the standard of the event
- P7. clean and store tools, equipment and machinery correctly
- P8. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P9. deal with waste safely and correctly in accordance with instructions/legislation
- P10. carry out work in a manner which prevents damage to the surrounding area
- P11. restore the site to a clean and tidy condition

You need to know and understand:

- K1. the importance of thorough and appropriate preparation prior to renovation and repair and how to do so
- K2. methods of renovation and repair for sports turf surfaces
- K3. how to prepare, use, maintain and store tools, equipment and machinery in a safe and effective condition
- K4. why it is important to renovate and repair surfaces to the required standard and the consequences of not doing so
- K5. how to inspect surfaces for the need for renovation and repair
- K6. the required standards of surfaces for different events
- K7. how to ensure that the surface meets the requirements of the sport and the standard for the event
- K8. the importance of restoring the site to a clean and tidy condition
- K9. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K10. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K11. the potential impact of your work on the environment and how to minimise this.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Renovation and repair: renovating and repairing damaged areas according to the degree of damage and the type of surface by overseeding by hand, lifting of turf, patching and plugging by hand, forking up by hand, top dressing by hand and the use of distributors.

Unit 219 Renovate and repair sports turf surfaces (LANH27)

Supporting information

Evidence requirements

- A. use three the following renovation and repair methods:
- (i) over-seeding
- (ii) hand lifting
- (iii) patching or plugging
- (iv) forking up
- (v) top dressing
- (vi) divotting
- B. maintain at least three of the following aspects of the standard for the surface:
- (i) speed
- (ii) surface response to a ball, animal or player
- (iii) moisture content
- (iv) grass cover
- (v) degree of consolidation
- (vi) trueness

Notes

Evidence from simulations is not acceptable for this element.

Unit 220 Maintain and renovate artificial sports surfaces (LANH28)

SCQF Level:	5
SCQF Credit value:	9
Aim:	This standard covers making sure that artificial/synthetic playing surfaces are safe and meet the required standards for the sport.
	This standard is for those responsible for the maintenance of artificial sports surfaces. If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. select tools and equipment that are appropriate to the surface and the type of maintenance you will be carrying out
- P3. use tools and equipment according to manufacturers' instructions and legal requirements
- P4. clear and prepare the surface for maintenance
- P5. carry out maintenance so that the quality and appearance of the surface is suitable for the sport
- P6. carry out work in a manner which prevents damage to the surrounding area
- P7. deal with waste safely and correctly in accordance with instructions and legislation
- P8. restore the site to an appropriate condition following completion of the work
- P9. maintain and safely store your tools and equipment so that they are ready for use next time

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the types of tools and equipment that you need for different maintenance operations
- K3. how to use these tools and equipment safely and effectively
- K4. the different maintenance methods for each type of surface
- K5. how surface and weather conditions affect maintenance and renovation operations
- K6. how to prepare the surface before carrying out maintenance
- K7. the standard of playing quality and appearance that has to be achieved for the sport
- K8. the potential impact of your work on the environment and how to minimise this
- K9. the importance of restoring the site to a clean and tidy condition
- K10. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K11. routine cleaning, maintenance and storage procedures for the types of equipment you use.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Inspect surfaces: clearing and preparing surfaces for maintenance.

Carry out routine maintenance: brushing, luting, top dressing, weed control, moss/ algae control, frost protection.

Unit 220 Maintain and renovate artificial sports surfaces (LANH28)

Supporting information

Evidence requirements

- A. maintain one of the following types of surfaces:
- (i) hard porous water bound
- (ii) filled synthetic
- (iii) non-filled synthetic
- B. use two of the following types of tools and equipment:
- (i) hand
- (ii) powered
- (iii) mounted
- C. carry out four of the following types of maintenance:
- (i) brushing
- (ii) luting
- (iii) top dressing
- (iv) weed control
- (v) moss/algae control
- (vi) frost protection
- (vii) marking out
- (viii) irrigation
- (ix) renovation (damage repair)
- (x) contamination removal

Notes

Evidence from simulations is not acceptable for this element.

Unit 221 Install land drainage systems (LANH31)

SCQF Level:	6
SCQF Credit value:	7
Aim:	This standard covers the installation of land drainage systems. This standards is for those responsible for the installation of land drainage system
	The typical activities you would carry out include - ensuring reference marks and setting out are accurate according to specifications, locating and protecting underground and overground services, using concrete, bricks, pipe materials, masonry and aggregates, clearing up and disposing of debris.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. carry out an environmental assessment of the site before starting work
- P2. assess the risks associated with the site and the proposed work
- P3. select, prepare, use and maintain equipment and machinery that is appropriate for the work, safely and effectively
- P4. use working methods that are safe and efficient
- P5. position reference marks in accordance with specifications
- P6. install drainage systems in accordance with specifications
- P7. minimise damage to existing structures and services
- P8. keep working areas clean and tidy
- P9. restore the site to an appropriate condition following completion of the work
- P10. complete work to the agreed time schedule
- P11. complete records as appropriate

P12. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the importance of carrying out an environmental assessment of the site before starting work and the findings which must be reported
- K2. how to identify hazards and assess risks
- K3. how to interpret risk assessments
- K4. how to select, prepare, use and maintain equipment and machinery in a safe and effective condition
- K5. why it is important to position reference marks correctly according to specifications and how to do so
- K6. how to ensure that the installation of the drainage is correct according to specifications
- K7. how to work efficiently and minimise wastage of materials and time
- K8. why it is important to clear debris and keep working areas clean and tidy
- K9. deal with waste safely and correctly in accordance with instructions
- K10. the type of damage that is likely to occur to services and surroundings and how to keep this to a minimum
- K11. why it is important to complete work to the agreed time schedule
- K12. the records which need to be completed
- K13. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

Specification: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines

Instructions: verbal or written

Unit 221 Install land drainage systems (LANH31)

Supporting information

Evidence requirements

- A. install two of the following types of drainage system:
- (i) surface water
- (ii) pipes
- (iii) tile
- B. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients
- C. use both of the following types of tools and equipment:
- (i) hand tools
- (ii) mechanical
- D. use all of the following types of material:
- (i) concrete
- (ii) clay
- (iii) plastic
- (iv) masonry
- (v) aggregate

Notes

Evidence from simulations is not acceptable for this element.

Unit 222 Maintain land drainage systems (LANH32)

SCQF Level:	6
SCQF Credit value:	6
Aim:	This standard covers the maintenance of land drainage systems. This standard is for those responsible for the maintenance of land drainage systems. The typical activities you would carry out include inspecting drainage systems, identifying blockages and leaks, dealing with blockages and leaks.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. inspect and assess drainage systems according to agreed time schedules
- P3. select, prepare, use and maintain equipment and machinery that is appropriate for the work, safely and effectively
- P4. use working methods that are safe and efficient
- P5. take action to restore drainage systems to full effectiveness
- P6. record inspections and work undertaken
- P7. maintain effective working relations with all relevant people throughout
- P8. minimise damage to services and surroundings
- P9. deal with waste safely and correctly in accordance with instructions
- P10. restore the site to an appropriate condition following completion of the work
- P11. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. how to select, prepare, use and maintain equipment and machinery in a safe and effective condition
- K4. the schedule of inspections required to identify faults
- K5. the importance of inspecting drainage systems according to schedule
- K6. how to carry out inspections of drainage systems
- K7. the types of problems that are likely to occur with drainage systems
- K8. how to identify impeded drainage and its causes
- K9. methods to correct impeded drainage
- K10. the factors affecting flow rates in drains
- K11. the importance of drainage systems working efficiently and effectively
- K12. the principles of drainage design
- K13. the principles and calculations relating to drainage specifications
- K14. how to correct problems with drainage systems
- K15. why it is important to keep working areas clean and tidy
- K16. the type of damage which is likely to occur to services and surroundings and how to keep this to a minimum
- K17. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K18. why it is important to complete work to the agreed schedule
- K19. the records which need to be completed
- K20. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

specification – drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers guidelines, customer requirements

Instructions – verbal or written

Unit 222 Maintain land drainage systems (LANH32)

Supporting information

Evidence requirements

- A. maintain one from three of the following types of drainage system:
- (i) solid pipe
- (ii) tile
- (iii) open
- (iv) perforated pipe
- (v) sustainable drainage systems
- B. maintain three of the following types of drainage systems:
- (i) solid pipe
- (ii) perforated pipe
- (iii) sustainable drainage systems
- C. deal with both of the following types of problems:
- (i) blockages
- (ii) leaks
- D. use both of the following types of tools and equipment:
- (i) hand tools
- (ii) powered equipment

Notes

Evidence from simulations is not acceptable for this element.

Unit 223 Maintain irrigation systems (LANH33)

SCQF Level:	6
SCQF Credit value:	6
Aim:	This standard covers the maintenance of irrigation systems. This standard is for those who are responsible for the maintenance of irrigation systems.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. inspect and assess irrigation systems and surfaces according to agreed time schedules
- P3. identify problems with irrigation systems and arrange repairs
- P4. select, prepare and use tools, equipment and machinery that are appropriate for the work, safely and effectively
- P5. record inspections clearly, accurately and promptly
- P6. restore the site to an appropriate condition following completion of the work
- P7. maintain effective working relations with all relevant people throughout
- P8. carry out work in a manner which prevents damage to the surrounding area
- P9. deal with waste safely and correctly in accordance with instructions

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the principles of design and construction of irrigation systems
- K3. the principles, methods and calculations relating to soil water management
- K4. the water source and quality systems for irrigation
- K5. the maintenance requirements for irrigation systems
- K6. the different maintenance requirements of irrigation equipment
- K7. the different irrigation requirements of surfaces
- K8. the frequency and thoroughness of inspections to identify faults
- K9. what contingencies may affect operations and how to handle these effectively
- K10. what records need to be kept and why
- K11. the principles and application of risk assessments
- K12. the potential impact of your work on the environment and how to minimise this
- K13. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K14. how to arrange repairs when problems occur

Glossary

Irrigation systems include those which are mobile or installed.

Surfaces provided for by these systems may include: hard/porous; synthetic; fine turf; coarse turf.

Specifications include drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Unit 223 Maintain irrigation systems (LANH33)

Supporting information

Evidence requirements

- A. manage one of the following types of irrigation systems:
- (i) mobile
- (ii) installed
- B. inspect one of the following types of surface:
- (i) hard /porous
- (ii) synthetic
- (iii) turf

Notes

Evidence from simulations is not acceptable for this element.

Unit 224 Construct pools and water features (LANH37)

SCQF Level:	5
SCQF Credit value:	9
Aim:	This standard covers the construction of pools and water features.
	The typical materials and equipment you would use include: rocks and concrete, plastic ridged or flexible liners, electrically powered pumps and filters.
	Electrical work should only be completed by a competent and qualified electrician.
	If you are working with machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value

Performance criteria

- P1. assess site conditions to establish suitability prior to commencing operations
- P2. assess the risks associated with the site and the proposed work
- P3. carry out an environmental assessment of the site before starting work
- P4. identify and prepare the necessary tools, equipment and materials for the work
- P5. prepare the site according to specifications
- P6. install and construct pools or water features safely and following specifications
- P7. install equipment according to manufacturers' instructions and legal requirements
- P8. use tools, plant and equipment safely and correctly
- P9. carry out work in a manner which prevents damage to the surrounding area
- P10. check that the installation is working correctly
- P11. identify potential defects and take corrective action

- P12. restore the site to an appropriate condition following completion of the work
- P13. deal with waste safely and correctly in accordance with legislation
- P14. maintain effective communication with colleagues and others involved in the work
- P15. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. the importance of carrying out an environmental assessment of the site before starting work and the findings which may affect proposed work
- K4. how to interpret specifications and the importance of following them
- K5. how to select the tools, equipment and materials required to carry out the job
- K6. how to use the required tools, equipment and materials safely and correctly
- K7. the problems which may arise and the action to take
- K8. potential causes of damage to the surrounding area and ways of preventing or minimising them
- K9. the potential conflicts between this work and conserving the natural environment
- K10. the conditions suitable to the construction of pools and water features
- K11. the features and application of the range of materials
- K12. the principles and methods of pool and water feature construction
- K13. the principles of pump power calculation, selection and positioning
- K14. the safety requirements for pump systems
- K15. methods of checking the functioning of the installation
- K16. the symptoms of the types of faults that may occur
- K17. the potential hazards when constructing pools
- K18. the importance of maintaining effective communication with those involved in the work
- K19. the legal and organisational requirements for the handling, transporting and disposal of waste
- K20. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Glossary

Pools and water features could be ponds, streams, fountains and waterfalls.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Unit 224 Construct pools and water features (LANH37)

Supporting information

Evidence requirements

- A. construct two of the following types of water feature:
- (i) streams
- (ii) fountains
- (iii) water falls
- (iv) ponds
- B. select and use one of the following types of materials:
- (i) puddled clay liners
- (ii) fibre glass in situ
- (iii) concrete in situ
- (iv) irregular shaped preformed or precast
- (v) butyl or PVC liner
- (ii) flexible liners
- C. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients
- D. select and use the following tools:
- (i) powered
- (ii) hand tools
- E. select and install the following equipment:
- (i) pumps
- (ii) filters
- (iii) electrical supply

Notes

Evidence from simulations is not acceptable for this element.

The aim of this unit is to provide the knowledge and skills, required to construct water features such as ponds, streams, fountains and waterfalls.

All electrical work must be signed off by a qualified electrician

Unit 225 Maintain pools and water features (LANH38)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard covers the maintenance of pools and water features.
	The typical materials and equipment you would use include: rocks and concrete, plastic ridged or flexible liners, electrically powered pumps and filters.
	Electrical work should only be completed by a competent and qualified electrician.
	If you are working with machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- P3. inspect the integrity of pools or water features
- P4. identify potential defects
- P5. select methods to maintain pools and water features
- P6. check the pool or water feature on completion of work making sure it is safe and fit for purpose
- P7. deal with waste safely and correctly in accordance with legislation
- P8. restore the site to an appropriate condition following completion of the work
- P9. minimise unwanted damage to services and surroundings
- P10. complete records as appropriate

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. how to carry out inspections of pools and water features
- K3. the importance of carrying out inspections according to schedule
- K4. the types of problems that are likely to occur with pools and water features and how to deal with them
- K5. the type of damage that is likely to occur to services and surroundings and how to keep this to a minimum
- K6. why it is important to keep working areas clean and tidy during the operation
- K7. why it is important to complete work to the agreed schedule
- K8. the importance of restoring the site to a clean and tidy condition
- K9. the records which need to be completed
- K10. how to handle, transport and dispose of waste in accordance with legal and organisational requirements

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Unit 225 Maintain pools and water features (LANH38)

Supporting information

Evidence requirements

- A maintain two of the following types of water feature:
- (i) streams
- (ii) fountains
- (iii) waterfalls
- (iv) ponds
- B. identify and deal with three of the following problems:
- (i) leaks
- (ii) filters and pumps in need of cleaning
- (iii) filters and pumps in need of replacement
- (iv) dirt and unwanted vegetation

Notes

Evidence from simulations is not acceptable for this element.

Water features include ponds, streams, fountains and waterfalls.

Unit 226 Install hard standing sublayers (LANH39)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standards covers the installation of hard- standing sub-layers that are used within the landscaping industries.
	The standard is suitable for operatives working under limited supervision and focuses on the skills required to understand the structure and to undertake the installation of hard surface sub-layers, working to specifications.
	You will be expected to understand the impact of this work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work, safely and effectively
- P3. select appropriate materials
- P4. use appropriate methods to rectify any problems
- P5. install sub-layers to accurate levels and profiles
- P6. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P7. clean tools and equipment and store tools, equipment and materials securely
- P8. protect prepared sub-layers effectively against weather and use until they are in a suitable condition
- P9. leave the site safe, tidy and suitable for intended use
- P10. maintain effective working relations with relevant people throughout
- P11. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. the importance of sub-layers
- K4. the impact that prevailing weather conditions may have on sublayers
- K5. how to select the correct tools and equipment for the installation of sub-layers, including PPE
- K6. the various types of compaction equipment that can be used, their efficacy, and suitability for various sub-layers and materials
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. how to measure to ensure work is within tolerances
- K9. the sequence of layers that may be encountered within a typical installation and the relevance of each to the overall structure
- K10. the impact of sub-grade conditions on the performance of overlying layers
- K11. the use of geo-textiles to improve and/or reinforce sub-layers
- K12. the range of primary and secondary aggregates that are used in the installation of sub-layers
- K13. the range of bound and unbound materials used in sub-layers
- K14. the range of conventional and permeable materials used in sublayer installation
- K15. the concept of optimal moisture content to sub-layer compaction
- K16. the importance of sub-layer drainage and how this can be best achieved in a range of circumstances
- K17. the importance of levelling and grading the aggregate within each sub-layer and of working to defined tolerances and profiles, including the checks used to ensure compliance
- K18. how various types of bound and unbound primary and secondary aggregates compact, to what degree, and the importance of installing each sub-layer in stages with a specified maximum thickness
- K19. the potential for environmental pollution and how to prevent it
- K20. the importance of minimising damage and unnecessary waste and how to do so
- K21. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

PPE: Personal Protective Equipment Sub-layers:

- > capping/improvement layer
- > sub-base
- base

Machinery:

- vibrating roller
- vibrating plate compactor
- > rampactor.

Unit 226 Install hard standing sublayers (LANH39)

Supporting information

Evidence requirements

- A. install at least two of the following sub-layers:
- (i) capping/Improvement Layer
- (ii) sub-base
- (iii) base
- B. operate at least two of the following types of machinery:
- (i) vibrating roller
- (ii) vibrating plate compactor
- (iii) rampactor
- C. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element.

It is designed to give a basic understanding of the materials, tools and techniques used by operatives to install both temporary and permanent hard surfaces.

Unit 227 Install flexible block surfaces (LANH40)

SCQF Level:	5
SCQF Credit value:	7
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of flexible block surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure.

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. set out for line and level
- P5. construct a suitable restraining edge course to both straight lines, regular arcs and irregular curves
- P6. lay blocks by hand to a suitable pattern
- P7. check laid blocks for alignment
- P8. cut-in blocks to required standard
- P9. compact blocks
- P10. check completed surface for compliance and rectify any problems
- P11. fill joints and re-compact
- P12. keep the site in a clean and tidy condition
- P13. clean and store tools and equipment promptly and securely
- P14. protect working areas effectively against weather and use until they are in a suitable condition
- P15. leave the site safe, tidy and suitable for intended use

- P16. maintain effective working relations with relevant people throughout
- P17. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitter, saw and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K13. the range of blocks available, including permeable block systems, and their suitable applications
- K14. the range of block patterns commonly used on site, their relative strengths and weaknesses, and how they are established
- K15. the importance of mixing and randomising blocks from three or more packs prior to laying
- K16. how areas are continuously checked for compliance to line, level, joint width and block competence during the laying process
- K17. how cutting-in is achieved following the principles of minimum block size and inboard cutting techniques
- K18. the importance of using the correct jointing material and its role in the performance of the completed surface
- K19. techniques used for dry and wet grouting
- K20. the size, mass and type of compaction equipment suitable for the type of blocks being laid
- K21. how compaction equipment is used, and the use of any required attachments
- K22. removal and replacement of defective blocks
- K23. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K24. the importance of final compliance checks
- K25. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools such as floats and trowels, brick/scutch hammers, paving hammer/maul/ mallet, block extractor, alignment bar, string lines, line pins
- vibrating plate compactors
- guillotine splitters
- cut-off saws
- appropriate PPE and RPE

Installation tasks:

- block laying
- cutting-in
- compaction
- compliance checks
- jointing
- lift and repair

Materials:

- conventional concrete pavers
- permeable concrete pavers
- conventional clay pavers
- permeable clay pavers

Block patterns:

- stretcher/running/broken bond
- 90° herringbone
- 45° herringbone
- basketweave.

Unit 227 Install flexible block surfaces (LANH40)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) hand tools
- (ii) vibrating plate compactors
- (iii) guillotine splitters
- (iv) cut-off saws
- B. undertake all of the following installation tasks:
- (i) block laying
- (ii) cutting-in
- (iii) compaction
- (iv) compliance checks
- (v) jointing
- (iv) lift and repair
- C. use at least one of the following types of material:
- (i) conventional concrete pavers
- (ii) permeable concrete pavers
- (iii) conventional clay pavers
- (iv) permeable clay pavers
- D. work with at least two of the following block patterns one herringbone and one other:
- (i) stretcher/running/broken bond
- (ii) 90° herringbone
- (iii) 45° herringbone
- (iv) basketweave
- E. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, block extractor, alignment bar, string lines, line pins.

Evidence from simulations is not acceptable for this element.

Unit 228 Install rigid block surfaces (LANH41)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of rigid block surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. set out for line and level
- P5. place and prepare a suitable laying course
- P6. lay blocks by hand to a suitable pattern
- P7. check completed surface for compliance and rectify any problems
- P8. cut-in blocks to required standard
- P9. fill and point joints to required finish
- P10. maintain a clean surface, free from cement or mortar stains
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use
- P15. maintain effective working relations with relevant people throughout

P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitter, saw, and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K13. the range of blocks available and their suitable applications
- K14. how a rigid laying course is prepared, the working life of the bed material, and the importance of not preparing too large an area in advance of the laying face
- K15. the range of block patterns commonly used on site, their relative strengths and weaknesses, and how they are established
- K16. the importance of mixing and randomising blocks from three or more packs prior to laying
- K17. how surfaces are continuously checked for compliance to line, level, joint width and block competence during the laying process
- K18. how cutting-in is achieved following the principles of minimum block size and inboard cutting techniques
- K19. the importance of using the correct jointing material and its role in the performance of the completed surface
- K20. the range of jointing materials available, how they are prepared, their working life, and how they are used within rigid surfaces
- K21. the importance of maintaining a clean and stain-free surface
- K22. removal and replacement of defective blocks
- K23. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K24. the importance of final compliance checks
- K25. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools such as floats and trowels, brick/scutch hammers, paving hammer/maul/ mallet, block extractor, alignment bar, string lines, line pins
- pointing/jointing tools and surface cleaning equipment
- guillotine splitters
- cut-off saws
- appropriate PPE and RPE

Construction tasks:

- block laying
- cutting-in
- compaction
- compliance checks
- jointing
- lift and repair

Materials:

- conventional concrete blocks
- conventional clay blocks

Block patterns:

- Stretcher/running bond
- 90° herringbone
- 45° herringbone
- basketweave

Unit 228 Install rigid block surfaces (LANH41)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) hand tools
- (ii) pointing/jointing tools and surface cleaning equipment
- (iii) guillotine splitters
- (iv) cut-off saws
- B. undertake all of the following construction tasks:
- (i) block laying
- (ii) cutting-in
- (iii) compaction
- (iv) compliance checks
- (v) jointing
- (vi) lift and repair
- C. use at least one of the following types of material:
- (i) conventional concrete blocks
- (ii) conventional clay blocks
- D. work with at least two of the following block patterns, one herringbone and one other:
- (v) Stretcher/running bond
- (vi) 90° herringbone
- (vii) 45° herringbone
- (viii) basketweave
- E. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, block extractor, alignment bar, string lines, line pins.

Evidence from simulations is not acceptable for this element.

Unit 229 Install flexible flag surfaces (LANH42)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of flexible flag surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. set out for line and level
- P5. lay flags to a suitable pattern using manual and/or mechanically-aided techniques as appropriate
- P6. check laid flags for alignment
- P7. cut-in flags to required standard at edges and around obstructions such as access covers
- P8. compact flags
- P9. check completed surface for compliance and rectify any problems
- P10. fill joints and re-compact
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use

- P15. maintain effective working relations with relevant people throughout
- P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitter, saw, and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K13. the range of flags available and their suitable applications
- K14. how to determine the most suitable type of laying course preparation (screeded, individual bed, or a combination of both) for any given flag laying project
- K15. the range of flag patterns commonly used, their relative strengths and weaknesses, and how they are established
- K16. the importance of mixing and randomising flags from three or more packs prior to laying
- K17. how flags are laid to radii and corners
- K18. how flags are laid to ramped and dropped crossings, and at changes in gradient or direction of fall
- K19. how flagged surfaces are continuously checked for compliance to line, level, joint width and flag competence during the laying process
- K20. how cutting-in is achieved following the principles of minimum flag size, notched cuts, and inboard cutting techniques
- K21. the use of concrete fillets around obstructions such as access covers
- K22. the importance of using the correct jointing material and its role in the performance of the completed surface
- K23. techniques used for dry and wet grouting
- K24. the size, mass, and type of compaction equipment suitable for the type of surface being laid
- K25. how compaction equipment is used, and the use of any required attachments

- K26. removal and replacement of defective flags
- K27. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K28. the importance of final compliance checks
- K29. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools including floats and trowels, brick/scutch hammers, paving hammer/ maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels)
- vibrating plate compactors
- guillotine splitters
- cut-off saws
- maul and mallet.
- mechanical laying aids
- vacuum laying aids
- appropriate PPE and RPE

• Installation tasks:

- flag laying to straight lines and slow curves
- flag laying to fast radii and corners using fan radius pattern
- flag laying to fast radii and corners using ring radius pattern
- flag laying to fast radii and corners using run-out pattern
- flag laying to fast radii and corners using new town corner pattern
- cutting-in to edges and around obstructions
- jointing
- compaction
- lift and replace

Material:

- concrete flags
- natural stone flags.

Unit 229 Install flexible flag surfaces (LANH42)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) hand tools
- (ii) vibrating plate compactors
- (iii) guillotine splitters
- (iv) cut-off saws
- (v) Maul and mallet
- (vi) Mechanical laying aids
- (vii) Vacuum laying aids
- B. undertake all of the following installation tasks:
- (i) flag laying to straight lines and slow curves
- (ii) flag laying to fast radii and corners using fan radius pattern
- (iii) flag laying to fast radii and corners using ring radius pattern
- (iv) flag laying to fast radii and corners using run-out pattern
- (v) flag laying to fast radii and corners using new town corner pattern
- (vi) cutting-in to edges and around obstructions
- (vii) jointing
- (viii) compaction
- (ix) lift and replace
- C. use one of the following types of material:
- (i) concrete flags
- (ii) natural stone flags
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels.

Evidence from simulations is not acceptable for this element.

Unit 230 Install rigid flag surfaces (LANH43)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of rigid flag surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. set out for line and level
- P5. lay flags to a suitable pattern using manual and/or mechanically-aided techniques as appropriate
- P6. check laid surface for alignment
- P7. cut-in to required standard at edges and around obstructions such as access covers
- P8. compact surface
- P9. check completed surface for compliance and rectify any problems
- P10. fill joints and finish appropriately
- P11. maintain a clean and stain-free surface
- P12. keep the site in a clean and tidy condition
- P13. clean and store tools and equipment promptly and securely
- P14. protect working areas effectively against weather and use until they are in a suitable condition
- P15. leave the site safe, tidy and suitable for intended use

- P16. maintain effective working relations with relevant people throughout
- P17. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitter, saw and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face and how they are positioned for the laying operative
- K13. the range of flags available and their suitable applications
- K14. how a rigid laying course is prepared, the working life of the bed material and the importance of not preparing too large an area in advance of the laying face
- K15. the range of flag patterns commonly used on site, their relative strengths and weaknesses, and how they are established
- K16. how buttering of receiving edges can improve the competence of hand-pointed mortar joints
- K17. how flags are laid to radii and corners
- K18. how flags are laid to ramped and dropped crossings, and at changes in gradient or direction of fall
- K19. the importance of mixing and randomising flags from three or more packs prior to laying
- K20. how flagged surfaces are continuously checked for compliance to line, level, joint width and flag competence during the laying process
- K21. how cutting-in is achieved following the principles of minimum flag size, notched cuts, and inboard cutting techniques
- K22. the use of concrete fillets around obstructions such as access covers
- K23. the importance of using the correct jointing material and its role in the performance of the completed surface
- K24. techniques used for dry and wet (slurry) grouting, gun injection and hand pointing

- K25. how mauls, mallets and other compaction equipment is used and the use of any required attachments
- K26. removal and replacement of defective flags
- K27. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K28. the importance of final compliance checks
- K29. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools including floats and trowels, brick/scutch hammers, paving hammer/ maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels
- vibrating plate compactors
- guillotine splitters
- cut-off saws
- maul and mallet
- mechanical laying aids
- vacuum laying aids
- appropriate PPE and RPE

Installation tasks:

- laying to straight lines and slow curves
- flag laying to fast radii and corners using fan radius pattern
- flag laying to fast radii and corners using ring radius pattern
- flag laying to fast radii and corners using run-out pattern
- flag laying to fast radii and corners using new town corner pattern
- cutting-in to edges and obstructions
- pointing by hand
- jointing with a mortar or polymeric slurry
- compaction
- lift and replace

Materials:

- concrete flags
- natural stone flags.

Unit 230 Install rigid flag surfaces (LANH43)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) vibrating plate compactors
- (ii) guillotine splitters
- (iii) cut-off saws
- (iv) maul and mallet
- (v) mechanical laying aids
- (vi) vacuum laying aids
- B. undertake all of the following installation tasks:
- (i) laying to straight lines and slow curves
- (ii) flag laying to fast radii and corners using fan radius pattern
- (iii) flag laying to fast radii and corners using ring radius pattern
- (iv) flag laying to fast radii and corners using run-out pattern
- (v) flag laying to fast radii and corners using new town corner pattern
- (vi) cutting-in to edges and obstructions
- (vii) pointing by hand
- (viii) jointing with a mortar or polymeric slurry
- (ix) compaction
- (x) lift and replace
- C. use one of the following types of material:
- (i) concrete flags
- (ii) natural stone flags
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels.

Evidence from simulations is not acceptable for this element.

Unit 231 Install flexible sett/cobble surfaces (LANH44)

SCQF Level:	5
SCQF Credit value:	7
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of flexible sett/cobble surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. lay setts, cubes and/or cobbles to a suitable pattern
- P5. check laid units for alignment
- P6. cut-in to required standard at edges and around obstructions such as access covers
- P7. compact units
- P8. check completed surface for compliance and rectify any problems
- P9. fill joints and re-compact
- P10. set out for line and level
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use

- P15. maintain effective working relations with relevant people throughout
- P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitters, saws and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face and how they are positioned for the laying operative
- K13. the range of setts, cubes and cobbles available and their suitable applications
- K14. the range of suitable laying course materials
- K15. how to determine the most suitable type of laying course preparation (screeded, individual bed, or a combination of both) for any given sett laying project
- K16. the range of laying patterns commonly used and how they are established
- K17. how laying patterns affect overall surface strength and performance
- K18. the importance of mixing and randomising units from three or more packs prior to laying
- K19. how surfaces are continuously checked for compliance to line, level, joint width and unit competence during the laying process
- K20. how cutting-in is achieved following the principles of minimum unit size and inboard cutting techniques
- K21. the use of concrete fillets around pavement obstructions such as access covers
- K22. the importance of using the correct jointing material and its role in the performance of the completed pavement
- K23. techniques used for dry and wet grouting
- K24. techniques used for polymeric jointing
- K25. the size, mass, and type of compaction equipment suitable for the type of units being laid

- K26. how compaction equipment is used, and the use of any required attachments
- K27. removal and replacement of defective units
- K28. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K29. the importance of final compliance checks
- K30. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools including floats and trowels, brick/scutch hammers, paving hammer/ maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels
- vibrating plate compactors
- guillotine splitters
- cut-off saws
- appropriate PPE and RPE

Tasks:

- laying in courses
- laying in chevrons
- laying in bogens/segmental arches
- laying in fans
- cutting-in
- loose material jointing
- polymeric jointing
- compaction
- lift and repair

Materials:

- sawn cubes
- cropped cubes
- sawn setts
- cropped/textured setts
- cobbles.

Unit 231 Install flexible sett/cobble surfaces (LANH44)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) hand tools
- (ii) vibrating plate compactors
- (iii) guillotine splitters
- (iv) cut-off saws
- (v) maul and/or mallet
- B. undertake all of the following tasks:
- (i) laying in courses
- (ii) laying in chevrons
- (iii) laying in bogens/segmental arches
- (iv) laying in fans
- (v) cutting-in
- (vi) loose material jointing
- (vii) polymeric jointing
- (viii) compaction
- (ix) lift and repair
- C. use at least three of the following types of material:
- (i) sawn cubes
- (ii) cropped cubes
- (iii) sawn setts
- (iv) cropped/textured setts
- (v) cobbles
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels

Evidence from simulations is not acceptable for this element..

Unit 232 Install rigid sett/cobble surfaces (LANH45)

SCQF Level:	5
SCQF Credit value:	7
Aim:	This standard is one of six which covers installation of the various forms of hard-standing surfaces that are used within the landscaping industries.
	This standard is targeted at operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of hard surfaces while working to specifications.
	This standard covers the installation of rigid sett/cobble surfaces. You will be expected to understand the impact of the installation on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P4. set out for line and level
- P5. lay setts, cubes and/or cobbles to a suitable pattern
- P6. check laid units for alignment
- P7. cut-in to required standard at edges and around obstructions such as access covers
- P8. compact units
- P9. check completed surface for compliance and rectify any problems
- P10. fill joints and finish, ensuring a clean surface
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use
- P15. maintain effective working relations with relevant people throughout

P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to carry out a risk assessment for installation and decide on safe working methods
- K3. how to interpret specifications
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select and prepare the correct tools and equipment for the task, including PPE and RPE
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. use of cutting tools including splitters, saws and trimming tools
- K9. the importance of dust-suppression and RPE when using a cut-off saw
- K10. the importance of edge restraints
- K11. how to calculate the quantity of paving materials required
- K12. how paving materials should be stored on site, how they are delivered to the laying face and how they are positioned for the laying operative
- K13. the range of setts, cubes and cobbles available and their suitable applications
- K14. the importance of movement joints
- K15. the importance of intermediate restraints
- K16. the range of suitable laying course materials
- K17. how to determine the most suitable type of laying course preparation (screeded, individual bed, or a combination of both) for any given sett laying project
- K18. how a rigid laying course is prepared, the working life of the bed material and the importance of not preparing too large an area in advance of the laying face
- K19. the range of laying patterns commonly used and how they are established
- K20. how laying patterns affect overall strength and performance
- K21. the importance of mixing and randomising units from three or more packs prior to laying
- K22. how surfaces are continuously checked for compliance to line, level, joint width and unit competence during the laying process
- K23. how cutting-in is achieved following the principles of minimum unit size and inboard cutting techniques
- K24. the use of concrete fillets around obstructions such as access covers
- K25. the importance of using the correct jointing material and its role in the performance of the completed pavement
- K26. techniques used for dry and wet grouting
- K27. techniques used for polymeric jointing

- K28. techniques used to ensure a clean, stain-free pavement surface on completion
- K29. the size, mass, and type of compaction equipment suitable for the type of paving being laid
- K30. how compaction equipment is used and the use of any required attachments
- K31. removal and replacement of defective units
- K32. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
- K33. the importance of final compliance checks
- K34. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- hand tools including floats and trowels, brick/scutch hammers, paving hammer/maul/ mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels
- vibrating plate compactors guillotine splitters
- cut-off saws
- maul and/or mallet appropriate PPE and RPE

Tasks:

- laying in courses laying in chevrons
- laying in bogens/segmental arches laying in fans
- cutting-in slurry jointing polymeric jointing compaction
- lift and repair

Materials:

- sawn cubes
- cropped cubes
- sawn setts
- cropped/textured setts.

Unit 232 Install rigid sett/cobble surfaces (LANH45)

Supporting information

Evidence requirements

- A select and use all of the following types of tools and equipment :
- (i) hand tools
- (ii) vibrating plate compactors
- (iii) guillotine splitters
- (iv) cut-off saws
- (v) Maul and/or mallet
- B. undertake all of the following construction tasks:
- (i) laying in courses
- (ii) laying in chevrons
- (iii) laying in bogens/segmental arches
- (iv) laying in fans
- (v) cutting-in
- (vi) slurry jointing
- (vii) polymeric jointing
- (viii) compaction
- (ix) lift and repair
- C. use at least three of the following types of material:
- (vi) sawn cubes
- (vii) cropped cubes
- (viii) sawn setts
- (ix) cropped/textured setts
- (x) cobbles
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Scope A hand tools could be floats and trowels, brick/scutch hammers, paving hammer/maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels.

Evidence from simulations is not acceptable for this element.

Unit 233 Install kerbs, channels and edgings (LANH46)

SCQF Level:	5
SCQF Credit value:	12
Aim:	This standard covers the installation of kerbs, channels and edgings that are used within the hard-landscaping industries.
	It is suitable for operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of edge restraints while working to specifications.
	You will be expected to understand the impact of the installation work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. set out for line and level
- P4. place and prepare a suitable bed
- P5. lay kerbs, channels and edgings to the correct line and level
- P6. cut in to required specifications
- P7. maintain correct joint width
- P8. check completed work for compliance with specifications and rectify any problems
- P9. haunch edge restraints
- P10. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use
- P15. maintain effective working relations with relevant people throughout
- P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to interpret specifications
- K3. how to measure to ensure work is within tolerances
- K4. how falls, lines and levels are determined and set out
- K5. how to select the correct tools and equipment for installation, including PPE and RPE
- K6. the importance of dust-suppression and RPE when using a cut-off saw
- K7. how to use, maintain, clean and store the required tools and equipment correctly
- K8. how to carry out a risk assessment for installation and decide on safe working methods
- K9. the range of edge restraints available and their suitable applications
- K10. the importance of robust edge restraints
- K11. the importance of using the correct type of bed material
- K12. how the bed is placed and prepared, and how it is shaped to follow summits, hollows and transitions
- K13. the pros and cons of using fresh windrow bedding and pre-placed races
- K14. how to calculate the quantity of units required
- K15. how units should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K16. how units are manoeuvred into position using mechanical and/or vacuum lifting aids
- K17. how units are consolidated to the required line and level
- K18. how edge restraints are checked for accuracy in alignment along both straights and curves
- K19. how cutting is achieved, following the principles of minimum unit size
- K20. use of cutting tools including guillotines, saws and trimming tools
- K21. the potential for environmental pollution and how to prevent it
- K22. the importance of using the correct jointing method and its role in the performance of the completed edge restraint
- K23. removal and replacement of defective units
- K24. the dangers of underground services and how to take account of these when working
- K25. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

RPE: Respiratory Protective Equipment.

PPE: Personal Protective Equipment.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Tools and equipment:

- appropriate mechanical lifting aids
- cut-off saw
- maul and/or mallet
- appropriate PPE and RPE

Installation tasks:

- place a suitable kerb race
- lay units onto a mortar bed on a pre-existing race
- lay units to a straight line (windrow)
- lay units to a true arc
- lay units to a free curve
- install a dropped crossing
- lay transitions between two different types of unit
- lay an edge restraint to a right-angled return using internal/external angle units and quadrants
- lay channels to an existing kerb line
- lift and repair

Materials:

- concrete road kerbs
- stone road kerbs
- concrete dished/fluted channels
- stone dished/fluted channels
- concrete flat channels
- stone flat channels
- concrete edgings
- stone edgings

Unit 233 Install kerbs, channels and edgings (LANH46)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment :
- (i) appropriate mechanical lifting aid
- (ii) cut-off saw
- (iii) maul and/or mallet
- B. undertake all of the following installation tasks:
- (i) place a suitable kerb race
- (ii) lay units onto a mortar bed on a pre-existing race
- (iii) lay units to a straight line (windrow)
- (iv) lay units to a true arc
- (v) lay units to a free curve
- (vi) install a dropped crossing
- (vii) lay transitions between two different types of unit
- (viii) lay an edge restraint to a right-angled return using

internal/external angle units and quadrants

- (ix) lay channels to an existing kerbline
- (x) lift and repair
- C. work with at least three of the following materials:
- (i) concrete road kerbs
- (ii) stone road kerbs
- (iii) concrete dished/fluted channels
- (iv) stone dished/fluted channels
- (v) concrete flat channels
- (vi) stone flat channels
- (vii) concrete edgings
- (viii) stone edgings
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element..

Unit 234 Install combined kerb-drain systems (LANH47)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard covers the installation of combined kerb-drain systems that are used within the hard-landscaping industries.
	It is suitable for operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of combined kerb-drain systems while working to specifications.
	You will be expected to understand the impact of the installation work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. set out for line and level
- P4. place and prepare a suitable bed
- P5. lay units to the correct line and level
- P6. cut-in units to required specifications
- P7. maintain correct joint width
- P8. seal joints to meet specifications
- P9. connect the kerb-drains to suitable outfalls
- P10. check completed system for compliance and rectify any problems
- P11. haunch units
- P12. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P13. keep the site in a clean and tidy condition
- P14. clean and store tools and equipment promptly and securely
- P15. protect working areas effectively against weather and use until they are in a suitable condition
- P16. leave the site safe, tidy and suitable for intended use
- P17. maintain effective working relations with relevant people throughout

P18. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to interpret specifications
- K3. how to measure to ensure work is within tolerances
- K4. how falls, lines and levels are determined and set out
- K5. how to select the correct tools and equipment for the work including PPE and RPE
- K6. how to use the required tools and equipment safely and efficiently
- K7. how to carry out a risk assessment for the installation and decide on safe working methods
- K8. the range of systems available and their suitable applications
- K9. the importance of robust edge restraints
- K10. the importance of using the correct type of bed material
- K11. how the bed is placed and prepared, and how it is shaped to follow summits, hollows and transitions
- K12. the pros and cons of using fresh windrow bedding and pre-placed races
- K13. how to calculate the number of units required
- K14. how units should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K15. how units are manoeuvred into position using mechanical and/or vacuum lifting aids
- K16. how units are consolidated to the required line and level
- K17. how units are jointed
- K18. how systems are connected to outfalls
- K19. how kerb-drain systems are checked for accuracy in alignment along both straights and curves
- K20. how cutting is achieved following the principles of minimum unit
- K21. use of cutting tools including guillotine, saw and trimming tools
- K22. the importance of dust-suppression and RPE when using a cut-off saw
- K23. the importance of using the correct jointing method and its role in the performance of the completed kerb-drain system
- K24. removal and replacement of defective units
- K25. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- appropriate mechanical lifting aid
- cut-off saw
- maul and/or mallet
- appropriate PPE and RPE

Installation tasks:

- set out for line and level
- place a suitable kerb race
- lay units onto a mortar bed on a pre-existing race
- lay units to a straight line (windrow)
- lay units to a true arc
- lay units to a free curve
- install a dropped crossing
- lay transitions between kerbs and kerb-drain units
- lay an edge restraint to a right-angled return using internal/external angle units and quadrants
- lift and repair

Kerb-drain:

- single piece systems
- multiple-piece systems.

Unit 234 Install combined kerb-drain systems (LANH47)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) appropriate mechanical lifting aid
- (ii) cut-off saw
- (iii) maul and/or mallet
- B. undertake all of the following construction tasks:
- (i) set out for line and level
- (ii) place a suitable kerb race
- (iii) lay units onto a mortar bed on a pre-existing race
- (iv) lay units to a straight line (windrow)
- (v) lay units to a true arc
- (vi) lay units to a free curve
- (vii) install a dropped crossing
- (viii) lay transitions between kerbs and kerb-drains units
- (ix) lift and repair
- C. work with at least one of the following types of kerb-drain:
- (i) single-piece systems
- (ii) multiple-piece systems
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element.

Unit 235 Install small element kerbs and edge restraints (LANH48)

SCQF Level:	5
SCQF Credit value:	8
Aim:	This standard covers the installation of small element kerbs and edge restraints that are used within the hard-landscaping industries.
	It is suitable for operatives working under limited supervision and focuses on the skills required to both understand the structure and to undertake the installation of edge restraints while working to specifications.
	You will be expected to understand the impact of the installation work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. set out for line and level
- P4. place and prepare a suitable bed
- P5. lay units to the correct line and level
- P6. cut-in units to required specifications
- P7. maintain correct joint width
- P8. check completed installation for compliance and rectify any problems
- P9. haunch units
- P10. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
- P11. keep the site in a clean and tidy condition
- P12. clean and store tools and equipment promptly and securely
- P13. protect working areas effectively against weather and use until they are in a suitable condition
- P14. leave the site safe, tidy and suitable for intended use
- P15. maintain effective working relations with relevant people throughout
- P16. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. the weather conditions that are appropriate for installation
- K2. how to interpret specifications
- K3. how to measure to ensure work is within tolerances
- K4. how falls, lines and levels are determined and set out
- K5. how to select and prepare the correct tools and equipment for installation, including PPE and RPE
- K6. how to use, maintain, clean and store the required tools and equipment correctly
- K7. the range of small unit kerb systems and other suitable units that are available and their suitable applications
- K8. the importance of robust edge restraints
- K9. the importance of using the correct type of bed material
- K10. how the bed is placed and prepared, and how it is shaped to follow summits, hollows and transitions
- K11. the pros and cons of using fresh windrow bedding and pre-placed races
- K12. how to calculate the number of units required
- K13. how units should be stored on site, how they are delivered to the laying face, and how they are positioned for the laying operative
- K14. the pros and cons of both butt-jointed and mortar-jointed installations
- K15. how units are consolidated to the required line and level
- K16. how edge restraints are checked for accuracy in alignment along both straights and curves
- K17. use of cutting tools including guillotine, saw and trimming tools
- K18. the importance of dust-suppression and RPE when using a cut-off
- K19. removal and replacement of defective units
- K20. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

PPE: Personal Protective Equipment. RPE: Respiratory Protective Equipment.

Tools and equipment:

- cut-off saw
- maul and/or mallet
- appropriate PPE and RPE

Installation tasks:

- set out for line and level
- place a suitable kerb race
- lay units onto a mortar bed on a pre-existing race
- lay units to a straight line (windrow)
- lay units to a true arc
- lay units to a free curve
- construct a dropped crossing
- lay transitions between two different types of unit
- lay units to a right-angled return using internal/external angle units and quadrants
- lift and repair

Units:

- small kerb units (<250mm length)
- small paving units (<250mm length e.g.: block pavers)
- setts/cubes/cobbles (<250mm length)

Unit 235 Install small element kerbs and edge restraints (LANH48)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) cut-off saw
- (ii) maul and/or mallet
- B. undertake all of the following tasks:
- (i) set out for line and level
- (ii) place a suitable kerb race
- (iii) lay units onto a mortar bed on a pre-existing race
- (iv) lay units to a straight line (windrow)
- (v) lay units to a true arc
- (vi) lay units to a free curve
- (vii) construct a dropped crossing
- (viii) lay transitions between different types of units
- (ix) lay units to right-angled returns using internal/external angle units and quadrants
- (x) lift and repair
- C. work with at least two of the following types of unit
- (i) small kerb units (<250mm length)
- (ii) small paving units (<250mm length eg: block pavers)
- (iii) setts/cubes/cobbles (<250mm length)
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element.

Unit 236 Harvest crops by hand (LANH50)

SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard covers the harvesting of crops by hand. harvesting methods will depend on the type of crop involved and the customer or market requirements. This standard is for those responsible for the harvesting of crops by hand. You will be working in accordance with instructions and specifications. You must carry out your work in a way which will minimise any impact on the natural environment.

Performance criteria

You must be able to:

- P1. prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P2. where problems arise during harvesting take the appropriate action
- P3. handle the harvested crop in a way which maintains quality and minimises damage to the crop
- P4. maintain suitable levels of hygiene and biosecurity during harvesting
- P5. complete harvesting in line with specifications
- P6. dispose of waste safely and correctly in accordance with specifications
- P7. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P8. complete records in line with specifications.

Knowledge and understanding

You need to know and understand:

- K1. the equipment which is needed to carry out the harvesting activity
- K2. how to prepare, use and maintain equipment in a safe and effective condition
- K3. stages of plant development
- K4. the importance of carrying out the activity in accordance with specifications

- K5. how to recognise crops which do not meet specifications
- K6. how to carry out the harvesting activity
- K7. methods of maintaining the quality of the crop during harvesting
- K8. why it is important to maintain suitable levels of hygiene and biosecurity during harvesting and the methods for achieving this
- K9. problems which may arise during harvesting and the action to take
- K10. the methods for the recycling or disposal of waste created by the harvesting process
- K11. the records which must be completed
- K12. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Unit 236 Harvest crops by hand (LANH50)

Supporting information

Evidence requirements

- A. deal with one of the following problems during harvesting:
- (i) access
- (ii) equipment
- (iii) staffing
- (iv) adverse weather conditions
- (v) soil conditions

Notes

Where simulations are used to generate performance evidence, these must properly reflect the requirements of the real work environment.

Harvesting method will depend on the type of crop and may be either mechanical or manual. The unit does not cover collecting plats for dispatch or sale which is covered by a separate unit..

Unit 237 Carry out post harvest operations (LANH52)

SCQF Level:	7
SCQF Credit value:	4
Aim:	This standard is for anyone who carries out post-harvest operations to prepare a harvested crop for transfer to customer or storage. It includes activities such as selection, cleaning, drying, pre-storage treatments, grading, quality control, packing and labelling. The types of preparation activities will depend on the crop involved and the customer or market requirement.
	You will be working in accordance with instructions and specifications.

Performance criteria

You must be able to:

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P3. carry out activities in accordance with specifications
- P4. identify harvested produce that does not meet production specifications and take the appropriate action
- P5. maintain suitable levels of hygiene and biosecurity when carrying out activities
- P6. where required prior to dispatch, store crop in accordance with specifications
- P7. deal with waste safely and correctly in accordance with specifications
- P8. complete records in line with specifications.

Knowledge and understanding

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. how to prepare, use and maintain equipment in a safe and effective condition

- K3. how to carry out required post-harvest activities in line with specifications
- K4. how to identify harvested produce that does not meet specifications and the appropriate action to take
- K5. why it is importance to maintain suitable levels of hygiene and biosecurity during post-harvest activities and the methods for achieving this
- K6. relevant methods for storing produce prior to dispatch
- K7. methods for the recycling or disposal of waste created by postharvest activities
- K8. the records which must be completed

Post-harvest activities:

- selection
- grading
- trimming
- packing/containering
- labelling
- cleaning
- drying
- pre-storage treatments
- quality control

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Unit 237 Carry out post harvest operations (LANH52)

Supporting information

Evidence requirements

- A. use two of the following preparation methods:
- (i) handling
- (ii) grading
- (iii) packing or labelling
- (iv) cleaning
- (v) drying
- B. dispose of the following types of waste:
- (i) organic
- (ii) inorganic
- C. prepare harvested crops for:
- (i) transfer to customer
- (ii) storage

Notes

Evidence from simulations is not acceptable for this element..

Unit 238 Identify, collect and prepare plants for sale or dispatch (LANH54)

SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard is about collecting plants for orders, and is mainly appropriate to ornamental nurseries producing house plants, bedding plants and hardy ornamental nursery stock (trees, shrubs, herbaceous and alpine plants). Such plants may be in containers or pots, for example, bedding plants, shrubs or house plants. They may also be plants which have been grown in the ground, such as open ground trees, shrubs or roses. It covers the collection of plants for intermediate storage, dispatch or sale. Collection of orders may be carried out manually or mechanically.
	The standard also covers the preparation of plants for dispatch. The term 'preparation' is used to cover activities that take place following the identification and collection of plants. The types of preparation activities will depend on the enterprise within which you are working.
	The term 'specification' is used to refer to customer, market and organisational requirements.
	You will have significant personal responsibility in carrying out these activities, but will not be involved in planning or supervising the collection and preparation of plants.

Performance criteria

You must be able to:

- P1. prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P2. correctly identify the plants that are to be collected and check their condition against specifications
- P3. handle and transport plants in a manner that maintains quality and minimises damage
- P4. identify any problems that arise during the collection of plants and take the appropriate action
- P5. ensure the collection of the plants takes place within the appropriate timescales and in accordance with specifications
- P6. correctly prepare and maintain the plants for dispatch
- P7. identify and replace plants that do not meet specifications
- P8. ensure the plants meet specifications and are ready for dispatch at the correct time
- P9. maintain the health of plants that require intermediate storage prior to dispatch
- P10. complete records as appropriate
- P11. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

Knowledge and understanding

You need to know and understand:

- K1. how to prepare, use and maintain equipment in a safe and effective condition
- K2. relevant species or varieties of plants produced by the enterprise and how to recognise them
- K3. sources of information in relation to different species or varieties of plants
- K4. the importance of completing the activity in accordance with specifications
- K5. how to recognise where a plant does not meet specifications and the action to take
- K6. methods of maintaining the quality of plants during handling and transportation
- K7. methods for transporting plants within the site relevant to the enterprise
- K8. problems that may arise during the collection of plants and what action to take
- K9. methods for preparing the plants ready for dispatch
- K10. methods for maintaining the health of the plants ready for dispatch
- K11. any relevant storage arrangements for plants prior to dispatch
- K12. the records which need to be completed
- K13. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Instructions: verbal or written.

Preparation:

- weeding
- grading
- bundling
- wrapping
- containering/packaging
- labelling
- watering
- loading
- storage

Unit 238 Identify, collect and prepare plants for sale or dispatch (LANH54)

Supporting information

Evidence requirements

- A. maintain equipment through:
- (i) preparation
- (ii) cleaning
- (iii) storage
- B. preparing plants for dispatch using methods relevant to the enterprise within which you are working:
- (i) handling
- (ii) removal of unsuitable plants
- (iii) packing or labelling

Notes

Evidence from simulations is not acceptable for this element.

There is separate unit relating to plant identification..

Unit 239 Merchandise and sell plants and other relevant products (LANH56)

SCQF Level:	5
SCQF Credit value:	5
Aim:	This standard covers the merchandising and selling of plants and other relevant products.

This standard is for those whose role involves the merchandising and selling of plants or other relevant products. It involves ensuring that you have an understanding of the products you are merchandising and selling. To successfully sell plants and relevant products you must be able to inform your customers about the requirements of the product e.g. condition it is to be kept in, storage requirements, watering methods, general care and maintenance, life cycle and how to establish a plant to achieve optimum growth.

Successful selling relies on attracting and retaining customers. In this environment you will need to be able to care for your customers and merchandise and sell your plants and relevant products. In order to do this successfully you must be actively involved in a selling role.

Performance criteria

- P1. display plants and relevant products (e.g. growing media, containers, plant feed, etc.) effectively to maximise sales
- P2. maintain optimum conditions for the plants as far as possible within the available facilities
- P3. provide any necessary food and water to maintain the condition of the plants
- P4. identify any plants or products that should be removed and take the appropriate action
- P5. carry out appropriate stock rotation
- P6. monitor the development of new plants against the stock rotation plan and take the appropriate action if there are any problems
- P7. use point of sale materials and labels effectively
- P8. promote linked sales

- P9. communicate well with customers
- P10. provide information on the product you are selling
- P11. open and close sales satisfactorily
- P12. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

You need to know and understand:

- K1. how to present plants and relevant products (e.g. growing media, containers, plant feed, etc.) for best effect
- K2. the importance of plant location and hot and cold spots
- K3. how to maintain the condition of plants and products
- K4. different pests or diseases and the appropriate action to take
- K5. the different ways plants are sold e.g. root wrap and containers
- K6. principles of stock rotation
- K7. the value of point-of-sale material and the range available
- K8. how other sales can be linked to plant purchases
- K9. different methods of communication and when to use them
- K10. who your customers are, what they expect and why they may not come back
- K11. the products you are selling
- K12. how to provide information to customers
- K13. the principles of good customer service
- K14. how to open and close sales satisfactorily
- K15. how to deal with queries and complaints
- K16. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Unit 239 Merchandise and sell plants and other relevant products (LANH56)

Supporting information

Evidence requirements

A. display at least two of the following products to merchandise and sell:

(i) growing media(ii) containers(iii) plant feed(iv) plants(v) seeds(vi) bulbs

Notes

Evidence from simulations is not acceptable for this element..

Unit 240 Install hard standing laying courses (LANH62)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standard covers the installation of hard- standing laying courses that are used within the landscaping industries.
	The standard is suitable for operatives working under limited supervision and focuses on the skills required to understand the structure and to undertake the installation of hard-surface laying courses while working to specifications.
	You will be expected to understand the impact of this work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

- P1. assess the risks associated with the site and the proposed work
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. set out for line and level
- P4. place and prepare a suitable laying course
- P5. manually titivate the laying course at edges and around obstructions such as drainage access covers
- P6. manually make good the channel left by screed rails with minimum disturbance to or compaction of adjacent screeded areas
- P7. keep damage to the surroundings to a minimum
- P8. leave the site in a clean and tidy condition
- P9. clean and store tools and equipment promptly and securely
- P10. protect working areas effectively against weather and use until they are in a suitable condition
- P11. leave the site safe, tidy and suitable for its intended use
- P12. maintain effective working relations with relevant people throughout
- P13. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. the weather conditions that are appropriate for screed preparation
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. how to select the correct tools and equipment for screed preparation, including PPE
- K7. how to use the required tools and equipment safely and efficiently
- K8. how to calculate the expected surcharge and/or the screed depth required for a notched screed bar
- K9. the importance of using the correct type of laying course material
- K10. the importance of laying course grain shape, grain size, and moisture content to overall performance
- K11. the correct storage and protection conditions for laying course material
- K12. how the laying course is placed and prepared manually, how it is shaped to follow summits and hollows, and how its compaction is pre-determined
- K13. how channels formed by screed rails are made good
- K14. how mechanically-aided techniques can be used to prepare a screeded laying course for larger areas
- K15. how screeding can be carried out using existing fixed edges and/or screed rails
- K16. the size, mass, and type of compaction equipment suitable for the installation of laying courses
- K17. how compaction equipment is used, and the use of any required attachments
- K18. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

PPE: Personal Protective Equipment

Tools and equipment:

- full screed bars
- notched screed bars
- screed rails
- vibrating plate compactors
- hand finishing tools (floats, trowels, short screed bars)

Techniques:

- pre-compacted
- uncompacted

Materials:

- fine aggregate for conventional paving
- coarse aggregate for permeable paving
- cement-bound material for rigid pavements.

Unit 240 Install hard standing laying courses (LANH62)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment:
- (i) full screed bars
- (ii) notched screed bars
- (iii) screed rails
- (iv) vibrating plate compactors
- (v) hand finishing tools (floats, trowels, short screed bars)
- B. manually prepare a laying course using at least one of the following techniques:
- (i) Pre-compacted
- (ii) Uncompacted
- C. manually prepare a laying course using at least two of the following materials:
- (i) fine aggregate for conventional paving
- (ii) coarse aggregate for permeable paving
- (iii) cement bound material for rigid pavements
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element..

Unit 241 Install hard standing bed preparation (LANH63)

SCQF Level:	5
SCQF Credit value:	7
Aim:	This standard covers installing hard-standing individual bed preparation that is used within the landscaping industries.
	The standard is suitable for operatives working under limited supervision and focuses on the skills required to understand the structure and to undertake the installation of hard-surface individual bed preparation while working to specifications.
	You will be expected to understand the impact of this work on the immediate environment, and the impact of the environment on the structure.

Performance criteria

You must be able to:

- P1. assess the risks associated with the site and the proposed work/required activity
- P2. select, prepare, use and maintain tools and equipment that are appropriate for the work safely and effectively
- P3. set out for line and level
- P4. place and prepare a suitable laying course
- P5. keep damage to the surroundings to a minimum
- P6. leave the site in a clean and tidy condition
- P7. clean and store tools and equipment promptly and securely
- P8. protect working areas effectively against weather and use until they are in a suitable condition
- P9. leave the site safe, tidy and suitable for intended use
- P10. maintain effective working relations with relevant people throughout
- P11. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

Knowledge and understanding

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. the weather conditions that are appropriate for bed preparation
- K4. how to measure to ensure work is within tolerances
- K5. how falls, lines and levels are determined and set out
- K6. where and when individual bed preparation is preferred to screeding
- K7. how to select the correct tools and equipment for bed preparation, including PPE
- K8. how to use the required tools and equipment safely and efficiently
- K9. how to calculate the expected surcharge and/or the bed depth required to accommodate compaction of the paving units
- K10. the importance of using the correct type of laying course material
- K11. the importance of laying course grain shape, grain size, and moisture content to overall performance
- K12. the correct storage and protection conditions for laying course material
- K13. how the laying course is placed and prepared manually, how it is shaped to follow summits and hollows, and how its compaction is determined
- K14. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies.

Glossary

PPE: Personal Protective Equipment

Tools and equipment:

- spades/shovels
- rakes/lutes/spazzles
- trowels/floats

Situations:

- flat area
- area with a sudden change of height (summit)
- area with a sudden change of fall (valley)

Materials:

- fine aggregate for conventional paving
- coarse aggregate for permeable paving
- cement-bound material for rigid pavements.

Unit 241 Install hard standing bed preparation (LANH63)

Supporting information

Evidence requirements

- A. select and use all of the following types of tools and equipment :
- (i) spades/shovels
- (ii) rakes/lutes/spazzles
- (iii) trowels/floats
- B. manually prepare a laying course to all of the following situations:
- (i) flat area
- (ii) area with a sudden change of fall (summit)
- (iii) area with a sudden change of fall (valley)
- C. manually prepare a laying course using at least two of the following materials:
- (ii) fine aggregate for conventional paving
- (iii) coarse aggregate for permeable paving
- (iv) cement bound material for rigid pavements
- D. liaise with two of the following types of relevant people:
- (i) colleagues
- (ii) sub-contractors
- (iii) clients

Notes

Evidence from simulations is not acceptable for this element..

Unit 242 Maintain and store records within the workplace (LANCS5)

SCQF Level:	6
SCQF Credit value:	3
Aim:	This standard is about the effective maintenance and storage of information. This involves accurately recording information and storing it in the correct location. Most workplaces use computers to store and maintain records but paper-based systems are still used.
	Records could include those that are required by law and those that are maintained to aid the efficient running of the business. You will need to maintain any necessary confidentiality.

Performance criteria

- P1. accurately locate the appropriate recording mechanism for the information you need to record
- P2. where records do not currently exist, set them up, or work with the appropriate people to get them set up
- P3. make entries into records that are accurate, complete and, in the case of written records, legible
- P4. record information within required timescales
- P5. store updated records accurately in the correct location
- P6. follow procedures when records are transferred to another location
- P7. maintain security and confidentiality of information recorded, in accordance with requirements
- P8. take the appropriate action to resolve or report any errors or omissions that are discovered in the records, or any problems with maintaining, storing or retrieving records.

You need to know and understand:

- K1. the systems for record keeping and storage used within the organisation
- K2. the records which you are required to update and where they are located
- K3. the correct format in which records must be completed
- K4. when records should be completed
- K5. the limits of your responsibility for handling and using records
- K6. your responsibility under relevant legislation
- K7. what the records are used for and the importance of accurate record keeping
- K8. procedures for transferring records
- K9. records that are confidential or commercially sensitive and how to deal with these
- K10. the types of problems that may occur with records, and how these should be resolved
- K11. the person to whom problems with records should be reported
- K12. how long records need to be kept.

Unit 242 Maintain and store records within the workplace (LANCS5)

Supporting information

Evidence requirements

- A. take appropriate action to:
- (i) make corrections to the records
- (ii) recognise and report the errors to the appropriate person

Notes

Evidence from simulations is not acceptable for this element.

Unit 243 Transport physical resources within the work area (LANCS6)

SCQF Level:	4
SCQF Credit value:	3
Aim:	This standard covers the transportation of physical resources within the work area. Physical resources may be products, equipment, materials, liquids etc. You must be able to load, transport and unload resources safely and efficiently while maintaining the load in good condition. Some resources require careful loading and transportation in order to minimise damage.
	It should be noted that this standard only refers to transportation within the work area. It does not cover transportation on public highways. If there is the need to travel on public roads, the relevant licenses are

This standard is for anyone who transports physical resources within the work area.

required. Transportation is by any method suitable to the resources being moved, and may be manual or through the use of mechanical equipment. To operate some machinery you will need to be appropriately trained or certificated in line with current

Performance criteria

You must be able to:

P1. assess the resources requiring transportation to identify suitable methods of transporting them

legislation.

- P2. assess the risks associated with the site and the required activity
- P3. select and prepare equipment that is appropriate for the work
- P4. assess the weight of heavy and bulky items to determine how they should be lifted
- P5. carry out lifting operations safely and in accordance with legislation position
- P6. resources safely and securely on the transportation equipment operate
- P7. transportation equipment safely in accordance with instructions and safety requirements

- P8. minimise damage through appropriate manoeuvring of the transportation equipment
- P9. monitor loads during transit and take appropriate action for any which become unsafe
- P10. unload resources and position them safely in the appropriate place
- P11. complete records as appropriate
- P12. maintain and store equipment ready for subsequent use
- P13. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. how to select appropriate transportation equipment for different loads
- K2. how to identify hazards and assess risks
- K3. how to prepare, use and maintain equipment in a safe and effective condition
- K4. how to assess loads to determine safe methods of lifting
- K5. safe methods of lifting and carrying resources manually
- K6. the correct use of lifting equipment and legal restrictions on operations
- K7. ways of securing resources during transit in order to maintain safety and minimise damage
- K8. physical resources which are easily damaged during transportation and ways this can be minimised
- K9. ways of handling and manoeuvring transportation equipment to minimise damage to physical resources in transit
- K10. ways of monitoring the condition of physical resources during transit
- K11. methods of protecting resources from contamination
- K12. methods of protecting resources from adverse weather conditions
- K13. loading and unloading requirements for transportation such as positioning, stacking and the weight of loads
- K14. the records which need to be completed
- K15. your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies.

Unit 243 Transport physical resources within the work area (LANCS6)

Supporting information

Evidence requirements

- A. transport the following physical resources:
- (i) products
- (ii) materials
- (iii) equipment
- B. use one of the following forms of transportation:
- (i) vehicle
- (ii) manual

Notes

Evidence from simulations is not acceptable for this element.

Unit 244 Prepare and operate a tractor with attachments (LANCS7)

SCQF Level:	5
SCQF Credit value:	11
Aim:	This standard is about the preparation and operation of a tractor with attachments. The competent use of a tractor with attachments requires considerable skill and knowledge. Attachments may include loaders, trailers and mounted implements.
	It is vital that during the use of tractors you adhere to health and safety requirements at all times. You will need to use warning signals correctly, and identify (and remove/ avoid) hazards.
	You will need to be able to use a tractor during a variety of weather conditions. These weather conditions will have an impact on the handling and use of the tractor. You will also need to be able to use tractors both on and off roads.

Performance criteria

- P1. carry out pre-start checks and adjustments in accordance with standard procedures
- P2. check the immediate work area for hazards and obstacles and take the appropriate action
- P3. use attachments that are suitable for the tractor (loaders, trailers and mounted implements)
- P4. make sure that attachments are secure and safe
- P5. use attachments to the vehicle safely at all times
- P6. check that the work area is clear of people and animals immediately prior to the start of operations
- P7. use the correct warning signals immediately prior to the commencement of operations
- P8. conduct all movements of the vehicle safely, and consistent with the type of vehicle and operation
- P9. modify operating procedures to take into account any changes in weather and ground conditions, and types of terrain
- P10. deal with any hazards and obstacles encountered during the operation in accordance with standard practice

- P11. maintain the efficiency of vehicle performance through the appropriate handling and use of the vehicle (speed, gears, hydraulics and coverage of ground)
- P12. leave the vehicle secure after use and in a condition suitable to its future use
- P13. carry out all work activities in accordance with health and safety legislation, and codes of practice.

You need to know and understand:

- K1. the required pre-start checks, adjustments, routine maintenance and safety checks
- K2. types of attachments and how they should be secured to the tractor
- K3. types of attachments that are safe for use with the vehicle and those that are not
- K4. the safe use of attachments
- K5. conditions that should be taken into account when considering the use of attachments
- K6. the correct use and duration of warning signals and indicators
- K7. the ways in which the vehicle should be manoeuvred, and how different weather and ground conditions must be taken into account
- K8. types of hazards that may be encountered and how these should be dealt with
- K9. the capabilities of the vehicle and the expected efficiency of vehicle operation
- K10. the reasons why the vehicle should be left in a condition suitable for future use
- K11. current health and safety legislation, and codes of practice in relation to the preparation and use of tractors and the workplace.

Unit 244 Prepare and operate a tractor with attachments (LANCS7)

Supporting information

Evidence requirements

- A pre-start checks to include:
- (i) routine maintenance
- (ii) routine safety checks
- B operator environment
- (i) seat adjustment
- (ii) mirror adjustment
- (iii) steering wheel position
- (iv) controls are free from obstruction
- C operate a tractor in at least two of the following ground conditions:
- (i) wet
- (ii) dry
- (iii) frost
- D use the vehicle on two of the following terrain:
- (i) hard surfaces
- (ii) soft surfaces
- (iii) slopes
- E. use at least two of the following attachments:
- (i) loaders
- (ii) trailers
- (iii) mounted implements

Notes

Evidence from simulations is not acceptable for this element.

Unit 245 Construct paths or surfaces (LANCS16)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standard covers the construction of paths or surfaces.
	Construction is defined as creating a new path or surface, or replacing an existing path or surface.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	This standard is for those who undertake the construction of paths or surfaces.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. assess the site prior to operation to identify any restrictions on the planned work
- P3. select, prepare and use equipment and machinery in accordance with specifications
- P4. select materials to meet specifications
- P5. prepare the site in accordance with specifications
- P6. construct paths or surfaces in accordance with specifications
- P7. provide foundations and drainage in accordance with specifications where required
- P8. carry out work in a manner which prevents damage to the surrounding area
- P9. ensure that other site users are not put at risk by your work
- P10. ensure the appearance and condition of the path or surface meets specifications

- P11. handle and transport materials and equipment in accordance with regulations
- P12. deal with waste safely and correctly in accordance with instructions
- P13. restore the site to an appropriate condition following completion of the work.

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g. presence of listed structures, wildlife, non- native invasive or protected species etc.
- K4. the hazards presented by services on site and how to avoid these
- K5. how to select, prepare and use tools, equipment and materials relevant to the agreed specifications
- K6. suitable methods for preparing the site
- K7. the methods of construction for different types of paths or surfaces
- K8. the purpose of the path or surface
- K9. the relative advantages and disadvantages of different types of surface or paths and situations in which they are appropriate
- K10. the types of foundations which are required
- K11. the principles of drainage for paths or surfaces and how to ensure its effectiveness
- K12. the qualities of the finished product that make it fit for purpose
- K13. the potential impact of your work on the surrounding area and how to minimise this
- K14. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K15. why it is important to keep working areas clean and tidy during operation and to restore the site following completion of the work.

Glossary

Paths and surfaces could include dirt tracks, bark paths, flagstone, standing areas, aggregate paths, stone-pitched paths and boardwalk paths.

Specifications include drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, legislation and tolerances.

Instructions can be verbal or written.

Unit 245 Construct paths or surfaces (LANCS16)

Supporting information

Evidence requirements

- A. maintain the necessary equipment by:
- (i) cleaning
- (ii) storing
- (iii) checking and adjusting
- B. construction paths or surfaces with:
- (i) fluid components
- (ii) hard components
- C. dispose of the following types of waste:
- (i) organic
- (ii) inorganic

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

Unit 246 Maintain and repair paths or surfaces (LANCS17)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standard covers the maintenance and repair of paths or surfaces.
	Maintenance and repair includes the treatment of weeds, ensuring level and safe surfaces, clearing and cleaning, and replacing and fixing damaged material.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	This standard is for those who undertake the maintenance and repair of paths and surfaces.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. carry out all work in accordance with instructions and specifications
- P3. assess the site prior to operation to clarify maintenance requirements
- P4. select, prepare and use equipment and machinery to carry out required maintenance
- P5. select materials to meet specifications
- P6. prepare the site and carry out work in a manner which prevents damage to the surrounding area
- P7. restore the site to an appropriate condition following completion of the work
- P8. handle and transport materials and equipment in accordance with regulations
- P9. ensure that other site users are not put at risk by your work

- P10. deal with waste safely and correctly in accordance with instructions
- P11. complete records as appropriate.

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g. presence of listed structures, wildlife, non- native invasive or protected species etc.
- K4. the hazards presented by services on site and how to avoid these
- K5. the maintenance techniques required for maintaining paths or surfaces
- K6. how to select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- K7. suitable methods for preparing the site
- K8. why paths and surfaces must be maintained and repaired and the potential problems if this is not carried out
- K9. the purpose of the path or surface and how this relates to the specifications and operations
- K10. the potential impact of your work on the surrounding area and how to minimise this
- K11. problems which may occur during operations and how these should be dealt with
- K12. why it is important to keep working areas clean and tidy during operations and to restore the site following completion of the work
- K13. the legal and organisational requirements for the handling, transporting and disposal of waste.

Glossary

Paths and surfaces could include dirt tracks, bark paths, flagstone, standing areas, aggregate paths, stone-pitched paths and boardwalk paths.

Specifications include drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, legislation and tolerances.

Instructions can be verbal or written.

Unit 246 Maintain and repair paths or surfaces (LANCS17)

Supporting information

Evidence requirements

- A. maintain the necessary equipment by:
- (i) cleaning
- (ii) storing
- (iii) checking and adjusting
- B. maintain paths with:
- (i) fluid components
- (ii) hard components
- C. carry out the following maintenance:
- (i) clearing
- (ii) repairing
- D. dispose of the following types of waste:
- (i) organic
- (ii) inorganic

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

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Unit 247 Construct structures (LANCS18)

SCQF Level:	6
SCQF Credit value:	12
Aim:	This standard covers the construction of structures on land-based and environmental sites.
	This standard is for those who undertake the construction of structures.
	Structures may be permanent or temporary and could include animal holding pens, polytunnels, bridges, hides and screens.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.
	During both preparation and construction, you may have to deal with unexpected events such as accidental damage, or difficulty in conforming to the specifications.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. assess the site prior to operation to identify any restrictions on the planned work
- P3. select, prepare and use equipment and machinery which meets the agreed specifications
- P4. select materials which meet specifications
- P5. prepare the site in accordance with specifications
- P6. ensure the preparation of structures is consistent with the specifications

- P7. ensure any required foundations for the structure are in accordance with specifications
- P8. construct the structure in accordance with the specifications
- P9. carry out work in a manner which prevents damage to the surrounding area
- P10. ensure that other site users are not put at risk by your work
- P11. ensure the appearance and condition of the structure meets specifications
- P12. restore the site to an appropriate condition following completion of the work
- P13. deal with waste safely and correctly in accordance with instructions
- P14. handle and transport materials and equipment in accordance with regulations.

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g designated sites; presence of listed structures; wildlife; non-native, invasive or protected species, etc.
- K4. prepare for the construction of structures
- K5. the purposes the structures are designed to meet
- K6. how to select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- K7. how to interpret specifications and the importance of following the specifications
- K8. correct preparation methods for different structures and how these are related to timing and scheduling
- K9. the potential impact of your work on the surrounding area and how to minimise this
- K10. the potential conflicts between constructing structures and conserving and protecting the natural environment
- K11. methods of constructing the structure and the relationship of this to its planned use
- K12. the context within which the structure is set, and how this relates to the specifications
- K13. how to use materials correctly
- K14. problems which may occur during operations and how these should be dealt with
- K15. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K16. the importance of restoring the site to a clean and tidy condition

Glossary

Structures: simple bridges, fords, steps, holding pens, sheds, polytunnels, screens, hides.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines.

Unit 247 Construct structures (LANCS18)

Supporting information

Evidence requirements

- A. interpret the specification in relation to the following categories:
- (i) security
- (ii) quality
- (iii) design
- (iv) construction
- B. maintain the necessary equipment by:
- (i) cleaning
- (ii) storing
- (iii) checking and adjusting
- C. manage the following waste:
- (i) organic
- (ii) inorganic

Notes

Evidence from simulations is not acceptable for this element.

Unit 248 Maintain and repair structures (LANCS19)

SCQF Level:	5
SCQF Credit value:	7
Aim:	This standard covers how to maintain and repair structures.
	Maintenance and repair is defined as mending or restoring something to a sound and safe condition.
	This standard is for those responsible for the maintenance and repair of structures.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. assess the site prior to operation to identify any restrictions on the planned work
- P3. select, prepare and use equipment and machinery which meets the agreed specifications
- P4. prepare the site and carry out work in a manner which prevents damage to the surrounding area
- P5. carry out all work in accordance with instructions and specifications
- P6. ensure maintenance and repair takes place at an appropriate time
- P7. ensure completed work meets the specifications and is fit for purpose
- P8. ensure that other site users are not put at risk by your work
- P9. restore the site to an appropriate condition following completion of the work
- P10. deal with waste safely and correctly in accordance with instructions

- P11. handle and transport materials and equipment in accordance with regulations
- P12. complete records as appropriate

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g. presence of listed structures, wildlife, non- native invasive or protected species designated sites etc.
- K4. the hazards presented by services on site and how to avoid these
- K5. the maintenance techniques required for maintaining structures
- K6. how to select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- K7. suitable methods for preparing the site
- K8. why the structure must be maintained and repaired and the potential problems if this is not carried out
- K9. the purpose of the structure and how this relates to the specifications and operations
- K10. methods for testing the safety, stability and durability of structures and their fitness for purpose
- K11. how to evaluate the completed work against the specifications
- K12. the potential impact of your work on the surrounding area and how to minimise this
- K13. problems which may occur during operations and how these should be dealt with
- K14. the importance of restoring the site to a clean and tidy condition
- K15. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K16. the records which need to be completed.

Glossary

Structures: holding pens; hides; screens; sheds; polytunnels; bridges; fords; steps.

Instructions: verbal or written.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines..

Unit 248 Maintain and repair structures (LANCS19)

Supporting information

Evidence requirements

- A. interpret the specification in relation to the following categories:
- (i) security
- (ii) quality
- (iii) design
- (iv) construction
- B. maintain the necessary equipment by:
- (i) cleaning
- (ii) storing
- (iii) checking and adjusting
- C. manage the following waste:
- (i) organic
- (ii) inorganic

Notes

Evidence from simulations is not acceptable for this element..

Unit 249 Construct boundaries or access points (LANCS20)

SCQF Level:	7
SCQF Credit value:	12
Aim:	This standard covers how to construct boundaries or access points.
	This standard is for employees and volunteers working in the land-based and environmental sector.
	Local custom and materials should encourage the use of a wide range of styles and techniques.
	Construction is defined as creating a new boundary or access point, or completely replacing a boundary or access points.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.
	The construction of drystone walls/drystone dykes is covered in VR567 build drystone structures from CSC.
	This does not include safety, high security or electric fencing.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. assess the site prior to operation to identify any restrictions on the planned work

- P3. select, prepare and use equipment and machinery in accordance with specifications
- P4. select material and resources to meet specifications
- P5. prepare the site in accordance with specifications
- P6. identify the proposed line for the boundary in accordance with specifications
- P7. carry out all work in accordance with instructions and specifications
- P8. carry out work in a manner which prevents damage to the surrounding area
- P9. ensure the appearance and condition of boundaries and access points meets specifications
- P10. deal with waste safely and correctly in accordance with instructions/legislation
- P11. restore the site to an appropriate condition following completion of the work

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g. designated sites, presence of listed structures, wildlife, non-native invasive or protected species etc.
- K4. the hazards presented by services on site and how to avoid these
- K5. how to select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- K6. suitable methods for preparing the site
- K7. the construction regulations and standards pertinent to the construction of boundaries or access points
- K8. the construction techniques appropriate to the boundary, access points and surrounding environment
- K9. the types of ground preparation appropriate to the construction of the work
- K10. the context within which the boundary or access point is set, and how this relates to the specifications
- K11. the relative advantages and disadvantages of different types of boundaries or access points and the appropriate situations in which to use them
- K12. the potential impact of your work on the surrounding area and how to minimise this
- K13. problems which may occur during operations and how these should be dealt with
- K14. how to evaluate the success of the completed work against the specifications
- K15. methods of protecting materials and structures during construction
- K16. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K17. the importance of restoring the site to a clean and tidy condition.

Glossary

Boundaries could be fences, walls, banks.

Access points through such boundaries could be stiles, gates, steps.

Specifications include drawings, schedules, method statements, Standard Operating Procedures (SOPs) and manufacturers' guidelines..

Unit 249 Construct boundaries or access points (LANCS20)

Evidence requirements

- A. identify the proposed line for the boundary from the specification and any special considerations which relate to the line including:
- (i) health and safety
- (ii) environmental impact
- (iii) access
- B. outline how to interpret and use relevant specifications covering:
- (i) setting out and location
- (ii) materials and resources
- (iii) timing and timescales
- (iv) working methods
- (v) suitability to expected use and local tradition
- C. construct one of the following boundaries below within the tolerances specified for the site
- (i) fence
- (ii) wall
- (ii) bank
- D. construct one of the following access points:
- (i) gates (wooden/metal)
- (ii) stiles
- (iii) steps

Notes

Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

It is essential that environmental good practice (fitting into the landscape, minimum disturbance to wildlife, disposal of waste etc) is considered at all stages of the work to be carried out.

'Construction' is defined as creating a new boundary or completely replacing boundary or other structure.

'Stone walls' include drystone walls/drystone dykes in keeping with local traditions; mortared rough stone walls and stone retaining walls (including ha-has).

Stiles may be timber or stone construction but should fit the landscape and their proposed use.

Unit 250 Maintain and repair boundaries or access points (LANCS21)

SCQF Level:	5
SCQF Credit value:	6
Aim:	This standard covers the maintenance and repair of boundaries or access points. You will need to ensure that the work is carried out in accordance with specifications, legislation and organisational policy.
	Maintenance and repair is defined as mending or restoring to a sound and safe condition. Maintenance could be preventative (prevention of major repair work at a later date) or reactive.
	Local custom and materials should encourage the use of a wide range of styles and techniques.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation.
	This standard is for those who are responsible for the maintenance and repair of boundaries or access points.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements and company policies
- P2. assess the site prior to operation to identify any restrictions on the planned work
- P3. select, prepare and use equipment and machinery which meet the agreed specifications

- P4. select materials to meet specifications
- P5. carry out all work in accordance with instructions and specifications
- P6. prepare the site and carry out work in a manner which prevents damage to the surrounding area
- P7. ensure completed work meets the specifications and is fit for purpose
- P8. handle and transport material and equipment in accordance with regulations
- P9. carry out work tidily and safely with due regard to users of the site
- P10. restore the site to an appropriate condition following completion of the work
- P11. deal with waste safely and correctly in accordance with instructions
- P12. complete records as appropriate

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. the importance of examining the site prior to commencing work with regards to hazards, assessment of risk and potential restrictions
- K3. the restrictions affecting the work e.g. presence of listed structures, wildlife, non- native invasive or protected species, designated sites etc.
- K4. the hazards presented by services on site and how to avoid these
- K5. the maintenance techniques required for maintaining boundaries and access points
- K6. how to select, prepare and use tools, equipment and machinery relevant to the agreed specifications
- K7. the purpose of boundaries or access point and how this relates to the specifications and operations
- K8. suitable methods for preparing the site
- K9. how to interpret and use relevant specifications
- K10. why boundaries and access points must be maintained and repaired and the potential problems if not carried out
- K11. methods of testing the safety, stability and durability of the boundaries or access point and their fitness for purpose
- K12. how to evaluate the completed work against the specifications
- K13. the potential impact of your work on the surrounding area and how to minimise this
- K14. problems which may occur during operations and how these should be dealt with
- K15. why it is important to keep working areas clean and tidy during operations and to restore the site following completion of the work
- K16. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K17. the records which need to be completed.

Glossary

Boundary: walls, fences, banks.

Access points: gates, stiles, steps.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines

Instructions: verbal or written.

Unit 250 Maintain and repair boundaries or access points (LANCS21)

Supporting information

Evidence requirements

- A. maintain and repair three of the following types of boundary or access points:
- (i) stone walls
- (ii) post and wire fences
- (iii) post and rail fences
- (iv) banks
- (v) gates
- (vi) stiles
- B. carry out the following types of equipment maintenance:
- (i) preparation
- (ii) checks and adjustments
- (iii) cleaning
- (iv) storage
- C. work to specifications which cover the following:
- (i) materials and resources
- (ii) timing and timescale of work
- (iii) working methods
- (iv) appropriate to local tradition

Notes

Simulations may be used to generate evidence of dealing with problems where naturally occurring evidence is not available. Where simulations are used to generate evidence, these should properly reflect the requirements of real working situations.

'Maintenance and repair' is defined as mending or restoring to a sound condition after dilapidation or wear. It may be undertaken for safety, to maintain the effectiveness of the boundary or structure or to increase its lifespan. Repairs may be temporary or long-term.

'Stone walls' include drystone walls/drystone dykes in keeping with local traditions; mortared rough stone walls and stone retaining walls (including ha-has).

Stiles may be timber or stone construction but should fit the landscape and their proposed use.

Unit 251 Carry out maintenance and repair of equipment and machinery (LANCS25)

SCQF Level:	6
SCQF Credit value:	5
Aim:	This standard covers the routine maintenance of equipment and machines. Such maintenance is usually recommended by manufacturers in order to maximise the working life of the equipment or machinery. You will carry out such activities in accordance with manufacturers' instructions and/or instructions provided by a supervisor or an experienced individual. Important health and safety considerations apply throughout this standard.
	If you are working with chemicals or machinery you need to be appropriately trained or certificated in line with current legislation. You must carry out your work in a way which will minimise any impact on the natural environment.

Performance criteria

- P1. select and prepare equipment and machines for maintenance
- P2. ensure the equipment and machines requiring maintenance are safe and completely isolated from the power source
- P3. take the correct precautions to minimise dangers from contamination and hazardous chemicals
- P4. ensure the work area is safe and in a condition suitable for the maintenance procedure
- P5. obtain and prepare tools and materials suitable for the maintenance procedure
- P6. maintain equipment and machines in accordance with manufacturers' instructions, standard procedures and legislation
- P7. prevent the escape of substances and deal with waste safely and correctly in accordance with legislation
- P8. identify the need for advice and assistance and refer to the appropriate person

- P9. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P10. clean, service and store maintenance tools safely and effectively
- P11. complete records as appropriate

You need to know and understand:

- K1. the equipment and machinery that requires routine maintenance and the reasons for this
- K2. prepare equipment and machines for maintenance
- K3. methods for preparing equipment and machines
- K4. the dangers created by stored energy and how these should be responded to during the preparation stage
- K5. hazardous chemicals and substances which may be present and ways in which they should be dealt with
- K6. the type of tools, equipment and materials required for the maintenance procedure
- K7. types of personal protective equipment and the reasons for and correct use
- K8. methods for maintaining equipment and machines and the maintenance procedures
- K9. the reasons for maintaining equipment and machinery and the possible consequences of not maintaining them
- K10. legislative requirements relating to the maintenance of equipment and machinery
- K11. levels of responsibility in relation to the maintenance of equipment and machinery and to whom to go for advice
- K12. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K13. how to handle, transport and dispose of waste in accordance with legal and organisational requirements
- K14. how to store tools, equipment and machinery in a safe and effective condition

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Stored energy e.g. springs, belt tension, hydraulic pressure or electrical discharge.

Tools used to carry out the maintenance procedures will include hand tools and power tools.

Waste materials may include hazardous and non-hazardous materials. Equipment and machines may be manual or mechanical

Unit 251 Carry out maintenance and repair of equipment and machinery (LANCS25)

Supporting information

Evidence requirements

- A prepare the following equipment and machines for maintenance:
- (i) manual
- (ii) mechanical
- B obtain and prepare the following tools used for carrying out maintenance:
- (i) hand tools
- (ii) power tools

Notes

Simulation is permissible for this element. Where simulations are used to generate performance evidence, these should properly reflect the requirements of real working situations.

Unit 252 Identify the presence of pests, diseases and disorders (LANCS29)

SCQF Level:	6
SCQF Credit value:	7
Aim:	This standard covers identifying pests, diseases and disorders within crops or plants.
	You are expected to help monitor the incidence and spread of pests, diseases and disorders, and to report your findings to the appropriate person.
	You will be working in accordance with instructions and specifications.
	You must carry out your work in a way which will minimise any impact on the natural environment.

Performance criteria

- P1. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2. monitor the crop(s) or plant(s) according to specifications
- P3. correctly identify the presence of pests, diseases and disorders
- P4. correctly identify the presence of any biological controls in use and beneficial insects
- P5. establish the extent of the pest population, disease and any disorders
- P6. promptly report the presence and extent of pests, diseases and disorders to the appropriate person
- P7. carry out work in a manner which prevents damage to the surrounding area
- P8. complete records as appropriate

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. workplace policies and procedures relating to the identification and reporting of pests, diseases and disorders
- K3. your responsibilities under environmental and conservation legislation
- K4. reasons for monitoring the crop or plant
- K5. when to carry out crop monitoring i.e. frequency and regularity
- K6. common types of pests, diseases and disorders
- K7. the problems caused by common pests, diseases and disorders to crops or plants
- K8. relevant biological control and beneficial insects as they apply to crops or plants within your area of responsibility
- K9. to whom you should report the presence and extent of pests, diseases, disorders and biological control/beneficial insects
- K10. the potential impact of your work on the environment and how to minimise this.

Scope/range

The presence of:

- pests
- diseases
- disorders
- biological control or beneficial insects.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Pests will include insects, slugs, snails and rodents, for example. Diseases may be fungal, viral or bacterial.

Disorders may include nutrient deficiencies (e.g. nitrogen or calcium deficiencies).

Unit 253 Prepare and use equipment and machines (LANCS35)

SCQF Level:	5
SCQF Credit value:	11
Aim:	This standard covers the preparation and use of equipment and machinery correctly and safely, with due regard to manufacturers' instructions and legal and regulatory requirements.
	This standard does not cover repair of equipment and machinery which is covered in CU27. It does cover the routine day-to-day maintenance of equipment and machinery before and after use.
	You must carry out your work in a way which will minimise any impact on the natural environment and enhance its nature, conservation and recreational value.
	Use of machinery and equipment and all actions must meet the requirements of the law and relevant codes of practice. NB: this unit does not cover the use of tractors or tractor-mounted equipment other than small lawn/compact tractors.

Performance criteria

- P1. select the correct equipment and machinery in accordance with specifications
- P2. select and use the correct personal protective clothing and equipment
- P3. carry out pre-start checks and adjustments of equipment or machinery in accordance with procedures
- P4. prepare and use the equipment or machinery in accordance with the manufacturers' instructions and legal regulatory requirements
- P5. take correct action if a problem occurs with the equipment or machinery
- P6. carry out routine maintenance of equipment or machinery prior to and after use
- P7. identify the need for advice and assistance and refer this matter to the appropriate member of staff

- P8. minimise the escape of substances and deal with waste safely and correctly in accordance with legislation
- P9. store the equipment or machinery safely and effectively
- P10. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K2. how to select the correct equipment or machinery for the planned work
- K3. how to check the equipment or machinery and the types of preoperational maintenance required
- K4. the main hazards associated with using the equipment or machinery in your area of responsibility
- K5. the manufacturers' instructions for the operation of the equipment or machinery in your area of responsibility
- K6. the types of problems that may occur with the equipment or machinery and how to deal with them
- K7. the principles of two- and four-stroke engines
- K8. the principles of lines of drive including clutch, v-belts and chains
- K9. types of protective clothing and the reasons why it must be worn
- K10. the correct ways of wearing personal protective equipment
- K11. the legal and regulatory requirements that govern the use of the equipment and machinery in your area of responsibility
- K12. methods for maintaining equipment or machines
- K13. the reasons for maintaining equipment or machinery and the possible consequences of not maintaining it correctly
- K14. hazardous chemicals and substances which may be present and ways of minimising leakage
- K15. how to handle, transport and dispose of waste in accordance with legal and organisational requirements.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements.

Instructions: verbal or written.

Equipment and machinery could include non-powered tools and equipment (for example hand tools, fertiliser distributors), hand-held powered equipment (for example strimmers, hedge cutters, leaf blowers), pedestrian-controlled powered equipment (for example rotary mowers), ride-on powered equipment (for example ride-on mowers), chippers and/or shredders.

Routine maintenance could include oil changes, spark plugs, wheels and tyres, backlapping, sharpening hand tools

Unit 254 Prepare and cultivate sites for planting (LANAGC1)

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SCQF Level:	6
SCQF Credit value:	6
Aim:	This standard covers the preparation and cultivation of sites for planting.
	You will need to be able to use cultivation equipment to achieve the required ground conditions for planting to take place and will require an understanding of soil types and condition, climate, weather and ground conditions.
	If you are working with chemicals or machinery you need to be appropriately trained in line with current legislation, and hold a relevant award where appropriate
	You must carry out your work in a way which will consider any impact on the natural environment and enhance its nature and conservation
	The standard is suitable for anyone with responsibility for preparing and cultivating sites ready for planting crops.

Performance criteria

- P1. assess the risks associated with the site and the required activity
- P2. select, prepare, use and maintain equipment and machinery in a safe, clean and effective condition throughout
- P3. check equipment and machinery is fit for use and ensure it is properly set up prior to undertaking activity
- P4. prepare the site to meet the requirements of the crop to be planted and other relevant factors
- P5. use cultivation equipment in the correct order to achieve the required ground conditions
- P6. cultivate the site to meet the requirements of the crop and other relevant factors
- P7. respond effectively to the different circumstances which may arise when preparing and cultivating sites

- P8. maintain suitable levels of hygiene and bio-security
- P9. maintain the security of equipment and machinery on site
- P10. follow organisational and industry environmental good practice to minimise environmental damage
- P11. deal with waste safely and correctly in accordance with legislation
- P12. monitor and maintain the site prior to the planting of crops, in accordance with production requirements
- P13. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P14. keep accurate and up-to-date records as required by relevant legislation and the organisation

You need to know and understand:

- K1. how to identify hazards and assess risks
- K2. how to interpret risk assessments
- K3. the importance of carrying out an environmental assessment of the site before starting work and the findings which may affect site preparation and cultivation
- K4. the requirements, advantages and disadvantages of different crop production systems
- K5. the principles of sustainable crop production
- K6. types of equipment and machinery required for preparing and cultivating sites and how to prepare, maintain and use these safely and effectively, including the use of new technology
- K7. how to set up the equipment and machinery to carry out required task
- K8. methods for preparing the site according to production requirements
- K9. methods for cultivating the site according to production requirements
- K10. the effect which soil type, climate, weather and ground conditions, previous treatments, existing structures and systems will have on the cultivation methods used
- K11. the requirements which sites may have for drainage and the relationship of this to soil type and condition, climate and geographical location
- K12. the relationship between the crop and soil type and condition, climate and geographical location
- K13. problems which may arise during preparation and cultivation and the actions to take
- K14. the importance of maintaining hygiene and bio-security during preparation and cultivation of sites and the methods for achieving this
- K15. why it is important to maintain safety and security of equipment and machinery when on site
- K16. the potential impact of your work on the environment and how this can be minimised
- K17. the legal and organisational requirements for the handling, transport, storage and disposal of waste

- K18. the reasons for monitoring the site prior to planting
- K19. your responsibilities under current environmental and health and safety legislation, codes of practice and company policies
- K20. the records which need to be maintained.

Glossary

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers guidelines, customer requirements, crop requirements

Prepare the site:

- drainage
- adjustment of nutrient
- clearance

Relevant factors:

- soil type and condition
- topography
- climate
- weather and ground conditions
- existing structures and systems (e.g. fences, hedges, drainage)
- previous use of the site
- previous treatments
- access

Ground conditions:

- depth
- area covered
- tilth

Circumstances:

- different soil conditions
- different weather conditions
- different sites

Sustainable agriculture: Meeting the requirements for food production while maintaining profitability and preserving the environment.

Records: manual or computerised.

Unit 254 Prepare and cultivate sites for planting (LANAGC1)

Supporting information

Evidence requirements

- A maintain equipment through:
- (i) preparation
- (ii) checks and adjustments
- (iii) cleaning
- B prepare sites in one of the following ways:
- (i) drainage
- (ii) adjustment of nutrient
- (iii) clearance
- C recognise and respond to the following relevant factors:
- (i) soil type and condition
- (ii) climate
- (iii) weather and ground conditions
- (iv) previous treatments
- (i) existing structures and systems
- (ii) previous use
- D achieve the required ground conditions in terms of:
- (i) correct depth
- (ii) area covered
- (iii) soil condition

Notes

Evidence from simulations is not acceptable for this element.

Unit 255 Harvest crops by mechanical means (LANAGC5)

SCQF Level:	4
SCQF Credit value:	5
Aim:	This standard covers the harvesting of crops by mechanical means. Harvesting methods will depend on the type of crop involved and the production requirements.
	You will be working in accordance with instructions and specifications.
	When working with machinery you will need to be appropriately trained in line with current legislation, and hold a relevant award where appropriate.
	You must carry out your work in a way which will consider any impact on the natural environment and enhance its nature and conservation.
	This standard is suitable for anyone who carries out the harvesting of crops by mechanical means.

Performance criteria

- P1. select, prepare, use and maintain harvesting equipment and machinery in a safe, clean and effective condition throughout
- P2. ensure harvesting equipment and machinery is fit for use and properly set up prior to undertaking activity
- P3. use equipment and machinery to harvest crops in accordance with instructions and specifications
- P4. harvest crops in a way which maintains quality and minimises damage to the crop
- P5. identify and carry out adjustments to the equipment and machinery to improve the process where appropriate in accordance with specifications
- P6. maintain suitable levels of hygiene and biosecurity during harvesting
- P7. maintain the security of equipment and machinery on site
- P8. follow organisational and industry environmental good practice to minimise environmental damage

- P9. deal with waste safely and correctly in accordance with legislation
- P10. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P11. keep accurate and up-to-date records as required by relevant legislation and the organisation

You need to know and understand:

- K1. types of equipment and machinery required for harvesting crops and how to prepare, maintain and use this safely and effectively
- K2. the stages of plant development
- K3. safe operation of harvesting equipment and machinery
- K4. how weather conditions will influence harvesting decisions
- K5. how to recognise crops which do not meet specifications
- K6. how to recognise crop damage and how to prevent damage to crops
- K7. how harvesting methods vary according to the type of crop and the required use e.g. straw for thatching / straw for animal bedding
- K8. how to make adjustments to the harvesting process and why these may be required
- K9. the importance of carrying out the activity in accordance with specifications
- K10. problems which may arise during harvesting and the actions to take
- K11. the importance of maintaining hygiene and bio-security during harvesting, and the methods for achieving this
- K12. why it is important to maintain the security of equipment and machinery when on site
- K13. the potential impact of your work on the environment and how this can be minimised
- K14. methods for the recycling or disposal of waste created by the harvesting process
- K15. your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies
- K16. the records which need to be maintained

Glossary

Specifications: schedules, method statements, Standard Operating Procedures (SOPs), manufacturers guidelines customer requirements, crop requirements

Instructions: verbal or written.

Records: manual or computerised.

Unit 255 Harvest crops by mechanical means (LANAGC5)

Supporting information

Evidence requirements

- A prepare machinery and equipment by carrying out the following:
- (i) routine maintenance
- (ii) check for damage and faults
- (iii) check cleanliness
- (iv) servicing
- B make adjustments for two of the following:
- (i) crop density
- (ii) crop condition
- (iii) prevailing weather
- (iv) ground condition
- (v) terrain
- (vi) crop type

Notes

Evidence from simulations is not acceptable for this element.

Unit 256 Store harvested crops (LANAGC6)

SCQF Level:	5
SCQF Credit value:	5
Aim:	This standard covers the storage and maintenance of harvested crops. Crops may include grass, arable crops, vegetables, herbs, flowers or fruit. The standard applies to the storage of crops indoors or outdoors. It also covers temperature-controlled storage.
	The standard includes preparing the storage area, storing the crop and monitoring the storage of the crop.
	You will be working in accordance with instructions and specifications.
	This standard is suitable for anyone who carries our the storage of harvested crops.

Performance criteria

- P1. prepare the storage facility in accordance with specifications
- P2. carry out measures to prevent the risk of contamination by pests or disease in accordance with specifications
- P3. check crops have been properly prepared before storage
- P4. store crops in the storage facility in accordance with specifications and in a manner which minimises damage
- P5. prepare, use and maintain equipment in a safe, clean and effective condition throughout, including personal protective equipment where required
- P6. maintain suitable levels of hygiene and biosecurity
- P7. maintain the storage facility in a safe and secure condition
- P8. conduct routine inspections of the storage facility and the crop in accordance with specifications
- P9. maintain harvested crops in an optimum condition
- P10. identify the presence of pests or any damage or contamination to the crop and take the appropriate action
- P11. check the environmental conditions of storage facilities and take appropriate action
- P12. carry out stock rotation where appropriate in accordance with specifications

- P13. remove crops from the storage facility in accordance with instructions and in a manner which minimises damage
- P14. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P15. keep accurate and up-to-date records as required by relevant legislation and the organisation

You need to know and understand:

- K1. type and condition of storage facility necessary for the harvested crop
- K2. signs of pests and disease and the action to take
- K3. types of measures which may be taken to prevent risk of damage from pests
- K4. the use of pest control measures and their relevant legislation
- K5. reasons for preparing the storage facility
- K6. preparation requirements for crops
- K7. reasons for the way crops are arranged in storage facilities
- K8. how to prepare, use and maintain equipment in a safe and effective condition
- K9. ways in which security and safety of the storage facility is maintained
- K10. the importance of maintaining hygiene and biosecurity when storing crops, and the methods for achieving this
- K11. methods for conducting routine inspections and the reasons for them
- K12. conditions required for maintaining stored crops in good condition
- K13. how to recognise stored crops which are damaged or contaminated and the appropriate action to take
- K14. methods of preventing damage or contamination to stored crops
- K15. the purpose of stock rotation
- K16. your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies
- K17. the records which need to be maintained

Glossary

Specifications: schedules, method statements, Standard Operating Procedures (SOPs), manufacturers guidelines, customer requirements, crop requirements

Instructions: verbal or written.

Conduct routine inspections for the presence of:

- animals
- insects
- birds

- mould
- disease
- contamination
- bruising / damage
- moisture / humidity
- changes in temperature

Records: manual or electronic.

Unit 256 Store harvested crops (LANAGC6)

Supporting information

Evidence requirements

- A prepare the storage environment by:
- (i) cleaning the area
- (ii) making the layout suitable
- B minimise risks from two of the following pests:
- (i) rodents
- (ii) insects
- (iii) birds
- C conduct two routine inspections for:
- (i) pests
- (ii) environmental conditions
- (iii) crop condition
- D explain the type and condition of the storage environment necessary for a range of crops covering:
- (i) arable
- (ii) vegetables
- (iii) fruit
- (iv) grass

Notes

Evidence from simulations is not acceptable for this element.

The necessary action to treat crops prior to storage may involve the preparation and application of chemicals to reduce the problem, or the bringing in of contractors to carry out such work.

For indoor storage areas - condition as required under insurance schemes.

Unit 257 Transport harvested crops (LANAGC7)

SCQF Level:	4
SCQF Credit value:	4
Aim:	This standard covers the transportation of crops following harvesting.
	If you are using a vehicle or mechanical equipment in the transportation of crops you will need to be appropriately trained in line with current legislation, and hold a relevant award where appropriate. When transporting crops on the public highway you will need to hold the appropriate licenses for both yourself and the vehicle.
	You must carry out your work in a way which will consider any impact on the natural environment and enhance its nature and conservation.
	This standard is suitable for anyone involved in the transportation of harvested crops.

Performance criteria

- P1. prepare appropriate equipment ready for transportation
- P2. operate transportation equipment in accordance with instructions and with due regard for the safety of others and surroundings
- P3. maintain appropriate levels of hygiene and biosecurity when carrying out the activity
- P4. position harvested crops on the transportation equipment safely and securely, and in a manner which protects them from damage and contamination during transportation
- P5. monitor the harvested crops during transit and take appropriate action as required
- P6. carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies.

You need to know and understand:

- K1. suitable transportation equipment for different crops
- K2. correct methods of operating transportation equipment and limits of responsibility in relation to the operation of such equipment
- K3. how to load and secure crops for transit in order to maintain safety of load and minimise damage
- K4. relevant methods of protecting the harvested crop from contamination or adverse weather conditions
- K5. ways of operating transportation equipment to prevent damage to crops, equipment and the surrounding area
- K6. ways of monitoring the condition of the harvested crop during transit
- K7. the legal requirements for the use of transportation equipment
- K8. the importance of maintaining hygiene and biosecurity when transporting crops, and the methods for achieving this
- K9. your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies

Glossary

Specifications: schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, customer requirements, crop requirements

Instructions: verbal or written.

Unit 257 Transport harvested crops (LANAGC7)

Supporting information

Evidence requirements

- A deal with at least one of the following types of harvested crops:
- (i) combinable crops
- (ii) root crops
- (iii) grass/forage
- (iv) vegetables
- (v) fruit
- (vi) plants
- B maintain equipment through:
- (i) preparation
- (ii) checks and adjustments
- (iii) cleaning
- C use the following equipment:
- (i) manual
- (ii) powered

Notes

Evidence from simulations is not acceptable for this element.

Unit 258 Promote responsible public use of outdoor sites (LANENC1)

	<u> </u>
SCQF Level:	5
SCQF Credit value:	4
Aim:	This standard covers promoting the responsible public use of outdoor sites. You must show that you can communicate effectively with visitors and look after their welfare and safety, in addition to protecting the site, its character and its contents.
	You should be aware of actual or potential threats, dangers or breaches of the law, both in general and those specifically related to the site in which you are working. You also need to know how to deal with breaches against environmental legislation with regard to protected species and sites. This may involve advising members of the public of dangers and being alert to suspicious behaviour.
	This standard is suitable for Countryside Officers, Rangers, Wardens, Park Managers, Garden Managers, etc.

Performance criteria

- P1. welcome visitors in accordance with the organisation's policies
- P2. present a positive image of yourself and your organisation
- P3. promote the features of the site to visitors to enhance enjoyment and understanding of the site
- P4. provide visitors with suitable opportunities to express and clarify their requirements
- P5. provide information clearly to visitors and encourage them to ask questions about the site and the organisation
- P6. ensure that the pace, style and structure of your communications are suitable for the audience
- P7. care for visitors according to their needs and any organisational requirements
- P8. provide visitors with methods of obtaining assistance if it cannot be immediately provided

- P9. encourage visitors to use the site in a way which is consistent with its purpose and condition
- P10. encourage visitors to maintain their own safety during visits to the site
- P11. encourage visitors to maximise the potential of their visit and take advantage of what the site has to offer
- P12. identify visitors and other members of the public who may cause a threat or breach of the law and take the appropriate action to minimise any damage or risk
- P13. carry out all work in accordance with relevant environmental, health and safety legislation, risk assessment requirements and company policies
- P14. encourage feedback from the public on their experience of the site and communicate findings to the appropriate person
- P15. make changes in response to feedback which are within your area of authority.

You need to know and understand:

- K1. organisational codes of practice and requirements for the care of visitors
- K2. the purpose and value of presenting a positive image of yourself and your organisation
- K3. the features of the site and your organisation to enable you to provide information and respond to queries
- K4. how to identify the needs of visitors, and when to engage and offer advice or help
- K5. the range of visitors that may be encountered
- K6. ways in which communication styles are adjusted according to the audience and location
- K7. who to refer visitors to when you are unable to provide assistance
- K8. why the organisation may have certain access policies or designated areas for public access
- K9. the needs of the site and the effects that visitors may have on it
- K10. the importance of balancing the needs of the site with the needs of visitors
- K11. your responsibilities under current environmental and health and safety legislation and codes of practice
- K12. legislation relating to offences against wildlife
- K13. the threats the public may pose to sites
- K14. how to handle people who cause a threat to sites in an effective, safe and courteous way
- K15. the organisational procedure for dealing with breaches of the law
- K16. how to obtain and monitor feedback from the public
- K17. the limits of your authority and competence and who to refer to if you need advice or guidance.

Glossary

Visitors:

- adults
- children and young people
- families
- general interest groups
- special interest groups
- recreational users
- those with special requirements
- those for whom English is not the first language

Threats:

- to the site and its contents
- to flora and fauna
- to own personal health, safety or security
- to health, safety and security of others

Breaches of the law:

- theft
- criminal damage
- assault
- public order offences
- trespass
- wildlife persecution.

Unit 258 Promote responsible public use of outdoor sites (LANENC1)

Supporting information

Evidence requirements

- A. communicate with the following audiences:
- (i) organised groups
- (ii) individual members of the general public
- (iii) people with special interests or needs
- B. use the following types of communication:
- (i) formal
- (ii) informal
- C. provide the following types of care:
- (i) supporting people in terms of their safety and welfare
- (ii) providing information and advice
- D. deal with two of the following threats:
- (i) to the site and its contents
- (ii) to flora and fauna
- (iii) Own personal health and safety
- (iv) Other peoples health and safety

Notes

Evidence from simulations is not acceptable for this element.

Unit 259 Resolve customer service problems (LANICSC3)

SCQF Level:	5
SCQF Credit value:	6
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Aim:

This Standard is part of the Customer Service Theme of Handling Problems. This Theme covers the behaviours, processes and approaches that are most effective when handling customer service problems. Remember that customers include everyone you provide a service to. They may be external to your organisation or they may be internal customers.

This Standard is about what to do when it is difficult to meet customer expectations. Even if the service you give is excellent, some customers experience problems. Part of your job is to help to resolve those problems. There is likely to be a problem if customer expectations are not met. This may be because your customer's expectations involve more than you can offer or because your service procedures have not been followed. Some problems are reported by customers and sometimes you spot the problem first and resolve it before your customer has even noticed. As soon as you are aware of a problem, you need to consider the options and then choose a way to put it right. This Standard is particularly important in customer service because many customers judge how good the customer service of your organisation is by the way problems are handled.

Performance criteria

You must be able to:

Spot customer service problems

- P1. listen carefully to your customers about any problem they have raised
- P2. ask your customers about the problem to check your understanding
- P3. recognise repeated problems and alert the appropriate authority
- P4. share customer feedback with others to identify potential problems before they happen

P5. identify problems with systems and procedures before they begin to affect your customers

Pick the best solution to resolve customer service problems

- P6. identify the options for resolving a customer service problem
- P7. choose the most effective method of communication for dealing with your customer when resolving a customer service problem
- P8. work with others to identify and confirm the options to resolve a customer service problem
- P9. work out the advantages and disadvantages of each option for your customer and your organisation
- P10. pick the best option for your customer and your organisation
- P11. identify for your customer other ways that problems may be resolved if you are unable to help

Take action to resolve customer service problems

- P12. discuss and agree the options for solving the problem with your customer
- P13. take action to implement the option agreed with your customer
- P14. work with others and your customer to make sure that any promises related to solving the problem are kept
- P15. keep your customer fully informed about what is happening to resolve the problem
- P16. check with your customer to make sure the problem has been resolved to their satisfaction
- P17. give clear reasons to your customer when the problem has not been resolved to their satisfaction

Knowledge and understanding

You need to know and understand:

- K1. organisational procedures and systems for dealing with customer service problems
- K2. how to defuse potentially stressful situations
- K3. how to negotiate
- K4. the limitations of what you can offer your customer
- K5. types of action that may make a customer problem worse and should be avoided
- K6. how to choose the most effective method of communication when dealing with customer service problems
- K7. how to make best use of remote communications with customers through social media when resolving customer problems.

Unit 260 Process payments for purchases in a retail environment (LANC.8)

SCQF Level:	5
SCQF Credit value:	5
Aim:	This unit is all about providing service to the customer at point of sale (POS). It involves sorting out pricing problems, spotting faulty goods, checking that payments are acceptable and storing payments securely.

Performance criteria

You must be able to:

Work out the price of customers' retail purchases

- P1. accurately identify the price of purchases
- P2. promptly sort out any pricing problems by referring to pricing information
- P3. get advice promptly from the right person when you cannot sort out pricing problems yourself
- P4. work out accurately the amount the customer should pay

Provide service at point of sale in a retail store

- P5. tell customers the correct amount to pay
- P6. check accurately the amount and means of payment offered by the customer
- P7. where the payment is acceptable, process the payment in line with company procedures
- P8. tell the customer tactfully when payment cannot be approved
- P9. record payments accurately
- P10. store payments securely and protect them from theft
- P11. offer additional services to the customer where these are available
- P12. treat customers politely throughout the payment process
- P13. balance the need to give attention to individual customers with the need to acknowledge customers who are waiting for help

Knowledge and understanding

You need to know and understand:

Know how to work out the price of customers' retail purchases

- K1. how to identify and check prices in your own store
- K2. how to identify any current discounts and special offers
- K3. where to find information and advice on pricing
- K4. company procedures for working out payments
- K5. common methods of working out payments including point-of-sale technology, electronic calculators and longhand
- K6. relevant rights, duties and responsibilities relating to The Sale of Goods Act

Know how to provide service at point of sale in a retail store

- K7. how to keep cash and other payments secure
- K8. the types of payment that you are authorised to receive
- K9. procedures for authorising non-cash transactions
- K10. how to check for and identify counterfeit payments
- K11. how to check for stolen cheques, credit cards, charge cards or debit cards
- K12. how to deal with customers offering suspect payments
- K13. the relevant rights, duties and responsibilities relating to the Sale of Goods Act
- K14. company procedures for taking payments
- K15. company procedures for dealing with suspected fraud.

Unit 261 Receive goods from deliveries (LANWS10)

SCQF Level:	5
SCQF Credit value:	3
Aim:	This unit is aimed at operatives working in warehousing and storage, transport, or freight forwarding. The unit is particularly relevant to those who already have basic experience and an understanding of the logistics industry. Goods (meaning any physical products and materials) frequently arrive at logistics facilities. They can be goods that need to be forwarded, or goods being returned. The goods have to be unloaded and handled ready for further work. To be competent, an individual has to be able to achieve all the performance criteria listed in the unit, and possess the specified knowledge

Performance criteria

You must be able to:

- P1. obtain relevant information and confirm the goods being received
- P2. check that the goods being received match the specifications provided in the information
- P3. ensure the area used to receive the goods is clean and free of obstructions and hazards
- P4. ensure that vehicles are safe and secure before unloading from them
- P5. handle goods using the correct handling methods and moving equipment
- P6. ensure that any moving equipment used is operated correctly and safely in accordance with organisational procedures
- P7. ensure that goods are unloaded safely in accordance with storage requirements
- P8. identify any health, safety, and security issues relating to the goods, and make provision for them in accordance with organisational procedures
- P9. identify any problems with receiving the goods, and take the appropriate action to deal with them
- P10. report work activities and record them in the appropriate information systems according to organisational procedures

P11. comply with all relevant work and safety legislation, regulations, standards, and organisational procedures

Knowledge and understanding

You need to know and understand:

Receiving goods

- K1. sources and types of information for the goods being received, including information relevant to health, safety, and environmental factors
- K2. characteristics and special requirements of the goods being received
- K3. organisational procedures relevant to the goods being received
- K4. equipment and facilities required in the area to receive goods
- K5. vehicle safety and security during unloading
- K6. handling methods for different types of goods g)
- K7. methods of safely unloading vehicles
- K8. health, safety, and environmental issues relevant to the storage of goods
- K9. types of problem arising from receiving goods
- K10. how to use and update stock control systems

Legislation and regulations

- K11. sources of information on legislation and regulations
- K12. legislation and regulations that apply to health and safety in the workplace
- K13. legislation and regulations that apply to own area of responsibility
- K14. legal requirements for the storage and distribution of specific goods and materials

Organisational procedures

- K15. reporting responsibilities and information systems used by the organisation for specific work activities
- K16. working practices, operating procedures, guidelines, and codes of practice
- K17. roles and responsibilities of different colleagues

Unit 262 Place goods in storage (LANWS11)

SCQF Level:	5
SCQF Credit value:	5
Aim:	This unit is aimed at operatives working in warehousing and storage, transport, or freight forwarding. The unit is particularly relevant to those who already have basic experience and an understanding of the logistics industry. Goods (meaning any physical products and materials) are placed into storage for a variety of reasons and durations. The goods have to be stored correctly to ensure that they are not damaged, and that they are kept safe and secure. To be competent, an individual has to be able to achieve all the performance criteria listed in the unit, and possess the specified knowledge.

Performance criteria

You must be able to:

- P1. locate the goods to be stored and check them against the relevant information
- P2. confirm the area to be used for storage, and ensure it is suitably prepared to receive the goods
- P3. identify any health, safety, and environmental issues relating to the goods to be stored
- P4. identify any storage conditions or equipment required to place the goods in storage
- P5. handle goods using the correct handling methods and equipment
- P6. place goods into storage in accordance with operational and organisational procedures for safety, space utilisation, and distribution requirements
- P7. identify any monitoring and storage arrangements for the goods, and record and communicate these arrangements to the appropriate people
- P8. identify any problems with storing goods, and take the appropriate action to deal with them
- P9. report work activities and record them in the appropriate information systems according to organisational procedures
- P10. comply with all relevant work and safety legislation, regulations, standards, and organisational procedures.

Knowledge and understanding

You need to know and understand:

Storing goods

- K1. types of goods being stored
- K2. how to obtain information relating to the goods to be stored
- K3. areas used for storing specific goods
- K4. importance of preparation of storage areas, including cleaning, tidying, and clearing obstructions
- K5. storage conditions relating to the different types of goods
- K6. types of equipment and facilities that may be required for the storage of goods
- K7. handling methods for different types of goods h
- K8. importance of positioning goods in storage for further use and to prevent damage
- K9. health, safety, and security issues relevant to the storage of goods
- K10. types of problem found with different types of goods
- K11. how to use and update stock control systems.

Legislation and .regulations

- K12. sources of information on legislation and regulations
- K13. legislation and regulations that apply to health and safety in the workplace
- K14. legislation and regulations that apply to own area of responsibility
- K15. legal requirements for the storage and distribution of specific goods and materials

Organisational procedures

- K16. reporting responsibilities. and information systems used by the organisation for specific work activities
- K17. working practices, operating procedures, guidelines, and codes of practice
- K18. roles and responsibilities of different colleagues.

Unit 263 Prepare plant or machinery for operational performance (COSVR386)

SCQF Level:	5	
SCQF Credit value:	7	
Aim:	This standard is about	
	 interpreting information 	
	 adopting safe and healthy working practices 	
	 selecting and/or using materials, components and tools to prepare plant, machinery or equipment for operational performance 	
	 preparing and setting up plant, machinery or equipment for operational performance. 	

Performance criteria

You must be able to:

- P1. interpret the given operating information relating to the use of plant or machinery and confirm its relevance
- P2. organise with others the sequence in which the work is to be carried out
- P3. comply with the relevant, current legislation, special legal status documents, official guidance and organisational procedures to maintain safe and healthy work practices
- P4. request resources to sustain plant or machinery operations to complete the programme of work
- P5. select plant or machinery resources for the methods of work and operations to be carried out
- P6. comply with organisational procedures to minimise the risk of damage to the work and surrounding area
- P7. comply with the given contract information to carry out the work efficiently to the required specification
- P8. complete the work within the allocated time, in accordance with the programme of work.

Knowledge and understanding

You need to know and understand:

Performance Criteria 1 Interpretation of information

- K1. the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented
- K2. the types of information, their source and how they are interpreted
- K3. the organisational procedures to solve problems with the information and why it is important they are followed

Performance Criteria 2 Organise with others

- K4. communication of ideas between team members
- K5. organisation of resources in conjunction with the progress of work
- K6. the skills required to carry out the work

Performance Criteria 3 Safe work practices

- K7. the level of understanding operatives must have of information for relevant, current legislation, Approved Codes of Practice and official guidance and how it is applied
- K8. how emergencies should be responded to and who should respond
- K9. the organisational security procedures for plant and/or machinery, tools, equipment and personal belongings
- K10. what the accident reporting procedures are and who is responsible for making the report
- K11. why, when and how health and safety control equipment should be used

Performance Criteria 4

Request resources

K12. the organisational procedures for requisitioning consumables and other

Performance Criteria 5 Selection of resources

- K13. the characteristics, quality, uses, sustainability, limitations and defects associated with plant resources and how defects should be rectified
- K14. how the resources should be used and how any problems associated with the resources are reported
- K15. the organisational procedures to select resources, why they have been developed and how they are used
- K16. the hazards associated with the resources and methods of work and how they are overcome

Performance Criteria 6 Minimise the risk of damage

- K17. how to protect work from damage and the purpose of protection
- K18. why disposal of waste should be carried out safely and how it is achieved

Performance Criteria 7 Meet the contract specification

- K19. how methods of work, to meet the specification, are carried out and problems reported
- K20. how maintenance of plant and/or machinery, tools and equipment is carried out

Performance Criteria 8 Allocated time

K21. what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

Unit 263 Prepare plant or machinery for operational performance (COSVR386)

Supporting information

Scope/range related to performance criteria Performance Criteria 1

1 interpretation of drawings, specifications, schedules, method statements, risk assessments and manufacturers' information related to the work to be carried out

Performance Criteria 2

2 organisation of own work

3 communication with team members and other associated occupations about the plant or machinery operation and the work to be carried out

Performance Criteria 3

4 avoidance of risk by complying with the given safety information relating to / at least of the following

- a. methods of work
- b. safe use of health and safety control equipment
- c. safe use and storage of plant, machinery, tools and equipment
- d. specific risks to health

Performance Criteria 4

5 follow organisational procedures for the requisition of consumables, materials and other resources

Performance Criteria 5

6 selection of resources associated with own work

a.attachments, tools and ancillary equipment

Performance Criteria 6

7 protection of the work and its surrounding area from damage

8 minimise damage and maintain a clean work space

9 disposal of waste in accordance with current legislation

Performance Criteria 7

10 demonstration of work skills to fit, attach, set up, adjust, secure, check, confirm and remove

11 use and maintain hand tools, ancillary equipment and/or accessories

12 prepare plant, machinery or equipment for operational performance to given working instructions relating to

- a. set up
- b. functional checks
- c. operational performance
- d. safety and security

Performance Criteria 8

13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

Communication

1 discussions, sketches and briefings

Disposal of waste

2 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Emergencies

3 operative's response to situations in accordance with organisational authorisation and personal skills when involved with

- a. fires, spillages, injuries
- b. emergencies relating to occupational activities

Hazards

4 those identified by method of work, risk/COSHH assessments, manufacturers' technical information, statutory regulations and official guidance

Health and safety control equipment

5 identified by the principles of protection for occupational use, types and purpose of each type, work situations and general work environment

- a. collective protective measures
- b. personal protective equipment (PPE)
- c. respiratory protective equipment (RPE)
- d. local exhaust ventilation (LEV)

Information

6 drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and current regulations governing the operation of plant or machinery or the use of equipment

Legislation, Approved Codes of Practice and official guidance

7 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting

Maintenance

8 operative care of plant or machinery, hand tools, ancillary equipment and/or accessories

Methods of work

9 application of knowledge for safe and healthy work practices, procedures and skills relating to the method/area of work and materials used to:

- a. identify the characteristics of the plant, machinery or equipment appropriate to the operation
- b. complete pre- use checks
- c. select ancillary equipment and/or accessories
- d. prepare, set up and adjust for operational requirements, safety and security
- e. complete functional checks
- f. operate and move plant or machinery, or use equipment
- g. move and remove ancillary equipment and/or accessories
- h. use hand tools, ancillary equipment and accessories
- i. team work and communication
- j. needs of other occupations associated with preparing plant, machinery or equipment for operations

Problems

12 those arising from information, resources and methods of work

- a. own authority to rectify
- b. organisational reporting procedures

Programme

13 types of progress charts, timetables and estimated times 14 organisational procedures for reporting circumstances which will affect the work programme

Protect work

15 protect work against damage from general workplace activities, other occupations and adverse weather conditions

Resources

16 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and/or specialist:

- a. consumables, lubricants, fuels
- b. ancillary equipment and/or accessories
- c. hand tools, ancillary equipment and/or accessories
- d. methods of calculating weight, quantity, length and area associated with the method/procedure to operate plant machinery or equipment for operations

Security procedures

18 site, workplace, company and operative

Skills

19 own occupation and occupations related to the work

Unit 264 Give customers a positive impression of yourself and your organisation (Unit 9)

SCQF Credit value: 5 Aim: This Unit is all about communicating with customers and giving a positive impression of yourself whenever you deal with a customer. By doing this you will also be giving a positive impression of your organisation and the customer service it provides. All of us enjoy the experience of good customer service if we feel that the person serving us really wants to create the right impression, respond to us and give us good information. Every detail of your behaviour when dealing with a customer counts.		
Aim: This Unit is all about communicating with customers and giving a positive impression of yourself whenever you deal with a customer. By doing this you will also be giving a positive impression of your organisation and the customer service it provides. All of us enjoy the experience of good customer service if we feel that the person serving us really wants to create the right impression, respond to us and give us good information. Every detail of your behaviour	SCQF Level:	5
customers and giving a positive impression of yourself whenever you deal with a customer. By doing this you will also be giving a positive impression of your organisation and the customer service it provides. All of us enjoy the experience of good customer service if we feel that the person serving us really wants to create the right impression, respond to us and give us good information. Every detail of your behaviour	SCQF Credit value:	5
	Aim:	customers and giving a positive impression of yourself whenever you deal with a customer. By doing this you will also be giving a positive impression of your organisation and the customer service it provides. All of us enjoy the experience of good customer service if we feel that the person serving us really wants to create the right impression, respond to us and give us good information. Every detail of your behaviour

Performance criteria

You must be able to:

Element 9.1

Establish effective rapport with customers

- P1. meet your organisation's standards of appearance and behaviour
- P2. greet your customer respectfully and in a friendly manner
- P3. communicate with your customer in a way that makes them feel valued and respected
- P4. identify and confirm your customer's expectations
- P5. treat your customer courteously and helpfully at all times
- P6. keep your customer informed and reassured
- P7. adapt your behaviour to respond effectively to different customer behaviour

Element 9.2

Respond promptly to a customer seeking assistance

- P1. respond promptly to a customer seeking assistance.
- P2. select the most appropriate way of communicating with your customer
- P3. check with your customer that you have fully understood their expectations

- P4. respond promptly and positively to your customers' questions and comments
- P5. allow your customer time to consider your response and give further explanation when appropriate

Element 9.3

Communicate information to customers

- P1. quickly locate information that will help your customer
- P2. give your customer the information they need about the services or products offered by your organisation
- P3. recognise information that your customer might find complicated and check whether they fully understand
- P4. explain clearly to your customers any reasons why their needs or expectations cannot be met

Knowledge and understanding

You need to know and understand:

- K1. your organisation's standards for appearance and behaviour
- K2. your organisation's guidelines for how to recognise what your customer wants and respond appropriately
- K3. your organisation's rules and procedures regarding the methods of communication you use
- K4. how to recognise when a customer is angry or confused
- K5. your organisation's standards for timeliness in responding to customer questions and requests for information

Unit 264 Give customers a positive impression of yourself and your organisation (Unit 9)

Supporting information

Key words and phrases for this unit

- meet and greet customers
- communicate with customers
- adapt behaviour for customers
- identify customer expectations
- give information to customers
- check customer understanding
- respond appropriately to customers
- locate information for customers
- explain problems of delivery to customers.
- •
- •
- •

Unit 265 Assemble and install purpose made equipment and components for sport/play (Unit C18)

SCQF Level:	5
SCQF Credit value:	3
Aim:	This unit is about receiving, checking and assembling purpose made equipment – such as goals, rebound boards and play equipment – following the manufacturer's instructions. The unit also covers installing the equipment after assembly, using various methods, for example, cast-in or socketed. Correct lifting and handling techniques are important in this unit. It is also important to be able to identify and solve problems safely and effectively.

Performance criteria

You must be able to:

Assemble purpose made equipment and components

- P1. check that you have the necessary plans and components and report any shortfalls
- P2. interpret plans and specifications correctly
- P3. assemble equipment following manufacturer's instructions and methods
- P4. protect yourself, others and the environment from hazards

Install purpose made equipment and components

- P5. install the equipment following the manufacturer's instructions, using approved methods
- P6. take appropriate corrective action when components do not conform to specification
- P7. identify and put right any defects within the limits of your own authority
- P8. report any defects outside the limits of your own authority to the responsible person
- P9. protect yourself, others and the environment from hazards

Knowledge and understanding

You need to know and understand:

- K1. the types and use of fixings used in the assembly of equipment and components
- K2. methods of checking quality and quantity of components
- K3. how to interpret manufacturers' instructions and specifications
- K4. safe working methods and relevant industry codes of practice
- K5. methods of lifting, handling and transferring assembled structures
- K6. methods of supporting and protecting unfixed structures
- K7. methods of handling and positioning structures
- K8. methods of providing temporary supports for structures
- K9. methods of aligning and levelling structures
- K10. factors affecting the positioning and method of fixing structures
- K11. relevant statutory regulations
- K12. handling and lifting techniques and regulations
- K13. types and methods of fixing structures to foundations.

Unit 264 Give customers a positive impression of yourself and your organisation (Unit 9)

Additional information

Scope/range related to performance criteria

Assemble purpose made equipment and components

1 methods

- 1.1. nuts and bolts
- 1.2. screws
- 1.3. proprietary fixings

Install purpose made equipment and components

2. methods

- 2.1. cast in
- 2.2. bolted
- 2.3. socketed

Glossary

Cast in

For example, grouting in fixings or posts, in-situ concrete around supports

Components

For example, a set of swings for a frame, a platform on a climbing frame, goal posts

Proprietary fixings

For example, bolts made specifically for an item of equipment, purpose made clamps

Socketed

Inserted into preformed apertures

Links to other NOS

This unit links closely to units SKAA513, SKAC224 and SKAC241.



Appendix 1 Relationships to other qualifications

Links to other qualifications

This qualification has connections to the:

- Level 2 Work-based Horticulture (Horticulture) (0065-21)
- Level 2 Work-based Horticulture (Production Horticulture) (0065-22)



Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information on such things as:

- Walled Garden: how to register and certificate candidates on line
- Qualifications and Credit Framework (QCF): general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

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Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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